Politics Triumphs Economics?

Political Economy and the Implementation of Competition Law and Economic Regulation in Developing Countries

(Volume II)

Editors

Pradeep S. Mehta
Simon J. Evenett

Politics Triumphs Economics?

Political Economy and the Implementation of
Competition Law and Regulation in
Developing Countries

(Volume II)

Editors
Pradeep S Mehta & Simon J. Evenett

Politics Triumphs Economics?

Published by

&

CUTS Centre for Competition,
Investment & Economic Regulation
CUTS C-CIER

CUTS Institute for Regulation & Competition
B-2, Greater Kailash Enclave II
New Delhi 110048, India
Ph: 91.11.2922 3021
TeleFax: 91.11.4053 5921
Email: circ@circ.in
Website: www.circ.in

CUTS Centre for Competition, Investment & Economic Regulation
D-217, Bhaskar Marg, Bani Park, Jaipur
302 016, India
Ph: 91.141.2282821, Fax:91.141.228 2485
Email: c-cier@cuts.org
Website: www.cuts-ccier.org

Edited by
Pradeep S Mehta and
Simon J. Evenett

Citation:
Mehta, Pradeep S (2009) and Evenett, Simon J (2009), Politics Triumphs Economics?, Book 292 pp, CIRC, Jaipur

© CUTS International 2009

Any reproduction in full or part must indicate the title of the Report, name of the publisher as the copyright owner, and a copy of such publication may please be sent to the publisher.

#0903

CONTENTS

List of Tables, Boxes, Figures, Annexures and Appendixes vi

Acknowledgements viii

Editors/Contributors ix

Foreword xi

Preface xiv

1. Introduction
   PRADEEP S. MEHTA AND SIMON J. EVENETT 1

2. Reforming and Privatising the Telecommunications Sector in Jamaica: Experiences of a Small Developing Country'
   CEZLEY SAMPSON AND FAYE SAMPSON 14

3. Credibility and Accountability in Belgian Competition and Regulatory Policies
   BART DEFLOOR AND FRANK NAERT 44

4. Competition Constraints in Small Jurisdictions
   LINO BRIGUGLIO AND EUGENE BUTTIGIEG 80

5. Regulation, Competition & Government Ownership: A case study of the Banking Sector in India
   M. K. DATAR 97

6. Introducing Competition in the Indian Electricity: Is Micro-Privatisation a Possible Way?
   ASHWINI K. SWAIN 119

7. Institution and the Effectiveness of Competition Policy and Regulatory Regimes in Kenya
   NORMAN LITIGU SHITOTE 140

8. The Role of Regulatory Agencies in Developing Countries: A Game Theoretic Approach to the Regulation of Public-Private Contracts
   OLIVIA JENSEN 162

9. The Tripod of Independence, Autonomy and Accountability of a Regulator – An Analysis of the Indian Competition Law
S. CHAKRAVARTHY 194

10. A Quantitative Evaluation of Effectiveness and Efficacy of Competition Policies across Countries
SERDAR DALKIR 226

11. Towards Harmony between Regulation and Competition Agencies: Experience from Turkish Telecommunications Industry
ALPER KARAKURT AND USSAL ŞAHBAZ.. 264

List of Tables, Boxes, Figures, Annexures and Appendixes

Tables

2.1 Teledensity and Labour Efficiency ... 36
2.2 Growth in Telecommunications ... 37
2.3 Telecommunications Traffic ... 38
2.4 Investment in the Telecommunications System ... 38
2.5 Teledensity and Labour Efficiency ... 39
3.1 Independence of the Competition Authority ... 59
3.2 The independence of the federal energy regulator ... 63
3.3 The independence of the financial regulator ... 65
3.4 The independence of the telecom regulator ... 67
3.5 The independence of the railway regulator ... 69
3.6 Formal Independence from Government ... 70
3.7 Independence from stakeholders ... 70
3.8 Independence in decision making ... 71
3.9 Organisational autonomy ... 71
3.10 Independence index ... 72
5.1 Progress of Banking Reforms in India ... 101
5.2 Sector wise Distribution of Scheduled Commercial Bank Business ... 108
5.3 SCB: Branches & ATMs (as of end March 2005) ... 110
5.4 Concentration in Scheduled Commercial Bank Business ... 111
5.5 SCB: Profitability and Asset Quality ... 112
5.6 Scheduled Commercial Banks; Number of Employees ... 113
5.7 Bank Group wise Employee Composition ... 113
5.8 Average Compensation in SCBs ... 114
5.9 Structure of Operating Expenses ... 114
9.1 Annual Budget of the MRTP Commission ... 204
10.1 Summary statistics of the variables used in statistical analyses ... 238
10.2 Parameter estimates for the WEF rating equation ... 242
10.3 Parameter estimates for the FDI inflow equation ... 246

Boxes

9.1 Compromise inimical to competition 200
9.2 Procedure not substance 206
9.3 Suppression of TRAI........ 208

Figures

2.1 Financial Performance of Cable and Wireless 38
3.1 Marginal costs and benefits of independence........ 53
8.1 Timing of Moves in the PPC Game 166
8.2 Long-Term Pay-Offs 168
8.3 Short-Term Pay-Offs........ 169
10.1 Ex-post policy evaluation framework: a schematic demonstration 253
10.2 Four corners of the international antitrust landscape, in three dimensions 253
10.3 Effectiveness as a function of budget........ 254
10.4 Effectiveness gap: developed countries vs. other countries 254
10.5 Effectiveness gap: recent EU members and EU candidate(s) vs. other EU members 255
10.6 Efficacy as a function of effectiveness........ 255

Annexures

A-8.1 Structure of the PPC Game........ 186
A-8.2 List of Interviews Conducted 190

Appendixes

A-3.1 Computation of Independence Index........ 79

Acknowledgements

This research volume was prepared under the supervision and guidance of Pradeep S Mehta, Secretary General, CUTS International and Simon J. Evenett, Professor of International Trade and Economics at the University of St. Gallen, Switzerland.

The foreword has been written by Dr Supachai Panitchpakdi, Secretary General, UNCTAD for which we are very grateful.

The various chapters in this volume were written by Lino Briguglio, Eugene Buttigieg, S. Chakravarthy, Serdar Dalkir, M. K. Datar, Bart Defloor, Olivia Jensen, Alper Karakurt, Frank Naert, Ussal Şahbaz, Cezley Sampson, Faye Sampson, Norman Litigu Shitote, Ashwini K. Swain

The volume benefited from the inputs and comments received during different stages from various reviewers.

The financial support of the Department for International Development, UK and The International Development Research Centre, Canada is gratefully acknowledged.

Project management and coordination was provided by Manish Agarwal, Vijay Vir Singh, Siddhartha Mitra, Udai S Mehta, Rahul Ranjan and Vikash Batham

CUTS International is grateful to all the mentioned persons who contributed to its success.

Editors/Contributors

Editors:

Pradeep S. Mehta, *CUTS International and CUTS Institute for Regulation & Competition, India*

Simon J. Evenett, *Universität St. Gallen and CEPR, Switzerland*

Contributers (This Volume):

Lino Briguglio, *University of Malta*

Eugene Buttigieg, *University of Malta*

S. Chakravarthy, *Competition Law Expert,* India

Serdar Dalkir, *Principal, Microeconomic Consulting and Research Associates, Inc. (MiCRA), Washington*

M. K. Datar, *General Manager, Industrial Development Bank of India*

Bart Defloor, *University College Ghent, Member of Ghent University Association*

Olivia Jensen, *Development Studies Institute, London School of Economics and Political Science*

Alper Karakurt, *TCA,* Turkey

Frank Naert, *University College Ghent, Member of Ghent University Association*

Ussal Şahbaz, *TCA,* Turkey

Cezley Sampson, *Mona Institute of Business at the University of the West Indies in Kingston,* Jamaica

Faye Sampson, *Legal Consultant*, Jamaica

Norman Litigu Shitote, *Atlas Economic Links*, Nairobi

Ashwini K. Swain, *PhD Student, Department of Politics,* University of York

Contributers (Accompanying Volume)

Luis Andres, *World Bank, USA*

Thankom Arun, *Lancashire Business School, UK*

Max Everest-Phillips, *Senior Governance Adviser, Growth and Investment Group, Department for International Development, UK*

Jose Luis Guasch, *World Bank and University of California San Diego, USA*

Thula Kaira, *Zambia Competition Commission, Zambia*

Devendra G. Kodwani, *The OU Business School, UK*

Eduardo Luiz Machado, *Technological Research Institute (IPT), Brazil*

Michael W. Nicholson, *Transylvania University, USA*

Gesner Oliveira, *Getúlio Vargas Foundation (FGV), Brazil*

Lucas Martins Novaes, *Getúlio Vargas Foundation (FGV), Brazil*

Masrur Reaz, *DfID, Bangladesh*

Cezley Sampson, *Mona Institute of Business at the University of the West Indies in Kingston, Jamaica*

Faye Sampson, *Legal Consultant, Jamaica*

D. Daniel Sokol, *University of Missouri-Columbia School of Law, USA*

Kyle W. Stiegert, *University of Wisconsin-Madison, USA*

Stephane Straub, *University of Edinburgh, UK*

Valentina Zoghbi, *Project Lawyer at the International Bar Association, UK*

Accompanying Volume can be purchased at:
http://www.academicfoundation.com/n_detail/ptrumph.asp

Foreword

The political economy of regulation has been examined with extensively in economic literature from both theoretical and empirical standpoints. Economic theory recommends correcting market failures through regulation as a means to maximise total welfare. National realities however often constrain policymakers in their efforts to address market failures and maximise national welfare. The sheer magnitude of regulatory challenges facing developing countries is frequently overwhelming so that there remains a huge gap between the regulatory options suggested by economic theory and what is achievable in practice. Bridging this gap is a major challenge that necessitates sustained collaboration between experts, policy makers and regulators. In this process developing countries can benefit from information on the experiences of other countries, and advice and cooperation from different sources regarding the room for manoeuvre to adopt and adapt their regulatory regimes and to pursue international cooperation in this area. Conditions prevailing across different countries differ widely such that uniform prescriptions, remedies or recipes are not feasible.

The task facing developing countries in designing and applying regulatory regimes is not an easy one given the political economy constraints in regulatory regimes. There are real issues which need to be deliberated upon and resolved to tailor regulatory regimes to country specific circumstances so as to maximize the benefits of such regulation, minimize the costs and be administratively feasible. Not least, decisions have to be taken on the approach and substantive content of competition laws; how much administrative discretion there should be in enforcing competition laws; what might be the possible trade-offs between the objectives of economic efficiency and public interest and how these should be resolved; how related areas such as consumer protection and sectoral regulation should be addressed in a compatible and coherent manner substantively and administratively or what should be the division of labour between these agencies, the courts and political authorities; and what would be the appropriate structures and organization of such agencies in order to maximise their expertise, independence, accountability, political support and overall effectiveness.

The papers contained in these volumes by the Consumer Unity and Trust Society (CUTS) research project on "Competition, Regulation and Development Research Forum" provide a useful and practical guide to addressing some of the difficult issues in designing and applying regulatory regimes. They examine the political economy of the enforcement of competition laws, the regulatory regimes and the implementation of sector-specific regulation, including issues of ownership and how it might influence performance. The often uneasy relationship between competition authorities and economic regulators is also considered. Sector-specific and general case studies are also presented. As is rightly underlined in the different

contributions, political will is a key factor determining the successful adoption and effective implementation of competition laws and economic regulation. These papers were presented at an international symposium on 'Political Economy Constraints in Regulatory Regimes in Developing Countries" organised by CUTS in New Delhi, India in March 2007. I was privileged to inaugurate the conference, which attracted experts from around the world.

In fact for many years UNCTAD has promoted the development benefits of competition law and policy, adopted and implemented in pursuance of the doctrines underlying the Set of Multilaterally Agreed Equitable Principles and Rules for the Control of Restrictive Business Practices that were unanimously adopted by the United Nations in 1980. UNCTAD is the focal point on the work on competition policy and related consumer welfare within the United Nations system. It has undertaken extensive analytical research on a range of subjects in this area, including sectoral regulation, promoted intergovernmental cooperation and sharing of experiences, as well as delivered extensive technical assistance and capacity building to a large number of developing countries and countries with economies in transition to elaborate and implement competition legislation and policies. UNCTAD has also carried out substantial work on consumer protection in line with the United Nations Guidelines on Consumer Protection.

UNCTAD's work on competition policy and consumer welfare was recently affirmed and strengthened by the outcome of its 12th conference in April 2008. The Accra Accord adopted by UNCTAD XII mandates UNCTAD to continue to: provide a forum for intergovernmental policy dialogue and consensus-building on competition laws and policies, including through voluntary peer reviews; carry out research and analysis in this area; facilitate discussion on competition issues on the multilateral level, with close linkages to existing networks of competition authorities; and promote the use of competition law and policy as tools for achieving domestic and international competitiveness. Such work and advocacy promotes competition law regimes that take into account the prevailing conditions in the developing countries.

UNCTAD recognises the contribution of civil society in support of promoting development objectives through *inter alia* work on competition policy and consumer welfare. It has accordingly cooperated CUTS and other civil society groups to promote a genuine competition culture oriented towards development and to raise awareness in developing countries about the benefits of competition policy for consumers for economic development in general and for the realisation of internationally agreed development goals including the Millennium Development Goals.

I am thus pleased to commend this CUTS publication for the fresh and insightful consideration of regulatory issues it brings. This volume and the accompanying volume makes a signification contribution to raising awareness about regulatory challenges facing developing countries, and how to address them. It will further strengthen our joint effort to help developing countries introduce and adapt

regulatory regimes and pursue international cooperation that maximizes the welfare of their citizens and the world at large.

— Supachai Panitchpakdi
Secretary-General of UNCTAD

Preface

Since the 1990s developing countries have been very busy in the policy space enacting competition laws, introducing competition policies and modernising or putting in place regulatory regimes and laws. This trend obviously results from the dawning of a realisation that fair and free play of competitive forces and regulation of anti-competitive forces is the way through which optimal growth and efficient output and prices can be attained.

Given the fast pace of such developments in competition and regulation on the policy front, it seems strange that very little research on the peculiar problems facing the competition and regulation regimes in developing countries had taken place till a couple of years back. Much of the effort in competition and regulation in these countries had focused on capacity building along developed country lines to meet the requirements of new competition and regulatory regimes which in effect amounted to putting the cart before the horse. For the problems confronting these regimes were peculiar only to developing countries! Moreover, no attempt had been made to obtain a clear picture of the problems – a task which had to be accomplished before the capacity which was supposed to tackle these was put in place!

Realising the institutional difficulties that hinder the enforcement of competition and market regulatory regimes in developing countries (their low levels of income leading sometimes to conflicting welfare objectives, peculiar political economy considerations emanating from the presence of conflicting multiple lobby groups etc.), CUTS decided to fill the vacuum in research on political economy and institutional problems facing competition and regulatory regimes with the Competition, Regulation and Development Research Forum (CDRF). In its endeavour it received encouragement from international bodies/donors such as IDRC and DFID.

Continuing platform

The CDRF was and continues to be a forum for doing research on the problems confronting the competition and regulatory regimes of developing countries. However, unlike academic research forums it does not just stop at generating the results of research – it uses symposia and simple policy briefs to disseminate the results of research to a wide array of stakeholders including experts, policy makers, media and the common man with the objective of appropriately influencing the framing and implementation of competition policy and regulation.

This volume and the accompanying one are compilations of 10 and 9 papers respectively which were presented at the symposium marking the culmination of the research efforts of the 1st research cycle of CDRF. The research papers covered the experiences of a wide range of developing countries as seen mainly through the eyes

of developing country authors. Importantly, rigorous analytical techniques were used to draw generalisable policy implications, which were later on also communicated to a vast and heterogeneous audience of stakeholders in a simplified form through policy briefs and online forums.

Multi dimensional problems

The agenda for the 1st research cycle was structured to capture the multi-dimensional problems facing the competition and regulation regimes of developing countries and this feature is reflected in these two volumes of selected essays. An effort has been made to capture as wide a range of issues as possible – for instance, the political economy underlying the implementation and enforcement of competition and regulatory laws and regimes; barriers posed by vested interests to the free and fair functioning of competition and regulatory regimes; and the often choppy relationship between competition enforcement agencies and regulators attributable to functional overlap which often delays decisions and is therefore detrimental to the welfare of any country.

Moreover, these papers have been written from different perspectives and have used different methodologies. The perspective varies from 'economic' to 'legal' with some papers treading the middle ground. Methodologies vary from being purely analytical to being based on sophisticated economic theory to deriving their findings from quantitative techniques such as econometrics and game theory. Such methodologically rigorous papers are backed up by a set of more descriptive sector-specific and other case studies. These describe either the competition regime or law in a particular country or the recent regulatory experience in given sectors in different countries.

Emphasis on implementation aspects

A distinctive feature of these two volumes, apart from these being the first to expound the problems confronting competition and regulatory regimes in developing countries, are their strong emphasis on the implementation aspect of policy and law rather than just its content. The practical utility of these volumes is also highlighted by the fact that they deal with the problem of structuring political incentives so as to obtain competitive outcomes. It is this orientation and emphasis on practicalities rather than elegant but often inapplicable theory, which makes these volumes stand out as seminal contributions to the literature on competition and regulatory issues.

Prioritisation

Several findings come to light through the volumes which could not have been anticipated otherwise. A very fundamental result stresses the influence of vested interests on competition and regulatory agencies in developing countries with the recommendation for a wide implementation of a competition policy of moderate intensity to tackle such vested interests. The plea for moderation and gradualism

makes sense as any attempt to upset the political applecart too drastically might be counterproductive.

Another major recommendation emerging out of the papers in these volumes is the need for competition agencies to prioritise their case work, given that the financial resources and human capabilities at their disposal are limited. Through a finding that is quite heartening yet another paper brings to light the lack of positive association between affluence and the independence of regulatory agencies (which is a much desired quality), the latter being more affected by the age of the regulatory agency. This finding offers much hope for developing countries which are still new to regulation in many sectors.

Yet another important finding relates to small economies; an optimal level of competition exists in the case of such economies as too much competition might impede the achievement of economies of scale. In addition to such general findings, case studies such as those of banking in Bangladesh and the electricity sector in India provide specific recommendations for the stimulation of fair competition. All these results bring to the fore the utility of these volumes not only to scholars of competition and regulatory issues but also members of the policy community, media and civil society organisations who deal with the practical side of such issues.

Building research capacity in developing countries

What is not apparent from an inspection of these volumes is that their genesis has spawned an entire new generation of researchers in developing countries working on competition and regulatory issues. Many of these researchers should continue to be the flag bearers of such research in developing countries for years to come if they are provided with the necessary support and encouragement. Thus, this cycle has helped to generate a mass of human capital which can with a little more encouragement form the basis of a self sustaining research network on competition and regulatory issues. While focussing on developing country researchers through the CDRF, care has been taken not to neglect the researchers from developed countries who are interested in the problems of developing countries. This is because parallels between the development experiences of developing and developed countries do exist despite their considerable differences; what is or was useful in the latter can with suitable modification prove to be useful in the former.

While the volumes are a comprehensive collection of papers on the competition and regulatory problems facing developing countries these have just marked the beginning of a research effort which still has a long way to go. This is because of the fact that regulatory and competition policy/laws/agencies are still in their infancy in developing countries even though their brief history has already thrown up a rich mass of data and information which yields a treasure-trove of implications for policy. The point, however, remains that much of their critical history remains in front of us. It is, therefore, necessary that their future history continues to be studied with as great an interest as their past has been examined by the contributors to these pioneering volumes. CDRF itself continues to exist and CUTS plans to bring out volumes through this forum in the future which will investigate the root causes that

determine the state of the world in terms of competition policy and law highlighted so well by this first volume. The future course of the eventful path traversed by this forum would, however, depend not only on the initiative displayed by CUTS but by the support and good wishes of the entire international policy community.

— Pradeep S. Mehta

1

Introduction

PRADEEP S MEHTA AND SIMON J EVENETT

With the shift away from state ownership of national industries and direct interventions in commerce (through price controls, licensing, etc.) market forces have been given greater sway in determining resource allocation. This shift has been particularly pronounced in developing countries and is significant given the potential impact on product prices, payments to labour and capital, and economic growth; all of which have implications for attaining important social goals, such as poverty reduction. Recognition of the greater role that markets can play has not, however, led to the complete abandonment of state intervention. Instead, legitimate concerns about market power, other sources of market inefficiency, and social (that is, non-efficiency-related) priorities have manifested themselves in new forms of regulation, including competition law and sectoral regulation, which are often implemented through state agencies that are (at least on paper) independent from central government (Mehta 2006). Indeed, by some estimates over 100 jurisdictions have enacted competition laws, many within the last 15 years. Moreover, in recent years regulatory reform has been an important focus of policymaking in developing (and, for that matter, in industrialised) countries. These developments have placed a premium on understanding the factors that lead to effective and efficient sectoral regulation and competition law enforcement.

As soon as consideration is given to the practicalities of enacting and implementing competition law and sectoral regulation it becomes apparent that actors in the political arena – be they government officials and ministers, firms, and civil society groups (such as consumer organisations) – may well shape outcomes, potentially profoundly. Proposals for new forms of market regulation and associated reforms must, therefore, pass through a political filter. This creates a complication in that there is likely to be a two-way relationship between regulatory intervention in markets and the dynamics that unfold in the political arena. On the one hand, corporate, bureaucratic, and sometimes consumer interests may seek to influence the terms upon which such regulation is enacted and enforced; the former being often motivated by the desire to preserve or create rents or other benefits for themselves. On the other hand, the very implementation of efficiency-enhancing and pro-competitive market regulation may erode supra-normal profits (rents) and therefore the capacity of certain vested interests to influence political leaders, the press, etc. On this latter view, then, the relative strength of different vested interests over time may be influenced by the implementation of competition law and sectoral regulation, which in turn has knock-on effects for future political debates about market-enhancing reforms. Moreover, *a priori* there is no reason to believe that this two way

relationship is less important in developing countries than in industrialised countries, and vice versa.

Going beyond the debates over the merits of promoting competition in developing countries and the case for enacting market-corrective regulation, the purpose of the contributions to these volumes is to examine the factors which determine the manner and effectiveness of the implementation of competition law and sectoral regulation in developing countries. Drawing upon country-specific experience, case studies, and cross-country quantitative analyses, the contributors to this volume (and a priced companion volume published separately) demonstrate how the implementation of numerous regulatory measures have been influenced by vested interests, including corporate interests, bureaucratic interests, as well as other stakeholders such as consumer organisations. A richer picture emerges of the two-way relationship between regulatory and market outcomes mentioned earlier, amongst other findings. The sectoral and country coverage of the studies in these two volumes is broad, although no claims are made for exhaustiveness or that the matters studied herein are necessarily representative of the entire body of developing country experience. Section 2 of this introduction provides more information on the specific contributions to each volume.

A research initiative such as this should acknowledge numerous intellectual antecedents. Perhaps the longest standing are the views of many Continental European scholars and policymakers who envisaged a very political purpose for competition law; namely, to enhance what some have referred to as "economic democracy" by taming concentrations of corporate power and by ensuring that markets remain open for new firms to enter (Gerber 2001, World Bank 1999). Measures to promote inter-firm rivalry, then, have long been seen as altering the configuration and distribution of economic power within societies. Nowadays, this perspective may have particular relevance to developing countries especially in instances where dominant firms restrict access to, or raise prices of, essential commodities, with the implied adverse effects on the living standards of the populace. The attention given by some contributors to these volumes, then, to the political consequences of competition law and sectoral regulation can be seen as a return to this venerable tradition and stands in marked contrast to those who solely emphasise the efficiency-improving consequences of appropriately-enforced state intervention in markets.

The factors which determine the nature and extent of regulation in developing and industrialised countries – as opposed to the effects of such regulation – has also been addressed by much prior research (see Peltzman 1989 for a still-relevant survey of the key conceptual matters.) Like much of the extant literature, the contributors to this volume and its companion reject what is termed the Public Interest theory of regulation. According to the latter theory regulation arises to fix market failures and thereby enhances the allocation of resources within an economy. The concern here is not that appropriately designed and implemented regulation can improve resource allocation, rather that often the manner in which such regulation is introduced and enforced in developing countries is more influenced by vested corporate and bureaucratic interests than by efficiency considerations and that a comprehensive

account of the nature and effects of such regulation should take these matters into account.

Advancing generalisations about the non-efficiency-based factors that shape the enactment and implementation of regulation, however, is fraught with danger. While it is true that some instances of "regulatory capture" (either by corporate or rival bureaucratic interests) can be identified (see Nikomborirak 2005 for evidence on the capture of the Thai competition agency), so much depends on the manner in which competition in the political arena takes place within a jurisdiction. For example, in economies with small populations and market size, including in particular island economies, the political and bureaucratic elites may literally be related through family ties. Moreover, when there is a small number of established families collusion rather than competition may be outcome not just in markets but also in the political milieu. In contrast, in other jurisdictions the principal competition over a regulatory matter may be between government ministries and associated fiefdoms. As an example of the latter a number of news reports out of China in 2006 and 2007 suggested that the enactment of that nation's new competition law was delayed due to disagreements among three government ministries as to which would be responsible for the enforcement of their law and, therefore, which ministry would acquire the powers allowed for under the new statute. This example highlights the importance of non-corporate interests shaping the nature and extent of certain state interventions in markets.

Much ink has also been spilt in the literature on the independence of regulatory agencies. By and large there is a strong presumption of the advice of international organisations and in the writings on industrialised country regulatory experience that the independence of regulators is a desirable characteristic. This is perhaps more of a reaction to the failings of ministry-led regulation than it is to the established merits of a clear-cut alternative, although evaluations of the impact of measures of independence on regulatory outcomes are growing in number. Like other studies, a number of the country-specific and sector-specific studies in these volumes imply that it is very difficult for a state agency to preserve full independence from governmental or political influence. The fact that agencies have to be accountable to the public (directly or indirectly through state legislatures or government ministries) and that from time to time politicians typically determine both the budgets of and senior appointments to regulatory agencies suggests that absolute independence is most unlikely to come to pass. Instead, degrees of independence probably characterises the status quo and the question arises as to what regulatory officials can do and whether legislative design can ensure that the agency is not unduly swayed from its legitimate functions by external pressures.

With specific reference to the enforcement of competition law, many have argued that nascent competition agencies should focus on competition advocacy and should pick any initial enforcement cases with particular care. Two of the studies in these volumes tend to confirm this advice (Oliveria et al. and Zoghbi) and this is said to reflect the "political realities" facing nascent enforcement agencies. The desire to build credibility with the public and the private sector when an agency's officials are new to the task are important considerations. However, surely much depends on the

nature of the "political realities" and on the perceived anti-competitive threats in question. Moreover, the prioritisation of competition advocacy rarely addresses the question as to why a competition agency is effective at entering the political arena in this manner given the other established vested interests in an economy. In short, both advocacy and enforcements are acts that may generate reactions by other societal interests and, therefore, these acts may have ramifications in the political sphere.[1]

Up to this point the goal of this introduction has been to state the overall purpose of this volume (and its companion) and to situate this research initiative vis-à-vis both policy developments in developing literature and the relevant extant literature and policy advice. In the next section of this introduction some further thoughts on the relationship between market regulation and political dynamics are discussed. These observations also highlight the care that must be taken in drawing conclusions, including policy recommendations, from the types of study contained in these volumes. It is hoped that these remarks will facilitate interpretation and evaluation of this volume's studies and perhaps inspire further analysis. Section 2 of this introduction summarises the papers included in this volume and its companion, organising them into four broad – but inevitably somewhat related – themes. This latter section also describes the scrutiny to which the papers included in these two volumes were subjected before being accepted for publication.

1.1. Thinking Through the Nexus Between Market Regulation and Politics in Developing Countries.

The purpose of this section is not to advance a general, or indeed a particularly new, theory of the relationship between regulatory and market outcomes and political factors. Instead, the goal is to offer a number of observations about this relationship that are prompted by the contributions to these two volumes. These observations also relate to the lessons that can be legitimately learned from studies of regulatory interest in developing countries and may be of interest to policymakers and government officials and not just to scholars.

The starting point surely in any analysis of the regulation-politics nexus is to be clear about each term's meaning. Regulation is not just taken to be the enactment of the associated law or administrative rules but also its subsequent administration, funding, execution (including potential enforcement action), and potential reform. Thus, the multi-faceted nature of regulation has temporal components, legal elements, and administrative facets. One might not just be interested in the form of regulation but also its effectiveness, which itself can be defined in a number of ways. For instance, a regulator may be seen as effective if its actions attain the objectives laid down in the law governing its creation; if it makes a substantial contribution to accepted developmental objectives such as poverty reduction, the targets embodied in the Millennium Development Goals, and reductions in waste (or improvements in

---

1 See Evenett (2006) for a fuller discussion of the merits of competition agencies, especially nascent agencies, engaging in competition advocacy and an evaluation of the claims made by certain others in this regard.

the efficiency) in the allocation of resources; if the regulator's actions meets either the government's needs or the goals of influential elements of societal opinion; if the regulator's actions compare well with the record of other regulators in the same jurisdiction or with the same regulators in peer nations; or if the regulator's actions sustain support for the current regulatory structures or for its enhancement. These considerations imply that effectiveness is not just a matter of *what* (that is, of metrics including potentially efficiency-based metrics) but effectiveness as seen by *whom*. Moreover, the numerous potential metrics may well account for different perspectives taken on the performance of any one indicator and it is perfectly legitimate to discuss which metrics are most appropriate for a given regulator.

With respect to "politics" our interest here is typically in the factors that ultimately influence the decisions taken (potentially collectively) by senior officials (appointed, elected, or otherwise) concerning the various facets of regulation. The emphasis on factors reflects the potential endogeneity of official decision-making, each official potentially being influenced by the actions of non-officials and by the motives and actions of other officials. The endogeneity of official decision-making opens up the possibility that others may seek to attain in the political arena what they could not accomplish easily (or at low cost) through the market system. Or, that some resort to the political arena to prevent their coveted market position being eroded. The latter two considerations speak to the interests of non-officials, however, governmental decision-makers have ends of their own that could include discouraging discontent (which might be triggered by rising prices for essential commodities, for example), re-election, so-called empire building, or even self-enrichment. In which case regulatory form and implementation may be "exchanged" for support and favours to political leaders and related parties. Once it is appreciated that the amount of funds that the private sector has to potentially support official decision-makers is a function of market outcomes (as, for instance, firm support for political parties can be funded out of any supra-normal profits made) then the potential two-way relationship between regulations and the outcomes in the political arena becomes clear. This complicates matters as it suggests that regulatory form and implementation, market outcomes, and political decisions are *jointly determined*. This has an important implication, namely, that emphasising the relationship between any two of these three variables might well omit potentially significant factors, in particular over the longer term when all the knock-on effects between these variables work themselves through. These considerations augur well for studying – and evaluating – regulation in both its appropriate market and political milieu.

The fact that the sustained rents obtained by firms are often capitalised into the value of the firm or some of its underlying assets and the general discrepancy between the costs of collective action and the relatively small benefits that may derive to consumers and other smaller parties (Olson 1965), creates strong pecuniary incentives for rent-creation and rent-preservation and goes a long way to account for the limited opposition to both. In some cases it may, therefore, be possible to envisage self-sustaining outcomes whereby government leaders create and preserve rents for selected corporate interests in return for (directly and indirectly) a share of

those rents or the benefits that follow from what those rents could buy (including, for example, financial support for political parties or other favoured organisations.) The other important elements of this story are the motives of the official decision-makers (including how much they value overall societal welfare compared to the benefits that follow from the various forms of corporate support), the manner in which decision-making is taken in official circles (and therefore the potential form of inter-official rivalry and coalition formation) and the technological factors and preferences that influence the magnitude of rents that can be created in the market place. These factors critically influence the two-way relationship between regulation and politics, at least as conceived in the so-called Economic Theory of Regulation as advanced by Gary Becker and others and employed in this chapter (see Becker 1983 and Peltzman 1995). In what follows, we consider the implication of this perspective for the introduction and implementation of competition law and other market-correcting sectoral regulation in developing countries.

From this point of view, then, the introduction of a competition law that seeks to encourage inter-firm rivalry – and in so doing better align prices and (marginal) costs and ultimately better allocate resources – is an act which has potentially profound political ramifications. Advocating greater competition amounts to arguing that certain interests (that currently enjoy rents in inefficiently operating markets) should have a smaller share of national income and that those official decision-makers who have sought support from these interests should expect favours of smaller magnitude in the future. Seen in these terms it should not be surprising that some potentially significant corporate and official parties will oppose the enactment of competition laws and efficiency-enhancing sectoral regulation. However, the very fact that regulations need to be enforced after enactment provides opponents with another opportunity for emasculating any threats to their rents. Moreover, given that a regulator's budget, senior officials, and even powers tend to be reviewed from time to time this suggests that proponents of efficiency-based competition law and sectoral regulation face a recurring struggle to advance their goals. Worse, some of the implementation-related debates may seem to others (including the media and the general public) to be far more arcane than the grand principles that motivated enactment of the relevant law in the first place; a consideration that opponents of a such law may take advantage of. A challenge, then, for advocates of competition- and efficiency-based principles of state intervention is to devise strategies that sustain, and potentially increase over time, the support for such intervention. Without such support any current "success" of an implementing agency may well be transitory, especially if that success attracts greater corporate and bureaucratic resistance in the future. These considerations imply that a comprehensive assessment of the effectiveness of state regulation requires an inter-temporal perspective and should pay particular attention to the relevant developments in the local political arena.

One factor that makes sustaining broad-based support for promoting competition principles through a cross-sectoral agency difficult is that the beneficiaries of greater inter-firm rivalry are often numerous and, on a transaction-

by-transaction basis, gain little.[2] The case-specific nature of competition law enforcement almost inevitably skews the discussion of any gains away from the aggregate benefits to the specific benefits resulting from action concerning the certain goods and services transactions targeted by the enforcement agency at a point in time. Unlike a tax collection agency, then, competition enforcement agencies are less likely to take action against a class of offenders across a range of sectors. Moreover, the small per capita gain from competition law enforcement also distinguishes it from the enforcement of health and safety laws where the gain per individual could be very sizeable (especially if injuries or death are concerned.) Finally, promoting competition has not yet risen to the status of cherished societal value[3], so enforcers of competition law cannot draw on the same deep well of support that a labour ministry can when implementing laws against the ill-treatment of immigrant workers or child labour, to name just two examples from the industrialised countries. For these reasons advancing competition principles and sustaining support for the enforcement of competition law and other forms of market-corrective sectoral regulation may be an uphill struggle in many jurisdictions.

Another consideration that follows from this perspective is the emptiness of calls for greater "political will" to support market-improving regulation. If the degree of political support for an economic law is contingent on the manner in which official decisions are taken, the potential for rivalry between official decision-makers, and the willingness of others to "pay" for favours, etc., then "political will" is not an exogenous, independent factor that can be conjured up. This perspective takes a pretty dim view of calls for "leadership" and the like and emphasises the need to understand the underlying determinants of political support for efficiency-enhancing regulatory reform. Having said that, it may be the case that some official decision-makers can be persuaded of the merits of promoting competition and this could influence the extent to which they are prepared to sacrifice the implementation of a competition law for some other payoff – in which case there is some advantage in seeking to inform politicians of the consequences of promoting inter-firm rivalry and the failure to do so. However, a convincing explanation would have to be advanced as to why a decision-maker's preferences might evolve in response to new information and how the set of regulatory and market outcomes are affected.

Calls to promote competition are arguments that rest on the contention that some counterfactual outcomes are better than the status quo. Such arguments run into a number of concerns in the political arena. First, many studies of decision-makers (in both the public and private sector) show an inherent bias towards the *status quo* or to an acute aversion to losses. Opponents to promoting competition can emphasise the fears and concerns and adjustments that may follow from the proposed changes, adjustments that could involve job loss, unemployment, and other forms of disruption. Policymakers that particularly value social harmony may,

---

[2] This does not exclude the possibility that aggregating across all of the agency's enforcement decisions that the average gain to each individual or firm is sizeable.

[3] Presumably one payoff from promoting a "competition culture", which many supporters of competition law advocate, is that might translate promoting competition into such a cherished value.

therefore, be disinclined to support such reforms. Second, the counterfactual outcomes sought by proponents of competition principles are based on a conception of how they think markets work, and it should not be assumed that others – including official decision-makers – share the same views as to the operation of markets. This problem may be particularly acute in jurisdictions where market forces have long been suppressed and the factors driving markets treated with suspicion. (Arguably many developing countries, in particular the formerly Communist countries and some industrialised countries, such as France, fall into this category.) In sum, then, it is important to appreciate that the degree of support for pro-competitive regulation is contingent on the views of political decision-makers on how markets work.

Two variants of the last argument are sometimes advanced in developing countries in opposition to promoting competition and market-corrective regulation. It has been contended that such initiatives would jeopardise the process of economic restructuring or, quite distinctly, the attainment of public interest goals, thereby compromising the development prospects of the country in question. With respect to economic restructuring it has been argued that merger review laws, a form of competition law, could prevent the attainment of economies of scale and retard firm "competitiveness." Supporters of merger review laws argue that appropriately-enforced such laws do not target large firms *per se*, rather mergers or acquisitions that will generate market power and harm customers. In principle, those who doubt this defence of merger review laws can either refute the suggestion that enforcement would be appropriate (which points to concerns about implementation) or their conception of how market forces work is different from that of proponents. In passing it is worth noting that the evidence against this particular criticism of merger review laws is growing. It was precisely this sort of concern that led the Government of India to exclude merger review from the reform of its competition law in the early 1990s, which took place when liberalisation and opening of the Indian economy were expected to accelerate corporate restructuring. A recent article in *The Economist* magazine quotes Rajan Tata, the Chief Executive Officer of the Tata Group, one of India's largest commercial houses, as noting that when India opened up at first many firms felt that they would have to merge (The Economist 2008). However, numerous India firms quickly saw the commercial opportunities in information technology and outsourcing and adjusted their strategies accordingly. Fortunately for India's economy enough of its firms did not seek shelter from competitive pressures through combinations and developed their commercial advantages elsewhere.[4]

Likewise, with respect to public interest goals defenders of market-corrective regulation ask whether compromising such regulation is the most effective means to attain a given public interest goal. If not, they contend, then the market-corrective regulation should be left in place and the most effective form of state intervention

[4] For lengthier treatments of the relationship between competition law and firm competitiveness see Geroski (2005) and Evenett (2007).

implemented.[5] Again, those sceptical of this logic often view the operation of market forces differently and may well conclude that adapting the market-corrective regulation is the best approach. Disagreements over how markets work are probably an important factor in accounting for disagreements over policy recommendations concerning regulatory reform.

It would be wrong to conclude from the above discussion that the argument applies only to the enforcement functions of competition and regulatory agencies. The so-called advocacy functions of such agencies also pose a potential threat to any cosy arrangements that policymakers may have with some corporate interests. Proposals to give a state body powers that enable it to publicly articulate the costs and benefits of different government regulations are unlikely to find favour with those seeking to preserve rents. Moreover, to the extent that the exercise of advocacy functions results in proposals to dilute or redistribute regulatory and other state powers then the likelihood that some government bureaucratic interests will oppose such advocacy cannot be ruled out either. A potent array of interests may then be arrayed against proposals to grant or strengthen the advocacy functions of regulatory agencies.

Competition law and efficiency-promoting regulation are particularly likely to face opposition when there are very close ties between the owners of entrenched incumbent firms, political leaders, and the bureaucratic elite. Nowhere is this more likely than in countries with small populations and highly unequal distributions of wealth. Here a small number of extended families tend to be well represented in corporate, political, and bureaucratic circles, effectively strongly discouraging members of these circles from promoting entry and other measures that may threaten profits and rents. A milder version of this argument envisages competition being promoted only in those sectors and activities where rent generation possibilities are limited. In which case economic bottlenecks – such as ports, airports, and access to network industries – are likely to remain immune from competitive forces.

The Economic Theory of Regulation, then, provides a number of reasons why what makes sense from an economic point of view (promoting competition and market-corrective regulation) might not win favour with policymakers in developing (and for that matter, industrialised) countries. Does this represent a triumph of politics over economics? If political forces acted independently of underlying economic conditions, then maybe. However, it is the very market-based rents created by the certain state interventions that motivate political and bureaucratic behaviour. The moral is surely that economic (that is, technological and preference-related) factors and political factors jointly determine the form and effects of regulations implemented in an economy. Yet the same logic points to a number of factors which may limit the triumph of vested interests over the common weal and these are described in the paragraphs that follow.

5 Notice that the proponents of market-corrective regulation do not demote or call in question the public interest goals. Rather they contest whether efficiency-enhancing tools should be sacrificed or unduly amended to attain those goals.

The joint determination of regulatory and market outcomes arises in part because policymakers are prepared to sacrifice some of the gains from mutual exchange to create or sustain rents for corporate interests some of which, one way or the other, finds it ways back to policymakers. How much policymakers do so depends in part on their needs for financial and other support from the private sector and the existence of alternative sources of funds available to state decision-makers. This suggests that there may well be jurisdictions where the electoral system in such that politicians need less support from the private sector, in which case the incidence of market-distortive state intervention will tend to be less. The frequency of elections, whether parties or individuals are responsible for funding candidates' election campaigns, the degree of state funding of political parties, and level of compensation of elected or appointed officials may have effects on the regulatory and market outcomes observed in an economy. In turn, these considerations should inform assessments of whether measures to promote efficient market outcomes can realistically be expected to go further in a given jurisdiction. Alternatively put, the appropriate benchmark for the regulatory structure in a given jurisdiction is almost certainly not zero market-distortive regulation. Furthermore, reforms to national electoral systems and the manner in which officials are compensated that reduce political needs for support from the private sector may trigger deregulation.

A related countervailing tendency is that politicians may find that they either need not or cannot create and appropriate many rents in each economic sector. In which case, the implicit bargain struck between corporate interests and politicians to avoid efficiency-promoting regulation may be confined to a limited number of sectors and, therefore, there may be little or no serious opposition to the implementation of competition laws and the like so long as they *de jure* or *de facto* exempt the sectors where substantial rent generation is possible. Alternatively, those corporate practices that generate substantial rents may be exempt from the competition law and from sectoral regulation (an example being vertical agreements between firms that create supra-normal profits in distribution chains.) The interaction between economic and political forces manifests itself here not in terms of outright opposition to certain market-correcting regulations but in the pattern of practices and sectors exempted from such regulation and associated legislation.

A third countervailing factor is that the operation of other organised groups in society may influence the calculations of official decision-makers. Even in jurisdictions where fully-fledged democracy is not practiced, governments may still be concerned about unrest and protest and so take into account any manifestation of discontent, whether organised or not. Two non-corporate groups, the media and organised civil society (including consumer organisations), can play important roles in this regard. It is worth bearing in mind that in countries where market forces have tended to have a bad name, profiteering firm owners aren't that popular either. The media and civil society can do much to raise the (political) price paid by a politician or bureaucrat of colluding with a particular corporate interest, and thereby limit the extent of rent-creating regulation. Having said that, savvy politicians may use the unpopularity of a corporate interest group to increase the share of rents that they extract from the latter.

Another consideration to bear in mind is that the politically-optimal structure of regulation will not be set in stone. The Economic Theory of Regulation expounded here implies that as the underlying parameters of the economy, political, and bureaucratic systems shift over time then this will create opportunities for regulatory reform and for possible retrogression (the imposition of more rent-creating regulation.) Changes in technologies, in the willingness to pay for goods and services, national electoral systems, the incentives for appointed officials (bureaucrats), and the set of available regulatory instruments can alter the politically-optimal structure of regulation. In some cases the so-called convergence of technologies across sectors (as is said to be happening in data transmission-related sectors such as telecommunications, broadcasting, cable television, etc.) can increase the number of modes of supply, creating additional competition between suppliers and this typically erodes rents. In turn, this reduces the funds incumbent firms have to induce policymakers to favour them and the latter respond by reducing the supply of market-distortive regulation. Demonstration effects from sharp technological and other changes may provide guidance as to the likelihood of regulatory reform or retrogression in a given sector.

In sum, the purpose of this discussion in this section has been to describe and motivate the principal policy-relevant question addressed in this book: namely, to better understand the nexus between regulation (and by implication deregulation), politics, and markets in developing countries. The approach taken here draws upon the long-established Economic Theory of Regulation and emphasises the joint determination of market and regulatory outcomes which, in turn, influences developmentally-sensitive indicators such as the price of and access to "essential" commodities and the pace of economic progress. In democracies and elsewhere it should be recognised that there are likely to be limits to the extent to which market failures are likely to be corrected through regulation, in particular when those failures generate rents for incumbent firms. This should be borne in mind when assessing both countries and sectoral case studies as the "perfect" may not be attainable, in which case the appropriate benchmark may be the "very good", however, that is defined. It was also argued that the pattern of observed regulation is not fixed over time and that technological change, evolving customer preferences, actions by civil society organisations and the media, and changes to electoral systems and bureaucratic incentives will shape the evolution of politically-optimal regulation over time. Undoubtedly some these factors are potentially influenced by external assistance and expertise others, however, are likely to be deeply entrenched national characteristics.

1.2. An Overview of Contributions to this Volume and the Companion Volume

This volume is being published in conjunction with another. Both contain papers of direct relevance to the research question and matters described earlier. The papers contained in these volumes were part of the same research project and were presented at an international symposium in Delhi, India, during March 2007, organised by CUTS. Prior to the publication each paper was revised to take account of comments made at the symposium and received from external experts.

Considerations of size required that two volumes rather than one were eventually published.

The papers in this research initiative can be divided into four groups. The first group specifically considers the political economy of the implementation and enforcement of competition laws. Everest-Phillips examines the role of competition law as it challenges vested interests that typically retard the growth process. The inherently political nature of competition law is stressed as well as its relationship to societal governance. Zoghbi takes a different tack by seeking to identify the priorities of competition agencies in developing countries. A number of best practices are identified which, she claims, are of general relevance. The special circumstances facing competition enforcement agencies in smaller jurisdictions are discussed by Briguglio and Buttigieg and they draw upon the experience of Malta. Nicholson, Sokol, and Stiegert provide an econometric-based assessment of the factors likely to generate more successful technical assistance projects in competition law and policy during the years 1996 to 2003. The effectiveness of competition law, as perceived by businesspeople and in terms of its consequences for foreign direct investment, is assessed by Dalkir.

The second group of papers considers regulation and its implementation. Andres, Guasch, and Straub examine whether measures of regulatory governance influence the performance of affected sectors in a dataset compiled from Latin American infrastructure sectors. They also examine whether the ownership of firms – and changes in such ownership – influence performance and confirms that they do. Oliveria, Machado, and Novaes develop an indicator of the independence of a competition agency and examine whether it correlates with levels of development, finding that it does not. In different ways these papers shed light on the impact of regulatory characteristics on societal measures of interest, while trying to appropriately control for other relevant factors.

The (often uneasy) relationship between competition enforcement agencies and regulators is the theme of the third group of papers. Sampson and Sampson examine whether the policy advice concerning how to best manage this relationship that was motivated by Anglo Saxon experience is applicable to Caribbean nations and argues that it is wanting in some important respects. In this volume Shitote pursues a similar line of inquiry with respect to Kenya's regulatory regime. Karakurt and Sahbaz review Turkish experience of such matters and make three recommendations to promote effective collaboration between sectoral regulators and national competition agencies.

The fourth set of papers comprises a set of sector-specific and other case studies and they are described here in alphabetical order in the country concerned. Arun and Reaz describe the regulatory structure and corporate governance practices in the banking sector of Bangladesh and emphasises the importance of a number of political economy factors and advances policy recommendations. Defloor and Naert compare measures of the independence of the regulators operating in the Belgian economy. Sampson analyses the post-privatisation experience of the Jamaican telecommunications sector and highlights numerous deficiencies in the prevailing

regulatory framework. The relationship between independence, autonomy, and accountability and their manifestation in India's Competition Act of 2002 is discussed by Chakravarthy. The relative impact of ownership types and aspects of the extant regulatory regime in the Indian banking sector is examined by Datar. Kodwani elucidates the regulatory challenges facing the electricity sector in India in a chapter in the companion volume. Swain examines the merits of introducing competition in India's electricity sector and concludes that developmental considerations should privilege the affordability of and accessibility to electricity over other objectives. Finally, these volumes contain an account of the various practical hurdles, some of which are governance related, preventing the effective implementation of competition law and sectoral regulation in Zambia.

References

Becker, Gary (1983), "A theory of competition among pressure groups for Political Influence", *Quarterly Journal of Economics*, 98(3): 371-400.

Evenett, Simon. J. (2006), "Competition Advocacy: Time for a Rethink?", *Northwestern Journal of International Law and Business.*

Evenett, Simon. J. (2007), "Does the Return of Industrial Policy Pose a Threat to Competition Law?", in: Vinod Dhall (ed.), *Competition Law Today*, New Delhi, Oxford University Press.

Gerber, David. (2001), "Law and Competition in Twentieth-Century Europe", Oxford University Press.

Geroski, Paul A (2005), "Competition Policy and National Champions," Speech given to Australian Institute of Economic Research, Vienna, 8th March.

Nikomborirak, Deunden (2005), "Thailand, Chapter 8 in: Simon J. Evenett and Douglas Brooks (eds.)," *Competition Policy and Development in Asia*, Palgrave Macmillan.

Mehta, Pradeep S (2006) (ed.), "Competition Regimes in the World: A Civil Society Report", Jaipur, India.

OECD and World Bank (1999), "Organisation of Economic Co-Operation and Development and World Bank" A Framework for the Design and implementation of Competition Law and Policy, OECD, Paris.

Olson, Mancur (1965), "The Logic of Collective Action: Public Goods and the Theory of Groups", Harvard University Press.

Petzman, Sam (1995), "The Economic Theory of Regulation after a Decade of Regulation", Brooking Papers on Economic Activity: Microeconomics, 1-59.

The Economist (2008), "The Challenger- Emerging Market multinationals", 12th January.

2

Reforming and Privatising the Telecommunications Sector in Jamaica: *Experiences of a Small Developing Country*

CEZLEY SAMPSON AND FAYE SAMPSON

Introduction

This paper provides an overview of telecommunications privatisation and liberalisation in Jamaica. A great deal of research, for example Noll (2000) and Wallenius and Stern (1994) have found that the introduction of competition in the telecommunications sector, not only leads to improved performance over monopoly provision of services, but also results in lower prices, wider choice of services, wider access and faster expansion in capacity. The findings from the Jamaican telecommunications liberalisation experience are consistent with these earlier studies.

Telecommunications Corporation of Jamaica Limited (TOJ) became the first public utility company and the second major state owned enterprise (SOE) to have experienced privatisation in Jamaica when the domestic and international telecommunications businesses were merged in 1987. In fact, a point writers often fail to recognise is that Jamaica and Argentina in 1987 and Chile earlier on were the first developing countries to privatise their telecommunications industry and the Jamaican case took place, four years after the trend setting of the UK experience in 1983. Jamaica has also had a history of private ownership of utilities and public regulation going back to the 1940s. Unlike in the UK Jamaica was not without a culture of utility regulation at the commencement of the privatisation programme in the 1980s.

Between 1972 and 1980 under the populist Peoples National Party (PNP) administration, major economic restrictions were introduced, as part of the macro-economic policy framework of democratic socialism, including severe barriers to international trade and the free movement of capital. During this period, government took a strong interventionist stance in the productive and commercial sectors. Government's policy called for ownership of the 'commanding heights' of the economy. Telecommunications and electricity utility companies which had developed essentially under private ownership were acquired by the state. By 1980 over 400 enterprises were under state control including companies in the hotel industry, food importation, sugar, airlines, cement, commercial banking and petroleum, with major interest also in the bauxite and alumna industries.

The privatisation process started in 1981 (one of the earliest in any developing country) with two small enterprises, those of Seprod Ltd. and Versair Inflight Services Ltd. Privatisation or divestiture as it was then called was never pursued in

earnest as a deliberate policy of the government (the term privatisation did not form part of the nomenclature in the early 1980s). The initial process was slow and in fact in 1986 government owned more productive assets than in 1981 at the commencement of the divestiture programme.

Privatisation in earnest was forced on the government, being a direct result of the IMF stabilisation and the World Bank's structural adjustment loan conditionality. Neither the Jamaica Labour Party (JLP) nor the PNP administration had a policy to include utilities in their privatisation programme. As late as 1986, Prime Minister Seaga announced in his budget that government would not divest ownership of the telecommunications system and that it would always be operated in the public interest. This announcement was made despite the fact that merger discussions were taking place between the publicly-owned Jamaica Telephone Company Limited (JTC) and Jamaica International Telecommunications Company Limited (JAMINTEL), 51 percent owned by the state with the rest owned by Cable & Wireless of the UK[6].

The PNP administration which later sold the remaining 40 percent of the TOJ shares to C&W (without offering any of these shares to the Jamaican public), itself had been very critical in 1987 of the first sale of TOJ shares declaring the transaction was a sale of the 'Jamaican patrimony' and that the policy would be reversed on the re-election of a PNP government.

The prevailing view prior to nationalisation was that firms operating in utility industries, such as telephone and electricity were natural monopolies and public regulation should provide for only one industry service operator (Parades 2003, p. 4).With the shift to democratic socialism the view was that they are best owned and operated by the state in the public interest. The view was that under state ownership there was in fact no need for separate regulatory bodies for these utilities.

Neither administration understood or came to terms with the complex issues surrounding the privatisation of an infrastructure utility, nor the rapid technological changes that were taking place within the telecommunications sector. The privatisation was treated in such a way that no serious consideration was given to the problem of regulating the new vertically integrated TOJ as a monopoly, or alternatively providing for competition in an industry that was rapidly losing its natural monopoly characteristics.

The JLP was led into privatisation of telecommunications because the increased demand could not be met by local finance and although privatisation had commenced in 1987, 12 years later the government had failed to introduce effective mechanisms for independent regulation of what was in effect a legally created 49 year franchised monopoly. The necessary regulatory changes did not come about until 2000 when a Telecommunications Bill was enacted. Although the Office of

---

[6] Cable and wireless owned the remaining 49 percent share of JAMINTEL. Government had acquired the majority interest in international telecommunications after independence in 19602, when the JAMINTEL joint venture was established. JTC was 95 percent owned by government with 5 percent owned by a number of small shareholders who refused to sell their shares to government upon nationalization in 1975.

Utility Regulation (OUR) was established in 1997 its role up to 2000 when the OUR Act was amended was purely advisory.

Industry Restructuring and Privatisation

Under the industry restructuring agreement the two shareholders, Cable and Wireless (C&W) and the Government of Jamaica (GOJ) undertook to pool their shares in the two operating companies (JAMINTEL and JTC) to create a new Company, Telecommunications Corporation of Jamaica Ltd, later renamed C&W Jamaica Ltd. The independent shareholders of JTC were also permitted to receive shares in the new company. A new regulatory mechanism was devised and formally incorporated in amended licenses, stipulating how the government was to set prices. Divestiture of some of the government's shares in the new company was also agreed (Spiller and Sampson 1996, p.58). As part of the reform package government committed itself to the introduction of a new telecommunications bill to recognise the new technologies and certain pledges which were made to C&W[7].

On the commencement of restructuring in May 1987 the shareholding was: GOJ 82.7 percent, C&W 9.4 percent and the public 7.9 percent; GOJ's holding was further reduced in October. Finally, in September 1988, GOJ offered 126,500 ordinary TOJ shares, approximately 13.1 percent of the issued capital of the company, to the public and retained 40 percent of the equity with C&W owning 39.6 percent.

The terms of the offer were as follows (National Investment Bank of Jamaica 1992, p.5):

- 126,500,000 out of the 965,683,648 issued ordinary shares were offered to the public. Each share had a par value of US$1 and a book value of US$1.19 share was offered to the public at 88 cents, a discount of 12 cents.
- 21,100,000 shares, approximately 2 percent of the issued share capital were reserved for employees under an Employee Share Option Plan (ESOP).
- 51,000 residential customers of JTC were accorded priority to acquire up to 1,750 shares per residential account, approximately 105,400,000 ordinary shares.
- Pursuant to the shareholders' agreement, application for the listing of TOJ's shares on the Jamaica Stock Exchange was to be made prior to the commencement of any public offer.
- Intrinsic to the offer was the underwriting of the shares; the underwriters agreed to take up half of the share offer.

The underwriting of the shares was arranged and coordinated by a local bank supported by fourteen (14) other Jamaican financial institutions. With respect to the ESOP, 21,100,000 shares were reserved for full-time (eligible) permanent employees of the TOJ group. The government and the company launched a major publicity

[7] There is said to be a side letter which provides for all of Jamaica's telecommunications services to be operated and owned by TOJ. This has been disputed and the position is that only basic telephone services have been granted monopoly status.

drive to secure wide employee participation in the offer. This in effect brought an end to the JLP phase of the privatisation process.

In July, 1989, the new PNP administration which had only a few months earlier come into power and which had promised in 1987 to reverse the privatisation did a volte-face and reduced GOJ's percentage shareholding to 20 percent. This sale provided for C&W to increase its shareholding to 59 percent of TOJ' stocks. Finally in May 1990, the PNP government sold its remaining shares to C&W resulting in C&W owning 79 percent, employees 2 percent and the public 19.0 percent of the shares in the privatised TOJ.

Arguably therefore, both JLP and PNP administrations more or less were dragged into privatisation of the telecommunications industry; there was no intention at the outset to transfer controlling interest to a foreign investor. Prime Minister Seaga never succumbed to laissez–faire, neo-liberal market economy which was being espoused by Milton Friedman and the Washington Consensus. Seaga believed in development economics. He was a nationalist and did not see a minimalist role of the state; rather he felt capitalism should be directed. However, he like Manley later was forced to accept the World Bank and the IMF structural adjustment programmes, which later disseminated the manufacturing and social sectors of Jamaican economy. Interestingly it was the socialist Manley, rather than the pro-market Seaga which gave majority control of the telecommunications industry to a foreign operator; and the market reforms which Seaga paid lip service to in the 1980s were to receive strong support from the 1990 converted capitalist Manley.

Institutional Endowment

In the period up to 2000, as in most developing countries the main customers of domestic telephone services were the middle and upper classes and the business community, the swing voters in Jamaican elections. This made telephone pricing and services an important political issue. Keeping local telephone prices low and expanding access to meet the needs of the growing middle class was the key issue for the political parties which tended to keep telephone policy stable up to 1998, despite changes in administration or ideology. Meeting middle class demands to expand the services and at the same time keeping prices low required an institutional governance structure that provided strong incentive to induce investments in a highly specific and non-transferable asset.

A regulatory governance structure based on legislation as is the case with the US, suffers inherent weakness in meeting this requirement. It will not be seen by foreign investors to be sufficient to put a curb on administrative discretion and political opportunism, since the party in power can unilaterally change the law. Regulation based solely on legislation tends to be unstable and alternative institutions have been needed to provide the stability required for credible regulation that honours regulatory commitment.

In the US, the regulatory commitment or contract is sustained by the separation of the judiciary from the legislature and the executive branches of government, by

the constitution, and by a well developed body of administrative procedures that specify how regulatory agencies must behave, reach decisions, and may be challenged. The independence of the judiciary is therefore critical in restricting the discretion of the regulatory agency or the executive. Where these established procedures are absent, or where administrative law does not adequately restrain discretion, then very specific regulatory legislation are required. If the country lacks a well established tradition of administrative procedures and administrative jurisprudence as was the case with Jamaica and for most Commonwealth developing countries, then it will be necessary to restrain political and regulatory opportunism by specific contract provisions specifying the rights of the utility provider.

Both the Jamaican and British cases demonstrate why countries opt for a regulatory framework of both legislation and license (Newbery 2000). In both cases the regulatory framework was vulnerable to opportunism. Parliament is sovereign and can overrule previous legislation with simple majority making legislative commitment relatively weak. In the Jamaican case where there is a written constitution; there is the added protection that a two-third majority of parliament is needed for matters with constitutional implications.

The courts in both countries are independent and will uphold contracts; the result then is that the main body of regulation is normally included in the licence. Licenses are legally enforceable contracts that will be upheld in courts by an independent judiciary and cannot ordinarily be unilaterally changed. Because utilities have durable, immovable and valuable assets, heavy sunk costs, investors require a durable and stable regulatory contract which both government and regulator are committed to uphold.

This is the essence of the regulatory commitment problem, institutional endowment is therefore of critical importance when it comes to creating a new set of institutions to regulate infrastructure industries, upon privatisation. The modern theory of regulation has come to emphasise informational commitment and transactional costs considerations. Most developing countries in Eastern Europe and in Africa are far less endowed with the key institutions and therefore face serious regulatory commitment problems.

Utilities in Jamaica unlike the UK have not been privatised with the passage of an up to date primary legislation specifying the general framework for regulation and with the requirement that the utilities supplying the services specified must obtain a licence. The reason for this is that in Jamaica the enterprises historically were limited liability companies and all the government was required to do was to sell the shares in the companies in order to carry out the transfer from the public sector to the private sector. There was no need to obtain parliamentary approval to effect the privatisation of a particular enterprise. Jamaica therefore did not go through the stage of corporatisation, as was the case with Britain, New Zealand and Australia.

The intention however, was that for water, telecommunications and electricity an enabling legislation would have been enacted to replace the existing industry acts, which in the case of electricity and telephone went back to the 1890s. The first of

the industry acts did not come on stream until 2000 when the Telecommunications Act was passed.

Telephone politics in Jamaica has tended to be played out in the shadow of the various licence negotiations. Major turning points in both telephone and electricity regulations have followed the timing of the licence changes. Both parties (The JLP and PNP) have dominated the political agenda since the 1940s, alternating power every decade (two electoral cycle or two terms), except since 1989 when the PNP has been able to win four consecutive elections. Patronage and fund raising arrangements give the parties a strong hold on their constituencies and therefore Jamaica's political structure provides substantial discretion to the party in power however, the governments have been and are constrained by the upholding of property and contract rights by the courts.

Evidence of the role of the judiciary in constraining administrative decisions is provided below. As briefly mentioned above, the judiciary played a minor role in the first 30 years of independence, except during 1970s where its adherence to property rights partially contributed to restraining the PNP government from outright expropriation of land and industrial enterprises. The judiciary, however, did not completely restrain the government in its regulation of the private utilities and the populism of both the JLP and the PNP at that time translated into very activist regulatory agencies which the judiciary could not reasonably have been expected to effectively restrain.

Notwithstanding however, the courts seemed to have been able to restrain outright 'impropriety" in dealing with the issues. For example: JTC's 1945 license stipulated that the company's rates should provide a return of 8 percent over rate capital. Deficit earnings below that level could be accumulated, and should be counted towards earnings in the next rate review by the Rate Board (then the regulatory agency and was three man panel appointed by the Governor in Council). The license also stipulated that both the company and the rate payers had the right to appeal the Rate Board's decisions to the Supreme Court. In 1956, the Rate Board disallowed JTC's claim to increase rates to compensate for past deficiencies. JTC, appealed to the Supreme Court and in December 1956, the court determined that JTC was entitled to recover those amounts. This was the last time up to 2000 that the Jamaican Supreme Court actually restrained the administration in its relation with a public utilities company.

The judiciary could also be expected to constrain the government on constitutional decisions, and in respect of specific contractual commitments with private parties. In the case of the regulated utilities, the regulatory framework was based on the enabling laws (that is the 1893 Telephone Act, the 1973 Radio and Telegraph Law, the 1891 Electricity Act, etc.); the particular license, and the 1966, the Public Utility Commission Act. Only the license could have been seen as a contract between the government and the firm, the terms of which could form the basis of an appeal to the courts. In principle, the telephone companies (both international and local) could appeal administrative decisions to the judiciary (separate from its right to judicial review). It should be noted that JTC only appealed to the courts following

an amendment to the license that stipulated a minimum rate of return, which supports the view that the courts effectiveness in restraining legislation-based administrative decisions may be quite different from their effectiveness in upholding license stipulations, further suggesting the incompleteness of legislation.

Conditions of the Privatisation

Notably, the reversal of the PNP administration policy with respect to telecommunications privatisation which had called for state ownership (ownership of the 'commanding heights' of the economy) was a direct result of the IMF conditionality constraints on the public sector borrowing and the need of the government to increase its foreign exchange resources to meet the IMF net foreign exchange targets in May of 1990. The IMF structural adjustment policies which called for drastic reduction on public expenditure, as well as serious cut back on foreign indebtedness had come to seriously restrict any room the government had to manoeuvre. The PNP administration had also failed to restructure the licence conditions upon transferring majority control from the domestic owners (government and the local private sector) to a foreign owned company. This is a classic example of a multi-national company being able to use its powerful bargaining power to extract monopoly rent from a weak developing country.

The new set of licenses granted in 1988, marked a regulatory turning point for Jamaica[8]. The four exclusive licenses under the 1973 Radio and Telegraph Control Act and the licence under the 1893 Telephone Act committed the government to maintaining the profitability of the company at their levels before the 1988 agreement, thus ensuring operating returns sufficient to cover cost of capital. Whilst the exclusivity went well beyond 'conventional' exclusivity agreements at the time it was arguably the only option available to the government to secure commitments to high levels of investments in the sector. While TOJ could not increase its real price, it could rebalance its prices, giving the company an incentive to increase price on the relatively inelastic domestic demand sector. A gentleman's agreement was arrived at providing for the freezing of domestic prices for at least five years; and domestic services came to be heavily subsidised by international services. Prices on domestic calls remained frozen for over 10 years.

The licence in essence cemented the cost-plus rate of return tariff mechanism. The rate of return was also based on shareholders' equity rather than the traditional US rate-base mechanism. Each licence was granted for a period of 25 years with an option to renew for a further 24 years.

The five licenses were:

- The All-island Telephone Licence

[8] The sets of licence were the All Island Telephone Licence under the 1893 Telephone Act; the Wireless Telephony Special Licence, the Telex and Teleprinter Special licence, the Telegraph Services Special Licence and the External Telecommunications Services Special Licence under the Radio and Telegraph Control Act.

- The Wireless Telephony Special Licence,
- The Telex and Teleprinter Special Licence,
- The Telegraph Services Special Licence; and,
- The External Telecommunications Services Special Licence.

The non-exclusive service was defined as all forms of telecommunications services, not falling within the above (exclusive services) and not exempt under the Radio and Redifusion Act. The licence granted to C&W for cellular services was treated by the ministry as non-exclusive, however, since TOJ refused to interconnect third parties to their transmission system the cellular licence was de-facto exclusive.

The 1988 license and agreement did not recognise any independent regulatory agency. A simple mechanism for price adjustment and dispute resolution was provided. Government had a short time to respond to a request for a rate increase and if the two partners could not agree the requirement was for the dispute to go to arbitration. There was no provision for formal public hearings; however, it was possible to appeal license violation to the Supreme Court.

As the Special Adviser to Deputy Prime Minister Patterson, the author disputed the exclusivity right claimed by TOJ to 'all forms of telecommunication in, from and through' Jamaica. The legal opinion was that the five licenses gave TOJ the exclusive right for 25 years to operate only the fixed line services in the domestic market through paired wire network and the exclusivity did not apply to domestic wireless services, as the 1893 Telephone Act only recognised the technology of paired wire services. However, TOJ's position was that the five licenses conferred exclusivity to provide all forms of telecommunications in, from and through Jamaica, except radio and television broadcasting and cable television. This in effect would have given exclusivity to all forms of telecommunications traffic in, out and through Jamaica and locked out competition in telecommunications services for another 49 years.

The 1893 Telephone Act also was not only silent with respect to customer equipment and international services; it never anticipated the new technologies of fibre optic transmission, cellar service and digital data transmission. Additionally, it gave the minister authority to establish domestic monopoly only over paired wired services. TOJ, however, had first right of refusal to most domestic and international services, and this in effect at the time gave the company virtual monopoly over all telecommunications in Jamaica, excluding cable, radio and television broadcasting. The Radio and Telegraphic Control Act expressly precluded the company from owning and operating radio and television broadcasting services.

The Sale Transaction

Pursuant to the shareholders' agreement, application for the listing of TOJ's shares on the Jamaica Stock Exchange was to be made prior to the commencement of any public offer; intrinsic to such an offer was the underwriting of the shares. Underwriting of the shares undoubtedly guaranteed the success of the entire share offer. Strong public criticism developed over the low price of the shares to C&W in

1989, the closed nature of the offerings to C&W and the failure to provide for competition in the market, including access to connect to the transmission network by third parties.

In granting monopoly status for most of the services, it was claimed government took no account of the monopoly value of the shares above the par value of J$1 to C&W. The comment from the press was that the shares to C&W were significantly under-priced and involved a redistribution of income, with no justification for this action. Whilst accepting the initial restructuring, general surprise was shown at the subsequent sale and absolute astonishment at the final transaction in respect of the remaining 20 percent equity. Public concern over the inadequacies of the telecommunications divestment intensified in the 1990s.

Public concerns were raised by Girvan, Dunn, Duncan, Ritch and Gooden of JAMPRO between 1991 and 1994 (Parades and Desmond 2003). The major criticisms were against government's announcement to introduce new legislation which would have: cemented the monopoly status in law for all forms of telecommunications for 49 years, the cost-plus pricing formula, the lack of incentives to the TOJ to be operationally efficient, the lack of transparency in the rate-setting procedure, the absence of independent regulatory oversight, the failure of government to allow competition for wireless services, the failure of TOJ to pay for the radio spectrum, and the writing-off of stamp duty tax to a company 80 percent foreign owned.

On the positive side, the domestic rate in real terms (1996) was less than what it was in 1966. The company had digitalised the entire network making the telecommunications system one of the most modern in the world. Annual expansion of new lines increased from 5000 up to 1990 to 50,000 per year after 1992, and in addition, a cellular service, albeit with obsolete technology was introduced by TOJ in 1994. It should however be pointed out that C&W did not bring any significant levels of new equity capital to the table. The monopoly on the international traffic allowed the company to maintain international service charges, earning well over US$100mn per year up to the mid-1990s.

Government Failure

The Ministry of Finance for its part handled most of the transactions for the sale of TOJ shares. The entire TOJ privatisation demonstrates lack of planning, lack of establishing clear objectives, lack of transparency and a failure to balance the long-term and wider interest of the society with that of the producers and short-term gains. Connected relationships are a major problem in small societies. There is no doubt that C&W used its powerful negotiating strengths to extort rent from successive administrations that had failed to understand the development complexities of telecommunications, and the increasing role telecommunications was to play in global communications and international trade. This is one of the major dilemma small developing countries faces when taking the privatisation path, especially for major utilities.

The 1988 licence under which TOJ initially operated, specifically named the portfolio minister as the regulator and TOJ insisted on this being the practice. The

Office of Utility Regulation which came into operation in 1997 following the passage of the OUR Act in 1995, as a mere advisor to the Minister had very limited regulatory decision making powers. Efforts by OUR to obtain information from the TOJ were always difficult and fraught with conflicts, as the company would question the legitimacy of any such request.

The 1987 agreement had provided for new legislation to be introduced within two years to recognise the monopoly structure, the emerging technologies and for new licenses to be issued in line with the new legislation. In 1991, a new telecommunications act and licence were drafted and presented by the portfolio ministry. This was despite concern that the draft which was introduced carried major inputs from TOJ and that it would have unduly cemented TOJ's interest. Internal pressures prevented this draft from being tabled in Parliament.

In 1996, Prime Minister Patterson directed the development of a new telecommunications policy to be carried out so as the set the new directions for the industry. The author was contracted by the IADB to develop the new policy and this was carried out after intensive consultation with TOJ and C&W. In principle the policy recommendations built on the commitments given earlier in the WTO framework agreement and recommitted government to pursue liberalisation of the industry (Sampson 1996). On regaining the confidence of the electorate in the 1998 elections, Patterson appointed a reform minded minister to take over the telecommunications portfolio. It was not until then that sustainable efforts were actually made to de-monopolise the sector. In 1998, the new minister updated the telecommunication policy document, affirming government's commitment to undertaking market, legal and institutional reforms. Up to then TOJ had resisted all attempts by government to issue competitive mobile licenses.

September of 1998 marked another critical juncture in the reform process (Brown 2003). C&W finally came to an agreement with government ending the company's exclusivity. This made Jamaica the first English–speaking Caribbean country and one of the first developing countries to embark on a path of full liberalisation of the telecommunications market. In this agreement, C&W undertook in 1999 to surrender its five licenses granted under the 1987 agreement and its rights of exclusivity for all forms of telecommunications to, from and through Jamaica, in consideration for GOJ adopting new legislation reflecting an understanding reached in a Draft Instrument previously approved by TOJ. Government on its part agreed to surrender its sovereign rights to set new policies for the telecommunications sector over a transitional period. Both parties agreed to the withdrawal of all litigation and claims relating to the 25-year exclusivity dispute.

The agreement also provided for the OUR to be the regulator of all telecommunications services and C&WJ'S operation, and the replacement of the cost plus rate of return economic regulatory method by the incentive price cap regulatory method. The original OUR legislation had provided for the regulator to monitor 'approved industries' which would include water, electricity and telecommunication. The intention was that separate sector legislation would have been introduced for water, electricity and telecommunications providing for a multi-

sector regulator to regulate these utilities. The first of these Acts did not come about until the Telecommunications Act was passed in 2000; and the electricity and water industries were made approved industries by an amendment to the OUR Act in 2000.

There were still causes for concern with some of the changes which were introduced in 1999 agreement:

- The Act reserved the power to the sector minister to issue instructions of a general nature to the OUR. This provides an opportunity for political intervention into regulatory affairs and has already resulted in tensions between the portfolio ministry and the regulator, which has resulted in a number of court actions by Digicel against the OUR and the OUR against the Minister;
- The Minister is reserved the power to determine the types of and number of licenses. Again further opportunity for political intervention;
- The legal rights of the VSAT operators were undermined (the minister had awarded a number of VSAT licences in 1998) as under the agreement the right to bypass the incumbent international gateway during the transitional period was withdrawn;
- The agreement provided for the triggering of a number of compensation claims. If the laws passed by the sovereign Parliament were inconsistent with the Policy Drafting Instrument (PDI) or if the courts or the regulator handed down decisions inconsistent with the PDI then it would have been possible to trigger compensation claims. The Government of Jamaica constitutionally has no control theoretically over Parliament and an independent regulator but agreed (not withstanding that it was for a short period) to bind future administrations and the regulator to the agreement set out in the PDI.

The legislative framework also left certain gaps:

- The Broadcasting Commission's role over cable industry is not clear. For example does it have the power to address mergers of cable television?
- Will the broadcasting Commission remit extend to content regulation over mobile phone;
- There is unclear provision over the role of OUR in interconnection price regulation and this is what gave rise to the series of court cases involving the OUR the minister and Digicel;
- The division of the respective roles between SMA and the OUR over licensing of new operators is not clear. Both SMA and the OUR advise the minister on licensing, although the minister makes the final decision.

The Act however eliminated some of the legal uncertainties and established a much clearer framework for the entry of private telecommunications investors. The agreement provided for liberalisation to take place over a phased period. The results were that a number of new telecommunications service operators entered the market

and this competition led to fixed landline expanding from 416,000 in 1998 to 511,000 by 2001. C&WJ's mobile service also expanded from 92,000 to 411,000.

Regulation of Telecommunication in Jamaica

Jamaica is an interesting case to explore the roles of institutions because in the 60 years since Jamaicans were granted the right to vote there have been several important regulatory institutional changes accompanied by changes in the performance of the sector. Not only has Jamaica experienced different regulatory regimes, it also has experienced different ownership arrangements – from private ownership, to public and to private again. The variety of regulatory institutions and ownership arrangements, coupled with the extraordinary stability of Jamaica's political system, provides then, an opportunity to explore, at least qualitatively, some of the main hypotheses of this paper. Prior to privatisation in 1987 there were four distinct regulatory periods: telephone under colonial rule, pre-1962; the period of negotiation for the 1966 All–Island Licence, 1962-67; the period involving the quasi-expropriation of JTC's assets and short life of the PUC 1968-75 and the nationalisation of JTC and its operation under public ownership 1975-1986. Beginning with privatisation there have been three further distinct regulatory periods: the period of monopoly control by C&W and ministerial regulation, 1987-1996; the introduction of competition mainly through the competition authority, 1994-2000 and the phased liberalisation and operation of an independent regulator which commenced in 2000.

The main hypothesis that is advanced and supported by evidence in this paper is that: given the nature of Jamaica's politics and political system, legislation based regulatory mechanism (for example U.S. regulatory style) constitutes an implicit contract that is too flexible and incomplete to provide the required safeguards for investment and growth. Instead, regulatory mechanism based on specific long term contracts between the government and the companies may, if properly designed, provide such safeguards. These long-term contracts, however, cannot be designed to be fully contingent. As a consequence, they will necessarily contain *ex-ante* rigidities and inefficiencies. All long-term contracts are incomplete agreements, hence changed circumstances may require the need for renegotiation initiated either by the investor or government.

As with the original paper by Spiller and Sampson (1994) and which was further developed by Levy and Spiller (1996), the central problem of regulatory design as it relates to industries characterised by market failure features is that of establishing a credible and effective regulatory institutional framework. The three fundamental dimensions of regulatory commitment are substantive written restraint on the regulator, restraints hindering a unilateral reversal of or amendments of the overall regulatory framework by the executive and the introduction of institutions which seek to safeguard these restraints. A country's specific institutional endowment provides a set of constraints and resources that must be taken into consideration in designing a credible regulatory regime. The regulatory commitment is at the heart of the problem, in that, with the privatisation of once publicly held enterprises credible

regulatory regimes are necessary to secure and sustain private investments, expand and modernise infrastructure industries. The paper builds on North (1990).

The core issue then is to identify features needed by a regulatory framework to support private investment and or private ownership, which are highly capital intensive, have considerable economies of scale and which provide services for household welfare and inputs for industry and commerce. A major problem is that it is difficult to write time-constraint, enforceable contracts for necessary period ahead that can cover all the necessary contingencies. The regulatory contact is an implicit principal–agent contract under which the regulator acts for the principal; customers, the government acts as an agent for the citizens and the management of the utility acts as an agent for the stockholders and investors. The solution is to develop an enforceable regulatory contract which is not vulnerable to post-contractual opportunism and, hence is relatively explicit. In countries with embryonic parliamentary and legal systems especially highly politicised countries with no tradition of enforcing property rights and separation of powers this can be challenging.

The design of regulatory systems therefore involve two distinct levels; the mechanism to constrain regulatory discretion and resolve conflicts that arise in relation to these constraints and the detail rules governing pricing, market entry, interconnection and technical monitoring. In order to limit administrative discretion the basic framework must include substantive restraints on the regulator and executive embedded in the regulatory legal system. Of particular importance is the independence of the judiciary and the nature and structure of the executive and legislative branches. Rules that appear optimal from a developed country point of view may not be feasible in another country. In the absence of institutional endowment required for workable regulation, a country may find it possible to commit to stable rules of the game through certain modalities of privatisation, such as international guarantees against certain non-commercial risks, underwritten by government or provide wide distribution of share ownership which increases the political cost of reneging on commitments. This emphasises the difficulty of transplanting regulatory system from one country to another, especially systems which have worked in developed societies.

The regulatory structure needed for Jamaica in the 1980s and 90s to secure badly needed network growth and modernisation, whilst designed to ensure credibility was inconsistent with economic efficiency: lack of incentives or control to contain costs, a distorted price structure with excessive cross-subsidies and sweeping monopoly privileges. However, it became clear that this regulatory regime which carried a trade-off in favour of growth against efficiency in the face of rapid global technological developments, market dynamism and competitive pressures was not able to survive into the twenty first century. Utility regulation in the pre-1980s which was production and engineering driven has come to emphasise the links with political incentives and institutional realities.

Decentralised constraints on regulatory agencies or ministerial departments are usually not binding in Jamaica as its parliamentary system with two strong and

competitive parties, ensures that the party in power has full control over legislation. As a consequence, regulatory laws, either sector (for example the Electricity Act, the Telephone Act) or agency specific (for example the Jamaica Public Utilities Act) will usually not serve as ex-ante constraints on the administration/regulators. Thus, for example, a ruling by the courts that a particular administrative decision violates the statute can be overturned by appropriate legislation during the same administration. On the other hand, operating licenses are contracts between the government and the company. While the government can change the law, it cannot unilaterally alter the terms of the contract. Furthermore, because of the nature of Jamaica's courts, independent, with long lasting tenure and with final appeal level to the Privy Council in the UK, they can be called upon to determine alleged violations of the contract by either party. To be sure, specific long term contract between the government and firms is not the only feasible way of restraining administrative discretion. Nevertheless, as shown below, they have been the most important instrument used throughout the last 60 years. Thus, in trying to provide an assessment of whether the current regulatory and ownership regime could have been designed better, an understanding of both the reasons for the prominent use of this particular type of legal form and of its consequence is required.

Both administrations and firms have seen the importance of these regulatory instruments and they have been used during different periods with different results[9]. A major result of this analysis is that the nature of those licenses given Jamaica's political structure and politics has been key determinants of the performance of the industry. In particular, it is shown that the sector develops relatively well during the periods of time when the licenses constraint the ability of government to set rates with political consideration in line (before independence and after 1987). On the other hand, the formalistic but substantively unconstrained regulatory structure defined in the 1966 Public Utility Act, under which the 1966 domestic license was granted, set the stage for the large extent of discretion taken by the newly created regulatory commission. Such regulatory flexibility increased the contracting costs between the government and the company, triggering the eventual nationalisation of the domestic company to the government in 1975.

The structural changes of 1987/1990 again brought about another set of major changes in the way Jamaican telecommunications sector have been regulated and organised. Not only were the institutional changes the most drastic since the introduction of the PUC in the mid-1960s, the sector subsequently has experienced an unprecedented vitality. In 1990 there were only 89,753 telephone lines having increased from 85,487 lines in 1973. During the period of state ownership there was virtually no expansion of the service. The main hypothesis advanced is that empirically the performance of the sector responds to a large extent to the resolution of the government/firm contracting problem through the writing of a regulatory

[9] Shareholders' agreements between the private investors and the government have also been used as regulatory safeguards. Cable & Wireless and the government of Jamaica (GOJ) used shareholders' agreements to regulate their relation in JAMINTEL (in 1971), and again concerning the regulation of Telecommunications of Jamaica (TOJ) in 1987. The second shareholders' agreement was eventually written into the licenses given to TOJ to operate both the domestic and international.

contract that was seen as credible and binding. Furthermore, the regulatory contract was designed so as to reduce short run political opposition. It now remains to explore to what extent these regulatory changes could have been improved upon, given the political, contracting and structural constraints.

Creation of TOJ and the Impact of the Reforms

The movement towards the creation of TOJ and the introduction of the 1988 licenses implied large changes in the way the sector operates. The real price of international calls after privatisation started in 1985 ceased to decline, and remained more or less constant up to 1994. The profitability of the companies also had been systematically high but well within the license-prescribed range. The high level of profitability allowed the companies to increase their levels of investments. The increase in the number of main lines was rapid, as well as the increase in the value of the network's fixed assets. Furthermore, the increase in profitability allowed JTC to finance a large part of its investments through long-term debt.

The increase in the size of the network implied substantial welfare gains for consumers. We can decompose the change in welfare as the sum of the changes in consumer surplus, government revenue[10] and firm's profits. Changes in consumer surplus, for each segment - international and domestic - had two sources: first, a change in prices faced by consumers[11], and second, increases in the network[12]. Changes in consumer surplus up to 1987 from network expansion were almost always positive. Estimate made showed that increases in consumer surplus doubled to J$100M for 1988-1990, and in 1991 reached $350M. Until 1987, changes in consumer surplus from network expansion were more or less evenly divided between domestic and international services, but following 1987 the great majority of the gains came from international services. Note that the consumer welfare measure does not take into account several developments, all of which should have provided additional welfare increases. First, the company had been installing fibre optic cables around the island and within all Kingston exchanges. Second, the island had been almost fully converted to digital technology by 1994 and third, C&W introduced cellular telephone in late 1991.

Undoubtedly then, post 1987 has been good for consumers, the firms and the government, in that more consumers gained access to telephone with low domestic prices, government benefited from increased tax revenues and the company from

---

[10] Government's revenue from indirect taxes is estimated. Government revenue from income tax is provided by the companies' annual reports. Government's income from its share of the dividends distributed by JAMINTEL appears as part of the changes in the profitability of the companies.

[11] This effect is simply the Slutzky effect, and can be computed as $-\Delta P * Q$, where ΔP reflect the increase in real price from year to year and Q reflects the previous year's quantity.

[12] Because Jamaicans' access to the telephone network was constrained by the availability of lines, increases in lines represented an upward shift in the demand curve for the network. Consequently, holding constant the quantity of calls, an increase in the number of lines increased total consumer surplus by the area under the two curves. This area can be approximated (assuming a linear demand) by change in the number of lines times the elasticity of the inverse demand for the service times the average revenue per line. We estimated log linear inverse demands for both domestic and international services for the period 1972/1991. The estimated equations, correcting for serial correlation, are as follows:

improved profitability. To what extent this welfare increase could have been replicated without the creation of TOJ and its privatisation is debatable. The history of the publicly owned JTC includes several development programmes that went nowhere, as financing and pricing problems delayed or pre-empted their implementation. On the other hand, the 1987 regulatory change provided the company with a relatively stable regulatory environment that could facilitate the implementation of such a large expansion programme.

In terms of the international network, during the 1970s and 1980s experience suggests that neither C&W nor GOJ found it profitable to or could have extended their exposures in the company. The post 1988 experience was quite different, with TOJ implementing a rapid process of development of the international network. The implication is that the combination of privatisation and regulatory reform provided C&W with incentives and confidence to invest in its Jamaican operation which the company did not have prior to 1987.

An Assessment of the Regulatory Reforms of 1987

It is possible to conjecture whether the regulatory changes of 1987 could have been instrumented better. A number of shortcomings of the regulatory changes of 1988 and of the manner in which the privatisation was undertaken are highlighted and can be classified into three groups: competition, pricing and ownership policies. The regulatory and structural changes of 1987 completely excluded the opportunity for competition, even in the more dynamic segments of the sector; maintained a policy of cross-subsidisation towards the domestic/household segment; generally incorporated an inefficient pricing scheme; emphasis in the privatisation process was on direct sales rather than public offerings providing for ownership concentration in a foreign hands with limited opportunity for domestic ownership. All these features have, on the one hand, significant income redistribution aspects, and may, also have, impaired future evolution of the sector.

A more efficient set of regulatory alternatives could have been selected and implemented in that the 1987 regulatory change could have provided TOJ with monopoly over the basic local network (the local loop then was still a natural monopoly), and provide for competition (competition was certainly possible in the international business) elsewhere. It could also have instituted a flexible pricing scheme with small administrative discretion (for example price caps): and ensure a wider ownership base. This scheme would have, on paper, looked much more efficient given the rapid technological changes taking place in value added service and long distance communications. In principle, these would have provided TOJ incentives to innovate and to reduce its costs, and would have also in principle provided for widespread political support for maintaining the privatisation process. The question however is whether these changes could have been successfully implemented in the early 1990s in Jamaica.

If a decision had been taken not to provide TOJ with a total monopoly over all telecommunications, both domestic and international, the possibilities of cross-subsidisation would not have been possible. There would have been political costs of

introducing competition in value added and long distance communications (including international) at the time. These costs, however, would have depended on the extent of competition allowed. The Jamaican government chose an extreme point on the competition-monopoly spectrum. It opted for expansion rather than efficiency.

Whilst a more narrow monopoly franchise could have been granted, it would have required greater institutional design. In particular, a narrow monopoly franchise, may grant the administration (ex-post) discretion on the definition of the local/monopoly segment. For example, assume that the monopoly is just for the local network; in that case, should fibre-optic cables be considered part of the network?[13] Should large users have been allowed to by-pass the network? Should cable TV have been considered part of the network? While, in principle, providing regulators with flexibility on these and related matters could have motivated the firm to adopt proper pricing and to innovate, administrative discretion could also have been used by the regulators to expropriate the company's quasi-rents.

To counter-balance the extent of administrative discretion, a conflict resolution process, such as arbitration could, in principle, have been developed. Alternatively, the license could have defined precisely the boundary between competitive and monopolistic sectors. Thus, terminal equipment, value added services, cellular, cable TV, and even international communications, could have been clearly unbundled from the TOJ monopoly. A second option could have defined precisely what TOJ monopoly covered and what could have been open for competition. These issues were later to be faced in the privatisation of the electric utility and again the government settled for a tight monopoly.

Although undertaking a more pro-competitive policy would have limited the opportunities for cross-subsidisation and thereby would have had a short run political cost, the fact that the GOJ pursued a total monopoly policy was, to a large extent, a missed opportunity. Reducing the extent of the legal monopoly would also have had fiscal implications, as private investors would have been willing to pay less for the company. Thus, while the society could have benefited from a more rapid technological change and introduction of new products under a more narrow monopoly stipulation it would have paid up-front with a reduction in the revenues collected from the privatisation. Given the rapid and unpredictable technological change that was taking place in certain segments of the industry, such a trade-off would have exposed society to added risks which one could argue was worth taking.

In the case of the introduction of alternative pricing schemes there are several schemes that could be implemented. The one chosen in Jamaica was a rate of return on equity, while this pricing scheme provided the incentives to invest; it did not provide enough incentives to reduce costs. Taylor (2000) states that the regulatory and pricing mechanism instituted in the licence carried beneficial effects. There were

[13] This is not a theoretical question. See the discussion in footnote 65.

improvements in labour productivity as reported earlier, hence improvements in efficiency.

A more flexible pricing scheme, however at the time, may have increased contracting costs. For example, there could have been provisions in the license for a price-cap system with automatic adjustments to prices over a base-price fixed ahead of time. However, the price-cap regulatory framework was not well developed at the time and as shown earlier, Jamaica's political institutions were such that administrative discretion appeared to be incompatible with attracting private investment, undercutting the viability of price cap regulation in the Jamaican institutional setting.

In the case of the divestiture it is clear that at the time of the public offering, GOJ was interested in achieving widespread stock ownership by domestic residents. Yet the sale of GOJ's remaining stock to C&W went against the expressed policy for widespread ownership and public sentiments. These tranches of divestiture were triggered by two important factors: first, as mentioned above, JAMINTEL's experience showed that C&W involvement by itself did not assure strong C&W investments, even when it had almost 50% of the shares. Second, during 1988/1991 period there were strong fiscal and foreign exchange pressures that seemed to have forced the government to sell its shares to a willing and ready buyer. There was always the possibility that conflict with the government could develop, and the ownership structure of TOJ did not provide the company with the extra political capital to counter the administration's side.

On the other hand, a more widespread stock ownership could in principle have served as a safeguard, and made possible a less rigid regulatory scheme than the one provided in the 1987 shareholders' agreement. It should be noted, however, that widespread local ownership is not assured without restrictions on ownership of shares, as domestic residents could easily end up selling their shares overseas, fully eliminating the advantages of widespread ownership as a safeguard[14].

In summary therefore, firstly, because of the need to restrain administrative discretion, it is not at all clear that a very flexible pricing scheme could have been designed so that it would have produced drastically better cost efficiencies. To a large extent, given the nature of Jamaican politics and political structure, the licence provisions of a minimum rate of return seems to be crucial for assuring performance, thus restricting the type of incentive mechanisms that may be able to be used. Furthermore, the discussion above suggests that the range of allowed returns did not seem to be much above C&W's alternative use of funds, and thus this range may not have been excessive.

Secondly, as long as the political will to cross-subsidise domestic communications remained strong, competition in long distance and international communications would have been constrained. This, however, may eventually have translated into a large social cost as the segments that cross-subsidise domestic rates

[14] For example, in early 1967 Jamaicans owned 9.1% of JTC. Shortly after CTC's acquisition of T> shares, the New York Stock Exchange quotation of JTC shares increased, and Jamaicans sold JTC shares to the point that by the end of 1969 5% of the shares were held by local residents.

were among the most technologically dynamic segments of the sector. Furthermore, realignment of rates prior to the privatisation may have substantially damaged public support for the privatisation process.

Thirdly, while GOJ could have tried to sell its stake in TOJ to the public generally rather than to C&W, it is uncertain whether in the long run diffused domestic ownership would have remained, given the openness of Jamaica's capital markets. Thus, the 1987 regulatory change seems to have erred in the preservation of a tight monopoly over all telecommunications segments. Allowing competition in some segments of the market at the time would have required some realignment of rates with a possible short term political backlash. It could have however had long-term benefits in the form of a more dynamic sector and lower prices in a quite elastic segment of the market. This, to a large extent, represents the missed opportunity in the whole regulatory change/privatisation process.

Early Attempts to Introduce Competition – 1993 to 1999

By the 1990s it was possible to facilitate competition in the telecommunications sector under three arrangements:

- Facilities based entry which provided for mobile or fixed linked operators, such as cable television or electricity distribution companies,
- Resale entry, whereby third party entrant pays the incumbent for the right to sell the incumbent services, mixed entry whereby the new entrant leased some facilities (transmission and switches) and provides switches in order to provide services. This latter approach is sometimes described as entry through unbundled network services.

Facilities based competition creates conditions for effective competition, reduces the demand for regulatory intervention and pressures the incumbent to upgrade services. Resale, however, provides the easiest and quickest way to introduce effective competition. It provides for low cost entry, efficient use of scarce resources in existing infrastructure, as well as providing opportunities for small investors to service niche markets without having to put out the outlays for heavy capital investments in infrastructure. Efforts to introduce competition first came from the Fair Trading Commission (FTC).

Early attempts to introduce competition in most instances were strongly resisted by TOJ. In 1993 FTC, a Patterson institutional initiative which had just come into being was able to extract an agreement from TOJ providing for liberalisation of the customer equipment market. Up to then TOJ insisted that it had an exclusive right to customer services equipment and only permitted attachments supplied from the company's sales outlets. Faced with pressure in 1994 from the FTC, TOJ also reached an agreement with the FTC, allowing Infochannel Ltd as an internet service provider (ISP) to interconnect with the TOJ's transmission system. TOJ had also failed to recognise the future market potential of internet service. The only other provider of internet services was the University of the West Indies. TOJ also came to face major

problems with call-back, as the technology by then permitted customers to bypass the incumbent for international service. TOJ eventually responded by taking out court proceedings against Infochannel for the use of voice-over-the-internet protocol to bypass its international services. The company also lobbied the government to make call back an illegal activity. FTC and C&W also reached an agreement in 1999 on certain aspects of C&WJ's advertising. C&W was offering free voice mail to customers and this was regarded by FTC as anti-competitive, as it would have had the effect of restricting entry to the messaging services market. The agreement reached between C&WJ and FTC required the incumbent to provide separate accounts for particular service, as well as the applicable rate.

Second, the minister with responsibility for telecommunications issued five VSAT licenses to ISP operators in 1998 under the Radio and Telegraph Control Act. Some of the ISPs used their equipment with the aid of VOIP to offer call back services by bypassing C&WJ international gateway, connecting to C&WJ domestic telephone network. Again C&WJ contested the Minister's decision on the grounds that the decision breached the exclusivity conditions in the licence. Proceedings by C&W against the operators which were offering VIOP services were unsuccessful regarding local access to the network; hence C&W abandoned its action at the Supreme Court[15]. The Attorney General argued at the Supreme Court that the Jamaican government acted unconstitutionally in granting the 1988 licence and that they were null and void. More importantly the 1893 Act made provisions only for services via paired wire services and could never have anticipated transmission via fibre optic, radio and satellite in respect to data and value added services.

A third force for liberalisation changes came first from government's policy regarding telecommunications in the National Industrial Policy of 1996. This policy endorsed information technology as a crucial aspect of a National Industrial Policy. External forces were also at work. Government with (reluctant consent from TOJ) in 1996 responded under the WTO General Agreements on Basic Services with a commitment to phased liberalisation of the telecommunications market by honouring existing commitments until 2013. The writer along with a representative from InfoDev, a special vehicle established to help developing counties prepare their commitments under the WTO telecommunications protocol prepared the Jamaican commitments. The WTO commitments set out how government should treat national and international telecommunications carriers. The principles outlined by Jamaica called for access to the incumbents' network on terms and conditions which are non-discriminatory, arbitration of interconnection disputes, the establishment of an independent regulator and an appropriate structure for the allocation and management of the radio spectrum. The writer along with Cabinet Secretary Dr. Carlton Davis and Prime Minister Patterson were the architect of the initial 1996 policy to liberalise the telecommunications market. These developments for the first time signalled to TOJ the government's commitment to future policy for a liberalised telecommunications industry. In 1997 Jamaica also came together with its CACICOM partners in reaching agreement on altering its negotiating strategy with

[15] Infochannel Ltd v. C&W Jamaica Ltd, Suit E014 1999.

C&W subsidiaries in the region. The 1996 Telecommunications policy document was later updated and presented to the Parliament in 1998.

More importantly opposition from US operators to C&W's monopoly services in Jamaica and the Caribbean intensified. The US carriers had been paying out some US$6bn per year to overseas operators under the existing accounting settlement rate protocol. Jamaica at the time netted over US$100mn per annum as foreign exchange inflows from TOJ making the company the third largest foreign exchange earner at the time. The US Federal Communication Commission (FCC) eventually issued a Benchmark Order in 1997 requiring US operators to unilaterally reduce settlement rates to foreign providers. In the case of Jamaica TOJ was required to reduce the settlement rate from US$0.57 to US$0.19 per minute by January 2001. Earlier in 1995 the accounting settlement rate was as high as US$1.25. The 1997 FCC order threatened to undermine the financial basis of the post-privatisation regime which had involved the incumbent cross-subsidising and expanding the unprofitable domestic services from the international services. TOJ and C&W challenged the FCC Order in the US and eventually lost at the US Court of Appeal. As shown earlier, most of the investments in the public system were financed by the high internally generated earnings from international telecommunications and not from portfolio financing. Lodge and Stirton (2002) stated that the FCC order threatened to undermine the financial basis of the post-privatisation regime which had involved the incumbent cross-subsidising and expanding the unprofitable domestic services from the international services. TOJ and C&W challenged the FCC Order in the US and eventually lost at the US Court of Appeal.

By 1996, C&W UK, more so than its local subsidiary had come to realise that technology and international regulatory developments had come to diminish the opportunity to benefit politically from the domestic voice monopoly. In a meeting with C&W executives in London the writer was informed that C&W UK had come to realise that the international data transmission market offered more profitable opportunities than the traditional voice telephony business. With changes in the very top levels of management in both London and Jamaica and with decision-making on policy matters increasingly being centralised in London less resistance was experienced from the company locally towards governments efforts to develop a more competitive local telecommunications market. C&W UK at the same time had been lobbying for regulatory barriers to be reduced in the US where C&W had less than one percent of the US market; hence the small Jamaican and Caribbean markets became expendable.

The Liberalisation Period 1999-2005

During the first 18 months following the enactment of the Telecommunications Act in 2000, the domestic market was to be liberalised. Since 1999, the Government of Jamaica has set about liberalising the telecoms industry to promote competition and efficient entry into the market. It adopted a phased approach to liberalising the telecommunications industry. The statutory provisions underpinning liberalisation are contained in the 2000 Telecommunications Act.

The start of the process of liberalisation in the Jamaican telecommunications sector was the signing of an agreement between the Government of Jamaica and Cable & Wireless (C&W) to allow competition into the sector and to end C&W's monopoly in September 1999. There were three main phases to the liberalisation of the telecommunications industry. Under phase one, the private operators were invited to bid for two mobile phone licenses, one to utilise GSM technology and the other to use CDMA technology. The licenses were auctioned and the minister eventually issued the two licenses. A third licence was later awarded. During the first phase, the minister was also empowered to issue cellular, reseller (data, internet and international voice), free trade zone service and carrier licenses. Two mobile operators, Digicel Ltd and MiPhone Ltd commenced operation in competition with C&WJ.

During phase two the minister's powers were extended to grant licenses to include domestic carrier and service provider licenses for voice facilities, resale of the incumbent switched domestic voice facilities, as well as voice-over-the-internet access and facilities for subscriber television operator internet licenses for licensed cable operators. Several of these licenses were issued.

In the final phase three years after the passage of the Act, all market segments were to be liberalised including the market for international facilities based operators. As a result of this development in 2004 the government decided to award licenses to two international cable operators to land new submarine cable network to Jamaica. Overall, as a result of liberalisation, the Minister issued over 350 licenses. The Two mobile carrier licenses granted in December of 1999 and January 2000 for the provision of mobile voice telephony, data and information service initiated the entry of competition in the mobile market and indirectly competition between landline and cellular services.

The major problem of facilitating competition however has cantered around interconnection, allowing callers to make and receive calls, regardless of the originating caller. Interconnection has presented major challenges to the existing regulatory framework and to OUR. The Telecommunications Act of 2000, requires the C&WJ to submit to the OUR all reference interconnection offers (RIO) setting out the terms and conditions for interconnection with other voice carriers. All carriers are required to provide interconnection on request under the Act. OUR has the responsibility to ensure that the offer is in keeping with the principles set out in the Act. Where the provider and the seeker fail to agree on the conditions and the transaction involve a dominant carrier the OUR is also required to arbitrate if requested by either of the parties.

The Telecommunications Act of 2000 sets out the principles of liberalisation and the provision of a universal service. A major feature of the Act is the requirement of the telecommunications industry to be regulated by the OUR. The Act requires the OUR to refer cases of "substantial competitive significance to the Fair Trading Commission. The Act also empowers the Minister to give directions to the OUR "of a general nature" if it is in the public interest and the OUR is required to comply with such directions. This provision has resulted in a major controversy leading to fierce

litigation. Subsequent to passing of the Act the ministry outlined its agenda for the industry in the Telecommunications Policy document which was intended to set the path for the provision of universal service and full availability of E-learning services to enable the Jamaican economy to benefit from ICT- led growth.

Post-2001 Privatisation Performances

Liberalisation of the telecommunications market brought competition between mobile networks and between mobile and the incumbent fixed linked services. Significant growth in mobile subscribers took place after 2001. In most countries, mobile termination rates are regulated; Jamaica has however achieved international comparable rates without intervention of the regulatory agency. Although termination rates are at a similar level to international benchmarks, customers often own multiple SIM cards and generally only make calls on the same network. This is driven by intensive competition for market share, primarily through special discounts offered by the operators.

As shown in Tables 2.1 and 2.2 below the number of phones (fixed and mobile) increased from 612,000 in 1999 to over three million in 2005 compared to an increase from 234,000 in1994 to 612,000 in 1999.

TABLE 2.1
Tele-density and Labour Efficiency

Year	**Pop**	**Fixed Tele-density**		**Mobile Tele-density**		**Total Tele-density**		**Number of C&W Workers**	**Line per worker**
		Main lines (000)	Lines per 100 (in percent)	Customer (000)	Line per 100	Main line & Cels (000)	Line per 100		
1994	2.4	208	8.7	26.1	1.1	234.1	9.8		
1995	2.4	251	10.5	40.3	1.7	291.3	12.1	4544	0.055
1996	2.4	306	12.7	55.4	2.3	361.4	15.1	4306	0.071
1997	2.5	368	14.7	71.3	2.9	439.3	17.6	3983	0.092
1998	2.5	416	16.6	91.7	3,7	507.7	20.3	3897	0.107
1999	2.5	494	19.8	117.9	4.7	611.9	24.0	3327	0148
2000	2.6	507	19.5	249.8	9.6	963.8	37.1	3204	0.158
2001	2.6	511	19.7	640.4	246	1151,4	44.3	2611	0.196
2002	2.6	435	16.7	1190.0	45.8	1625.0	62.5	2427	0.179
2003	27	451	16.7	1483.0	54.9	1934.0	71.6	2052	0.220
2004	2.7	423	15.7	1841.0	68.1	2264.0	83.9	1621	0.261
2005	2.7	390	14.4	2700.0	100.0	3090.0	114.4	1703	0.229

Source: Constructed from PIOJ and MCST and C&W Annual Reports

The most dramatic growth since 2000 has been in domestic business with the number of phones increasing from 143.9 million minutes to 1.26 billion minutes reflecting the increase in the cellular market. However growth in the incoming and

outgoing international business has been at a slower rate increasing from 433.4 million on 2000 to 695.4 million in 2005. Both the slower growth in international traffic and the reduced settlement rate forced the C&W to rebalance the charges, with higher rates for domestic traffic. The challenge over the medium term will be to build up investments in broad band as the cellular market matures.

TABLE 2.2
Growth in Telecommunications

Year	Customer Base (000) line	Mobile equipment (000)	Land line customers (000)	Broad Band customers Estimated (000)
1994	234.1	26.1	208	48
1995	291.3	40,3	251	52
1996	361.4	55.4	306	56
1997	439.3	71.3	368	59
1998	507.7	91.7	416	61
1999	611.9	117.9	494	63
2000	963.8	249.8	507	64
2001	1,151.1	640.4	511	68
2002	1625	1190	435	70
2003	1934	1483	451	72
2004	2264	1841	423	78
2005	3090	2700	390	92

Source: Constructed from information from MCST and C&W Annual Reports

Investment in the sector have been running at between J$ 11bn to J$12.4bn per annum. In 1995, landline investments at J$9.5bn significantly outperformed cellular investments at J$1.25bn. In more recent years broadband investments have also seen significant growth reflecting the demand for high speed internet services, increasing from under J$250mn per annum in 1995 to J$1.85bn in 2000. Notably, the introduction of competition has not slowed the rate of investments as shown in Table 4 below.

Although the number of telephones is now in excess of the total population, available data reflects multiple ownership, and the actual access to telephone is more like 60 to 70 percent, as many homeowners in rural areas do not have cellular or access. There have been significant improvements in labour productivity C&W itself has reduced the number of workers from 4,544 in 1994 to 1703 in 2005, with the result that lines per worker increased from 0.055 in 1994 to 0.229 in 2005 (see Table 2.5 below).

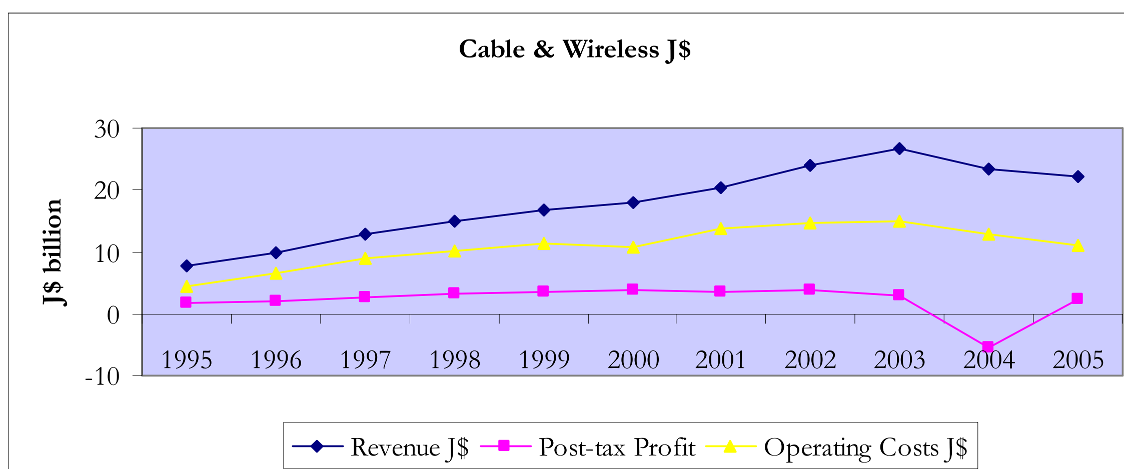
In addition, investment in mobile expansion also tailed off in 2004-5, whilst investment in broadband grew. This could be partly due to the fact that C&W had already built out the major part of its mobile network by 2004, or that industry reacted negatively to the issues over interconnection and settlement by slowing the pace of expansion. Traffic volumes and in particular international incoming and outgoing calls are shown in Table 2.3 below.

TABLE 2.3
Telecommunications Traffic

Year	Domestic Interconnect (million minutes)	International Outgoing (million minutes)	International Incoming (million minutes)
1997		60.7	345.3
1998		61.5	351.4
1999		64.4	347.4
2000	143.9	73.9	328.5
2001	965.1	95.6	413.8
2002	1,190.2	130.0	349.6
2003	1288.5	127.6	487.9
2004	1298.6	115.9	391.7
2005	1264.7	104.4	590.8

Source: Constructed from information from MCST and C&W Annual Reports

FIGURE 2.1
Financial Performance of Cable and Wireless



Source: CEPA Report 2006

TABLE 2.4
Investment in the Telecommunications System

Year	Gross Investment Million J$	Mobile Investment Million J$	Land Line Fixed Investment Million J$	Broadband Investment Million J$
1995	11,050	1,250	9,550	250
1996	12,107	1,550	10,257	300
1997	12,118	1,750	9968	400
1998	12,126	2,200	9,426	500
1999	12,182	2,650	8,932	600
2000	12,197	3,650	7,847	750
2001	12,245	4,200	7,245	800
2002	12,269	4,750	6,669	850

Year	Gross Investment Million J$	Mobile Investment Million J$	Land Line Fixed Investment Million J$	Broadband Investment Million J$
2003	12,289	4,950	6,389	950
2004	12,276	5,150	5,976	1150
2005	12,376	4,950	5,578	1,850

Source: Constructed from information from MCST and C&W Annual Reports

TABLE 2.5
Teledensity and Labour Efficiency

Year	Pop	Fixed Tele-densit y		Mobile Tele-density		Total Tele-density		Number of C&W Workers	Line per worker
		Main lines (000)	Lines per 100 %	Customer (000)	Line per 100	Main line & Cels (000)	Line per 100		
1994	2.4	208	8.7	26.1	1.1	234.1	9.8		
1995	2.4	251	10.5	40.3	1.7	291.3	12.1	4544	0.055
1996	2.4	306	12.7	55.4	2.3	361.4	15.1	4306	0.071
1997	2.5	368	14.7	71.3	2.9	439.3	17.6	3983	0.092
1998	2.5	416	16.6	91.7	3,7	507.7	20.3	3897	0.107
1999	2.5	494	19.8	117.9	4.7	611.9	24.0	3327	0148
2000	2.6	507	19.5	249.8	9.6	963.8	37.1	3204	0.158
2001	2.6	511	19.7	640.4	246	1151,4	44.3	2611	0.196
2002	2.6	435	16.7	1190.0	45.8	1625.0	62.5	2427	0.179
2003	27	451	16.7	1483.0	54.9	1934.0	71.6	2052	0.220
2004	2.7	423	15.7	1841.0	68.1	2264.0	83.9	1621	0.261
2005	2.7	390	14.4	2700.0	100.0	3090.0	114.4	1703	0.229

Source: Constructed from information from MCST and C&W Annual Reports

Lessons Learnt from Telecommunications Privatisation and Regulation

There is no doubt that the mobile sector has grown explosively due to new entrants to the market. The structure however is still one of a duopoly. What is clear today is that the telecommunications microeconomic policy framework has shifted to being that of applied competition policy with the need for intrusive industry regulation, regulating for example end user tariff and service standards are no longer necessary. The three critical features of telecommunications which continue to require public oversight today are: firstly to ensure non-discriminatory interconnection, secondly to provide for number portability and, thirdly, regulation of radio spectrum which continues to be a scarce resource.

While the process to resolve the interconnection issues has created significant uncertainty for the industry, the industry has found its own solutions by agreeing rates outside the formal regulatory framework. It could be argued that as the industry has found a solution, the need for formal regulation is brought into

question. However, the prevalence of customers owning more than one mobile phone, and a reluctance to make calls to different networks, might suggest that there remain opportunities for regulation to improve the interconnection position for customers.

It should be noted that empirical literature (mainly from the 1980s) comparing public and private enterprises in industrial market economies concludes that there is no conclusive evidence to show that private enterprise is superior to public enterprise in running utility monopolies. Whilst private firms may exhibit higher productivity and better performances than public enterprises there is no guarantee that this productive efficiencies will be passed to consumers; allocative efficiency. Whether privatisation and regulation serve the public interest depends on the appropriate decisions taken concerning the method and sequence of privatisation, the industry structure provided at the time of privatisation and the oversight powers of the regulator. However, the Stern Report (Stern 2004) acknowledges the significant growth in mobile, together with the increased volume in international incoming calls, as key drivers of the industry. Consumers have derived huge benefits from the prevalence of mobile service and in turn, the industry contributes 20 percent general consumption tax (the standard GCT is 16.5 percent) to the Ministry of Finance. The investment that is taking place in broadband will also deliver significant benefits to the wider economy. It is however, quite clear that it is the new liberalised regulatory regime which was introduced in 2000 providing for increased competition which has led to the escalation in tele-density, the widened range of products and services to consumers and significantly lower international rates. A direct outcome of this new regime is that another land line company, Flow International is now wiring Jamaica with fibre optic cable system to offer converged services of telephone, broad band internet and cable television.

A key criticism of the OUR from industry throughout the liberalisation period, particularly in relation to the interconnection issue, is that it has been slow to react to new and dynamic developments taking place in the industry. This has led the portfolio Ministry at time to play a more forceful and interventionist role while the OUR has taken a very careful and considered approach, often much to the annoyance of the industry operators in a fast developing market. These dynamic changes are however the results of the rapid technological developments talking place and increased competition in the industry and argue for less government intervention and less public regulation. Liberalisation has brought increased choice to the Jamaican consumers in terms of wider product choices, lower international rates, lower mobile charges, and has produced a highly competitive mobile industry, evidenced by the high propensity to make on-net calls.

The initial Telecommunications Act did not entirely achieve the required regulatory framework envisaged for the liberalisation and as it did not prevent disputes between the regulator, service provider and the portfolio Minister. Ongoing disputes between the Ministry and the regulator have created considerable uncertainty in interconnection rate regulation. However, the fact that the regulator is able to contest their position against the portfolio Minister in the courts demonstrates level of independence and transparency of the regulator process.

The separation of the reporting line of the telecommunications regulator from the policy-setting ministry serves as a two-way check on the powers both the regulator and the Ministry are able to exert over the industry. The experience of the past five years has demonstrated that whilst the Ministry may be a key actor in the industry, allowing liberalisation in the mobile and international segments, there is still the need for an independent and informed regulator to address any discrepancies in the market, especially on interconnection matters and to apply international best practices.

Developing countries like Jamaica find themselves in weak negotiating position when selling state assets to overseas firms which require large capital investments. These firms will seek to extract rent and unreasonable terms and conditions. The telecommunications case provides an example of the problem faced by a small state in dealing with the divestiture process when faced with a large multi-national company.

The absence of credible commitment in regulation carries far reaching implication for the operation of the regulatory process. The questions whether the Westminster-style government can realistically engender credible commitment without the constitutional entrenchment of property rights and respect for contract law is debatable. Although the licence was eventually changed, the fact that the structure was underpinned by contract law precluded the government from embarking on opportunistic action and the final outcome was one of mutual agreement with respect to the licence changes supporting the thesis that institutional endowment is central to the design of the regulatory frameworks. The need for a well-defined regulatory framework is clearly demonstrated in the Jamaican experience, as a precondition to privatisation of the infrastructure and utility enterprises. Regulatory methods, which are appropriate in one environment, may differ in another. Developing regulatory regime requires considerable technical competence and practical experience. Transplanting structures from the UK, the US or other developed countries under the guise of best international practices is clearly not the ideal solution.

Privatisation of the larger infrastructure enterprises (such as telecommunications) has proven to be far more difficult to execute. This is a direct result of the complex and often competing objectives, the need to satisfy competing and conflicting special interest groups and the sheer difficulty of privatising firms, which traditionally were characterised as natural monopolies. The trade-offs among the various objectives and competing interest groups can be politically intractable. Invariably, the consumers do not have strong lobby groups in developing countries to advocate their interest in the reform process and this leads to their interest often being given lower priorities. The desire for the new managers to maintain powers of influence and the opportunity for clientism can be powerful factors working against the interest of the consumer.

The privatisation option will remain attractive once short-term political considerations can be overcome. The large amount of capital investments required to provide water services, electricity, airports and transport cannot be financed with the

existing state of the Jamaican public budget. Jamaica remains amongst the group of most indebted nations. More so in telecommunications than in electricity, technology has now eliminated all natural monopoly characteristics in the industry. Digital wireless network, fibre optics and communications satellite have undermined the natural monopoly characteristics in the telecommunications industry. This gave the government the opportunity to re-examine its options and later to opt for liberalisation of domestic landline, mobile and international telecommunications markets.

The most important lesson learnt is that it is not simple ownership that matters but the structure of the regulatory regime or alternatively the level of competition allowed. Competition, in the long run provides for stronger incentives for productive and allocative efficiency. Jamaica has traditionally favoured monopoly for the utilities. The conception is that natural monopolies should be protected from entry and that legal barriers to entry are needed to take advantage of economies of scale, scope and density (that is sub-additivity of cost function) (Parades and Desmond 2003, p.4.) is still strong. Industries which are operated as state-owned enterprises invariably offer little or no opportunity for competition, hence no incentive for efficiency. Evidence also exists to show that the higher the level of political control the greater the level of inefficiency of public enterprises and the higher the cost of private capital. It is not so much the fact of public ownership which is the problem; it is the fact that with public ownership the propensity for political intervention is stronger. Privatisation may not increase efficiency and could reduce if new entry barriers are imposed. Not only is there a need for *ex-ante* regulation, but also there is need for coherence between anti-trust and competition legislation and sector industry laws. The issue today really is what form of competition is good for telecommunications and other utilities like electricity.

References

Brown, F. (2003), "Telecommunications Liberalisation in Jamaica", *International Journal of Regulation and Governance,* 2(2).

Levy, B. and P. Spiller (2006), "Regulations Institutions and Commitment: Comparative Studies of Telecommunications", Cambridge Mass: Cambridge University Press.

Lodge, M. and L. Stirton (2002), "Globalisation and Regulatory Autonomy in Small Developing States: The Case of Jamaican Telecommunications Reform", *New Political Economy*, 7.

National Investment Bank of Jamaica (1992), "Study of the Performance of Privatized Companies 1983-1991: TOJ," Kingston.

Newbery, D. (2000), "Privatizing, Restructuring and Regulating Network Utilities", Cambridge, Mass MIT Press.

Noll, R. (2000), "Telecommunications Reform in Developing Countries", SIEPA Paper, Stanford University.

North, D. (1990), "Institutions, Institutional Change and Economic Performance", Cambridge, Mass: Harvard University Press.

Parades, R. (2003), "Jamaica, Privatisation and Regulation: Challenges in Jamaica", Economic and Social Sector Studies, IADB, Washington.

Parades, R. and T. Desmond (2003), "Privatisation and Regulation: Challenges in Jamaica," Economic and Sector Study Series, EE 3-03-004, IADB.

Sampson, C. (1996), "Telecommunication Policy and Regulatory Framework for Jamaica", IADB / Ministry of Public Utilities and Transport.

Spiller, P. and C. Sampson (1996), "Regulating Telecommunications in Jamaica, in: Levy, B., and P. Spiller, Regulations, Institutions and Commitments: Comparative Studies in Telecommunications", Cambridge University Press.

Spiller, P. and C. Sampson (1994), "Regulations, Institution and Commitment: The Jamaican Telecommunications Sector", Washington, World Bank Policy Research Working Paper 136.

Stern, P. (2004), "Review of the Legal, Institutional and Regulatory Framework for the Telecommunications Sector and Recommendations for Reform", MCST, Kingston.

Taylor, L. (2000), "Privatisation in Jamaica and the Case of Telecommunication of Jamaica Limite", Caribbean Journal of Public Management (1).

3

Credibility and Independence in Belgian Competition and Regulatory Policies

BART DEFLOOR AND FRANK NAERT

Introduction

Belgium introduced a competition law as recently as 1993. In the same period more or less independent regulatory agencies were installed for telecommunications, postal services and energy. At present the job of regulating infrastructure in the recently opened up sectors of railway transport and airport infrastructure has been given to ministerial departments. It follows that a very different kind of independence is practised according to the sector in question.

The purpose of this paper is to analyse the credibility of the competition authority and these regulators. Investments, especially in network industries, have to be made in a situation where investors commit to the market and revenues only will arrive after a period of several years. This means that, to attract investment, competition and regulatory regimes have to be credible and predictable.

The question then is how successful these bodies have been in building up credibility towards the regulated industries and other stakeholders, such as government and consumers? There is literature on competition and regulatory bodies in which the degree of independence of the authority plays a crucial role as a determinant of credibility (Gilardi 2002). In addition there is more specific literature on the issue of efficiency of central banks, in which credibility is determined mainly by the degree of independence that a central bank has in formulating and executing monetary policy (Kydland and Prescot 1977).

In this paper we will analyse how credible Belgian competition authorities and regulatory agencies are by focusing on the factors that explain this credibility. The scope of the paper will be on the Belgian Competition Council, on the Committee for the Regulation of Electricity and Gas (CREG), on the Banking, Financial and Insurance Commission (CBFA), the Belgian Institute for Postal Services and Telecommunications (BIPT), and the Regulatory Service that regulates railway infrastructure and airport infrastructure.

The approach here is twofold. At first the literature on regulatory bodies in general and central banking in particular should supply the determinant factors that account for credibility and the role of independence and other determinants of credibility therein. Secondly, there will be a legal analysis of how the factors that came out of the literature study have been (or not) implemented in the cases of Belgian competition legislation, energy legislation, financial services legislation, the legislation on telecommunications services and the legislation on railway infrastructure.

This two step approach should result in an evaluation of the appropriateness of the arrangements made by the Belgian legislator in terms of the credibility and independence of the examined bodies. This evaluation can at last be transformed into some practical considerations that can be taken at heart by other countries, including developing countries.

The purpose of the present study is to show how Belgium is battling the problem of creating sufficiently credible competition and regulatory authorities. In that way the study can act as an example for other countries, especially developing countries that are in the process of designing their own institutions. The research questions of this paper are: What are the factors that determine the credibility of competition and regulatory agencies? How do these factors, such as independence, affect the credibility of competition and regulatory agencies? What are the various characteristics of independence and how can they be ensured?

These research questions have a potential relevance to policymakers in the sense that efficient markets are a main driver of competitiveness and constitute therefore a prerequisite for creating growth and welfare. The efficiency of markets cannot be left alone to market actors but requires a prominent role of government, mainly through its competition and regulatory policies. In order to set up efficient policies policy makers should be aware of the factors that promote credibility of the authorities that will enact those policies. This paper will try to offer some insights into this difficult problem by focusing on the Belgian example.

Review of the Literature

Introducing competition in (regulated) sectors plays a key role in ensuring productive, efficient, innovative and responsive markets, necessary for realising low prices (OECD 2005a). The correction of market failure is the traditional economic justification for regulation. Governments have a whole set of policies at their disposition, of which delegation of authority to an independent agency is one. This paper does not focus on market failure, but investigates why governments want to delegate authority to an independent agency. This, as we will argue, has to do with limiting government failure (Johannsen 2003).

In recent years, a new role for the state has emerged. On the one hand, governments retreat from sectors where it used to be interventionist; on the other hand, it increasingly regulates these now liberalised markets. This implies a shift from traditional tasks of the state (stabilisation, redistribution and allocation) to regulation (Gilardi 2002).

Network industries such as electricity and telecommunications play a significant role in the economy. Policy makers view them as extremely important for realising their objectives of stable economic growth and employment growth. To optimally introduce competition in an industry, some regulatory action has to be taken (Coen and Doyle 1999). Effective institutional structures are very important. We will take a closer look at the theoretical and empirical argumentation behind these institutional structures. In the beginning of the 1990s, Wu (2004) records only a dozen (independent) regulatory telecom agencies, whereas in 2004 there are more than 100.

This reflects the widely held notion that independent agencies are a good solution for the problem. The question remains what criteria are required to identify the independence of the regulator. We start with a study of the available and relevant literature: from the literature on regulatory bodies in general and on central banking in particular the determinant factors will be drawn that account for credibility.

Credibility in Policy Making

The interest taken by academics in the credibility of economic policy originated in the eighties. Especially the numerous exchange rate alignments in the European Monetary system created a fertile breeding ground for this attention. The credibility of central banks and the role therein of independence from politics was central in this discussion. The credibility issue was, however, not confined to exchange rate policy but was quickly applied to the general macroeconomic policy.

By the end of the 20th century the interest in credibility spread to microeconomic policy areas, leading to insights in how best to address the regulation of economic sectors such as network industries. Credibility emerged as an important concept.

We will first try to define this concept. Next we shall analyse the conditions needed to create credibility and the ways for less developed countries to handle this concept. Our special attention thereby is directed towards independence as a condition for credibility.

Why is there a Need for Credibility in Policy Making?

The essential insight about credibility is that economic agents' likely assessment of a proposed policy has to be taken into account when designing and implementing policy. Similar policies can produce different outcomes, depending on the extent to which economic agents believe that the given policy will be sustained. The way economic policy is perceived by market actors is thereby crucial to policy-making.

The need for credibility goes back a long time in history and is originally linked to the societal problem of theft and robbery (cf. Hobbes and Locke). This problem confronted by primitive societies could be solved by installing a monopoly on force. The owner of this monopoly, the ruler, thus provided protection against theft and robbery, thereby giving a significant impetus to development. The fruits of economic actions such as producing, investing, labouring, trading were no longer in danger of being stolen by fellow men.

The problem remained, however, that the ruler himself could not always be trusted. The threat that he could be tempted to use his monopoly on force to capture the fruits of the economic endeavours of his people was still very real. This had a negative effect on the economy and on development leaving also the ruler worse off. It was then in the interest of the ruler to convince his subjects that he could be trusted, in other words that he would be credible.

Which Factors Determine Credibility?

How could this be done? In the course of time delegation of some powers by the ruler seemed to be a good solution, on the condition that such a delegation was accompanied by a credible guarantee by the ruler of non-intervention. Delegation of powers came in various forms: the institution of the rule of law, private property laws, and division of powers. Political institutions are thus an important factor in producing, implementing and reviewing policies. The nature of institutions is crucial for economic actors' assessments of policy credibility. A very visible and elementary aspect of this institutional structure is clearly the separation of powers among the executive, legislative, and judicial branch. The checks and balances that are involved here can ensure that the policy-making process is subject to review and constraints from multiple centres of government power. An equally visible and elementary aspect is the presence of regular elections. They provide for a review of government actions and a possible temporal constraint on new policies.

On a deeper, less elementary and visible level the position of regulators comes into the picture. Power is further distributed into their hands, allocating to a certain degree the decision making powers to different parts of the executive. The obvious example here is the position of the central bank. If the decision making of the central bank is steered by the government, it becomes easier to secure monetary financing of a fiscal deficit. This makes the policy of price stability less credible. Guaranteeing the independence of the central bank can then be seen by economic actors as an institutional expression of a commitment to price stability. Similarly, a policy to promote competition in telecommunications is less credible if its implementation is entrusted to the ministry that runs the existing telecommunications monopoly or that manages the remaining government participation in the incumbent operator.

Although the focus in this paper is on independence, other factors beside independence play a role in determining policy credibility. We consider the following explanatory factors:

1. Compatibility of targets
2. Availability of information
3. Reputation
4. Openness to world markets

Economic policy must pursue compatible targets in order to be credible. Infeasible policies cannot be implemented. If an economic agent deems a policy to be infeasible, he knows that this policy will not be carried out and acts accordingly. This changes the policy outcome and policy aims may not be realised. Often, the problem is how to spot such incompatibilities. The determination of a feasible set of policy targets is often a contentious issue and incompatible policies may be apparent only in hindsight. Because policy reversals often present profit opportunities, there may be an incentive for capital market participants to uncover incompatible policies.

Public uncertainty about government policy and hence its credibility is negatively affected by an absence of information. Economic actors use information to

monitor and verify economic policy. If such information is absent or incomplete, they may believe that policy changes have occurred in cases where they actually have not. Lack of an informed public can also increase the incentive for government to change policy, since it may presume that such a policy deviation will not be detected. The net result is that economic policy becomes less credible.

Governments, through policy making, build up reputations that affect judgments about their likely behaviour. Policies, however, can change in response to new insights, new experiences, and new goals. Nevertheless, a reputation for pursuing one type of economic policy can be a significant obstacle to establishing the credibility of a new type of policy. The public may suspect a new policy initiative to be reversed when a government has a long-established reputation for changing his mind. These public beliefs may have significant adverse economic consequences.

Openness to world markets helps ensure that good policies will be recognised and will be pursued, because it gives economic actors an exit option. If both policy makers and economic actors know that adverse policy shifts can lead to an outflow of economic resources and activity, policy makers will have a strong incentive to avoid such policies. Moreover, economic actors have an additional reason to believe that such adverse shifts will not occur. Thus openness to world markets enhances the credibility of sound economic policies.

Openness to world markets also provides an external standard for evaluation, making it easier to detect deviations from credible policies. The international standards that come with openness make policy more credible by making it harder for the government to misrepresent the effects of policies.

What is Independence?

Now we focus on the independence aspect of institutional design put forward in the previous part. More precisely the independence of regulators is addressed. In the literature, two approaches exist. The first approach [for example, followed by Gilardi (2002)] only looks at independence from government. The second and broader approach also considers independence from stakeholders and consumers. It is the second approach we will follow in this paper.

For expositional clarity, we will start with the first approach. The decision to delegate authority is made by governments, so that will be our starting point. There is a time-inconsistency problem concerned with credible policy making. A policy maker today may want to limit the discretionary freedom of future policy makers. Suppose a policy maker announces a certain long-term policy plan. Due to the mere passage of time or due to lobby groups, the preferences of the policy maker may change. As a consequence, he will change his policy plan after some time. Therefore, sometimes short-sighted decision making takes place. Politicians want to be re-elected, so their decisions may be focused on short-term policy aims. An example is a politician who lowers taxes in the build-up to the elections, creating a deficit. After

the elections, taxes will have to be raised to pay for the deficit. In fact this is caused by a bad description of property rights in politics (Gilardi 2002).

To solve this problem, governments may choose to abandon some of their regulatory authority to independent regulatory authorities (IRA's) that are not fully democratically accountable and are insulated from political influence (Gilardi 2002). In this way, governments prohibit themselves and future policy makers from taking these short-sighted decisions. They 'tie their hands', so it will be politically more costly to overrule a decision made by an agency. Thus policy makers cannot use discretionary policy as a mechanism to favour a particular interest group. So they will have more time to focus on other policy issues.

Independence of regulatory authorities, however, should not be understood as autonomy for developing actions and programming policies ignoring the government, but rather as the probability of implementing policies without the interference of political or private agents (Baudrier 2001, cited in Oliveira et al. 2005).

The approach taken above is a rather narrow one. A regulatory agency may be very independent from political influence, but at the same time very influenced by company interests. We should take into account a broader view on independence. The definition we use in this paper is taken from Johannsen (2003). She follows Smith (1997) who states that independence consists of three elements: an arm's length relationship with regulated firms, consumers and other interests, an arm's length relationship with political authorities, attributes of organisational autonomy. This definition contains the definition used by Gilardi (2002).

Why Independence?

The reasons behind the delegation of authority may be diverse, some authors argue that it has to do with credibility; others take into account political uncertainty. In this paper, we focus on the credibility hypothesis. Credibility is the capacity for inspiring belief. A credible policy is a policy worthy of being accepted as true or reasonable. A regulator is credible when agents believe he will fulfil his promises. Credibility and independence are by no means synonyms. Optimally, one would measure credibility directly, and link it to regulatory independence to test whether a more independent regulator is effectively more credible.

A difference has to be made between motivational credibility and imperative credibility. A policy is motivationally credible when it is compatible with preferences of the actors, a policy is imperatively credible when there are no alternatives (Gilardi 2003). If regulatory power is delegated, the number of alternatives is reduced, causing a higher credibility. This is the link between independence and credibility. In the literature independence is used as a proxy for credibility because it is assumed that a more independent regulator is also more credible.

The 'credibility hypothesis' is stated extensively in the literature (Gilardi 2002 and 2006, Genoud 2003, Larsen et al. 2005). Credibility is a valuable asset for governments, because rational individuals base their expectations on all

economically available information at the moment of decision. Rational actors' beliefs are influenced by beliefs about future actions of policy makers. The starting point is the literature on central bank independence. In a seminal paper, Kydland and Prescott (1977) stress the importance of an independent central bank because there is a potential conflict between policy makers' discretion and policy optimality (time inconsistency of policy). Often coercion is not a viable option for policy makers; rather they need to credibly bind themselves to a fixed and pre-announced course of action. Otherwise the danger exists that policy is altered because of preferences changes of policy makers (Gilardi 2006).

In a more general sense a time consistent policy is a policy that will be sustained as circumstances change over time. Adhering to a policy rule may require pursuing a policy at a particular point in time that is not optimal at that time. In contrast, policy that is time inconsistent will be reversed in the future due to predictable developments over time.

From an economic perspective, the issue of time consistency emphasises the problem of predictably changing incentives over time. One approach to achieving time consistency in government policy is to limit policy to rules that the government will have an incentive to pursue in all normal future circumstances. Another approach is to develop capacity for commitment to a policy path. A commitment mechanism is a means for removing the risk of opportunistic policy in particular contingencies. Independence for regulators can act as such a commitment mechanism.

In regulatory policy credibility is important, especially in the aftermath of utilities privatisation and liberalisation (Gilardi 2002 and 2006). There are clear links between the literature on central bank independence and this literature. Policy makers have incentives to promise a favourable regulatory environment to attract investors, necessary for fostering competition. Once relatively irreversible investments are made, policy makers may be tempted to go back on their commitment. Rational investors will not invest in the first place, creating a suboptimal situation. In the literature this is called the 'hold up' problem (Kirkpatrick, Parker and Zheng 2006).

The more independent an agency is, the more credible the policy is for stakeholders, potential investors, consumers... Policymakers delegate to increase the credibility of their policy commitments. Gilardi (2002) uses independence as the dependent variable and links it to international interdependence, complexity of the economic regulation and the structure of the political decision making process. He tries to explain variations in delegation by changes in these three variables. His results, however, are not really convincing, so he offers some different explanations why governments delegate power.

Another explanation for delegation has to do with political uncertainty (Gilardi 2003). Several authors state that, because of political uncertainty, a government may delegate authority to an agency because it wants to increase its own political influence for longer periods in time (Johannsen 2001, Gilardi 2006). A government has a political property right today, but is uncertain about still having such a

property right tomorrow. Future policy makers will be less able to change the policy of current decision makers when authority is delegated. We will not focus on this issue further.

Which one of the two is the best explanation for independence? The evidence available is not abundant, but suggests that both factors matter; politicians seem to care about both credibility and political (un)certainty.

Pros and Cons

In a number of contributions, key arguments in the debate on regulatory independence have been put forward. Delegation is supposed to enhance the credibility and the efficiency of the regulatory intervention and at the same time it relieves politicians from being blamed when unpopular policy measures have to be taken. Policy makers decide whether it is optimal to delegate powers to an independent body. This evaluation depends on the nature of the sector. We will indicate some advantages and disadvantages of delegating authority.

Arguments Pro Delegation

The arguments pro can be split up in a number of categories (Gilardi 2003, Johannsen 2003). We will look at each of these briefly. A first category has to do with expertise. The independent agency will be closer to the regulated sector than bureaucratic agencies. They will have a better view on sector-specific problems. The more flexible organisational structure may increase and facilitate cooperation with experts and market parties. A second argument in favour of delegation is flexibility. An independent agent may adapt more easily to changes in the sector and anticipate proactively.

An independent agency is working in a longer time horizon than politicians. Because of this, a more stable and predictable regulatory environment is created. This can be seen as commitment to credibility. The independent agency implements agreed policy rules, so the decision process is more predictable than political decision making, leading to more stability and continuity. The scope for ideological discussions between political parties is reduced. This implies that less political time is lost, decision making is more efficient.

Politicians can blame the independent agency for taking politically unpopular measures. Agencies thus function as scapegoats. Thatcher (2001) remarks that institutions may also have been created because countries have to deal with international organisations and structures such as the EU.

Arguments against Delegation

These arguments have to do with the fact that the agency becomes too powerful, there is no accountability and they have no democratic legitimacy (Larsen et al. 2005). One argument against independent regulators is that they are vulnerable to agency capture and the establishment of rigid structures (Johannsen 2003, Larsen et al. 2005). This implies that the staff of the agency gets too focused on one regulated

party and overlooks the 'public interest'. This is caused by the fact that there is not enough feedback to supply pressure. This problem is amplified by the fact that the agency has more information than the government, creating a situation of asymmetric information. This could be remedied by balanced consultations, provided that interest groups are organised and are willing and able to participate in the discussion. An alternative solution, offered in OECD (2005), suggests the creation of multi-sector regulatory agencies to diminish the danger of agency capture. An extra advantage for this type of agencies is that they ensure a consistent approach to the regulation.

The danger, however, is that agencies become too autonomous and cannot be held accountable to a democratically elected body (Thatcher 1998, see also Amftenbrink 1999) for the case of central banks). Other authors (Majone 1996, Larsen et al. 2005) argue that regulators have to cooperate with numerous actors, so that their autonomy should not be overstated. Legal mechanisms can be built in to create accountability and to limit the discretion of the authority.

Another aspect has been covered by the literature on principal-agency relations. Delegation exactly creates the tensions familiar from these relationships: divergence between the preferences of the principal and of the agent, asymmetric information, danger of corruption, governance problems, steering problems… If all policy decisions are delegated to an independent agency, a technocratic system emerges. This means that politicians do not have any decisive power whatsoever. They cannot change anything in society anymore, the essence of political power. One may question whether such a system is democratically legitimate.

Graphical Representation

Authors do not always agree whether regulatory independence is beneficial or problematic and why regulatory independence has become fashionable (Johannsen 2003, Gilardi 2003). It may be optimal to limit the independence of the agency somewhat. These issues can be put together in a simple graph. On the horizontal axis the degree of independence is set out. The MB-curve (marginal benefit) is decreasing in the degree of independence. To keep things simple we assume a linear relationship. The benefits include all benefits from delegation. It is assumed that, as independence increases, the increment in benefit decreases. If there is no independence, there are large marginal benefits attainable from delegating power. The MC-curve (marginal cost) is increasing in the degree of independence. The larger the degree of independence, the larger the associated political costs of giving up discretionary power, risk of agency capture... The intersection of both curves is the 'optimal' degree of independence. Governments have to weigh the advantages and disadvantages of delegation.

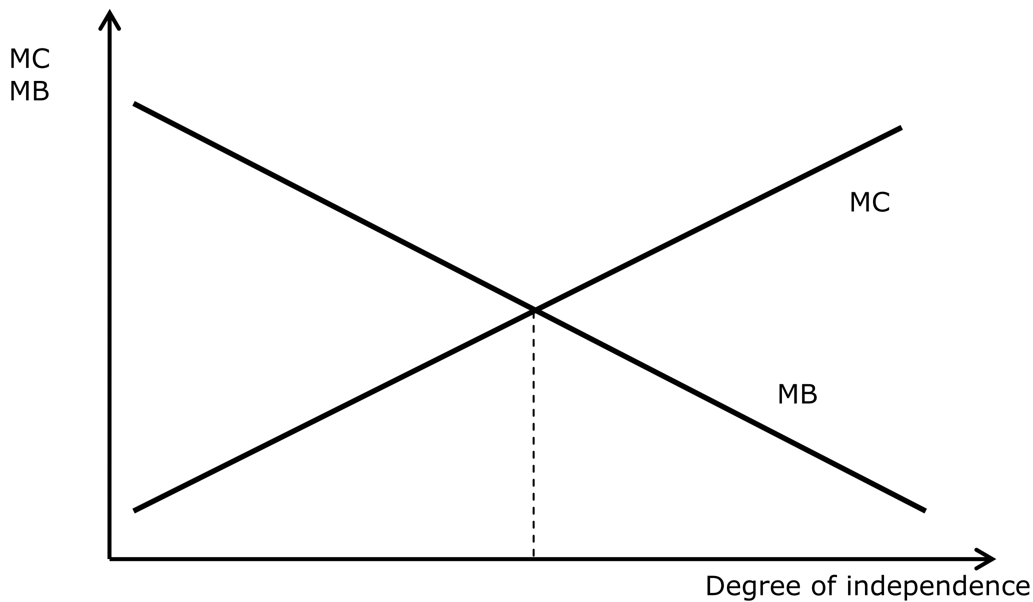
This optimal degree depends on the marginal costs and benefits, depending on the characteristics of the sector. In a politically very sensitive sector, the marginal costs of delegation may be higher, moving the MC-curve to the left.

As a consequence, a lower degree of independence will be optimal. If the gains of independence increase, for example, because a lot of investment can be attracted

by delegating powers, the MB-curve moves to the right, a higher optimal level of independence results.

GRAPH 3.1

Marginal costs and benefits of independence



Need for Independence

Politicians have to do this exercise to determine the preferred degree of independence for a specific sector. Gilardi (2002) considers three determining factors that influence this decision:

- International interdependence
  In national sectors, governments may use coercion to get what they want. In internationally interdependent sectors, this is not possible. In this case, delegation of authority may be a solution because there is a higher need for credibility. Majone (1997) argues 'there is a definite correlation between the increased openness of national economies and the credibility issue'.
- Complexity
- Public policy issues get more and more complex, that's why traditional command and control instruments are not a viable option. People's expectations and behaviour have to be adapted. Policy makers have to rely more heavily on persuasion and information. This implies a larger extent of delegation of authority.
- Decision making process
- The danger for policy change is not constant; it depends on the composition of the government and on the political system. The more unstable a political system is, the higher the danger for policy changes. Gilardi argues that policy stability is increased if there are multiple veto players, the incongruence of the players and their internal cohesion.

Categories of Independence

Obtaining information on independence is not a trivial task. First, it is important to state what exactly we want to measure. Independence may have different meanings, depending on the issues taken into account. Gilardi (2002) and most other researchers are only interested in independence from government. Based on our definition of independence, we take a broader view on independence.

Pedersen and Sørensen (2004) and Johannsen et al. (2004) and others divide independence into four dimensions:

1. Independence from government
2. Independence from stakeholders
3. Independence in taking decisions
4. Autonomy of the organisation

It is important to remark that, even when these formal dimensions of independence could be measured very accurately, this does not say anything per se about the actual political independence of the agency. The results of the measurement of independence should be confronted with actual policy decisions.

The literature suggests that several factors should be checked. We will structure these according to the four dimensions stated above. The relevant factors are taken from Gilardi (2002), Johannsen (2003), Oliveira et al. (2005), Wu (2004) and Keefer and Stasavage (1998).

Independence from Government

Here the formal independence of regulators from the government and the parliament is involved. Concrete indications for this kind of independence are the length of the term of appointment, the quality of the appointing body, the provisions for dismissal, the possibility to combine the appointment with other public mandates, the possible renewal of the appointment and independence as a formal condition for the appointment.

With regard to the term of appointment the hypothesis is that the longer the term the more independent the appointee will be vis-à-vis the appointing body. The longer the appointment term the better the appointee can put his stamp on the activities of the regulatory body.

The quality of the appointing body can also play a role. It is generally accepted that the higher the status of the body that appoints the regulator the more independent the appointees will be. Independence seems to be least guaranteed when the appointment is made by a minister. It would be better if the cabinet and the parliament were involved in the appointing procedure. The harder it is to dismiss regulators the more independent they are. Answers to questions, such as who is in a position to fire and in which circumstances supply relevant information to get an idea of how firmly regulators are in the saddle.

Another factor is the easiness to get permission to combine the appointment with other public mandates. An absolute interdiction of such a combination is supposed to enforce the independence of regulators, the idea being that a potential conflict of interest coming out of such a combination is not good for the independence of the regulators.

An important question is the possibility for a renewal of the term of appointment. The existence of this chance can put regulators in a weak position vis-à-vis the appointing body, if they consider pursuing such a renewal. There is a risk that the regulators adapt policy to the wishes of the appointing body, affecting the regulators' independence. The impossibility of a renewal, well communicated beforehand, fences off the regulators from the possible misuse of the renewal for exerting influence. Sometimes the condition of independence is formally stated in the regulatory statutes. It should be clear that the presence of such a clause can effectively enhance independence. It should be kept in mind, however, that independence does not necessarily translate into an absence of accountability (cf. 2.4.2).

Independence from Stakeholders

The basic idea underlying this form of independence is the fear for the so called 'capture' of the regulators by the regulated industries, as was first put forward in the 'theory of regulation' of George Stigler in the seventies. A too close involvement of regulators and the stakeholders creates the danger that the regulators' policy serves the interests of those stakeholders rather than the general interest. The stakeholders can be a diverse group. The immediate thought goes to the regulated companies themselves, but the category is not limited to them. Industrial organisations and trade unions act as stakeholders and the involvement of regulators with these organisations can influence the regulators' decision making. To a lesser degree this also applies to links with consumer organisations, the media, European and other international organisations. Henceforth we restrict ourselves to the regulated industries. The links between regulated industries and regulators can take different forms. A newly appointed regulator leaving a job in a regulated company or a regulator leaving for a regulated company are the best well known examples here. In general such moves are not regarded as being beneficial to the regulator's independence. Limits to these kinds of transfers are often imposed. The rigour of these limits should then correlate positively with independence.

Another aspect is the confidentiality that regulators keep in mind in discussions of pending cases with stakeholders. As far as such discussion is not allowed, the independence of regulators is safeguarded. Still another kind are personal or financial ties with supervised companies. Here again the same assumption applies: the absence of such ties, guaranteed by statutory or legal rule, benefits independence.

Independence in Decision Making

The basic idea here is that the regulator must be in a position to take policy decisions independent from politics. The delegation of powers from politics to the regulator can be narrowly or broadly defined. The broader the definition the more independent the regulator is supposed to be. Other aspects are the way in which the regulator has to account for its decision making towards government and the ways open to the government to eventually contest the decisions of the regulator.

Organisational Autonomy

Besides formal and policy independence a regulator should also have some degree of material independence. In the absence of material independence the former two types of independence are endangered. Material independence materialises in matters such as the sources of budgetary means, the control over the budget, autonomy in using financial means, the autonomy to decide on internal organisation, human resources management and other management aspects such as IT and real estate.

Credibility, Independence and Development

The insights on the relationship between independence and credibility have been developed within the framework of western highly developed countries. An important question is whether these insights can be transposed without problems to the context of developing countries. As Kirkpatrick, Parker and Zhang (2006) state, 'many developing countries lack the necessary trained personnel to sustain regulatory commitment and credibility. Regulatory offices in developing countries tend to be small, under-manned for the job they face, and possibly more expensive to run in relation to GDP than in developed countries.' Minogue (2005) is even more pessimistic when he points at the difficulties in policy transfer to developing countries. In his view independence of regulators is a concept that even in developed countries is not easy to define, let alone that it can be used effectively in less developed countries. Nevertheless he leaves the door open to the kind of analysis we are pretending to make in this paper by stating 'that research should focus on identifying and describing local variations in the dominant model of 'independent' regulation'.

According to CUTS (2006) 'while there are lessons to be learned from the reform experience of industrial countries, it is important to recognise that these lessons cannot be applied mechanically to developing countries.' CUTS (2006) also argues that 'it is therefore important that regulatory regimes in developing countries are designed in a manner to integrate such factors rather than designed on the basis of international best practices.'

Credibility and Independence in Belgium: Legal Analysis per Regulator

Belgium is a country belonging to the group of industrial countries. Taking at heart the considerations put forward in the previous paragraph, the value of the

experience of such a country for developing countries is not a priori clear and should be approached in a careful way. However, it should be kept in mind that although the standard of living in Belgium has been high for several decades, the introduction of regulation in network industries (with the exception of financial regulation) and the instalment of a competition policy are fairly recent. As a consequence experience in Belgium is still very limited but nevertheless the analysis intended in the next paragraphs can be useful.

Introduction

Before we go into the legislation of the chosen sectors, we will first provide a brief sketch of the Belgian political and economic system. Belgium is a representative democracy. Powers are divided between the executive, the legislative and the judicial power. For our purposes it has to be pointed out that within the executive branch some so-called administrative courts have been installed over the years. Examples of such courts are the Competition Council and the Supreme Administrative Court of Belgium, which deals with administrative problems caused by certain decisions made by regulators.

Belgium is a federal state and a member state of the European Union. These two facts taken together explain the devolution of many powers, either to the regional level or to the European level. For the purpose of the present paper competition policy has remained at the federal level, at least if intra-community trade is not involved. In that case the European Union is competent. Banking supervision remained at the federal government level, as well as the supervision of railway infrastructure. Energy regulation is split between the federal and the regional level with a strong impact of Europe's drive to liberalise the sector. In telecommunications regulation is federal, while broadcasting is a regional power. This poses problems because of the technological evolution that brings together cable and telephone networks into one sector. Again there is the large shadow of Europe wanting to create a single market in this area.

From an economic point of view, Belgium can be categorised as a free market economy, embedded into the European Union single market, the European Economic Area and the global WTO trade system. Its standard of living reached a GNI per capita of US$37500 in 2005, compared to US$43740 for the US. Belgium is a small open economy with an export ratio of 71 percent of GDP in 2005. A generous social security system cushions the hard edges of the market. Total government spending amounted to 50 percent of GDP in 2005.

Competition Authorities

In what way have the factors cited above been implemented in the case of Belgian competition legislation, the legislation on telecommunications and postal services, energy, financial sector, railways and airport infrastructure? Using legal analysis supplemented with insight in the internal organisation of the regulator, we get an insight into these issues. We construct an indicator for each regulator based on the four categories of independence.

Most of the relevant issues can be found using legal analysis. All answers get a value between 0 and 1. The closer the situation is to the presumed positive effect on independence, the closer the value is to 1. Per category of independence an index is constructed between 0 and 1. The four categories then are put together in one independence index between 0 and 1 (see appendix).

General Background

Belgian competition policy is of a fairly recent date. The law 'protecting economic competition' was passed by parliament in 1991 and came into force in 1993. It copied to a large extent the EU competition rules. The content of articles 81 (about undertakings that negatively affect competition) and 82 (about the abuse of dominant position) were more or less taken over and supplemented with a system of rules to avoid mergers that were supposed to threaten competition.

On the institutional side a two-leg ("dualistic") system was introduced. On the one hand, a Competition Service was created which was charged with investigating the cases brought before it. The Service is integrated into the Federal Public Service Economy, SME, Self-employed and Energy. Later on (1999) a Body of Examiners was installed. The Examiners take the lead of the staff of the Competition Service in the investigations. On the other hand the Competition Council was installed, an administrative jurisdictionary college that makes decisions over the cases based on the reports of the service. The Council is independent from the Ministry.

From the beginning the Belgian competition policy had serious problems establishing itself. Although the regulatory framework of the law was adequate enough, the lack of means endowed on the institutions made the system a lame duck. Rumours went that this was the result of a silent consensus within successive governments. An efficiently performing competition policy would possibly be harmful to the interests of some big companies who employed large numbers of workers and accompanying trade union power. Since some trade unions seem to have some influence on some government parties it was thought better to pay only lip service to the competition policy. Moreover, as Belgium can be qualified as a small open economy with important trade ties it was judged that import competition took over the role of the guardian of competition.

The Dimensions of Independence

Now what about the independence of the competition authority? We start with formal independence from government. The members of the Council are appointed for six years. They can be reappointed, but as of today this has not happened yet. The second category of independence, the independence from stakeholders, is less relevant because the competition authority acts economy-wide. So the risk for capture is smaller. However, this problem should not be minimised. There are no real formal barriers for potential personnel moving between the council and the corporate sector. In individual cases, members of the Council may be objected to. The part-time members of the Council are allowed to have positions in the corporate sector.

Concerning independence in taking decisions we have to take account of the dualistic nature of the Belgian competition policy. Besides the Council, there is a Competition Service and a Body of Examiners. The Council takes decisions; the Body of Examiners and the Service lead and carry out the investigations respectively. The Council is in principle the last chain in a process initiated by an economic fact such as an intended concentration, a notification of an arrangement or a complaint. Although by law the Council can instigate a procedure (art. 19, §2 Act on the Protection of Economic Competition, coordinated version of 1 July 1999), decisions about prioritised cases are not taken by the Council, but are taken by the Body of Examiners.

However, from the moment a case is presented to the Council, it decides autonomously. There is a stipulation in the legislation that the Council of Ministers can ultimately allow a denied concentration. As of today, this stipulation has never been used. It cannot be excluded, however, that its mere existence has a disciplining effect on the Council.

The organisational and financial independence of the Council is very small. The Council does not have a budget of itself, its budget depends on the Federal Public Service Economy, SME, Self-employed and Energy. In the matter of organisation, the Council does not have many competences. The government appoints the members of the Council and the personnel are a part of the Federal Public Service.

The Service and the Body are completely integrated in the Federal Public Service, so on that account there is not a large degree of independence. In reference to the Body of Examiners, the legislation stipulates that they have an administrative and pecuniary statute which guarantees their independence (art 14, §2). Experience has learned that the Body of Examiners scores rather well on the issue of functional autonomy.

The Competition Service is part of the Service for Competition and Prices of the Federal Public Service, coming under the General Directorate Regulation and Organisation of the Market and is as such no discernible entity in the Federal Public Service. There is no separate management for the Competition Service.

The Independence Index

Based on legal analysis and the issues put forward in the preceding paragraph, the aspects of independence are now translated into Johannsen's framework. This yields the following table.

TABLE 3.1
Independence of the Competition Authority

Variable A	0,44
Variable B	0,33
Variable C	0,83
Variable D	0,13
Independence index	0,39

The Belgian Competition Authority has a rather low independence index. This index is the average of rather diverging scores on the four categories of independence. The Competition Authority scores well on independence in taking decisions (variable C) but has a very low score on variable D, organisational and financial independence.

Energy Regulator

General Background

The European decision to create a European Single market lies at the grassroots of the present situation in the regulation of energy markets. For most markets this objective was reached already by the 1st January 1993. For a number of network industries, including energy, more time was reserved and liberalisation was gradually introduced in the first decennium of the 21st century, in combination with a new kind of regulation.

Before the liberalisation a fundamental characteristic of these markets was the omnipresence of government uttering itself in the existence of a government monopoly or in a strongly regulated private monopoly. Focusing on the Belgian situation before the liberalisation the following observations can be made for the electricity market and the gas market, the two markets concerned.

The electricity sector was strongly dominated by one player that is Electrabel active in the various stages of the electricity chain, namely generation, transmission through the high voltage grid, distribution through the low voltage grid and supply to the final customer. At that time Electrabel was a strongly integrated company that had to tolerate other important players only in the stages of distribution and supply. In some parts of the country Electrabel collaborated with the municipalities through so called 'mixed intercommunal companies'. In other parts of the country the municipalities themselves took care of distribution and supply through 'pure intercommunal companies'. Tariffs were decided upon by the Control Committee for Electricity and Gas, a body in which also Electrabel was represented (a nice example of "capture").

In the gas market too there was one big player, Distrigas, a government company that imported and distributed gas. Supply to the customers was done in the same manner as for electricity by the same intercommunal companies. As a consequence of a number of European directives these markets were turned upside down from the beginning of the 21st century onwards. For electricity the first (96/92/EC) and the second electricity directive (2003/54/EC) were important. In a nutshell the prime objectives of these directives were:

- Removal of legal monopolies
- Regulated third party access to transmission and distribution networks
- Full market opening by 1 July 2007
- The appointment of a national regulator independent from the electricity industry

- Unbundling (legal, accounting and management) between network activities (transmission and distribution) and all other activities.

The situation in the gas market evolved along similar lines. Five directives (90/377/EEC, 91/296/EEC, 94/22/EC, 98/30/EC, 2003/55/EC) were supposed to draw the new lines. The prime objectives here were:

- Full market opening
- Installation of national sector regulators
- Regulated third party access
- Regulated or negotiated access to storage
- Unbundling of integrated companies.

The transposition of these directives into Belgian legislation was complicated by the institutional structure of the country. Belgium chose to put the control of the electricity and gas markets in the hand of one institution, but also wanted to create regulators on the regional level. In this paper we will concentrate on the federal regulator CREG.

It has to be said that liberalisation is proceeding at different speeds, according to the market (faster in the electricity market than in the gas market), according to the type of customer (faster for big companies than for small companies and private households) and according to the region (faster in Flanders than in Wallonia and Brussels). The unbundling of Electrabel and of Distrigas took off. A series of new suppliers joined the electricity market, although Electrabel Customer Solutions, a subsidiary of Electrabel, strongly dominates this market and Electrabel itself takes in a dominant position in the generation of electricity. Following stronger competition on the end market a certain downward pressure on prices can be diagnosed, but this is mostly compensated by a number of government levies and the rise in oil prices.

The Dimensions of Independence

The statutes of the CREG are laid down in the Electricity Act of 29 April 1999 and in the Gas Act of the same date. Furthermore there is a Royal Decree of 3/5/1999 on incompatibilities and conflicts of interests as far as the Executive Board is concerned. Two bodies govern the CREG, the General Council and the Executive Board. The General Council has to control the Executive Board and is composed of representatives of the federal government, of employers' organisations, of trade unions, of the middle classes organisations, of environmental organisations, of the transmission system grid operator, of the distribution system grid operators, of middle men, of suppliers and of consumers. The actual policy is conducted by the Executive Board of the CREG consisting of a president and five members.

As concerns formal independence from the government and the parliament the statutes provides for an appointment of the president and the members of the Executive Board by the Cabinet (the Council of Ministers) for a renewable term of six

years. There are no specific provisions for their dismissal. They cannot occupy other public mandates. Independence is a formal condition for appointment.

The independence from stakeholders is provided for by the Royal Decree of 3/5/1999 mentioned above. Members of the Executive Board are prohibited from taking up a job in the energy sector during their tenure and for a year after. A job preceding the appointment poses no problem. Members of the Executive Board may have no shares or equivalent securities emitted by electricity or gas companies, nor any financial instruments allowing the acquisition or transferral of such shares or securities, or entailing payments in cash that depend on the value of such shares of securities. When a member of the Executive Board, directly or indirectly, has an interest in a decision, opinion or any other act by the CREG, he/she cannot participate in the deliberations of the Board, nor in the vote by the Board. He/she has to inform beforehand the other members of the Board and the Board has to mention this in the minutes of the meeting.

The policy independence of the CREG is quite high. It is fully competent for setting tariffs and for the access to the networks and the dispute settlement between companies and between companies and customers. There is a shared competence for the granting of licences and for the laying down of rules regarding terms of delivery. An informative annual report has to be laid down to the government and to the parliament. No other non-judiciary institution, except for the State Council, can overturn a decision by the CREG.

Functional and organisational independence has to be guaranteed by a budget financed by the regulated companies. This budget is controlled by the government. The government and the CREG share competences in the field of internal organisation and human resources management.

The Independence Index

With an index of 0,64 the independence of the federal energy regulator scores more or less at the average of the regulators that were analysed. The index is especially enhanced by the good marks for independence from stakeholders and for policy autonomy.

The methodology used in this paper is the same as the one used by Johannsen (2004) for their analysis of the independence of European energy regulators. In their paper it is reported that from the 15 EU member states only the Belgian respondent failed to return the questionnaire (Johannsen 2004, p. 45). The present paper gives us data that are perfectly comparable to the results of Johannsen.

TABLE 3.2
The Independence of the Federal Energy Regulator

	CREG	Average other EU energy regulators
Variable A	0,44	0,61
Variable B	0,71	0,55
Variable C	0,90	0,79
Variable D	0,50	0,80
Independence index	0,64	0,68

Source: EU averages: Johannsen (2004)

The Belgian energy regulator scores close to the European average on the global independence index, but this average hides strongly deviating averages for the underlying variables. The formal independence of the CREG is lower than in the other EU member states, while the independence from stakeholders is substantially higher. The policy autonomy of the CREG is better than in the rest of the EU, while financial and organisational autonomy is much lower.

Financial Sector Regulator

General Background

The roots of the banking regulator are to be found in the thirties of the previous century and have to do with the consequences of the worldwide economic crisis of that period. This crisis revealed itself in the Belgian financial sector through the bankruptcy in March 1934 of the 'Belgische Bank van de Arbeid'. This bank was of the 'so called' mixed type, meaning that the bank used the funds that it collected not only to grant credit but also to participate in company shares. When companies get into trouble because of the economic crisis, the participating bank also gets problems, sometimes leading to bankruptcy.

To avoid such problems the Belgian banking legislation was adapted. Mixed banks had to be split up in pure deposit banks and holding companies. In this context the installation of an independent Banking Commission took place, inspired by the American Securities and Exchange Commission. This Banking Commission had, among other tasks, to control access to the market of the deposit banks and their solvability and liquidity positions.

Over the years new tasks were regularly added, so that at present the Banking Commission not only controls the banking sector, but also the larger financial sector and the insurance sector. Its name had to be changed into the Banking, Finance and Insurance Commission (CBFA). The CBFA acts as the watchdog for a large variety of companies and markets: banks, insurance companies and their intermediaries, pension funds, collective investment funds, securities markets, IPO's, settlement and clearing systems,

The statutes of the CBFA are laid down in the Act on the supervision of the financial sector and financial services (2 August 2002). The CBFA is composed of a

supervisory board, an executive board, a president and a secretary general. The executive board is clearly the more important body since it is charged with the daily management of the CBFA. It determines the CBFA policy and takes decisions in all matters that have not been explicitly reserved to another organ. Thus we will concentrate on the executive board.

The Dimensions of Independence

The Act of 2 August 2002 pays careful and extensive attention to the workings of the CBFA. Broken down through our questionnaire we revealed the following: Regarding the independence from politics we observe that the members of the executive board are appointed by the Cabinet for a renewable term of six years. There are no specific provisions for their dismissal and independence is no formal condition for the appointment. The membership of the executive board cannot be combined with a position in a legislative organ on the regional, federal or European level, nor with a position in the executives at regional or federal level. Members of the executive board can, when approved by the responsible minister, take up positions in international institutions where Belgium is involved or in Belgian public advisory committees.

Independence from stakeholders is guaranteed through a prohibition to take up positions in a supervised company until two years after the end of the term at the CBFA. There are no provisions for the period prior to the term of appointment. The members of the executive board may not participate in deliberations on matters in which they have personal interests of a patrimonial nature or when relatives are involved in such a way that their judgment could be affected.

The policy autonomy of the CBFA is high. The CBFA has an extensive list of functions laid down by law for which it is entirely competent. The tasks comprise mainly controlling the observation of rules. Part of these rules concern prudential control, part concern market supervision. According to the IMF 'the CBFA has generally adequate powers of supervision and inspection for the financial entities under its regulatory authority' (IMF 2006). The CBFA only has to answer to the parliament by way of an informative annual report.

Finally we take a look at the financial and organisational autonomy. The budget of the CBFA is financed mainly by contributions from the supervised companies. The CBFA controls the budget itself and furthermore has a large degree of autonomy in handling its own organisation and human resources.

The Independence Index

With an independence index of 0,82 the CBFA is the most independent of the regulators that have been studied. This average hides a relatively low score on formal independence where the mark for the CBFA is only 0,44. On the other variables the CBFA obtains high scores.

TABLE 3.3

The Independence of the Financial Regulator

Variable A	0,44
Variable B	0,83
Variable C	1
Variable D	1
Independence index	0,82

We have no knowledge of international studies analysing the independence of financial regulators in a quantitative manner. Quintyn and Taylor (2003) apply a qualitative analysis in which they use four dimensions of independence: regulatory, supervisory, institutional and budgetary independence. Those four dimensions do not cover exactly the dimensions used by Johanssen (2004). Especially the independence from stakeholders is a conspicuous absent in Quintyn and Taylor (2003). It would be interesting for future research to complete the Quintyn and Taylor dimensions and to operationalise them through quantification along the lines of Johannsen (2004).

Postal Services and Telecommunications Regulator

General Background

Although the Belgian Institute for Postal and Telecommunications Services has competences in the field of telecommunications as well as in postal services, we will limit ourselves to the telecommunications markets because of its larger size and its bigger impact on daily life. Similar to the energy sector the developments in the telecommunications sector should be viewed in a European perspective. As in the energy sector the principle of a European single market was introduced later than 1 January 1993, namely since the end of the 90s of the previous century.

The starting position displays analogous features: a strongly regulated market with a government monopoly that after privatisation and liberalisation was suspected to keep a dominant position in a sector that displays at certain points in the production chain characteristics of a natural monopoly. (cf. the local loop).

As the energy sector the telecommunications sector experienced several European regulatory waves. A fist wave was finished in 1998 with a series of directives. A second wave arrived in March 2002 with the approval of four directives profoundly changing the approach to regulation (Directives 2002/19/EC, 2002/20/EC, 2002/21/EC and 2002/22/EC, later supplemented by the Directives 2002/58/EC en 2002/77/EC).

These measures introduced a system of free access. There is no need anymore for a preliminary authorisation to be active on the telecom markets. A crucial set of rules determines whether a company occupies a dominant position in a given market. If that is the case this market may be regulated.

This regulating has to be done by a national regulator who is supposed to perform all the tasks that are given to the member states by the directives mentioned. 'Member States shall guarantee the independence of national regulatory authorities by ensuring that they are legally distinct from and functionally independent of all organisations providing electronic communications networks, equipment or services. Member States that retain ownership or control of undertakings providing electronic communications networks and/or services shall ensure effective structural separation of the regulatory function from activities associated with ownership or control. Member States shall ensure that national regulatory authorities exercise their powers impartially and transparently' (Art. 3, section 2 & 3 Directive 2002/21/EC).

The Belgian telecommunications market is a market where the incumbent Belgacom still has a dominant position. Belgacom and its affiliated company Proximus have large market shares in, that is, fixed and mobile phone markets and also control supply of some essential facilities to the other actors in the market. As long as this situation lasts there is a need for intervention by the sector regulator. Furthermore as long as there are elements of a natural monopoly in the network of fixed telephone services (the so called local loop), permanent attention by a sectoral regulator is called for. This regulator, the Belgian Institute for Postal Services and Telecommunications (BIPT) was established in 1991 as the regulatory body of the postal and telecommunications sector and started its activities in 1993. The Act of 17 January 2003 the competences of the BIPT were adjusted to the European telecom exigencies. The BIPT has competences in access and in economic and technical regulation.

The Dimensions of Independence

The statutes of the BIPT were laid down in the Act of 21 January 2003 concerning the statutes of the regulator of the Belgian postal and telecommunication sector (Official Gazette 24 January 2003). The most important organ of the BIPT is the Council: 'The Council has the power to perform all deeds necessary to exercise the competences of the Institute. It represents the Institute before the courts and before third parties and it may conclude agreements in name of the Institute'. (art. 17). Regarding the formal independence from politics we observe that the four members of the Council are appointed by the King, after consultation in the Cabinet, for a renewable term of six years. The King can also, after consultation in the Cabinet and on the proposal of the minister competent for telecommunication, remove the members from their position. There are no specific dispositions for the combination with other public mandates. The statutes explicitly state that members of the Council are appointed on the basis of their competences, integrity and independence.

Concerning the independence from stakeholders there are no dispositions preventing the appointment as a Council member someone coming from the telecommunication sector. During and up to two years after their appointment member cannot have any interest in companies active on the markets of telecommunication and postal services. They may not, directly or indirectly,

remunerated or for free, exercise any function or supply any service to such companies.

The Council members are held to professional secrecy. 'They may not communicate any confidential information that they have collected in carrying out their function to third parties, except in the exceptions laid down by a legal act' (art. 23). Policy independence is substantiated by the full power to determine termination tariffs in fixed and mobile telephony. Under the BIPT Act, the Council may impose an administrative fine for a violation of the laws or any regulatory decision implementing the framework which can range between 0.5 and 5 percent of the last annual turnover in the relevant market, up to a maximum of €12.5mn (Commission of the European Communities 2004). The Council is obliged to make up a yearly report for the competent minister and twice a year it has to deliver an activities report to the Chamber of Representatives. According to art 15, §1 the Council of Ministers may, on the proposal of the competent Minister, suspend a decision on matters determined by a Royal Decree and when they consider such a decision to be illegal or contrary to the public interest. To date, such a Royal Decree has not been adopted.

Regarding financial and organisational independence the BIPT has an autonomous financial management which means that all operational costs are financed by the revenues of the Institute. These revenues mainly comprise fees for frequency licences, numbering plans, licences and declaration of networks and telecommunications services, as well as declarations of operation regarding other services. The annual report also comprises a financial statement. Decisions on the number and organisation of the staff are made by royal decree. The Institute has a right to advise the responsible minister on these matters.

The Independence Index

The BIPT positions itself in the middle group together with the CREG as regards global independence. The BIPT scores high on the variables B (independence from stakeholders) and C (policy independence), and low on the variables A (formal independence from politics) and D (financial and organisational independence)

TABLE 3.4
The Independence of the Telecom Regulator

Variable A	0,39
Variable B	0,83
Variable C	0,83
Variable D	0,38
Independence index	0,61

International points of reference can be found in the periodical studies of the European Competitive Telecommunications Association (ECTA a.o. 2006). ECTA uses 99 quantified variables. The spectrum overviewed by ECTA is larger than the one in this paper. ECTA intends to measure the effectiveness and efficiency of

telecommunication markets in a very detailed way for a very detailed number of aspects. Of course part of the 99 variables concern various aspects of the independence of regulators. More specifically there are three variables falling under the header 'Powers and sanctions', four variables under the heading 'Scale of resources' and six under 'Independence'. The first group falling under our chapter of policy autonomy carries a weight of 15 on a total of 518. The second one, under financial autonomy, carries 8 and the third one, belonging to our category of formal independence from politics, carries 36. The Belgian regulator scores 10, 6 and 11 respectively. Expressed in perunage these scores are 0,66, 0,75 and 0,31. The weighted average of the three groups taken together is 0,46. For all 99 variables the BIPT scores 281 on 518, or 0,54.

Railways

General Background

The European railway sector was traditionally governed by integrated public companies and could not meet the competition from other transport means in a growing mobility market. As in other network industries the EU objective was framed in the idea of the single market and was meant to introduce more open markets and to break up government monopolies. A first (Directives 2001/12/EC, 2001/13/EC and 2001/14/EC) and a second railway package have already been introduced, a third package is under the way.

The first package intended a.o. to separate infrastructure from transport service provision, to put down rules for the use of infrastructure and to harmonise the various railway systems. Important in our context is the obligation for the member states to install a railway regulator. The second package wanted to secure open access for international freight transport and the opening of the market for national freight transport (cabotage). The third package will that is introduce a further opening up of the market for international passenger transport.

In the Belgian railway sector a restructuring recently took place, in execution of the first railway package. More specifically the operation and the infrastructure have been disintegrated. The two divisions were organised as affiliates of a holding company. The national railway company NMBS takes care of the exploitation, another company called Infrabel manages the infrastructure.

The exploitation part of the sector has opened up for competition already but is presently almost entirely in the hands of the incumbent NMBS. Infrastructure is a natural monopoly. An independent supervisory organism is needed, on the one hand to guide the market process in the operation part and on the other hand to control the manager of the infrastructure. Thus the Belgian government provided for the setting up of a supervisory body, called the Regulatory Service for Railways Transport and for the Exploitation of the Brussels National Airport.

The Dimensions of Independence

The statutes of the Regulatory Service are laid down in the Royal Decree of 12 March 2003, supplemented by the Royal Decree of 25 October 2004 that has been changed by Royal Decree of February 01, 2006. More specifically, regarding formal independence from politics the appointment of the members of the Regulatory Service, the number of which is not put down in the Royal Decree, is done by the Minister of mobility. The director and the deputy director are appointed for a term of six years as employees on a contractual base. It is not explicitly stated whether the appointment is renewable, but the contrary is also not explicitly stated. In that case normal appointment rules apply and the contract can be renewed. The other members hold an employee contract for an unlimited term. There are no specific provisions for the dismissal of the members of the Regulatory Service. Nor are there specific provisions regarding the combinations with other public mandates. Independence is not a formal condition for appointment.

Regarding the independence from stakeholders there are no provisions prohibiting taking a job in the regulated sectors before or after the appointment. During the appointment such a prohibition exists. The members of the Regulatory Service are bound by professional secrecy regarding the knowledge of facts, deeds and information acquired during the execution of their functions. They may have no direct or indirect interests in a supervised company. The policy autonomy of the Regulatory Service should be regarded as non existent since the Service operates directly under the supervision of the transport minister. The same applies for financial and organisational autonomy. It is non existent given that the Regulatory Service is totally imbedded in the administration.

The Independence Index

The railway regulator clearly is the weak element of the regulators studied. Independence is almost entirely absent. There is a minimal distance from stakeholders. The distance from politics is also very minimal. Policy autonomy and autonomy for financial matters and HRM are totally absent.

TABLE 3.5
The Independence of the Railway Regulator

Variable A	0,22
Variable B	0,58
Variable C	0
Variable D	0
Independence index	0,20

Summary and Further Analysis of the Results

It is useful to look at the results not only per regulator but also per sub domain. In table 3.6 the results for formal independence from politics are summarised. These results lie relatively close in a range below 50 % with an even worse score for the railway regulator (appr. half the score of the other regulators).

TABLE 3.6
Formal Independence from Government

	Variable 5	Variable 6	Variable 7	Variable 8	Variable 9	Variable 10	Variable A
Competition Council	2/3	1/3	1	2/3	0	0	0,44
CREG	2/3	1/3	1/2	1/3	0	1	0,44
BIPT	2/3	1/3	0	1/3	0	1	0,39
CBFA	2/3	1/3	1/2	1	0	0	0,44
Railway regulator	2/3	0	1/2	1/3	0	0	0,22

TABLE 3.7
Independence from Stakeholders

	Variable 12	Variable 13	Variable 14	Variable 15	Variable B
Competition Council	1/3	0	1/2	1/2	0,33
CREG	1/3	1/2	1	1	0,71
BIPT	1/3	1	1	1	0,83
CBFA	1/3	1	1	1	0,83
Railway regulator	1/3	0	1	1	0,58

The danger of capture by regulated industries is reflected in variable B (see table 3.7). The CREG, the BIPT and the CBFA score high on this variable, the railway regulator has a low figure.

TABLE 3.8
Independence in Decision Making

	Variable 17	Variable 19	Variable 20	Variable 21	Variable C
Competition Council	1	1	1	1/3	0,83
CREG	0,6	1	1	1	0,90
BIPT	1	1	1	1/3	0,83
CBFA	1	1	1	1	1
Railway regulator	0	0	0	0	0

The score of the competition authority is low but probably less relevant. It reflects the answers to the Johannsen (2004) questions, but given the playing field of the competition authority that covers the whole of the economy the score itself is less relevant.

For the variable on policy autonomy the railway regulator again falls out of line (see table 3.8), since there is no policy autonomy at all. The other regulators score well on this variable.

In table 3.9 we can see the results for variable D organisational and financial autonomy. Here the variation between the scores is highest. They vary from 0 for the railway regulator to 1 for the financial regulator.

TABLE 3.9
Organisational Autonomy

	Variable 23	Variable 24	Variable 25	Variable 26	Variable D
Competition Council	0	0	1/2	0	0,13
CREG	1	0	1/2	1/2	0,5
BIPT	1/2	0	1/2	1/2	0,38
CBFA	1	1	1	1	1
Railway regulator	0	0	0	0	0

The CBFA really is an outlyer on the high side. The other regulators do not dispose of much autonomy in this field either.

TABLE 3.10
Independence Index

	Variable A	Variable B	Variable C	Variable D	Index
Competition Council	0,44	0,33	0,67	0,13	0,43
CREG	0,44	0,71	0,90	0,5	0,64
BIPT	0,39	0,83	0,67	0,38	0,61
CBFA	0,44	0,83	1	1	0,82
Railway regulator	0,22	0,58	0	0	0,20

Table 3.10 gives the independence index which is an average of the four variables. The CBFA scores highest, the railway regulator lowest. The CREG and the BIPT are close to each other at 0,64 and 0,61 respectively, while the Competition Council is under 0,50.

The Inter-Agency Dynamics

The focus should not only be on the independence factor of the regulator in each industry. Attention should also go to the way in which the regulators interact with each other. This point is especially important for the interface between competition authorities and sectoral regulators (Naert 2006a).

In Belgium this relationship is still in the build up stage. The regulation is being developed in a somewhat haphazardly fashion. Fragmentary kick offs are made, as well from the side of competition legislation as from the side of sector regulations. This fragmentary approach, sometimes justified by the urge to transpose European directives into national legislation in time, makes for a lack of policy consistency, although future lines are becoming clearer. For the time being this situation is not very problematic since few cases are presented for which a good institutional design of the relationship between competition authorities and sector regulators is relevant. In the railway sector there are no cases yet. In the energy sector there have been some important mergers in which the cooperation between the CREG and the Competition Service has proved to be quite useful. In the telecommunication sector the Competition Council is avoided by the market players, probably because of its limited credibility.

It can be expected that in the future, in the wake of the continuing liberalisation, the need will become stronger for a well suited relationship. When scanning the present legislation in the various sectors one mainly detects two kinds of relationship, the first being based on hierarchy and the second based on cooperation in a network context. The first kind is based on the possibility of appeal before the Competition Council against decisions made by sector regulators (energy, railways). Independent from the question of which body of appeal is designated the underlying thought seems to be that the appeal can be seen as a partial compensation for the independency of the sector regulator *vis-à-vis* the political authorities. The second is based on cooperation between the general competition

authority and the sector regulator (telecom). These two types mutually exclude each other to a certain degree. Ex ante cooperation, for instance in the form of a preliminary opinion by the competition authority addressed to the sector regulator or the exchange of information from one body to the other, cannot be easily reconciled with an ex post appeal before the general competition authority. The competition authority is 'affected' and is thereby deemed unable to judge in all objectivity in a case where it has been already involved.

However, the bipolar structure of the Belgian competition authority, with the Council as the decision making part on the one hand and the Body of Examiners and the Competition Service as the investigating parts on the other hand, offers possibilities to deal with this issue. The two pillars are independent from each other. If an investigation is done by the one pillar, an appeal before the other pillar remains possible without problems. If the Council, in order to prepare its decision, uses information coming from the investigation pillar, it must be deemed objective and independent enough to deal with this information.

This construction installing some hierarchical link in the relationship between the competition authority and the sector regulators offers advantages. The hierarchical link avoids that powers have to be divided a priori between the competition authority and the sector regulators. A conflict of competences can only arise after the sector regulator has taken a position. A deadlock of decision making can thus be avoided.

Furthermore the competition authority will always know beforehand the viewpoint of the regulator before it has to speak out itself. This allows the competition authority to judge in a better informed way which leaves the last word to this authority (of course under the proviso that there is no appeal against the decision by the competition authority).

Conclusion

In this paper, we tried to investigate the independence and credibility of five Belgian regulatory authorities. From the literature we learned that we can expect a close correlation between independence and credibility in the sense that the more independent a regulator is, the higher will be its credibility.

In the theoretical part of the paper we focused on the marginal costs and benefits of independence. By combining these costs and benefits we can show that there exists a theoretically optimal degree of independence. The optimum may differ across sectors because of different underlying costs and benefits. Available research focuses on regulators in one sector in a multi country setting (see for instance Johannsen 2004 for energy regulators; Quintyn and Taylor 2003 for financial regulators and ECTA (2006) for telecommunications regulators). Such an approach has the advantage of allowing for comparisons between the independence of regulators acting in similar markets, but loses the perspective of how individual countries try to tackle regulatory concerns across the whole of the economy.

In the empirical part of the paper we learnt that Belgian governments cannot be accused of having taken a very consistent approach to the design of regulatory authorities, neither through time nor across the various aspects of independence. We observe that the regulatory authority which has the longest standing, namely the financial regulator CBFA which dates back from the thirties, is also the most independent regulator, while the youngest regulator, the railway regulator that was set up very recently, is the least independent one. The other regulatory agencies were created in the nineties and have more or les comparable levels of independence, situated somewhere between the indexes for the financial and the railway regulator.

It seems that Belgian governments want less independent regulators nowadays than they are used to. In the case of the railway regulator a minimal approach was taken, only applying the minimum European requirements in the field of independence from stakeholders. Could this mean that independence has reached its limits, or that the perceived optimum level of independence has retreated, maybe because the costs of independence in terms of accountability have grown too high for politicians, or simply that the observed sectors differ so much from each other that their respective marginal cost and benefit curves (see graph 1) are very much apart? This is a matter that requires further research.

Looking at the regulators' scene across the different aspects of independence some consistency is only to be found regarding the formal independence from government. We find the same kind of rules across sectors: renewable appointments for six years, informative annual reports, the council of ministers or the minister as appointing organism. For the three other variables the variety in scores is very high, sometimes ranging from 0 to 1.

Which lessons can be learned from our analysis of Belgian regulators that can prove their usefulness for less developed countries? In the first place it has to be stated that in the domain of regulators Belgium can be considered to be a developing country. Only the financial regulator can take pride in a long experience, while the other regulators are not much older than 15 years at the maximum. The railway infrastructure and airport regulator has even just begun starting up its operation. This means that only little experience with regulators is available and that there does not exist a calibrated model that has proven its value in practice. Belgium, like so many other countries, developed and developing alike, is looking for workable models.

This paper demonstrates that the methodology developed by Johannsen (2004) to quantify the independence of energy regulators can easily be extended to other types of regulators. It seems to be obvious that the methodology can also be used by developing countries. Quantifying the broad independence concept used by Johannsen could then contribute to a more objective discussion. A shortcoming of Johannsen's method could be that the (in) sufficiency of the means available to regulators is not taken into account. Attention is directed to the sources of income and the degree of autonomy that regulators have in using their means, but nowhere is the question is asked whether those means, wherever they come from, allow the

regulator to do what needs to be done. In our view the availability of sufficient means is a determining aspect of the regulators independence to do his job. We will thereby try to take this factor into account in the following, more specifically in relation to credibility.

For the Belgian competition authorities a preponderant aspect of independence has been the lack of financial autonomy. During the most part of its short existence the authorities have struggled with a lack of means (Naert 2006b). Taken together with restrictive rules on notifying concentrations the authorities were forced to spend most of the scarce means to handle innocuous mergers and acquisitions. Restrictive business practices harmful to competition have only recently, after a change in the law, obtained the attention that they merited. A competition authority without teeth can hardly be called a credible authority. A lack of functional and more precisely financial autonomy is to be considered as the determining factor.

This is a story that should be familiar to developing countries. It is true, however, that in a country such as Belgium a lack of means is not caused by a low standard of living but by a lack of prioritising by government. We diagnose that the financial regulator is the institution that gained the most credibility in the Belgian regulatory landscape. The impression is that factors such as the long period of activity and the high independence are very important here. Credibility can only be built (or not) after a sufficient long period of existence and action. The CBFA has through the years gained respect from the financial world as well as from the political world. Besides the CBFA has always had enough financial means to fulfil its tasks properly, while in general independence has also been very high.

The telecommunications and energy regulators are finding themselves somewhere in the middle position. Their independence is not bad, but also not spectacular. The telecom regulator has been heard to complain about its lack of means to operate efficiently, from which possibly can be deducted an insufficient financial independence. As regards its credibility the BIPT is suffering from a lack of it. The sector is questioning its decisions to a considerable degree. The BIPT has taken approximately 100 regulatory decisions between June 2003 and end 2006. Approximately 50 appeals are running against BIPT decisions before the courts.

Besides that, the Belgian level of telecom services prices and of business investment in telecom is not very good compared to other European member states. The Belgian consumer pays significantly more for broadband access or mobile telephone services than the French or German consumer for instance. Business investment in sub-sectors such as fixed and mobile telephony services, cable television networks are among the lowest in the European Union. ECTA (2006) detects a clear statistical relationship between the regulatory framework and the investment level.

The energy regulator is struggling as well. Criticism about the effects of the recently liberalised gas and electricity markets is mounting. Consumer prices are increasing instead of going down. The cause is not really to be found in insufficient action by the regulator. Responsible are the price increases on the international oil and gas markets and the fact that government is taxing away the benefits of the

increased competition. Nevertheless the perception of energy markets is rather negative: the incumbent holds a dominant position in the various segments of gas and electricity activity. Investment levels are esteemed to be low, maybe causing long term problems, to a degree that the government decision taken several years ago to step out of nuclear energy is now coming under fire. These perceptions cast their shadow on the credibility of the regulator. One of the ways through which this crystallises is the fact that at the moment 268 decisions taken by the CREG are now being appealed. Contrary to other regulators a lack of means cannot be discerned. Intimates in the circles of the CREG ascertain that the wages are among the highest in the broad governmental sector.

Although it is probably too early to express oneself on the railway regulator the impression is that it has to start its operation on a wrong footing. Independence levels are generally very low. Regulation has not stabilised yet and it is not clear in which direction regulation is heading. The regulator has a minimal staffing of two persons and it is fully embedded in the government administration. All this is not very promising for credibility.

What can we conclude with respect to less developed countries?

1. It could be a good idea to use the methodology of this paper to quantify the independence of regulators in less developed countries. The CUTS Research Report of October 2006 offers an excellent basis for such quantification by presenting a good sampling of less developing countries and of regulated sectors in those countries.
2. A necessary, although insufficient, condition to have credible, well functioning regulators seems to be financial independence. In the design of regulatory institutions in less developed countries special attention should at least be directed at offering them sufficient means.
3. It is no coincidence that the only Belgian regulator with a high credibility is also the regulator which scores highly on independence, namely the financial regulator. Notwithstanding the various caveats that should be kept in mind in using western experiences for the problems of developing countries, this remains a robust fact for the Belgian situation.
4. Last but not least it should be admitted that the lessons to be learned by less developed countries out of the Belgian experience remain relatively limited. In my view this has less to do with the economic dichotomy between poor and rich, but more with specific institutional, political and cultural differences between countries in general. When comparing Belgium in the field of regulators to other member states of the European Union, than we have to diagnose that, even in the presence of the unifying force of the Union, each country is looking for its own design of regulatory structures. In doing so countries can look into each others gardens, but it does not prevent them from laying out and tending their own garden.

References

Amtenbrink, F. (1999), "The Democratic Accountability of Central Banks", Oxford, Hart.

Commission of the European Communities (2004), "Annex to the European Electronic Communications Regulation and Markets (10th Report)", Commission Staff Working Paper, COM(2004)759 final, Brussels.

CUTS International (2006), "Creating Regulators is Not the End, Key is the Regulatory Process", Research Report, October.

ECTA, Jones Day and SPC Network (2006), "Regulatory Scorecard", Report on the Relative Effectiveness of the Regulatory Frameworks for Electronic Communications in Austria, Belgium, Czech Republic, Denmark, France, Germany, Greece, Hungary, Ireland, Italy, The Netherlands, Poland, Portugal, Spain, Sweden and the United Kingdom, 1 December 2005 (updated April 27, 2006).

Genoud, C. (2003), "Towards a Content and Contextual Approach of Delegation, or How and Why Should we Open the Regulation Black Box," ECPR Joint Session 2003 Delegation in Contemporary Democracies, Edinburgh.

Gilardi, F. (2002), "Policy Credibility and Delegation of Regulatory Competencies to Independent Agencies: A Comparative Empirical Consideration", Journal of European Public Policy, 9(6), pp. 873-893(21).

Gilardi, F. (2003), "Institutional Change in Regulatory Policies: Regulation through Independent Agencies and the Three New Institutionalisms", in: Jordana J. and D. Levi-Faur (eds) (2004). "The Politics of Regulation: Examining Regulatory Institutions and Instruments in the Age of Governance", Edward Elgar and the CRC Series on Regulation, the University of Manchester.

Gilardi F. (2006), "The Same, but Different. Central Banks, Regulatory Agencies and the Politics of Delegation to Independent Authorities", Political Science Working Paper Series, Université de Lausanne, N° 25.

IMF (2006), "Belgium: Financial System Stability Assessment", including Reports on the Observance of Standards and Codes on the following topics: Banking Supervision, Securities Regulation, Insurance Supervision and Regulation, and Securities Settlement Systems, IMF Country Report No. 06/75.

Johannsen K.S. (2003), Regulatory Independence in Theory and Practice. "A Survey of Independent Energy Regulators in Eight European Countries", AKF Forlaget, Copenhagen.

Johannsen, K.S., L.H. Pedersen and E.M. Sørensen (2004), "Independent Regulatory Authorities – a Comparative Study of European Energy Regulators", AKF Forlaget, Copenhagen.

Keefer P. and D. Stasavage (1998), "When does Delegation Improve Credibility? Central Bank Independence and the Separation of Powers", WPS/98-18.

Kirkpatrick C., D. Parker and Y. Zhang (2006), "Foreign Direct investment in infrastructure in developing countries: does regulation make a difference?", Transnational Corporations, 15(1).

Kydland, F.E. and E.C. Prescott (1977), "Rules Rather than Discretion: The Inconsistency of Optimal Plans", Journal of Political Economy, 85(1), pp. 73-491.

Larsen A., L.H. Pedersen, E.M. Sørensen and O.J. Olsen (2005), "Independent Regulatory Authorities in European Electricity Markets", accepted for publication in: Energy Policy.

Majone, G. (1996), Regulating Europe, Routledge, London and New York.

Majone, G. (1997), "Independent Agencies and the Delegation Problem: Theoretical and Normative Dimensions, in: Steuenberg, Bernard and Van Vught (eds.), Political Institutions and Public Policy, Dordrecht, Kluwer Academic Publishers, 139-156.

Minogue, M. (2005), "Apples and Oranges: Problems in the Analysis of Comparative Regulatory Governance", Working Paper Series, Centre on Regulation and Competition, University of Manchester, Paper No. 94, January.

Naert, F. (2006a), "Competition Authorities and Regulators: The Birth of a Belgian Model", paper presented at the 3rd International Conference on Industrial Organisation, Economics and Law, June 12-14, 2006, Athens, Greece.

Naert, F. (2006b), *Een politiek-economische evaluatie van het Belgisch mededingingsbeleid*, in: Kwartaalschrift Economie, 3, Jaargang 3, October.

OECD (1999), "Relationship between Regulators and Competition Authorities", DAFFE/CLP(99)8, 24 June 1999.

OECD (2002), "Restructuring Public Utilities for Competition", Policy Brief, February 2002.

OECD (2005a), "Bringing Competition to Regulated Industries", DAF/COMPGF(2005)1.

OECD (2005b), The Relationship between Competition Authorities and Sectoral Regulators, DAF/COMP/GF(2005)2, 2 February 2005.

Oliveira, G., E.L. Machado, L.M. Novaes and C.B.Guimaraes Ferreira (2005), "Aspects of the Independence of Regulatory Agencies and Competition Advocacy", International Competition Network, Competition Policy Implementation Working Group, Subgroup 3, Competition Advocacy in Regulated Sectors, May 2005, at 6.

Pedersen, L. and E. Sørensen (2004), "Transfer and Transformation in process of Europeanization", in: EGPA 2004 Annual Conference, September 2004

Quintyn, M. and M.W. Taylor (2003), "Regulatory and Supervisory Independence and Financial Stability", CESifo Economics Studies, 49(2), pp. 259-294.

Smith, W. (1997), "Utility Regulators. The Independence Debate", Public Policy for the Private Sector, Note No. 127. Internet: http://rru.worldbank.org/documents/PublicPolicyJournal/127smith.pdf

Thatcher, M. (1998), "Institutions, Regulation and Change: New Regulatory Agencies in the British Privatized Utilities", in: West European Politics, Vol 21, No1, pp. 120-127.

Thatcher, M. (2001), "The Commission and National Governments as Partners: EC Regulatory Expansion in Telecommunications 1979-2000," Journal of European Public Policy, 8(4), pp.558-584.

Wu I. (2004), "Traits of an Independent Communications Regulator: A Search for Indicators", FCC International Bureau Working Paper Series.

Appendix A-3.1
Computation of Independence Index

'In the independence index, we have weighted the variables in each section together to construct four key variables (A, B, C and D). The overall independence index is calculated as the average of the values for the four key variables.

In the construction of variables, all answers have been given a value between 1 and 0; 1 being the answer indicating a high degree of independence and 0 indicating a low degree of independence. Where there are three possible answers, we have accorded the answers the values 1, 0.5 and 0, and where there are four possible answers they have been accorded the values 1, 2/3, 1/3 and 0.12.

In section C, we have constructed a single variable out of the six items from question 17 regarding the competencies of the regulatory authority. The answers for each variable have been coded as the above (1, 2/3, 1/3, 0). The mean of values accorded to the six items in variable 17 is added to the variables coming out of question 19, 20 and 21, concerning the accountability of the regulatory authority vis-à-vis government and legislature. Together they make up the regulatory authority's score on key variable C concerning competency.'

4

Competition Policy in Small Jurisdictions

LINO BRIGUGLIO AND EUGENE BUTTIGIEG

Introduction

This paper argues that in small jurisdictions, the formulation and implementation of competition policies should take account of the special characteristics associated with small domestic markets. Special reference will be made to Malta, a small island state, with a very small domestic market and a competition legislation modelled on the law of larger European states, to a lesser extent of the United States.

The paper will attempt to show that there are many factors associated with small domestic markets that have a bearing on competition law and policy. The thrust of the argument is that while the main principles of competition law that have evolved in larger economies are relevant also to smaller economies, the mode and intensity of application may have to be different in order to take into account the particular characteristics of small insular markets.

It should be kept in mind that, even in small jurisdictions, enterprises differ in the extent to which they can reap the benefits of economies of scale. Scale economies often pose serious problems in manufacturing and mining industries, but this is not necessarily true of many service enterprises including professional services, which are often sheltered from competition by restrictive practices.

Another point that should be kept in mind with regard to the arguments put forward in this paper is that small economies tend to be very open, and trade liberalisation may be as, and perhaps even more, important for promoting competition than competition law itself.

The paper is organised as follows. Section 2 which follows this introduction, lists the characteristics that distinguish small economies from larger ones, while section 3 discusses the factors that may require a more nuanced application of competition law principles in small jurisdictions. Section 4 concludes the study by proposing ways in which the national competition and regulatory authorities in such jurisdictions may apply competition law principles in order to better address competition concerns in these jurisdictions.

Characteristics of Small Jurisdictions

The term "small jurisdiction" is often used when discussing small geographical entities. This term includes small independent states as well as parts of larger states with a degree of administrative autonomy, and island provinces or regions with an

isolated geographical market. In this paper, small states and small jurisdictions are used interchangeably.

The Meaning of Small Size

A small economy is defined by Gal (2003) as 'an independent sovereign jurisdiction that can support only a small number of competitors in most of its industries'. This definition captures the fundamental concept of smallness with regard to competition law and policy, namely the highly concentrated nature of most of its markets. In reality a small economy is likely to be characterised by monopolistic or oligopolistic structures.

In studies on the economies of small states, the size of a jurisdiction is measured in terms of its population, its land area or its gross domestic product. Some studies prefer to use population as an index of size, while others take a composite index of the three variables.[16] There is no general acceptance as to what is the cut-off point between a small jurisdiction and other jurisdictions, although a jurisdiction with a population of around 1 million or less would generally be considered as a small one.

So far there has not been any attempt to classify jurisdictions according to the size of their domestic market, although the issue has been discussed in a number of studies (see, for example, Armstrong and Read 1998, Murphy and Smith 1999, and Gal 2001a, 2002).

One possible indicator could be a composite index consisting of population multiplied by real consumption expenditure, suitably standardised for international comparisons. Such an index would take account of the number of actors and the value of transactions within a given market. A cut off point would also be needed to establish whether a domestic market, in a given jurisdiction, is to be considered as a small one.

Small Domestic Markets

Small jurisdictions are likely to have a small domestic market, which in turn limits competition possibilities, due to the ease of market dominance by firms. For this reason, small markets tend to be characterised by monopolies and oligopolies. In addition, in these markets utilities such as electricity, fixed line telephony, gas and water, are provided by the so called natural monopolies, due to the relatively large overhead costs which do not permit more than one entity to viably supply the service.

Another characteristic of small markets relates to barriers to entry. There are natural barriers, due to the poor chances of success of setting new business in goods and services already supplied by existing firms. In addition, in a small market bulk buying is often required to avoid excessive fragmentation of cargoes, especially in the case of raw materials, and this limits the number of players in that market. There may also be artificial barriers to entry, often imposed by governments, to make it

---

[16] On this question see Downes (1988), Jalan (1982) and Briguglio (1993).

viable for a business to invest in certain types of production of goods and services, where overhead costs are large, and hefty capital outlays are required. In many cases, entry is also limited in the provision of services where competition could be possible, but the nature of the service requires licensing.

In addition, arrangements between importers and distributors may be easier to put in place and to justify in small jurisdictions. These often result in market entry restrictions and lead, amongst other things, to limitations in intra-brand competition. Although this is likely to stem from self-interest, it is often proposed as an argument against uncontrolled competition which leads to excessive fragmentation and instability. This issue will be discussed further below.

Yet another characteristic of small jurisdictions is parallel behaviour between firms, due to the fact that family ties in business are common. In such circumstances, the competition authorities may find it difficult to distinguish between concerted practices and independent action.[17]

Market Failures and Externalities

In a small domestic market, especially in the case of islands, it is more likely to find market failures, due to a number of factors, including the existence of relatively large external social and environmental effects. In such cases, market forces cannot be relied upon to ration supply and demand. In Malta, for example, business activity tends to have relatively large environmental impacts. This often leads to the need to limit the number of producers, permitting existing producers to continue enjoying dominance, even if the market, small as it may be, can take more suppliers.

Limited Natural Resource Endowments

Small country size often implies poor natural resource endowment and low inter-industry linkages, which result in a relatively high import content in relation to GDP (see Briguglio 1995). In addition, there are severe limitations on import substitution possibilities (Worrell 1992, p. 910).

This reality often leads to the domination of the market by undertakings monopolising import channels. One also finds in small jurisdictions a strong resistance by the existing businesses to parallel imports and a strong lobby for exclusive dealing arrangements, on the grounds of rationalisation. The Director for Fair Competition in Malta has been reported saying that resistance against parallel imports was one of the main problems relating to competition in Malta.[18]

High Reliance on Export Markets

A small domestic market gives rise to a relatively high dependence on exports (see Briguglio 1995) and therefore on economic conditions in the rest of the world. The high degree of export orientation is essentially a pro-competition situation, since

[17] See also Muscat (1998).
[18] On this question see also Gatt (1996).

success in export performance requires competitiveness. However, as already explained, small size renders the exploitation of the advantages of economies of scale difficult, mostly due to indivisibilities and limited scope for specialisation, which give rise to high per unit costs of production. It is thus often the case that a critical size is required to enable a firm to compete in the international market, and again here, the argument for rationalisation, and against fragmentation, tends to be a strong one.

State Aid

As is well known, state aid is often considered as a distortion to competition[19] but in small jurisdictions, especially insular ones, the case for providing state aid may be stronger than in larger territories, given the high degree of economic openness of such states and the need to be internationally price competitive. For this reason, state aid may be considered as justified in order to permit some form of level playing field across countries, in cases where small size and insularity have an important bearing on the cost of production.

Insularity and Transport Costs

Many small states and small jurisdictions are also islands, and therefore face additional transport costs, which are included in the price of imported industrial supplies and finished goods. Islands, being separated by sea, are constrained to use only air and sea transport for their imports and exports. Land transport is of course out of the question, and this reduces the options available for the movement of goods. Apart from high per unit cost of transport, insularity may also give rise to additional problems such as time delays and unreliability in transport services. These create risks and uncertainties in production. Such disadvantages are more intense for islands that are archipelagic and dispersed over a wide area.

An additional problem is that when transport is not frequent and/or regular, enterprises in islands find it difficult to meet sudden changes in demand, unless they keep large stocks. This implies additional cost of production, associated with tied up capital, rent of warehousing and wages of storekeepers.

Small Population Pool and Administrative Constraints

The size of the population has a bearing on competition law and policy. In small jurisdictions, where the population pool is small, the chances of finding the necessary expertise to administer competition law and policy are smaller.[20] Although

[19] The EU makes several exceptions to this principle and it has drawn up a number of guidelines on the extent to which these exceptions may be used, including aid granted for the purposes of restructuring and for rescuing companies which risk bankruptcy, aid for research and development, aid granted to promote Small and Medium-Sized Enterprises (SMEs), aid to promote employment, aid for training, aid to assist deprived urban areas and aid granted to promote the environment. The EU also allows aid which is granted to promote economic development in disadvantaged regions to support investment projects and in certain cases to compensate for transport disadvantages.

[20] To make matters worse, many trained specialists originating from small jurisdictions often emigrate to larger countries, where their specialised services are better utilised and where remuneration is more attractive.

smaller jurisdictions will need a smaller number of personnel, the proportionality rule does not hold, due to the problem of indivisibility, especially in matters associated with administration. As a matter of fact, the number of public administration personnel per capita of population, are likely to be larger in small jurisdictions when compared to larger jurisdictions. As a result many government functions tend to be very expensive per capita when the population is small, due to the fact that certain expenses are not divisible in proportion to the number of users.

Implications for Competition Law

The literature on competition law and policy in relation to small jurisdictions is growing, following the seminal work by Gal (1998, 2001a and 2001b). A major review of this issue was carried out by the OECD Global Forum on Competition (OECD 2003).[21]

The effects of smallness on optimal competition law and policy can be grouped into two main categories:[22]

- Cases in which small size calls for a competition policy that assigns major importance to efficiency;
- Cases in which small size affects the content of the law itself.

With regard to the first category of cases, it can be argued that competition law should attempt to strike an optimal balance between structural efficiency and competition so that firms operate at efficient scales and pass some or all of the benefits arising from efficiency on to consumers. For small economies productive and dynamic efficiency considerations need to be given major importance, given their small size. Some form of consolidation and concentration may be a necessary evil in order to attain efficiency.

The second category of cases can be explained with regard to Merger review standards. For example, the EC turnover rates that serve to screen anti-competitive mergers are much too high for small economies. This choice of index may be suitable to the nature of EU markets, in which it might be presumed that absent clear showings to the contrary, firms in markets that meet this threshold have already exhausted their scale economies. Yet such a presumption does not hold true in small economies.

These two categories of cases have major implications relating to competition law and policy in small jurisdictions, notably with regard to abuse of a dominant position, agreements, mergers and enforcement of the law.

---

[21] On this issue see also Stewart (2004).

[22] For further elaboration on this distinction see Gal (2006).

Abuse of a Dominant Position

Generally speaking, competition legislation does not take account of economic benefits[23] when considering abuse of a dominant position, although dominance per se is not normally prohibited. In competition regimes modelled on Article 82 of the EC treaty, abuse arising from dominance, such as limiting production, applying dissimilar conditions, (including price discrimination to equivalent transactions), charging excessive prices and refusing to supply goods or services in order to eliminate a trading party from the relevant market, are generally prohibited, and once detected the undertakings responsible will be sanctioned.

Interestingly, however, in its *Discussion Paper on the Application of Article 82 of the Treaty to Exclusionary Abuses*, the European Commission is now acknowledging that there might be room for an efficiency defence even under Article 82.

There could be situations where what may be considered as abuse of dominant position in a large market, need not be so in a small market particularly with regard to discrimination, "excessive" pricing and foreclosure of the market. Conversely, in some instances what may constitute abuse in a small market need not be so in a large market, as may be the case with refusal to supply.

Moreover, even in relation to the notion of dominance, a National Competition Authority (NCA) must be wary of following blindly rules of thumb that have evolved in larger jurisdictions as in small economies lower market shares may indicate a higher degree of market power because there is a higher degree of inelasticity of supply (see Gal 2006, p. 24).

Discriminatory Conditions

In some cases letting joint dominant oligopolists indulge in discriminatory practices may be to the advantage of the consumer. As Gal (2001a) argues, in oligopolistic markets discriminatory pricing may work against rigid oligopolistic price structures and could result in lowering prices to the benefit of the consumers.

Gal is also of the opinion that discounts are generally to be encouraged. She argues that:

'To forbid them would often reduce efficiency and slow reactions to changed market conduct ... Discrimination in small economies, thus, merits a deeper analysis of its real effects on the market.'24

Excessive Pricing

Similarly, a seemingly excessive price, when compared to the price of similar products in larger countries, may be justified in a small jurisdiction, since this may be one way in which a firm could cover costs associated with importing the product,

---

23 In other words, economic benefits are not traded off against the adverse effects of dominance as they are under Art 81 EC Treaty type of provisions—this lack of consideration to offsetting economic benefits could, in some cases, be detrimental to consumer welfare and consumer interests.

24 On this issue see also Buttigieg (1999).

particularly in the case of islands where transport costs tend to be relatively high, or to cover the relatively high overhead expenses associated with importing small quantities or producing on a very small scale.

The issue of transport costs is very important in this regard. One implication for competition is that a straightforward comparison with analogous goods in nearby mainland markets may not be appropriate.

Foreclosure of the Market

In small jurisdictions, where the number of players must necessarily be small, existing firms may tend to forestall new entrants, fearing that they will lose their share of the market. This is of course also true in the case of large jurisdictions, but the effect of new entrants on existing firms is likely to be more pronounced when the domestic market is small.

In the case of small domestic markets, the new entrants may find themselves suddenly controlling a large share of the market, as was the case with a supermarket chain in Malta. The sudden exit of this supermarket chain from the market left many business creditors at a disadvantage, and excessively destabilised the market, to the detriment of consumers. Such destabilising effects of exit and entry into the market are likely to be more pronounced in small domestic markets than in larger ones.

This does not mean that barriers to entry should be encouraged, but that: the limited number of players that can be accommodated in a small market constrains competition possibilities; and the high degree of instability that arises by the entry and exit of a relatively large firm should be given due importance when assessing consumer welfare in the context of competition law.

This is also noted by Ovum and and Indepen (2005), who state that in a microstate the number of mobile telephony licences must be limited to a number that strikes the right balance between maximising competition and maximising productive efficiency. They observe that such small markets limit the prospects for competitive entry at efficient access prices and they stress that in microstates, more than in macrostates, it is imperative that inefficient entry is discouraged as this is more damaging to the market than in large states. This argument is based on the premise that a microstate incumbent's ability to meet its universal service obligation and to invest in new technologies is more vulnerable to inefficient entry than is the case in a larger country. Small market conditions increase the importance of ensuring that microstate incumbents have the necessary investment incentives to build a nationwide next generation network. The report notes that it is especially important to build economies of scale effects into regulated access prices in microstates. While it is important that the incumbent firm or firms face competition, or at least the threat of competition, encouraging inefficient entry generates significantly greater social costs in microstates than in larger states with larger markets.

However, a word of caution is warranted with regard to such an argument. This assumes that the regulator has the knowledge and ability to differentiate efficient

from inefficient entry. Preventing entry into the market, even if eventually firms will realise that it was unprofitable to enter, could significantly reduce competitive pressures, even in small markets.

Refusal to Supply

Due to the constraints of replicating infrastructural facilities, there is more scope for the application of the essential facilities doctrine in small jurisdictions. Although the same theoretical analysis for essentiality applies in small and large economies, market conditions in the former therefore increase the probability that will be found in small ones. This leads to the argument that refusal to grant third party access to essential facilities owned and controlled by a dominant firm should be more readily and rigorously checked in small markets (Buttigieg 1999).

Thus, for example, what to a US agency would not appear to be an essential facility as it could be replicated by a potential entrant who is just as efficient as the incumbent, in a small jurisdiction the first entrant would be able to monopolise the sector where there is heavy sunk costs. This would of course be an argument for considering as anti-competitive a refusal to grant access or to grant access on equal terms that in a larger jurisdiction would not be deemed an abuse of a dominant position.

For instance, in November 2006, the Malta Communications Authority (MCA) decided to impose access obligations on Malta's two mobile network operators (MNOs) in favour of mobile virtual network operators (MVNOs) because it concluded that, since the two MNOs jointly enjoy significant market power in the wholesale access and call origination market, in the absence of such an obligation it would be impossible for any MVNO to penetrate the market.[25] On the other hand, in the US, the FCC has repeatedly found the mobile market to be effectively competitive and so it refuses to intervene by mandating that MNOs provide open access to MVNOs. The same is true of a number of other large jurisdictions (see Dippon 2006) As noted by Dippon, in these countries "MNOs" mobile networks do not qualify as essential facilities, as competition for mobile services traditionally has been strong … the ready availability or duplicability of mobile network facilities eliminates the essential facilities justification.'

Overall Remark with Regard to Dominant Positions

These arguments relating to the abuse of a dominant position should not be interpreted as proposing a case for allowing such abuse in small jurisdictions, but to explain that maximising consumer welfare may, in these jurisdictions, require an economic analysis which takes into account the issue of smallness and insularity.

[25] Malta Communications Authority 'Market Review – Wholesale Access and Call Origination on Mobile Networks' 21st November 2006.

Agreements

In the case of certain agreements, restrictions are often legally permitted, if the agreement between undertakings contributes towards the objective of improving production or distribution of goods or services or promoting technical or economic progress.[26] This is the case in Maltese law. In other words, agreements containing anti-competitive clauses may escape the prohibition if, on balance, the economic efficiencies they generate outweigh the negative effects.

In the case of Malta, various vertical agreements including certain exclusive distribution agreements, purchasing agreements, selective distribution agreements and franchise agreements and some horizontal agreements are allowed and exempted in block, on such grounds. Exemption regulations were adopted on Vertical Agreements and Concerted Practices (Legal Notice 271 of 2001), Research and Development Agreements (Legal Notice 177 of 2002), Specialisation Agreements (Legal Notice 178 of 2002) and Technology Transfer Agreements (Legal Notice 176 of 2002).

It may be argued that in small jurisdictions collaborative arrangements (horizontal as well as vertical ones) may have positive effects for business and ultimately for consumers, for acting on their own, the local operators that are typically micro enterprises, are likely to face strong often insurmountable constraints in competing with larger foreign enterprises based in larger jurisdictions. Such arrangements would enable them to rationalise costs and boost research, development and specialisation efforts. Consequently, it could be argued that a wider spectrum of agreements should be covered by block exemption in small jurisdictions, to encourage efficiency generating collaboration.

Up to 2004, Malta's Competition Act as the competition statutes of several other jurisdictions, required undertakings concluding efficiency generating agreements that were not covered by block exemptions to notify such agreements to the national competition authority for individual exemption. Although such notification systems do not prevent the agreement from being implemented immediately, they create uncertainty for the notifying parties as the exemption might take months to be granted would be granted for a short period of time and might even be subject to conditions. It could be argued that a system based on self assessment in lieu of notification as is now the case in Malta is more appropriate for small market economies where delaying efficiency generating collaboration might damage the viability of operators trying to meet competition from larger foreign competitors.

[26] This is subject to the so-called 'pass-on requirement,' meaning that consumers should ultimately get a fair share of the benefits, that the restrictions to competition are indispensable to achieve the benefits and that competition is not substantially curtailed as a result of the agreement.

Mergers and Efficiency

In the case of mergers, Malta's Regulations on Control of Concentrations state that:

> '… concentrations that bring about or are likely to bring about gains in efficiency that will be greater than and will offset the effects of any prevention or lessening of competition resulting from or likely to result from the concentration, shall not be prohibited if the undertakings concerned prove that such efficiency gains cannot otherwise be attained, are verifiable and likely to be passed on to consumers in the form of lower prices, or greater innovation, choice or quality of products or services.' 27

In the Guidelines on Efficiencies, which accompany Malta's Regulations on Control of Concentrations, it is stated that the type of efficiencies that are more likely to be cognisable and substantial than others, are efficiencies resulting from shifting production among facilities formerly owned separately, which enable the undertakings concerned to reduce the marginal cost of production as these are more likely to be susceptible to verification, concentration-specific, and substantial, and are less likely to result from anti-competitive reductions in output. Such justifications to anti-competitive behaviour are found in competition regimes in certain countries, such as the US, Canada and Australia, where the efficiencies defence is expressly mentioned in the law. On the other hand, under EC Merger law it is only in the recently adopted new Merger Regulation that the efficiencies defence was finally recognised, while it is still not expressly recognised under the law of several Member States.[28]

However, in a small country, where market dominance and natural barriers to entry are common, and sometimes cannot be easily dismantled, efficiency claims are likely to have more significance. In such cases, merger control that does not sufficiently acknowledge efficiencies may actually impede restructuring of firms, in their attempt to attain a 'critical mass'. As Gal (2006, p.13) observes:

> 'An overly aggressive or rigid stance toward mergers may prevent desirable efficiency-enhancing mergers from taking place. A small economy should, instead adopt a merger policy that is more accommodating to efficiency defences, and that relies less on rigid structural variables'.

[27] Legal Notice 294 of 2002 Reg 4(4).

[28] Council Regulation 139/2004 [2004] OJ,L24/22 Recital 29. It was sometimes argued that in assessing the legality of a concentration under the previous Merger Regulation, the European Commission did implicitly consider efficiencies as part of the dominance appraisal test. However, now, in the guidelines on the assessment of horizontal mergers published in February 2004 accompanying the new Council Regulation that replaced the previous Merger Regulation as from 1st May 2004, the Commission the Commission explicitly acknowledges that consideration of efficiency claims forms part of its assessment. It should be noted in this regard that in the US an anti-competitive merger would rarely be saved by the magnitude of efficiencies it generates because most are neither verifiable nor large enough to offset negative deadweight loss. Moreover the so called 'pass on requirement", that is that efficiencies must be passed on to consumers means that perceived cost savings must be quite high and that makes it difficult for the defence to succeed (see Buttigieg 2003).

Another argument in this regard relates to network benefits. Such benefits acquire greater relevance in the so-called "new economy" sector. In such sectors, concentration could enhance consumer welfare, as otherwise consumers would lose the benefit that a more extensive network generates in such sectors, including wider choice of complementary products and enhanced quality and service that this brings about. For example, in mobile telecommunications, as more users join a particular mobile network, that network becomes more valuable to those users as they can contact more people, in more locations, at lower cost as the network expands. In the transport sector, more integrated transport services can lead to network benefits that would improve service quality through strengthened hubs, better through-ticketing arrangements, more extensive services, more comprehensive and coherent information or better co-ordination of connecting services.

The relevance of all this to small jurisdictions is that the positive impact on the economy arising from mergers are likely to be more pronounced than in larger states, due to the fact that in a small market it may be desirable to avoid excessive fragmentation and encourage consolidation.

Indeed it has been observed that even if the merger law of a small jurisdiction is modelled on the US regime with its 'substantial lessening of competition' test[29] as is the case with Malta's concentration regulations, it would be wrong for the state's competition authorities to simply follow the thresholds adopted in the US for market concentration purposes as a merger increasing concentration might be of concern in the US but not in the small jurisdiction where that degree of concentration might actually be necessary to help the incumbent firms to achieve efficient scales. So in view of the higher level of MES required in such economies, small jurisdictions might have to adopt much higher concentration thresholds than those adopted in the US (see Gal 2006, p. 24).[30]

Mergers also raise extraterritorial issues that in small economies are harder to resolve. Mergers between foreign firms that export to the small market might affect the market negatively but the merger law of that state might be powerless to control or block such mergers. Even if the law might ostensibly claim extraterritorial jurisdiction, in practice this is hard to exert. Indeed, this is true also of collusive or unilateral anticompetitive behaviour by foreign operators exporting to the small market. Neither the law nor the domestic market forces can effectively regulate foreign operators.

In merger cases if the merger has an effect in all the jurisdictions where the merging firms operate then control by the larger jurisdictions involved will remedy

---

29 Gal (2006:14) notes that this behavioural lessening of competition test is actually more suited to small economies than the structural dominance test that was adopted under the old European Community Merger Regulation because it focuses on the effect that a concentration has on competition and in particular because 'the dominance test might not prevent coordinated interaction of firms as a method of exercising market power, which is a major concern in small economies'.

30 In Malta neither the concentration regulations nor the accompanying guidelines set any thresholds, presumptions or safe harbours. It would be difficult to do so as scale economies differ from industry to industry.

the situation. However, if the merger has different effects in these jurisdictions there is a danger that the respective NCAs might reach conflicting decisions or they might seek to safeguard divergent interests. Particularly problematic for a small jurisdiction would be the case where the merger has positive or neutral welfare effects on the home jurisdiction but negative welfare effects in the export markets including one that happens to be a small economy. This might arise because in the foreign markets unlike the home market the merging firms face weak competition and so with that merger the merged entity would obtain massive market power. Also damaging for the small jurisdiction would be the opposite scenario where the merger has a negative effect in the home market but positive effects in foreign markets (that is it generates efficiencies) so that the home jurisdiction blocks it while the foreign jurisdiction allows it as it is welfare enhancing.

Most jurisdictions apply a system of merger control that subjects even mergers that take place outside their jurisdiction to control, if certain thresholds denoting presence in the local market are reached. This is the case also under Maltese law. However, as Gal (2006, p. 26) observes 'the main problem is that small economies can rarely make a credible threat to prohibit a merger of foreign firms'. If the NCA imposes restrictions that the merged entity does not like it may simply exit that jurisdiction which would be a minor market as far as it is concerned and the effect of this would be more harmful to that jurisdiction than allowing the merger. Moreover, in any case the small jurisdiction may lack the resources and relevant information to block the merger or impose conditions on the merger. Thus, ultimately, in practice a small jurisdiction can't really exercise effective control in respect of several of its operators that would be foreign based. Maybe the solution for the NCA in a small jurisdiction would be to enter into enforcement cooperation agreements with NCAs in jurisdictions where the market's main foreign operators are established or, as Gal (2006, p. 27) suggests, to simply take these changes in the market structure as given and contain the damage by regulating their actions and their structures in the local market through the tools that it has. So for instance the NCA could approve the merger imposing conditions relating only to its own market such as divestiture or conduct concessions relative only to the local market.

Enforcement

For national competition and regulatory authorities in small jurisdictions the task of ensuring a competitive environment and enforcing competition norms is harder than it is for their counterparts in larger jurisdictions, particularly for two reasons.

Firstly, any misconceived intervention, wrongly striking down efficiency generating collaboration or conduct or blocking beneficial mergers, is likely to have a more pronounced and prolonged negative effect on the market than in larger economies. The main reason for this is that in small economies local operators in certain segments of the economy are particularly vulnerable to competition from foreign operators enjoying economies of scale and lower levels of MES. Therefore they need such collaboration or external growth to be able to achieve more

productive and dynamic efficiencies or the required minimum efficient scales of operation to survive.

On the other hand, the authority's failure (or delay) to intervene to prevent market foreclosure or to curb exclusionary practices against equally or more efficient operators is likely to heighten the industrial concentration in the market that in most sectors of small market economies would likely be already very high. This might have a prolonged effect as this failed or delayed intervention dissuades potentially efficient entrants from attempting to penetrate the market and adds to the already high entry barriers existent in these sectors; likewise the authority's failure to stop concentrations that create or strengthen monopolistic or oligopolistic positions in small market economies might further exacerbate the lack of competition in these markets. In larger economies, market forces are more likely to play a corrective role in the short term to neutralise the effects of bad decisions. As Gal notes (2006, p. 7):

> 'Given that the market's invisible hand has a much weaker self-correcting tendency, the costs of improper design and application of competition laws might be greater in both the short and the long run.'

Secondly, since, as has been shown, concepts and doctrines developed in larger economies to address competition problems might not necessarily provide an appropriate answer to competition problems in small market economies, National Competition Authorities and national regulatory authorities (NRAs) in such jurisdictions may not rely on *per se* rules, presumptions or rules of thumb followed in other larger jurisdictions but must consider the merits of each case in the light of the peculiarities dictated by the smallness and insularity of the market, taking due account of efficiency claims. As Gal (2001b, p. 56) observes 'small size affects the accuracy of many of the rules of thumb and indicators of market dominance and anti competitive conduct used in large economies'.

Moreover, even in prescribing the remedies to address competition concerns, competition authorities in small economies have a great responsibility to show restraint and proper consideration as a remedy that does not adequately take into account the effect that it might have on the market could lead to disastrous effects. In very concentrated markets with high barriers to entry they must be wary of remedies that might place an incumbent in such a disadvantageous position that it is forced to exit the market.

Such an assessment requires particular acumen and expertise in economics as authorities may not rely blindly on the established case law and decisional practice of larger jurisdictions such as the EU and US even if the legislation is modelled on the law of these jurisdictions. This aggravates the human resources problem indicated above. As noted by Evans and Hughes (2003, p. 25):

> '[T]he complexity of the dynamic efficiency issues and the need to consider the avenue of efficiency defences – rule of reason – suggest a resource intensive regulatory authority.'

This also creates legal uncertainty for operators, until a solid body of case law emerges that applies competition principles in a way that is sensitive to the local small market economic realities.

Implications Relating to the Culture of Competition

In small jurisdictions, the culture of competition may not easily take root due to the fear that intense competition may destabilise a small fragile and thin market. Another reason is that, as already noted, government involvement in such states tends to loom large over the market, and public undertakings often clamour for exclusion from competition law provisions claiming that they have a social role to play. In addition, the advantages of business consolidation and the disadvantages associated with business fragmentation often lead authorities of small jurisdictions to justify monopolistic and oligopolistic structures.

Furthermore even where, in small jurisdictions, competition legislation is in place, its enforcement may be more difficult than in larger countries due to the fact that everybody knows each other, and social and inter-family links predominate. Thus, in small jurisdictions, methods other than enforcement may sometimes bring better results as far as implementing competition policy is concerned. Competition advocacy among citizens, to render them aware of the benefits of competition policy are of relevance in this regard.

Conclusion

In developed countries, particularly in the EU, structural remedies such as vertical and horizontal disintegration are generally resorted to in order to increase competition in the market and avoid market power. In smaller economies because of the high incidence of market failure and problems associated with economies of scale, structural remedies may not be appropriate and therefore small developing countries should not slavishly pursue such policies. Small developing economies may have to tolerate a smaller number of players in the market and hence some amount of market power. Therefore the focus of competition policies in such economies should be on conduct behaviour, to ensure that firms do not operate in a way as to reduce consumer welfare.

The foregoing discussion suggests that NCAs and NRAs in small jurisdictions have to deal more frequently than their counterparts in larger economies with various factors that have a bearing on competition law and policy, including natural monopolies and concentrated markets with natural entry barriers and first-mover advantages. While acknowledging the inevitability of their existence and the problems of minimum efficient scales (MES) inherent in such markets, they should be especially vigilant to ensure that artificial barriers to entry are not created or maintained as these keep out productive and dynamic efficiencies. In addition, NCAs and NRAs of small economies should ensure the contestability of markets.

Acknowledging efficiency claims and properly weighing them against perceived anti-competitive effects in all aspects of competition oversight is essential in small market economies. Collaborative or unilateral action or consolidation through external growth might be crucial for operators in small economies to reach the minimum efficient scale of operation and thereby operate efficiently and optimally for the benefit of consumers.

In such economies any communication between competing firms is likely to involve a significant share of the market and appear widespread because of the small number of firms in highly concentrated industries but, as stated above, account should be taken of the positive dynamic efficiencies that joint ventures between competing firms might generate and the negative impact that an overly rigid approach by NCAs to such collaboration might have on such efficiencies.

It has been noted (Ovum and Indepen 2005) that, particularly in certain segments of the microstate's economy where the product can only be produced and purchased locally such as the telecommunications sector especially in relation to local network access services, the NCA and NRA, in enforcing competition law, are required to strike the right balance between the need to maximise competition and the need to maximise productive efficiency. Ovum and Indepen (2005, p. 3) state that:

> 'Problems of small scale are not confined to the telecommunications industry. Research by the OECD and Dr Michal Gal suggests that small scale requires a different approach to the application of competition policy in general. In particular there is a need in many industries to balance productive efficiency against the level of competition. Often this problem can be dealt with through international trade. But in the case of telecommunications the need to produce telecommunications locally limits the effectiveness of this remedy.'

It has been observed that the geographical market for innovation which together with investment is the key element of dynamic efficiency is by assumption international and that the small size of the market is not likely to serve as a disadvantage as innovation can be transported very easily internationally (Evans and Hughes 2003, p. 13). However, it is essential for NCAs in small states that in applying competition law they do not interfere too much with intellectual property rights and they should strive to strike the right balance as strong IPR protection is important to encourage innovation.

Consequently, even if the competition law of a small jurisdiction is identical to that of a larger one, these considerations require a different implementation, one that is tailored to the specific exigencies of a small isolated market (Evans and Hughes 2003, p. 25-26). Thus the challenge facing NCAs in small jurisdictions is how to adapt the doctrines established in a large market to a smaller market. The key should be a proper recognition of the importance of the realisation of scale economies in a small market to increase productive and dynamic efficiency while balancing this with the need for competitiveness.

The main argument put forward in the paper is not that competition rules should not be adopted in small jurisdictions or that abuse should be tolerated but rather that competition policy in small market economies should be sensitive to the constraints facing operators in such markets and if and where necessary even trade off competition for improved efficiency. A major implication of all this is that it may be appropriate for competition concepts and remedies to be tailored to suit market realities in the case of small jurisdictions.

In considering the arguments put forward in this paper, one should keep in mind that, even in small jurisdictions, enterprises differ with regard to the relationship between size and efficiency. In the service industries for example economies of scale are not of major importance and aggressive competition polices may be appropriate. Many services, including transport, distributive trades and professional services are currently subject to restrictive practices in many small jurisdictions and consumer benefits are likely to be derived if such services are exposed to more competition.

References

Armstrong, H. W. and Read, R. (1998), “Trade, Competition and Market Structure in Small States”, Bank of Valletta Review, 18, 1-18.

Briguglio, L (1995), “Small Island Developing States and their Economic Vulnerabilities”, World Development, 23, 1615-1632.

Buttigieg, E. (1999), “The Notion of Dominance and the Control of Abusive Pricing Under Maltese Competition Law”, Bank of Valletta Review, 19, 1-24.

Buttigieg, E. (2003), “The Substantive Standard for Merger Evaluation under Malta”, Bank of Valletta Review, 27, 35-49.

Dippon, C (2006), “United States: The Economics of Mobile Virtual Network Operators,” *NERA Newsletter Perspectives in Telecommunications.*

Downes, A. S. (1988), “On the Statistical Measurement of Smallness: A Principal Component Measure of Size,” *Social and Economic Studies*, 37(3).

Evans, L. and Hughes, P. (2003), “Competition Policy in Small Distant Open Economies: Some Lessons from the Economics Literature,” *New Zealand Treasury Working Paper 03/31.*

Gal, M. S. (2006), “The Effects of Smallness and Remoteness on Competition Law – The Case of New Zealand”, Law & Economics Research Working Paper No 06-48, New York University School of Law.

Gal, M. S, (2003), “Competition Policy for Small Market Economies”, Harvard University Press.

Gal, M. S. (2002), “Reality Bits (or Bites): The Political Economy of Competition Policy in Small Economies”, in: Barry Hawk, (ed) “International Antitrust Law and Policy”, New York: Juris Publishing.

Gal, M. S. (2001a), “Size Does Matter: General Policy Prescriptions for Optimal Competition Rules in Small Economies”, University of Southern California Law Review, 40, pp. 1437-1478.

Gal, M. S. (2001b), "Market Conditions under the Magnifying Glass: General Prescriptions for Optimal Competition Policy for Small Market Economies", University of Haifa.

Gal, M. S. (1998), "Defining Market Power in Small Markets", presented at International Conference on Competition and Competition Law in Small Jurisdictions, Malta: Islands and Small States Institute.

Gatt, B. (1996), "Parallel Importation and Competition in Malta", Bank of Valletta Review, 13, 43-64.

Government of Malta (1993), "Fair Trading: The Next Step Forward...," White Paper: Department of Information.

Jalan, B. (1982), "Classification of Economies by Size", in: Jalan B. (ed) "Problems and Policies in Small Countries", Croom Helm, London.

Murphy, S. and Smith, A. (1999), "Competition and Network Utilities in Small Jurisdictions: The Example of Northern Ireland", Bank of Valletta Review, 20, pp. 27-60.

Muscat, B. (1998), "Regulation of Parallel Behaviour in an Oligopolistic Market: Myth or Reality", Bank of Valletta Review, 18, 19-38.

OECD (2003), "Small Economies and Competition Policy: A Background Paper", Internet: http://www.oecd.org/dataoecd/57/57/2486546.pdf.

Ovum and Indepen (2005), *Applying the EU Regulatory Framework in Microstates.*

Stewart, T. (2004), "Shaping Competition Legislation to the Needs of Small Open Economies: The Case of CARICOM", Caribbean Dialogue, 9.

Worrell, D. (1992), "Economic Policies in Small Open Economies: Prospects for the Caribbean", Economic Paper 23, London: Commonwealth Secretariat.

5

Regulation, Competition and Government Ownership:
A Case Study of the Banking Sector in India

M. K. DATAR

Introduction

Though competition is considered important for ensuring efficiency and growth in several real sectors, the necessity for appropriate and effective regulation of financial sector to ensure macro-economic stability and to provide investor protection is fairly obvious and well accepted. Moreover, of late, competition is seen to be a facilitator of effective regulation (Whittaker 2001). Changes in communication and computation technology are changing the face of manufacturing and services industries affecting, *inter alia,* their structure and competition. (Wharton Financial Institution Center 2001) This is also affecting the trends in regulation of financial sector, making it more elaborate and internationally convergent. These trends are clearly reflected in the latest proposals from Basel Committee on Banking Supervision (commonly known as Basel II). Thus while interplay between regulation and competition is well recognised it is not clear whether government ownership would facilitate either competition or regulation of the financial system. However, government ownership in financial sectors is broadly a developing country phenomenon.[31]

Government of India has sizeable ownership in major segments of financial system viz. banking, insurance, fund management and pensions. How government ownership affects competition and regulation in the financial sector is an important issue. Profit is not only the most important objective for private businesses but also an enabler for survival in a competitive environment for all business entities. In the case of government owned commercial enterprises, profit may be subservient to other socially more important objectives (strategic control, natural monopolies, providing goods and services to target segments etc.). However, there are other not for profit organisations which are also guided by non-profit objectives. This link between ownership and profitability is well researched though the channel through which government ownership may adversely affect profitability and efficiency does not always get sufficient attention. Impact of ownership is generally studied in the context of privatisation and allowing foreign entry (Barth et al. 2000, Clarke et al. 2005).

---

[31] Barth et al. (2000) reported that out of 66 countries they studied in 9 countries government owned banks owned more than 50% of total banking assets. Of the 4 Asian countries 3 were from Indian Subcontinent (India, Pakistan and Sri Lanka) In contrast, in 17 other countries Banking assets were fully privately owned.

Historically, ownership was considered essential for effective regulation/ development of industries. In a globalising world, the role of government ownership needs to be re-examined from a competition perspective. If government ownership could become conducive to retain competition, it could facilitate growth and efficiency in addition to supporting effective regulation. This is possible, if government owned entities remain free to compete with privately owned entities subject to attainment of set objectives which need not be in terms of profits alone. The hypothesis underling this paper is that ownership rights may not be necessary for adequate and proper regulation of firms in financial sector. This paper seeks to identify the balance between competition and of regulation in financial services sector so as to ensure stability of the system and safeguard interests of the investor-depositors.

The paper is divided in five sections**.** In section I links between regulation and competition are studied in the context of financial sector. Compatibility between competition and government ownership is also examined therein. Section II takes a synoptic view of the process of financial sector reforms in India. In Section III a review of the literature that studies impact of ownership on profit and efficiency of financial institutions is presented. After reviewing the role of incentives in public sector units it hypothesises the potential links between ownership and performance of financial institutions. Section IV assesses impact of liberalisation and competition on different categories of banks. It focuses on certain mechanisms through which human resource policies and practices may affect working of public sector banks. Concluding observations and implications for improving regulatory efficacy are presented in the last that is Section V.

Regulation and Competition in the Financial Sector

Although the need for prudential regulation of financial sector is well accepted, regulation and competition need not always and inevitably be in conflict. As the market for financial services is becoming increasingly global, maintaining competition is becoming a vital objective of financial regulators even as an element of competition enters in regulation of global financial entities. At the global level, direct controls on interest rates, or fees and commission and lines of business have been relaxed. The mainstay of regulation is through prudential measures such as stipulation of capital requirements and strengthening of risk management processes to achieve financial stability, which has always been the overriding objective of financial regulators. Excessive risk taking by commercial banks is curbed mainly through stipulating minimum regulatory capital. The proposed Basel II arrangements would permit banks to use their internal risk rating models to compute capital requirements provided banks satisfy the regulators about suitability and accuracy of these models. Besides subjected stringent regulatory oversight, stipulation of norms for information disclosure would also encourage monitoring by depositors and/or equity investors There is also a trend towards enhancing corporate governance mechanism in banks, which also introduces an element of competition among banks to win confidence of customers and investors.

Competition in product markets is seen to help maintain high standards of corporate governance, which in its turn is helpful for prudential regulation of banks. (Stiglitz 2000, Allen and Gale 1998). Several OECD countries apply competition law to banking sector without exception or exemption. (OECD 1998) While FSA in the UK considers that competitive financial service industry would be helpful in achieving its objectives of maintaining market confidence, public awareness, consumer protection and reduction of financial crime.

While policy stance in several countries is favourable for deregulation that would facilitate competition, structural changes in technology and less trade restrictions have increased potential benefits from bank mergers and consolidation, which may have an adverse effect on competition. Besides, there are situations wherein banks have co-operative arrangements among themselves, which may also give rise to competition concerns. But in several developing countries statutory/legislative mechanism to preserve competition is quite recent and evolving. Moreover, the issue of competition in several sectors-particularly in the financial sector is intertwined with government ownership if not monopoly. The issue of continuance of governmental ownership is indeed important in the context of introducing / enhancing market competition. Issue of continuance or otherwise of government ownership often becomes a political economy issue because of its likely impact on the interests of bank employees and having inclusive financial system that is easy access to finance for small agriculturists and entrepreneurs particularly from weaker, poor sections.

Like India, in some other countries government involvement is not limited to regulation/ supervision; it either owns banks or provides guarantees. The *raison d'être* for government ownership is to achieve certain social objectives viz. providing finance to preferred sectors, regions or group of borrowers. While mechanism of deposit insurance may provide implicit guarantee for banks against failure, direct government ownership may distort the competition if perceived protection for private banks is considered less secure.

While possibility of market failure may lead to a case for government intervention it is often contested that actually existing governments are all knowing and benevolent, thus making possibility of politicians and bureaucrats might instead use state control to secure political office, accumulate power or seek rents very real. The under performance of public sector units could be due to:

i) Political interference
ii) Corporate governance problems
iii) Problems associated with competition

While privatisation is increasingly seen as a mechanism to improve performance of public sector units, Megginson and Netter (2001), in a survey of empirical studies of privatisation, has highlighted policy alternatives to privatisation viz. competition and deregulation to be equally, if not more, important than privatisation or governance changes in improving firm performance. Majumdar (1996) concludes with Indian data that reforms can improve performance of state owned enterprises.

Several studies have been carried out to assess the role of ownership in determinants of performance of firms in several sectors. The issue of competition is indeed important, as competition would be the channel through which benefits from privatisation would flow. Foreign firms' access provided to domestic market is an important barometer of openness, competition and efficiency. Foreign entry is seen as quick route to enhance competition in the domestic markets. Clarke, Cull and Shirley (2005) conclude that efficiency gains arising from bank privatisation are significant when 'government fully relinquishes control, when banks are privatised to strategic investors, when foreign banks are allowed to participate in the privatisation process and government does not restrict competition.'

Several studies enquiring the role of ownership factor choose profit, cost or stock market returns as a proxy for firm performance and the hypothesis is tested empirically. These studies more often than not treat ownership as a black box while linking performance to ownership. But certain issues such as organisational issues in large sized firms would be common irrespective of ownership are ignored. Hence there is a need to focus on channels through which government ownership may impact competition.

Banking Reforms in India

Banking reforms were an important dimension of economic reforms programme initiated since June 1991. GOI (1991) provided philosophy behind financial sector reforms as also an agenda for reforms. GOI (1998) presents an assessment of banking reforms and defines steps required for "second generation" reforms. On the eve of banking reforms in 1991, government predominantly owned commercial banks. Banks were subjected to elaborate operational controls from RBI besides it also stipulated their lending rates and deposit rates. A large proportion of deposits mobilised by banks were pre-empted due to high level of SLR and CRR stipulated for banks. Of the balance, 40% of the credit was to be earmarked for certain priority sectors. Despite such controls, banks were not regulated effectively. There was no competition among banks. Banks were not strong; their profitability was low; so was the level of technology developed.

GOI (1991) recommended a slew of measures to strengthen the banks by introducing an element of competition and effective regulation. Statement 1 presents a brief description of important banking reform measures. These measures have a visible impact on banking sector. Banking sector is now more competitive, diversified, customer oriented and uses higher technology.

GOI (1998) presents an assessment of banking sector reforms and recommends further measures to enable Indian financial systems becomes stronger and withstand competition in the global markets.

TABLE 5.1
Progress of Banking Reforms in India

1. Lowering of CRR & SLR	Both SLR and CRR have been progressively reduced from their peak levels of 38.5 and 15 percent. These are currently at 25 and 5.5 percent respectively. Legislative changes initiated to reduce the statutory minimum level of SLR. This has increased the quantum of funds banks could lend at their discretion
2. Deregulation of interest rates	Both deposit and loan rates deregulated. Presently RBI stipulates only two rates viz. (i) interest rate on saving bank deposits and (ii) interest rates on loans smaller than Rs. 2 lakhs. Banks are free to charge/offer other interest rates. Moreover Government is now offering market related interest rates on gilt securities Hence investment in government Securities also get a market related return and offers profit earning opportunity in line with changes in market rates.
3. Accounting, provisioning and minimum capital adequacy norms.	Most significant step to improve transparency in bank balance sheets and bringing regulatory practices in line with international norms. Measures have been taken to improve disclosures in bank balance sheets. Minimum Capital is prescribed for credit and market risks. Banks would required to be compliant with more elaborate capital standards under Basel II over a period of time
4. Entry of new private Banks	New private banks were permitted. These could start on a clean slate with modern technology. At present, 7 such banks are functioning. Moreover many governments owned banks have raised equity capital without bringing government holding below 51%.
5.Operational freedom	Banks enjoy more operational freedom as rationalisation of branch network is permitted. System of obtaining prior clearance from RBI for sanctioning large credit limits is dispensed with.
6.Enhanced competition	More avenues for price and non-price competition among different banks and also banks and non-banks. Banks entered into funds management, broking, insurance, primary dealership in government securities etc. through subsidiaries to diversify business activities
7. Restriction on voting rights from bank ownership	Cap on maximum voting rights by individual shareholders (irrespective of level of holding) increased from 1 % to 5%. This would facilitate M & A in banks
8. Entry of foreign Banks	Foreign banks may more access to domestic market after March 2009.

The committee felt that banking system in India could become stronger through a consolidation process. It suggested creation of a structure that would consist a couple of large banks that are comparable to and capable to successfully compete with international banks, five / six large banks operating at national level and several others that are confined to a particular region. It recommended reduction of government holding to 33 percent and complete operational autonomy to public sector banks. Both these recommendations are yet to be implemented due to lack of broad consensus on desirability of mergers among public sector banks as also reducing the extent of government holding at a lower cap.

Relationship between Ownership and Performance

Several studies evaluating performance of financial system have treated ownership as an independent variable in explaining growth and efficiency of banks. The issue of ownership (public vs. private or domestic vs. foreign) becomes

important in the context of financial sector reforms wherein deregulation and enhanced competition are considered necessary to improve efficiency and stability of the financial system.

It is hardly surprising that the results from these studies are mixed; given the differences in methodologies, time period, sample composition and the manner in which the ownership issue is articulated. Significantly, very rarely the channels through which ownership may affect performance are explicitly studied.

Barth, Caprio and Levine (2000), found *inter alia* state owned banks are, in practice, associated with poorly operating financial system, though in theory state ownership is expected to overcome informational problems and allocate scarce funds to more productive projects/ sectors. La Porta et al. (2002) reported state ownership to be negatively associated with both financial development and economic growth. Claessens and Laeven (2003), studying impact of competition and growth in the financial system, found that the degree of financial development is as important as competition. If the financial system is well developed, the extent of competition has a direct impact on growth while competition is less important in an underdeveloped financial system. Bonin et al. (2003) using frontier estimation technique found that privatisation itself is not sufficient, as government owned banks are not necessarily inefficient. But it found that foreign banks are more cost efficient and better service provider.

In the Indian context, Das, Nag and Ray (2005) noticed that increased competition in terms of reduced concentration in the banking sector following banking sector reforms. The study did not find much difference between public and private banks regarding input/output efficiency though differences existed as regards profit/income efficiency. Moreover, along with ownership differences asset sizes, and level of technology were also important. It was, in fact, found that "old" private banks faring badly devoid of these positive factors. Sensarma (2005) using Stochastic Frontier Analysis in a time series setting reported, that public sector banks have shown higher cost efficiency than private banks whereas it has been the other way around in the case of profit efficiency. It thus appears that privately owned banks are more focused on profit earning than their counterparts in the public sector. Banerjee, Cole and Duflo (2004) specifically considered non-profit aspect of the objectives of government owned banks viz. increased lending to socially productive sectors - that are supposedly not catered to by credit markets- but found evidence of under lending in the case of publicly owned banks. The study suggests privatisation coupled with better enforcement of social lending norms. It also recommends internal, bureaucratic reforms in both private and government owned banks by giving more freedom to lending officers.

These mixed findings of available empirical studies could be due to different contexts (technology, development, competition) as also methodologies. Moreover, the dimensions of publicly available information inevitably shape empirical studies. This paper therefore, instead of making another empirical attempt of studying ownership and profitability, focuses on identifying the channels through which government ownership is likely to affect performance.

Effect of Ownership on Performance

The impact of government ownership could be reflected in the objective function pursued by the government owned banks. If the objects pursued by public and private sector banks are different their measured performance would understandably be different. It is generally recognised that government owned entities do not try to maximise profits but seek to achieve multiple objectives, which are stated in very general terms. Banks were nationalised in India in 1969 and again in 1980 with a view to 'control the heights of the economy and to meet progressively and serve better, the needs of development of economy in conformity with national policy and objectives'. Such a situation may limit autonomy of management, as achievement of multiple objectives would restrict their degrees of freedom. A competitive market environment would force government to consider the implications of other objectives on overall profitability. It would need to modify such other objectives or provide an explicit subsidy. In either case competition would increase the transparency of the objectives set for government owned enterprises.

The published objectives of individual banks, are stated in very general terms, for example, enhancement in shareholder value, practicing business ethics, meeting supervisory norms. These are quite similar among private and public sector banks. Deposit mobilisation and portfolio management are most important banking activities. Impact of government ownership, if any, would percolate through these activities. Moreover, in any service industry quality and motivation of employee is important because it would indirectly affect efficacy of all operating activities.

Deposit Mobilisation and Portfolio Quality

Impact of government ownership on depositors is particularly significant because government ownership may be seen as additional security, over and above the safety net in the form of deposit insurance. This may put privately owned banks at a disadvantage but there are issues such as access, service quality wherein private players may get an edge. However, such security (arising from government ownership) to depositors can come about-without imposing any burden on taxpayers - only if risk adjusted portfolio returns are commensurately higher than the deposit rates and other costs. If returns on asset portfolio were low, the resulting losses would be higher partly due to extra deposits generated and lend by government banks.

The impact of ownership on portfolio management would be even more crucial. Instances are abound wherein privately owned banks have lend indiscriminately to related parties and suffered portfolio losses causing hardship to depositors. However, in the case of privately owned banks, danger of depositors shifting en mass to other banks may limit the extent of related lending (or straight looting). In the case of government owned banks, it is probable that banks would be directed to offer credit to certain clients / sectors where social returns are supposedly high. Moreover if depositors have a preference for government ownership, such assured

access to deposits would mean the restraining factors applicable in the case of private banks might not be effective because even portfolio managers would be less worried about potential portfolio losses due to implicit guarantee arising from government ownership.

It may be argued that as sole (or even majority) owner, government could decide the objective function of the banks it owns. If government, like other shareholders, decides to maximise profits and if the management gets full operational freedom to achieve the stated objective, the fact of government ownership by itself would be irrelevant.

However, the objective function could be different from just profit maximisation. It could be argued that government (read politicians) would use such additional objectives to distribute loans to "preferred" clients (read voters). But even if government does not have such unstated (ulterior) objectives, in an environment where deviations from profit maximisation strategies are tolerated if not encouraged, mangers may be temped to use this milieu to fund clients / projects of doubtful quality under the garb of achieving stated objective of extending banking services to preferred sectors/client segments. If private banks were to pursue such objectives, it would start making losses and eventually forced out of business if panicky depositors force a run on the bank. This would put a limit on private managers deviating from profit maximising strategies. Similarly if even employee were to treat their employment contract as "permanent" that is unaffected by the state of bank business / portfolio quality, disciplining effect of motivation factor would get weakened in the case of government owned banks.

Risk Management

Banks' ability to earn decent return from their portfolio depends, among other things, on the manner in which risks are assessed and managed. Admittedly risk management becomes more important, as domestic economy is opened up for competition though the same factors also renders this task more difficult. The chosen portfolio risk profile determines to a large extent realised portfolio returns.

It is important that lenders decide acceptable risk profile and choose projects / clients that are in conformity with their risk appetite. The risk of default could arise from several factors, which can be put under following broad heads:

i) Entrepreneurship
ii) Market
iii) Technology
iv) Macro- economic environment.

Each of first three factors could be (a) New, (b) Maturing or (c) Established. The associated risks would be progressively decline though expected returns too would tend to correspondingly decline over time from established technologies and markets, though not from established entrepreneurs. The choice of sectors / clients is thus important and needs to be performed in a dynamic context. In making such

choices, possibilities of making wrong decisions are inevitable and the lending organisation should develop institutional mechanisms to distinguish between genuine commercial decisions gone wrong and deliberate malafide decisions intended to maximise private returns. Devising mechanism that enables identification of acceptable clienteles with a clear focus on risk-adjusted returns is the cornerstone of a proper risk management system. To achieve this, it would be necessary to motivate employees with a clear focus on outcome/performance measurement and linking compensation / career path with it. It is not certain that private managements would always try to devise such systems or they would always be successful. But in the case of government owned banks the focus is likely to be static - on input or procedure linked and accord importance to follow pre set conditions on acceptable risk profile. In such a situation, private banks are likely to be quick in identifying new profitable lending opportunities, exploit them early and take quick exit decisions to maintain better portfolio risk profile.

Incentives in Public Sector

The main purpose of incentives is to bring interests of individual employees in alignment with corporate goals. The relevant literature notices agrees that incentives are effective that is these result in higher output or performance. But whether contracts are in fact drawn as predicted by the theory is not so certain (Prendergast 1999). But situations where measurement of individual effort / output is possible or output is determined mainly, if not solely, by individual efforts are few. Piece rate contracts provide direct link between individual efforts and output (or wages received). These prove useful in motivating employees to put in maximum efforts. But in these cases individuals bears the risk of variation in output due to other factors that affect the measured output but are beyond the control of employees. In such situations criterion of relative performance could be one way out to nullify the effect of external environmental factors.

Alternatively, incentives could be liked to aggregate or group output. But this may give rise to the problem of free riding. There may be situations where individuals have to undertake several tasks (multi-tasking) but all those may not be amenable to measurement. In such cases individuals may tend to devote their time and efforts on those tasks that are measurable and the crucial-but-difficult-to-measure tasks may get neglected.

Yet another alternative is to measure overall performance in a discretionary subjective manner. Supervisors may be able to take an overall view of the performance but it may not be verifiable by any third party. Further even in these cases distortions like leniency bias (supervisors would avoid giving low ratings) or centrality bias (ratings are centred at "respectable" levels which fails to separate good performers) may arise. Besides pay, other aspects like promotions (and the resulting higher pay), training or placements could also be used to provide proper incentives.

Linking performance with pay thus depends on how focused are objectives of a firm. If the sole objective is profit, providing a link with profits may be easier. But in

the case of not for profit companies or where objectives are multiple as is the case with public sector firms, providing individual or group based incentives to motivate workers may become tricky. Dixit (2002) and Dewatripont et al. (1999 (a) and 1999 (b)) have described peculiarities of public sector agencies in terms of multiple objectives, multiple principals and multiple tires of principals. The goals are often vague. Situations wherein actions are unverifiable but outputs are verifiable are as likely as those wherein reverse is true. Sometimes neither outputs nor inputs can be verified. Dixit has questioned the suitability of prescribing performance-linked payments in all public sector institutions without considering the special situations of these organisations. He however prescribes clear specification of goals and organisation designs whereby institutions are structured in a manner so that (multiple) objectives are complementary.

Traditionally public sector enterprises have been operating in business environment devoid of competition. In such situations public sector organisation may operate wherein implicit incentives like carrier concerns may play a paramount role. Alternatively, attracting motivated people who value or share higher institutional goals may also prove useful. However, several sectors traditionally characterised by public monopolies have now, due to technological advances, been transformed where private sector participants are competing with public sectors enterprises. In such situations providing appropriate incentives become extremely vital, as attracting and retaining talent is important in a competitive arena.

Human Resource Policies and Practices

Human resource management policies are exceptionally important in financial services particularly as these become more competitive. Focus on customer satisfaction provides competitive advantage. It becomes necessary that employers have freedom to choose required skills and offer them performance-linked compensation.

Moreover, with introduction of new technology, the types of skills required would become more diverse and varied and should be reflected in compensation packages. In organisations where generalists predominate parity is maintained across functional areas and compensation levels are mainly linked to seniority. In organisations with bureaucratic cultures permitting a situation where wage levels would vary across functions and would be linked to performance is considerably difficult. Banks owned by government tend to replicate HR policies and practices similar to those prevailing in government departments.

Linking performance with compensation would be necessary in a competitive business environment. Firstly, linking compensation with performance helps aligning individual interests with institutional objectives and maintaining risk profile as set by the management. Secondly, attracting and retaining talent would largely depend on level of compensation, and professional work environment.

Moreover, in financial entities, performance monitoring and proper incentive/disincentive structure is required to ensure compliance of prudential norms so that situations of adverse selection and / or moral hazard are avoided. The deterrence from undertaking undue risks should not lead to avoidance of lending.

The dividing line between a wrong business judgment and fraud is not easy but not very difficult either if human resource policies maintain a balance between power and accountability through developing strong in house norms of business decision-making.

Thus state of human resource practices would therefore be another channel which impact of government ownership would affect impact their commercial performance. HR policies through employee motivation would transmit its impact mainly through portfolio choice and risk management the other channels that as argued above would also have an independent effect.

Ownership issues in Non-Banking Institutions

Importance of Government ownership and HR issues arising there from is highlighted indirectly through the modernisation and reforms experiences in other segments of financial system. Equity markets reforms were relatively smooth partly because government's role was essentially of a regulator. Also government was not an employer; bulk of the employment being in the private sector. Even in the case of insurance, business procurement was through agents, which were in private domain and payments to them were by and large incentive driven.

It is noteworthy that competition was introduced among banks through permitting new entrants and not through privatisation of existing banks. Though government owned banks raised fresh capital from market, such ownership dilution was achieved without any dilution of managerial control. It is noteworthy that several "private" banks were promoted by government owned financial institutions such as ICICI, HDFC, UTI, and IDBI etc. But these new entities, despite directly or indirectly owned by government, were not required to follow HR policies and practices prevailing in government departments. On the other hand some of the new banks promoted by "true" private promoters (Global Trust, Times Bank) could not withstand competition and were merged with other public or private banks.

The main reason for success of new (private) banks, even those promoted by government owned entities, was largely due to operational freedom accorded to them. These entities operated without the burden of following public sector HR policies and practices. They could recruit required skills and experience and offer them performance linked compensation packages.

Several Public Sector Banks have entered new activities - like fund management, primary dealership in government securities, capital market related services - where specialised skills such as bond or forex trading, are required. This was done through floating separate subsidiary entities. The operational advantage of this rout essentially flowed from full operational freedom and adoption of flexible personnel policies, which would have been difficult within the main organisation.

Given the high initial capital requirements to start new banks it is difficult to find private promoters with integrity and resources. In this context the Tarapore Committee on Fuller Capital Account Convertibility have recommended that reputed industrial houses be permitted to start new commercial banks. This may be

a way-out to enhance competition in Indian Banking without privatising exiting public sector banks and / or giving larger access to foreign banks. While reluctance on the part of government to privatise public sector banks is not difficult to understand, the issue of operational freedom cannot be avoided. As competition from private banks intensifies, the question of public sector banks' ability to compete would come to the fore. While PSBs may be pursing multiple objectives but once these are stated, managements should be free to pursue these objectives like their private sector counter parts.

Liberalisation and Competition in Banks in India

As described in Section II above reforms in banking sector has led to decontrol, competition and stricter prudential regulations. This has also resulted in decline in market share of PSBs, particularly to the benefit of new private banks that had no baggage of history and could employ latest technology to improve customer services. It was inevitable that with new entrants PSBs would loose near monopoly presence. Restriction on voting power (capped at maximum 10%) has restricted the expansion of foreign banks at present; but this could change by March 2009 when foreign banks are set to get more access. Overall performance of banks has improved in terms of asset quality, credit growth and profitability. The booming economy has led to increased demand for bank credit. Though all banks have benefited from this boom, some (private and foreign) banks that could move fast to spot new business opportunities have benefited most.

Though moved up in recent times, interest rates have come down from very high levels largely due lower inflation and lower rupee depreciation. Banks are competing by offering lower interest rates for better-rated corporate clients. Lower interest rates have, in its turn, fuelled demand for retail loan; a major contributor for current credit boom.

TABLE 5.2
Sector wise Distribution of Scheduled Commercial Bank Business

Year Ending March	1990	1995	2000	2005
Deposits				
SBI & Associates	56828	112720	256288	505649
	28.4%	**27.9%**	**28.6%**	**27.8%**
Nationalised Banks	126960	236208	481025	915101
	63.4%	**58.6%**	**53.7%**	**50.2%**
Private Indian Banks	7775	26406	113670	314630
	3.9%	**6.5%**	**12.7%**	**17.3%**
Foreign Banks	8563	28079	45442	86505
	4.3%	**7.0%**	**5.1%**	**4.7%**
All	200126	403413	896425	1821885
Advances				
SBI & Associates	42036	64405	129034	284727
	34.0%	**31.1%**	**29.1%**	**25.8%**
Nationalised Banks	72203	113375	223076	524531

Year Ending March	1990	1995	2000	2005
	58.3%	**54.7%**	**50.3%**	**47.4%**
Private Indian Banks	4204	13970	55742	221149
	3.4%	**6.7%**	**12.6%**	**20.0%**
Foreign Banks	5351	15445	35617	75318
	4.3%	**7.5%**	**8.0%**	**6.8%**
All	123794	207195	443469	1105725
Branches				
SBI & Associates	12240	12875	13482	13661
	27.2%	**26.8%**	**26.2%**	**25.4%**
Nationalised Banks	28807	30880	32803	33627
	64.1%	**64.4%**	**63.6%**	**62.6%**
Private Indian Banks	3784	4078	5077	6196
	8.4%	**8.5%**	**9.9%**	**11.5%**
Foreign Banks	137	151	178	242
	0.3%	**0.3%**	**0.3%**	**0.5%**
All	44968	47984	51540	53726
Employees				
SBI & Associates	295352	313003	315546	278269
	32.2%	**32.5%**	**33.1%**	**32.5%**
Nationalised Banks	557394	581788	558158	467983
	60.8%	**60.4%**	**58.5%**	**54.7%**
Private Indian Banks	51185	54760	66377	92411
	5.6%	**5.7%**	**7.0%**	**10.8%**
Foreign Banks	12359	13262	13567	17210
	1.3%	**1.4%**	**1.4%**	**2.0%**
All	916290	962813	953648	855873
Profits				
SBI & Associates	117.3	846	2677	5676
	22.8%	**40.2%**	**36.6%**	**27.4%**
Nationalised Banks	195	269	2437	9494
	37.8%	**12.8%**	**33.4%**	**45.9%**
Private Indian Banks	23.2	358	1224	3534
	4.5%	**17.0%**	**16.8%**	**17.1%**
Foreign Banks	179.9	631	968	2002
	34.9%	**30.0%**	**13.2%**	**9.7%**
All	515.4	2104	7306	20706

Source: IBA (1999) Database on Indian Banks 1987-98 and RBI: Statistical Tables Relating to Banks in India various Issues

Table 5.2 above describes sector wise distribution of scheduled commercial bank business during 1990-2005 in terms of select parameters. Public sector banks have lost their shares in deposits and advances to private sector banks particularly to new private entrants. Foreign banks have lost their market shares since new private banks entered the scene. The movements in profit shares are more dramatic though volatile. The share of profits made by foreign banks has consistently declined, partly because restrictions placed on their expansion and stiff competition from new private banks are effectively competing with them in terms of technology and service standards.

Both PSBs and foreign banks have lost market share moderately to new private banks. The loss in share of profits by PSBs is quite modest in relation to their loss of market share in deposits/advances. The comparative stability in PSBs share in branches and employees reflect slow incremental changes in these parameters. While branch opening/closure is controlled by the RBI, downward adjustments in employees strength can only be slow. Moreover, due to changes in technology, both new entrants and existing operators are harnessing alternative channels like ATMs and phone banking / net banking as a result of which new private banks could garner new business with moderate increase in branches and employees. While old public and private banks inherited large branch network, new private and foreign banks moved faster in adopting new technologies like ATMs. As reflected in Table 5.3 private and foreign banks have significantly large share in ATMs as compared to nationalised banks which have been rather slow in expanding their ATM network. While SBI group's share in ATMs is comparable to its share in branches, nationalised banks have only 27 percent of total ATMs while they have 63 percent of total branches. In contrast, foreign and new private banks together account for one third of ATMs while their share in branches is just 3.5 percent.

TABLE 5.3
SCB: Branches & ATMs (as of end March 2005)

Category of Banks	Number of Branches	Percentage Share	ATMs			Percentage Share
			On Site	Off Site	Total	
Nationalised Banks	33627	62.6%	3205	1567	4772	27.0%
SBI Group	13661	25.4%	1548	3672	5220	29.6%
Old Private Banks	4511	8.4%	800	441	1241	7.0%
New Private Banks	1685	3.1%	1883	3729	5612	31.8%
Foreign Banks	242	0.5%	218	579	797	4.5%
All SCBs	53726	100.0%	7654	9988	17642	100.0%

Source: RBI: Trends and Progress of Banking in India 2004-05

The increased competition has led to less concentration at the top though the extent of decline in 5 firm concentration ratios for deposits, credit, income and other income is uneven (Table 5.4). It is more pronounced for deposits and credit where new technology has enabled techno savvy banks to offer better services in terms of convenience and improved access to retail and corporate customers. In contrast, changes in income are less dramatic because of relationship considerations. As regards branch network and employees the concentration has not changed much mainly because new banks are using alternative channels (ATMs, phone banking and e-banking). As regards employees, private banks had more flexibility in labour deployment as these could outsource part of the work (marketing, back office) that enable them to control strength of regular employees. Public sector banks could not display equal dynamism though these could shed a part of employee strength through a Voluntary Retirement Scheme.

Performance linked pay offered by private and foreign banks enable them to offer attractive salary packages to the top ranking new entrants. Attrition rates have

affected both private and public sector banks; only private banks are able to fill up the vacancies with experienced professionals, while PSBs recruit at base level. In any case their ability to attract experienced top professionals is constrained due to lack of flexibility in designing pay packages.

It is interesting to note that while five firm concentration ratios indicate decline in business concentration since 1990 or 1995, concentration seems to have increased since 2000 except for deposit mobilisation. Though share of top firm has come down in respect of all six parameters, five firm concentration ratios have increased for all parameters except deposits. Similar pattern is discernible from 10 and 15 firms concentration ratios.

TABLE 5.4
Concentration in Scheduled Commercial Bank Business

Year Ending March		1990	1995	2000	2005
Deposits	Top firm	**21.7**	**22**	**23.1**	**21.6**
	5 firm C ratio	**48**	**47.3**	**46**	**44**
	10 firm C Ratio	**68**	**65.5**	**62**	**61.6**
	15 firm C Ratio	**79.3**	**75.9**	**72.2**	**73.9**
Advances	Top firm	**27.9**	**22.9**	**21.6**	**18.4**
	5 firm C ratio	**53.5**	**46.4**	**42.2**	**46.7**
	10 firm C Ratio	**72.6**	**62.6**	**56.2**	**60.4**
	15 firm C Ratio	**81.6**	**71**	**64.2**	**69.5**
Branches	Top firm	**18.7**	**13.8**	**13.3**	**13.1**
	5 firm C ratio	**41.9**	**32.3**	**31.6**	**35**
	10 firm C Ratio	**61.8**	**49.6**	**46.9**	**48.5**
	15 firm C Ratio	**75.5**	**58**	**55.8**	**55.7**
Employees	Top firm	**24.2**	**24.0**	**24.5**	**23.3**
	5 firm C ratio	**46.6**	**48.1**	**47.6**	**48.9**
	10 firm C Ratio	**66.3**	**66.8**	**65.6**	**62.7**
	15 firm C Ratio	**78.3**	**77.8**	**75.6**	**70.1**
Interest Income	Top firm	**24.6**	**24**	**21.5**	**20.8**
	5 firm C ratio	**49.7**	**47.2**	**40.8**	**45.2**
	10 firm C Ratio	**68.2**	**62.8**	**55.9**	**59.1**
	15 firm C Ratio	**78.3**	**72.3**	**64.7**	**67.5**
Other Income	Top firm	**28.3**	**28.2**	**22.2**	**20.8**
	5 firm C ratio	**47**	**48.7**	**40.8**	**47.4**
	10 firm C Ratio	**62.8**	**62.4**	**51.7**	**60.5**
	15 firm C Ratio	**75**	**71.5**	**59.1**	**67.5**

Note: C Ratio is concentration ratio computed from data sources mentioned at Table 5.2

Risk Management

Though regulatory prescriptions on risk management are same for all categories of commercial banks, its different implementations are reflected in actual risk faced by different banks. The post facto risk is reflected in quantum of provisions, net profits and proportion of Non-performing assets (NPAs). It would be ideal to study

risk management systems at individual bank level but our assessment is at broad sectoral level. Moreover, macro economic factors that affect quality of portfolio are same for all banks. As a result, time trends in asset quality or provisioning in different categories of banks would be similar while cross sectional differences therein would reflect differences in risk appetite and approaches to risk management.(Table 5.5). While asset quality of all categories of banks has improved, higher past NPAs for PSBs *vis-à-vis* foreign and private counterparts would reflect their different risk appetite and / or efficacy of risk management systems.

TABLE 5.5
SCB: Profitability and Asset Quality

	1990	1995	2000	2005
Net Profit/Working Funds*				
SBI	0.14	0.59	0.8	0.89
SBI Associates	0.22	0.38		
Nationalised Banks	0.22	0.38	0.44	0.89
Private Banks	0.27	1.16	0.88	0.83
Foreign Bank	1.65	1.7	1.17	1.3
All	**0.22**	**0.41**	**0.66**	**0.91**
Provisions &Contingencies / Total Assets				
		2000	**2004**	**2005**
SBI Associates		0.49%	0.95%	0.22%
Nationalised		0.42%	0.97%	0.39%
Private		0.37%	0.64%	0.18%
Foreign		0.60%	0.66%	0.38%
All		0.45%	0.88%	0.31%
Net NPAs/Net Advances				
		1997	**2000**	**2005**
SBI Associates		17.3	15.3	5.2
Nationalised		21.7	14	5.4
Private		NA	8.5	3.9
Foreign		NA	7	3
All		NA	12.8	4.9

Source: RBI – Trend & progress Of Banks in India 2004-05 and Statistical Tables Relating To Banks in India various issues

Human Resources Management

Table 5.6 and 5.7 gives trends in overall employments as also its composition between officers, clerks and sub staff. While the total employment has declined since 1998 both due to voluntary retirement scheme in PSBs and low fresh recruitment. If proportion of officer staff is considered as a proxy for quality of skills there is slow improvement at the aggregate level as share of officers increased steadily from 27 to 35 percent over 1995-2005.

TABLE 5.6
Scheduled Commercial Banks; Number of Employees

Year End March	Officers	Clerks	Sub Staff	Total	Officer Share (%)
1995	270533	505728	221340	997601	27.1
1998	287701	507577	228693	1023971	28.1
2000	291389	494081	221161	1006631	28.9
2001	268239	451062	207217	926518	29.0
2003	286880	419675	194594	901149	31.8
2004	289356	401087	191279	881722	32.8
2005	313863	396812	189758	900433	34.9
CARG	0.01	-0.02	-0.02	-0.01	

Source: RBI – Statistical Tables relating to Banks in India (various issues)

However, there are significant differences among different categories of banks; Share of officer staff is lowest at SBI and its associates followed by nationalised banks. Foreign banks have not only maintained their lead but increase in proportion of officer staff has also been brisk. The increase in this proportion among private banks is largely due to new private banks, which have adopted technology and HR policies, which are comparable to and in force among foreign banks. It is true that this measure of measuring quality of human resources inputs is somewhat crude for it ignores intensity and diversity of skills. But such measure is useful as it brings out *differences* across different categories of banks.

TABLE 5.7
Bank Group wise Employee Composition*

Year Ending March	SBI & As--sociates	Nationalised Banks	Foreign Banks	RRBs	Other SCBs	All Banks
1995	24.4	26.8	-NA-	40.8	27.8	27.1
1998	24.4	27.5	50.5	40.6	32.6	28.1
2000	24.6	28.4	60.8	40.6	35.3	28.9
2001	24.4	28.0	62.0	40.4	38.3	29.0
2003	27.0	30.0	77.0	41.5	46.6	31.8
2004	27.0	31.3	79.2	42.0	47.6	32.8

* Employee Composition is % share of officers in total Staff.
Source: RBI – Statistical Tables relating to Banks in India (various issues)

Table 5.8 present average compensation levels, which are influenced both due to qualitative differences as also different productivity levels (reflected in business per employee), impacted largely by level of technology and marketing strategies. It is difficult to obtain detail data, but foreign and private banks do outsource marketing, back-office and collection activities in different business segments. Outsourcing is an aspect of flexibility in deployment of manpower. Moreover, expenses on these activities are shown under the head: Other expenses, which results in under estimation of employee expenses and overstates employee productivity in these

banks *vis-à-vis* PSBs. Outsourcing in PSBs has just commenced and is slow due to employee resistance. Moreover Table 7 represents average remuneration levels and there would be significant difference across employee categories. Averages are also likely to be more dispersed in the private sector, as there is a lot more flexibility in differentiating among different skill and motivation levels of employees as compared to PSBs. Despite these caveats, data in Table 5.7, 5.8 and 5.9 reveals less flexibility in HR policies in the public sector banks. Lower entry-level remuneration affects the quality of new recruits and in absence of any direct linkage between performance and compensation potential to motivate and reward good performance is low.

TABLE 5.8
Average Compensation in SCBs

Year Ending March	1995			2000			2005		
	Emp. Cost (Rs. Crore)	**No. of Employee** (Lakh)	**Avg. Compens.** (Rs Lakh)	**Emp. Cost** (Rs. Crore)	**No. of Employee** (Lakh)	**Avg. Compens.** (Rs Lakh)	**Emp. Cost** (Rs. Crore)	**No. of Employee** (Lakh)	**Avg. Compens.** (Rs Lakh)
SBI & Associates	3340	2.97516	1.12	5926	3.06198	1.94	9043	2.54424	3.55
Nationalised Banks	5238	5.6802	0.92	10436	5.55756	1.88	15592	4.26075	3.66
Foreign Banks	314	NA	NA	862	0.14602	5.90	1345	0.17210	7.82
RRBs	503	0.66974	0.75	1243	0.67006	1.86	NA	0.65753	NA
Other SCBs	487	0.65091	0.75	894	0.63069	1.42	2903	0.92411	3.14
Total	9882	9.97601	0.99	19361	10.06631	1.92	28883	7.90120	3.66

Note: For sake of comparability Number of employees in PSBs in 2005 have been adjusted for estimated number in RRBs
Source: RBI, Statistical Tables relating to Banks in India (various issues). Indian Banking Year book 2005 for Number of employees in 2005.

TABLE 5.9
Structure of Operating Expenses (as % of Total Operating Expenses)

Year Ending March	**1990**	**1995**	**2000**	**2005**
Employee Expenses				
SBI & Associates	67.8	72.4	71.6	67.4
Nationalised Banks	69.0	70.0	73.6	67.4
Private Banks	38.1	46.5	49.1	33.7
Foreign	26.1	32.7	33.3	30.6
All	64.2	66.9	69.2	58.3
Depreciation				
SBI & Associates	2.5	2.0	5.4	7.6
Nationalised Banks	3.3	2.6	4.0	5.4
Private Banks	2.5	4.7	13.5	13.9

Year Ending March	1990	1995	2000	2005
Foreign	7.8	8.2	8.7	6.0
All	3.3	2.9	5.9	7.5
Other Expenses				
SBI & Associates	13.0	9.0	10.1	9.9
Nationalised Banks	15.1	12.2	8.9	11.2
Private Banks	14.8	14.3	14.4	24.5
Foreign	31.3	34.5	27.4	35.4
All	15.5	12.9	11.9	15.3

Source: IBA; Data Base on Indian Banks 1987-98 and RBI Statistical Tables Relating to Banks in India.

The differing level of technology application is reflected in Table 5.9, which considers composition of technology and pattern of labour usage in different segments of banks. Extent of depreciation is a proxy for usage of computer and other equipment. In the case of foreign banks proportion of depreciation has come down while that in private banks has gone up significantly. Similarly, other expenses, that would capture expenses on outsourced activities, have always been significantly different across different category of banks. Freedom to outsource signals flexibility in labour deployment and intensity of marketing efforts. In the case of private banks other expenses have increased significantly while in the case of PSBs it has increased but less vigorously while other expenses have declined in the case of SBI and associate banks. Correspondingly share of employee compensation in total operating cost is steady at high levels for PSBs, while it has declined in the case of private banks. Thus technological change in PSBs is at slow pace while in private banks there are significant changes in terms of application of modern technology and outsourcing of certain activities. These would have a wider bearing on marketing and designing of products, customer services and business growth; in short competitive advantage.

Concluding Observation

Financial sector reforms have enhanced the degree of competition in the banking sector. Both the entry of new banks and the decline in direct controls on banks have increased the avenues competition among banks. Though banks have diversified their activities through entering new business activities they are required to compete with other segments of financial system in retaining clients. As domestic market access available to foreign banks is still restricted, it's the new private banks that have gained market share. This has largely been because these could start on a clean start without legacy issues (portfolio, manpower or technology).

New private banks have also been quick to spot emerging business opportunities and to offer new services at lower cost. These factors have enabled them to expand their portfolio. While concentration has decreased as compared to pre-reform period, latest trend signal a reversal. It would be desirable to maintain competition in among banks for efficient growth in real and financial sectors, improved customer satisfaction and also for effective regulation, which would facilitate financial stability.

Future trends in competition would depend several factors; foreign banks access to domestic market, which may increase after March 2009. Transition to Basel II would enable banks to use in-house risk measurement models and compute capital requirements. Banks with better risk management skills and systems would need to maintain lower regulatory capital and get an advantage in attracting "good" clients through attractive pricing. This transition would also improve disclosures by banks and facilitate monitoring by investors/ depositors. Regulatory regime does not distinguish on the basis of ownership (except a different definition of priority sector is applicable to foreign banks), given the aim of following best international practices is regulatory authorities are likely to strive to maintain competitiveness for better regulation of banking system.

Consolidation of domestic banks is getting increased attention in the context of strengthening of domestic banks by enabling them to increase their size, scope and reach to compete with foreign banks. Though transition to full convertibility is likely to be in a phased manner, competition with foreign banks would intensify as rupee becomes convertible. However, the issue of consolidation is linked to government ownership if public sector banks are to participate in the consolidation. Merger of public and private banks are difficult as it may require dilution of government holding. But even consolidation of banks under government ownership has proved to be difficult as it involves realignment of branch network and consolidation of employee pools. Even merger among private entities are linked with foreign banks' access to domestic banks.

But competition would also depend on how effectively government owned banks are able to meet the challenge of competition from new private banks and foreign banks. Government as a shareholder could justifiably pursue non-profit objective(s) but if these are clearly stated and once stated PSBs are operationally free to achieve these objectives, PSBs could capitalise on their reach and size. Their competitive edge would get particularly sharpened if they get flexibility in HR policies and practices by offering performance linked service conditions (pay, promotion and postings). The importance of motivated, skilled staff is important as risk management and customer retention becomes crucial for success in a competitive business environment. Even with consolidation of public sector banks, the issues of operational autonomy, performance linked service conditions would remain equally valid for larger banks, which would emerge from the process of consolidation. Recent move to transfer the ownership of SBI, the largest Indian bank from RBI, which is also bank regulator to Government of India may be useful to improve regulatory efficacy but may not lead to any change as its public sector character.

While some decline in the market shares of public sector banks (deposits and advances) may seem inevitable given their initial dominance, these trends unless reversed in near future, could lead to weakening of public sector banks and increased concentration. As noticed above, concentration ratios have tended to increase since 2000. Such a development could undermine competition, which is essential for efficiency and better regulation. Privatisation may not be the only

alternative if public sector banks can get operational autonomy including flexible HR policies and practices.

Banks were nationalised (in 1969 and 1980) to expand the reach of commercial banks to sectors such as agriculture, small-scale industries etc. However, the reach of organised financial system is still low and the need for more "inclusive banking" is still felt. However, unlike in the past new technology offers a potential to take organised finance to unorganised sectors. This would need innovative approaches to design and delivery of products suitable for varying needs of small customers. Banks would therefore need to experiment and explore alternative ways to reach these customers without undertaking unduly large risks. This is possible only if banks are operationally free and not constrained by uniform norms set by government or regulators for all banks.

If government decides to give top priority for "taking banking to un-banked", banks would need more freedom and this is truer for public sector banks, which face more restriction in terms HR policies and practices. Government owned banks with full operational freedom could combine stability from government ownership and efficiency; the later is a must in competitive business environment.

From a competition and regulation perspective it seems the issue of government ownership of banks is crucial for reforms of public sector banks as also future consolidation of Indian banks. While the later would help Indian banks gain in size and scale in order to compete with foreign banks the former is necessary to ensure competition among domestic banks. To be meaningful consolidation should also involve public sector banks. Though RBI has prepared a blueprint to introduce international best practice as regards bank regulation, these would get a dent if competition were not maintained in the banking industry.

A recent report from a high-powered committee (Ministry of Finance 2007) presenting *inter alia* a blueprint for future financial sector reforms, has recommended ushering in full convertibility of the Indian rupee; quick reduction in government holding from all financial entities (below 49% by end 2008 and to nil by 2015) and other several changes in system of financial regulation and governance. In short, it recommends privatisation and higher domestic market access to foreign banks to introduce competition in the financial system. It has sought significant changes in regulatory regime – shift from Rule-based regulation to Principle based regulation. But given the strong links between government and regulators, changes in regulatory regimes need to start from public sector reforms if not government reforms. Once possibility of public sector reforms is recognised it is possible to think of competition without privatisation. Given clear-cut objectives and full operational freedom strong public sector banks would facilitate competition.

The analysis presented in this paper indicate that in absence of proper HR policies public sector banks may not be able to attract, motivate and retain talent. Without motivated and efficient staff PSBs would find it difficult to maintain their significant presence. Unless banking industry has several efficient players the market may not remain competitive, which is essential even for proper regulation of banks.

References

Allen, Franklin and Douglas Gale (1998), "Corporate Governance and Competition", paper presented at a conference on Corporate Governance in Barcelona, Spain.

Barth, James R., Gerard Caprio and Ross Levine (2000), "Banking System Around the Globe: Do Ownership and Regulation affect Performance and Stability?", Policy Research Working Paper No. 2325,World Bank.

Bonin, John P, Iftekhar Hasan and Paul Watchel (2003), "Bank Performance, Efficiency in Transition Countries".

Claessens, Stigin and Luc Laeven (2003), "Competition in the Financial Sector and Growth: A cross Country Perspective".

Clarke, George R.G., Robert Cull and Mary M. Shirley (2005), "Bank Privatisation in Developing Countries: A Summary of Lessons and Finding", Journal pf Banking and Finance, (29)829.

Das, A., A. Nag and Subhash C. Ray (2005), "Liberalisation, Ownership and Efficiency in the Indian Banking: A nonparametric Analysis," *Economic and Political Weekly*, XL(12), 1190-97.

Dixit, Avinash (2002), "Incentives and Organisations in the Public Sector: An interpretative Review", Journal of Human Resources, 37(4), pp. 696-727.

Dewatripont, Mathias, Ian Jewitt and Jean Tirole (1999a), "The Economics of Career Concerns Part I: Comparing Information Structures," *Review of Economic Studies*, 66(1), 183-98.

Dewatripont, Mathias, Ian Jewitt and Jean Tirole (1999b), "The Economics of Career Concerns Part I: Comparing Information Structures", Review of Economic Studies, 66(1), 199-217.

La Porta, Rafael et al. (2002), "Government Ownership of Banks", Journal of Finance, 57, 265-301.

Majumdar, S. K. (1996), "Assessing Comparative efficiency of State owned, Mixed and Private sectors in Indian Industries", Public Choice, 96, 1-24.

Megginson, W. L. and Jerry M. Netter (2001), "From State to Market: A Survey of Empirical Studies of Privatisation," *Journal of Economic Literature* XXXIX, 321-89.

Ministry of Finance (2007), "Mumbai – An International Financial Centre", Report of the High Powered Expert Committee Sage Publications, New Delhi

OECD (1998), "Enhancing the Role of Competition in the Regulation of Banks".

Prendergast, Canice (1999), "The Provision of Incentives in Firms", Journal of Economic Literature XXXVII(1), 7-63.

Sensarma, Rudra (2005), "Cost and Profit Efficiency of Indian Banks 1986-2003: A Stochastic Frontier Analysis", Economic and Political Weekly XL(12), 1197-1209.

Stiglitz, Joseph E. (2000), "Whither Reforms? Ten Years of Transition", Annual Bank Conference on Development Economics, World Bank.

Wharton Financial Institutions Center (2001), "Competition, Innovation and Strategy in Financial Services Industry", University of Pennsylvania.

Whittaker, Andrews M. (2001), "The Role of Competition in Financial Services Regulation", Internet: www.fsa.gov.uk pages/ Library/ Communications/Speeches/2001/sp79.html

6

Introducing Competition in the Indian Electricity:
Is Micro-Privatisation a Possible Way?

ASHWINI K. SWAIN

Introduction

During the last decade of 20th century, many developed and developing countries started restructuring their electricity sectors to improve their performance. The restructuring programmes in most of these countries have included the separation of potentially competitive segments (generation, transmission and distribution), privatisation of the state-owned (public sector) enterprises, creation of "competitive" wholesale and retail markets, and establishment of "independent" regulatory mechanisms. Virtually many countries have decided to open up their electricity markets, at least to their big industrial consumers. In most of the countries electricity markets will be open to all users, including the household consumers. This is already the case in Finland, Germany, New Zealand, Norway, Sweden, England and Wales in United Kingdom, and several states of the United States and Australia. As a follower of the international currents, India has been strongly influenced by the international "standard model" of electricity restructuring.

Restructuring in the electricity supply industry is driven by the idea of increasing competition and choice as the mechanism of coordination in the sector (Dubash and Singh 2005). Recently, of all the steps of restructuring, the idea of having a competitive electricity market has increasingly dominated the Indian debate over restructuring.[32] The debate over competition in Indian electricity is relatively new. During early 1990s, India started with liberalisation of investment in the sector, which marked the first phase of reforms in Indian electricity. By the mid 90s, it was realised that mere opening up of the generation segment to the private players is not sufficient to improve performance of the sector. In response, the second phase of reforms emphasised on separation of distribution from generation and transmission and privatisation of distribution (supply) business. However, there were hardly any private player willing to take over the loss-making business of electricity distribution and there was a little "political will" in part of the state governments to go for privatisation of politically sensitive distribution segment. The result was that only two states, viz. Orissa and Delhi, have privatised electricity distribution, while others have completely boycotted the idea now.

Then came the third phase of reforms in Indian electricity with the enactment of the Electricity Act, 2003, the preamble of which states that "promoting competition" is a means for an efficient electricity sector. The Act has really started the debate over

[32] The larger debate over electricity reforms in India includes other aspects like distribution reforms, subsidy removal, management practices, rural electrification, regulatory practice, and so on.

promoting competition in Indian electricity through it's clear emphasis on the same and empowerment of the regulators to advise the governments on the matters of 'promotion of competition, efficiency and economy in activities of the electricity industry' (GoI 2003). In recent years, both at the policy and academic arena, the debate is more focused on competition ignoring the other aspects and there is a kind of consensus that competitiveness is the short-cut to efficiency in the sector. Of course, some disagree with the emerging consensus.

The objective of the present paper is not to find out whether competitiveness is a short-cut to efficiency or not. Definitely, I agree, competition will enhance efficiency of the sector. At the same time, the paper argues that it is not so easy to establish a competitive electricity market. Rather, the paper seeks to find out a suitable alternative to competition in Indian electricity, which redistributes the costs and benefits evenly among the users and providers. Therefore, the paper will briefly assess the attempts to introduce competition in Indian electricity. While there appears to be a demonstrated will to introduce competition, the approach and consequently attempts in introducing competition in Indian electricity has been limited from various aspects. At this point I would like to make it clear that the paper is more focused towards competition in retail electricity market. Although a condition for establishing a successful competitive retail electricity market is the existence of a competitive wholesale market, introducing competition in the retail segment would definitely improve the functioning and increase competitiveness within the wholesale market.

Drawing on Indian political economic conditions and considering the challenges of having a competitive electricity market in India, the paper suggests micro-privatisation[33] as an alternative to standard model of competition and choice in retail electricity market. The model of micro-privatisation exhibits potential to solve major problems in the sector like accessibility, subsidy, mismanagement, theft, loss, and lack of transparency and accountability, while providing choice for the users. Going further, the paper also suggests that participation of the users in the model will increase credibility of the system through monitoring at the local level and ensure a "short-route" of accountability between the users and the service provider. Thus it will contribute to overall governance of the sector. Finally, the state regulators will play a critical role of managing the emerging competition.

The paper is organised as follows. Section I tries to answer some general questions like what is competition, why it is necessary in electricity and also examines the barriers and challenges of having a competitive electricity market with reference to Indian case. Section II focuses on the state of Indian electricity and discusses political economy of policy shifts in Indian electricity to locate the context

[33] Micro-privatisation is a relatively less developed concept. As presented in the paper, it has two aspects: *firstly*, putting up a micro-entrepreneur at the point of delivery, which could be a franchisee, local body, or users' cooperative; *secondly*, ensuring users' participation in the process to plan, manage, and monitor the local service delivery mechanism. In the ideal case, micro-privatisation should take the form of independent users' cooperatives, where users own and manage their local service delivery mechanism. So far, the model has mostly been implemented in rural areas with different forms and names, based on the assumption that rural areas have pre-existed spirit of cooperation.

of present debate. In the section, the paper will discuss the various steps taken to introduce competition in the sector. Section III suggests micro-privatisation as a possible way in the direction and discusses the experiences in United States and Orissa to substantiate the argument. Finally, section IV provides a few concluding thoughts and emphasises the role of regulators to manage the emerging competition.

Competition in Electricity

Before going into the debate on competition in electricity, we need to understand the meaning of competition, why it is important in electricity and what are the challenges of having a competitive electricity market. In the following few paragraphs, the paper will discuss these issues. Competition is not concerned with maximising the number of firms; rather it is concerned with defending market competition in order to increase welfare (Motta 2004). The basis of competition is the idea that monopolies are "bad" and "inefficient". It is well accepted that a monopoly causes a static inefficiency and for given technologies, monopoly pricing results in a welfare loss. The condition is worse when the monopolies are run by government. This argument is often substantiated by citing the case of public enterprises providing infrastructure services. A recent World Bank report on public services in India argues that the 'model of monopoly service provision has failed to deliver acceptable outcomes.' It goes further to claim that 'a government cannot run vast delivery systems by itself without provoking serious problems, ranging from politicisation and bureaucratisation to an entrenched culture of corruption and high prices for poor quality goods' (World Bank 2006).

Then does the solution lie in privatisation of public service provisions? Many people believe that privatisation is a solution to the government failures encapsulated in the notion of the 'grabbing hand of government'.[34] Drawing on public choice theory, this idea indicated that the key problem of public enterprises was government interference in their management and activities, which lead them to pursue political rather than economic goals. Privatisation was considered as a policy solution that would restrict the future influence of the state/government on privatised units (Cook 2002). However, international experiences suggest that mere ownership transfers do not help in improving efficiency of public service provisions. Rather the solution lies in having several firms (both public and private) providing same service and ensuring a healthy competition among the players. Competition in the market place is regarded as a key to improve the performance of the public utilities. This idea has prompted privatisation of public enterprises world over, with a focus on introducing competition. As most of the public utilities (like telecom, electricity, gas and water) have been natural monopolies in their respective service areas, competition rather than ownership transfer will help in improving their efficiency (Gouri, Jayashankar and Fadahunsi 1993). The monopoly status (along

[34] See Shleifer and Vishney (1999) for detailed discussion on the grabbing hand view of government ownership.

with government ownership[35]) of public utilities leads to the emergence of "politically created" pressure groups whose presence distorts the economic pricing policies in favour of the group. This leads to poor quality of service often at an artificially created low price. For example, subsidised electricity tariff for agricultural consumers in India has not really helped the farmers with poor quality supply (World Bank 2001). On the other hand if the monopolies are privatised, the incumbent company would continue to increase price, at least for the first few years, in the absence of competition and regulation. The possible solution is regulation plus private ownership and competition which would lead to real price reductions (Littlechild 2000). Further in the absence of competition, the quality of service deteriorates and growth is stagnated. Public exploitation goes up as the consumers and clients are taken for granted. In this sense, it is well argued that inefficiency of the public utilities stems from their isolation from an effective competitive atmosphere.

It leads to think how competition is going to help in improving performance of public enterprises. There are two kind of argument in response to this question. While the first one focuses on efficiency enhancement, the second one deals with price reduction along with quality improvement. The supporters of competition in utility services argue that competition ensures operational as well as allocative efficiency in both the manufacturing and service sectors. The other group of proponents of competition claim that competition will reduce price of utility services while improving the quality. They very often refer to the classical economic argument that sees competition as a process of rivalry between players in the market who compete by changing prices in response to the market conditions, thereby eliminating excessive profits and unsatisfied demand.

The second argument in favour of competition in utility services is being criticised recently, particularly for its inapplicability in the electricity sector. In an introduction to a special issue of *Economic and Political Weekly on* global experience of electricity restructuring, Dubash and Singh (2005) have argued that 'suitably designed, competition may be one element' in electricity restructuring 'but it is not a short-cut to larger reforms.'[36] Drawing on price record of some restructured electricity sectors, they claim that it is hard to establish a causal connection between the price trends and competition because of several intervening factors like increase in production, reduction in fuel price and regulatory mandate, etc. The papers in the issue, while supporting the argument, go further to claim that the benefits of restructuring and competition are unevenly distributed where the large consumers have gained, often at the cost of small consumers. Newbery and Pollitt (1997) doing a cost-benefit analysis of the UK experience found that privatisation and restructuring in United Kingdom's electricity sector has substantial efficiency gains, but these gains have been unevenly distributed. Thomas (2002) argues that introduction of retail competition for small consumers has been an economic disaster

---

[35] Government ownership of monopolies is likely to be loss-making or too powerful, and likely to prolong the monopoly status, as always it is protected by the governments. Therefore, it is considered undesirable (Littlechild 2000).

[36] For more details please see *Economic and Political Weekly*, 40(50), December 10, 2005.

for them in UK, as it has opened the way for their exploitation that would never have been tolerated under the old system. On the other hand, Apt (2005) comparing the retail electricity price data over a period from 1990 to 2003 claim that competition has not lowered US industrial electricity tariff.

However, there is less challenge to the efficiency based argument for introducing competition in electricity. On the other hand, it is also agreed that electricity restructuring (the "standard model" based on competition and choice[37]) is far more challenging than it was imagined. Based on US experience, Lave, Apt and Blumsack (2004) argue that although creation of a "free" market for electricity may be a relatively straightforward task, designing a "competitive" market that meets the expected standards (and remedies the problems seen in restructured markets) is much more difficult. Although the problems can be overcome, the costs of doing so might make competition unattractive. The same argument applies to the Indian electricity market. Owing to the following factors, it may not be an easy task, as assumed by the Indian policy makers, to introduce competition (the way it has been debated and designed) in Indian electricity.

Firstly, the context under which competition and choice was introduced in electricity sectors of developed countries was quite different from India. The objective of restructuring and competition in developed countries was to squeeze greater efficiency out of essentially well-functioning electricity sectors. While developed countries, at the time of restructuring, had well functioning electricity systems providing reliable power to all on a financially viable basis (Dubash 2001), India is faced with capacity shortfall, low level of access, mismanagement, financial crisis, weak market institutions and many more problems. Subsidy to politically favoured consumers and cross-subsidisation from the industrial consumers is a distinct feature of Indian electricity market that may obstruct real competition, if the present pricing structure is to be maintained.

Secondly, as most part of the country had been served by the erstwhile SEBs, there are a very few private players in the sector. On the other hand, owing to the absence of a well-established electricity market, foreign players may not be interested in investing in Indian electricity. After more than 15 years, the generation segment is not able to attract too many private (domestic as well as foreign) investments. Absence of adequate number of players might result in concentration of market power with a few players, that won't allow the real competition.

Thirdly, proper management of a competitive market as well as to facilitate a healthy competition, there is a need for strong market institutions. Although "independent" regulatory institutions have been established both at the state level as well as at the centre, their independence and efficiency is still doubted. As most of the regulators are drawn from bureaucracy, they have been sympathetic and indebted towards the government, while they need to be independent of the government. Absence of financial autonomy is a strong factor contributing to their indebtedness (Swain 2006).

---

[37] See Hunt and Suttleworth (1996) for a detailed discussion on the 'standard model'.

Fourthly, the fact that competition policies are designed (by the government) and implemented (by the regulators, mostly drawn from government services) by the people, who have been pursued anticompetitive policies previously won't help (CRC 2005). The extension of responsibility of regulators, by the Electricity Act 2003, to promote and maintain competition poses doubts about its implementation. As Kahn (1998) argues it may be dangerous for two reasons. Firstly, as 'regulators tend to be hostile to competition', it will be difficult to have effective competition under a regulated regime and vice versa. Secondly, confronted with political pressure the regulators might produce less efficient (than the existing ones) competitors.

Finally, absence of proper infrastructure facilities will be a major constrain for introducing competition. Establishing competitive retail markets (that is considered to be the final step towards a complete electricity market) will require more extensive network. And it will be expensive to expand the existing transmission network owing to the geographic factor. Absence and cost of other infrastructures like real-time meters might make competition an unattractive project.

The State of Indian Electricity

After 60 years of independence and state led development, India has not achieved universal electrification. Although the total installed capacity has increased from 1,362 MW in 1947 to 1,28,182.47 MW in 2007 and the number of electrified villages grew from 1500 (0.25 %) in 1947 to 4,71,360 (79.4 %), there are huge disparities among the states as well as across districts within many states. While five states[38] claim to have achieved 100 percent electrification, most of the unelectrified villages are located in the populous northern and central states. Despite repeated efforts, out of around 192 million households around 85 million do not have access to electricity, 78 million in rural India, while the remaining 7 million are urban households. In percentage terms, 56.6 percent of rural households and 12 percent of urban households do not have access to electricity (Bhattacharyya 2006). The problem is growing worse as new connections fail to keep pace with population growth. India houses the largest number of people in any country in the world without electricity.[39] Most of the unelectrified households are poor and located in rural India, who are deprived of many social and economic benefits due to lack of access to electricity service. Finally, those who have access to the service are not satisfied with the high cost and poor quality of service.

At the face of these problems, the challenge for India is not to design and establish a competitive electricity market, rather to have such an electricity market which is affordable and accessible to all, at the same time competitive, distributes the costs and benefits evenly among the consumers and takes care of the small consumers keeping with the social objective. India needs to develop such a market

[38] The five states which claim to have achieved 100 percent village electrification are Delhi, Goa, Haryana, Punjab, and Kerala.

[39] According to 2001 census, an average household in India houses 5.3 persons. Accordingly, the size of population without access to electricity is more than 450 million.

structure in the electricity sector which provides certain amount of choice to the consumers, extends the service to everyone, and does so in a financially viable way. That will require not only more players in the sector but also strengthening of the market institutions- the existing regulatory commissions. To carry forward the discussion in that direction, this section will be focused on the political economy of policy shift in Indian electricity to contextualise the present debate.

Political Economy of Policy Shifts in Indian Electricity

During past six decades, Indian electricity sector has passed through four phases of major policy shifts. The first, following independence in 1947, established public-sector led electrification, which emphasised on two major objectives, viz. to power industrialisation in India (economic objective) and to provide electricity to all as a right, at affordable rates, and to the level required for ensuring adequate livelihoods (social objective). The second, beginning in the late 1960s and early 1970s, mostly at the state level, established an era of subsidisation and rural electrification, which ignored the economic objective by over concentrating on the social objective. The third, beginning in the early 1990s, laid the ground work for an increasing private presence in the sector and is being criticised for ignoring the social objective of extending the service to everyone. And the fourth begins in 2003 with the enactment of the Electricity Act 2003, which is more directed towards introducing a competitive market structure in the sector while giving importance to the other aspects of the sector including rural electrification (Swain 2006).

The first phase marked a shift to a public sector led development in the sector from an infant market, which was mostly dominated by small private players, recognising its inability to power the development and to electrify a vast country like India. The Electricity (Supply) Act 1948 had set the base for nationalisation of the electricity sector and established public institutions to carry forward the task of electrification. Although the Act set the base for public control of Indian electricity, it did not argue for complete state control over the sector. This is something that was advocated in the Industrial Policy Resolution 1956.[40]

The Act was drafted on the broad lines of the Electricity (Supply) Act 1922 in force in the United Kingdom. The model of nationalised electricity sector came from the centralised investment allocation and five-year plans of the Soviet Union, the United Kingdom's nationalised electricity system, and the massive public works of United States' Tennessee Valley Authority. During the discussion over the Electricity (Supply) Bill, in the Constituent Assembly, two important issues were raised and discussed which has particular relevance to the current debate- viz. nationalisation of the sector and autonomy of proposed SEBs. While some members supported the nationalisation move citing the case of UK, some others opposed it on various grounds. The opponents of nationalisation favoured a healthy competition among the private players and the state to electrify and capture the market in a "virgin

---

[40] The resolution states that 'all industries of basic and strategic importance, or in the nature of public utility services, should be in the public sector' and 'all new units in these, save where their establishment in the private sector has already been approved, will set up only by the state' (GoI 1956).

field". Advocating a competitive model between the public and private utilities, Constituent Assembly member M A Ayyangar said 'let the three horses run side by side, private enterprise, work through corporation, and the state enterprise. Let us wait and see which one will prove ultimately beneficial to the public, let there be a kind of healthy cooperation and competition' (GoI 1948, p. 43-44). The legislation that was passed fell short of full nationalisation and represented a compromise between the public and private operators. The legislation mandated that existing private licensees were to be honoured and allowed the state governments to decide about license extensions when they expired. While most of the states were quite aggressive in nationalising the sector fully, few others continued to extend the license period of private operators for decades, including into the current period (Kale 2004).

On other hand, the debate over autonomy of the SEBs raised the issue of political interference in the proposed boards. The basic objective of establishing autonomous Boards instead of Electricity Departments attached to the Ministry of Energy, was to free the Boards from the vagaries of ministerial change. In defence of autonomous boards, K Santhanam argued that 'ministries may change, and changing ministries may have changing policies; but the day to day administration of industrial undertakings should be continuous and should not be disturbed by political considerations. It is on that sound principle that nationalisation in this country should proceed and unless that principle is adopted in this country all task of nationalisation will be moonshine. Industries will be started by one ministry and as soon as the ministry is changed it will be scraped by another ministry' (GoI 1948, p. 50). Although there was some opposition to the autonomous boards, the legislation mandated that all the states would eventually create autonomous corporations, but allowed states sufficient time- initially for two years from the passage of the Act, but with explicit promise of further extension if required. It shows that the debate over the Act anticipated the contemporary debates about political interference and failure of public service utilities. At that point of time, there was a doubt over state's capability to run utility service provisions as well as a concern to depoliticise it.

Successive amendments to the Electricity (Supply) Act eroded SEB autonomy by gradually diminishing the boards' freedom to set tariffs and by imposing greater political oversight in personnel decision. The period of 1970s and 1980s is marked for decreasing autonomy of SEBs and increasing scope of political interference in their functioning. Over the period, the SEBs were being used for political considerations by governments and politicians.[41] During 1980s, the boards plunged into financial crisis and their performance declined owing to several factors like political interference, corruption, subsidy, mismanagement, etc. In the beginning of 1990s, a board consensus emerged that the Indian power sector was in "dire straits", and a major policy changes are required to change its management. At the moment, the

[41] For a better understanding of the political interference in the sector, it can be divided into two parts: firstly, interference thorough 'policy directions' from governments that was legally allowed by the Section 78A of the Electricity (Supply) Act; secondly, through executive instructions, which works through an informal nexus between the politicians and the employees of the boards (Ruet 2005).

international current was in favour of restructuring and privatisation as many developed countries had started restructuring.

In response to a severe crisis in the sector, the Central Government announced in 1991 that it would open up the generation segment for private investment. This change altered the existing policies in favour of public sector led development in the sector. Reforms in electricity sector began in October 1991, when the Power Ministry of the Government of India began to publish a series of notifications seeking to encourage the entry of private generating companies into the electricity sector, some of which were later enacted in parliament to become the Electricity Laws (Amendment) Act, 1991. This Act amending the Indian Electricity Act, 1910 and the Electricity (Supply) Act, 1948 makes provision for: allowing private sector to set up local, gas or liquid fuel-based thermal projects, hydel projects and wind or solar projects of any size; allowing foreign investors up to 100 percent ownership of power projects subject to government approval; setting new price structure; new power projects are eligible for a five-year tax holiday; and duties on the import of equipment for power projects have been reduced considerably. To attract private investors, IPPs were provided with massive incentives.

However, within a few years of its implementation, the IPP policy turned out to be a nightmare. For all the enthusiasms with which it was launched, the IPP programme significantly under-performed. By the mid-1990s, it could not ensure significant private presence in the business and was also realised that private presence in generation would not solve the problems in Indian electricity. In response to the failure of IPP policy, the second phase of reform began with a focus on restructuring and privatisation of the loss making distribution business. At this stage, these reforms, implemented at the state level, were clearly drawn from the World Bank policies on private participation in electricity sector, which was rewritten in 1993. Initially the Bank was successful to propagate the model of reform through its global reach and cheap capital. In 1993, the World Bank launched its policies in India, in a conference at Jaipur jointly convened by the Government of India and the Bank, where most of the state power ministers were invited. In response to these ideas, various states started experimenting reforms after the mid-1990s. While most of the states have unbundled the sector, only two have privatised the distribution business. Another important measure taken during the period was establishment of Central electricity Regulatory Commission and State Electricity Regulatory Commissions. While the major objective of establishing the regulatory commissions was to depoliticise the sector by transferring the tariff setting power to the "independent" regulators, it is still doubted whether the regulators are really independent or not. The relationship between the regulators and the government/politicians is considered to be cosy, as most of the regulators are drawn from among retired or nearly-retired bureaucrats, who usually have pre-existing relationship with the government. The states had established regulatory commissions within a few years, while restructuring and privatisation had proceeded very slowly, keeping the sector far from the expected result.

In response to the hesitant reforms at the state level, the Central Government passed the Electricity Act 2003 in May 2003, after a push and pull for two years

among the policy makers on what to retain from the draft bill and what to change. However, the passing of the 2003 Act really started the debate over competition in Indian electricity. The Act replaced all the existing legislation in the sector and prepared a ground for fundamental restructuring of the sector on the basis of international "standard model". The Act has mandatory provisions for corporatisation of SEBs through restructuring and open access to the transmission and distribution networks, which has been drawn from the standard model of restructuring. It seeks to promote a competitive electricity market in India through these provisions.

The Electricity Act 2003: Provisions for Competition

The 2003 Act intends to promote competition in the sector through delicensing generation, multiple distribution licenses, and open access. Under the new Act (Section 7), captive generators along with all other generators are exempted from licence. The definition of captive generation has been extended to include cooperatives and users' associations. It is expected that investment in generation will be increased by delicensing the entry of players. It should be noted that the liberal policy towards independent power producers, in the past decade, could hardly generate interest of private players in the sector. After more than one and half decade since introduction of IPPs, private generation is limited to only 12 percent of the total generation.

The Act also provides for multiple distribution licences in a single distribution area. The Act (Section 14) allows the appropriate Commission to grant a licence to two or more persons for distribution within same area, through their own distribution network. But multiple distribution license option is considered to be economically unviable owing to the cost of duplication of distribution lines (Sinha 2005). So the other option left is open access that requires the transmission licensees to provide non-discriminatory open access to their transmission network by any licensee, generating company or a captive generating plant.

A later amendment to the Act, making a change in the Section 42 (2) requires that the state regulators shall provide open access within five years (from 27.01.2004) to all consumers who require a supply of electricity with a maximum demand of 1MW. At the same time the Act also requires that the cross-subsidy charge is to be 'progressively reduced and eliminated' in a manner determined by the state commissions. But it will be difficult to provide open access to the larger consumers and eliminate cross-subsidy surcharges, particularly when the distribution companies are not financially stable. The Act does not provide substantial guidance to the state commissions in regards of achieving both these tasks. The critics argue that open access is hardly the beginning for a restructured sector organised around competition and choice. Rather it is a political strategy to side-step the political challenges to reform SEBs while increasing the pressure for internal reforms, as an efficiency enhancing economic strategy (Dubash and Singh 2005).

Open access facility will also be extended to retail consumers as and when it is introduced in distribution. The Act requires that open access will be introduced in

distribution in phases which will enable the consumers to obtain their supply of electricity from a generating company or any other licensee, other than the distribution licensee for that area. The distribution licensee operating in the area will be paid a wheeling charge, a surcharge to meet the current level of cross-subsidy and a surcharge to meet the fixed costs. In case of an open access consumer, the regulator is authorised to determine the wheeling charges and surcharge, not the tariff. The surcharge is not payable by a captive generation plant. By this provision of surcharge, the Act seeks to protect the revenue of existing licensee by way of cross-subsidy.

Implementation of the first phase of open access may lead the distribution companies into further financial crisis by withdrawing the large consumers from them. Singh (2005) provides two reasons for revenue loss when large consumers opt out of the distribution companies. Firstly, it will result in loss of cross-subsidy revenue that has been provided by the HT consumers to fund the subsidies to LT consumers; secondly, it will result in a change in consumer mix as the power that will be freed up will be supplied to the low paying LT consumers. Although the Act provides for cross-subsidy surcharge to the distribution companies, the magnitude of the surcharge will create political tensions. The methods provided for calculating the surcharge has been unsatisfactory so far. If the surcharge will be low enough to make open access economically viable, the revenue loss to the distribution companies will be enormous and if it will be too high, open access would not be implemented at all (Singh 2005).

From the discussion above, it could be concluded that multiple distribution licensee policy and open access will not be sufficient (although necessary) to establish the standard model competitive electricity market in India. It will repeat the global trend of uneven distribution of benefits in favour of the larger consumers or might be worse than that. The benefit that will come to the large consumers will be at the cost of small consumers. While the large consumers may benefit from open access, it will really hard for the domestic consumers to gain benefits of open access. The Act has not been able to provide a framework to distribute the costs and benefits evenly among the consumers. Whatever may the consequences, it is clear that the small consumers are not going to benefit from the proposed model of competitive electricity market. And this might have serious political consequences.

Micro-Privatisation: A Solution for India

Along with provisions for open access and multiple distribution licenses, the Electricity Act (in Section 5) recommends that 'the Central Government shall also formulate a national policy, in consultation with the State Governments and the State Commissions, for rural electrification……and management of local distribution in rural areas through Panchayat Institutions, users' associations, co-operative societies, non-governmental organisations or franchisees' (GoI 2003). In response the National Electricity Policy has mandated that 'Necessary institutional framework would need to be put in place not only to ensure creation of rural electrification infrastructure but also to operate and maintain supply system for securing reliable

power supply to consumers. Responsibility of operation & maintenance and cost recovery could be discharged by utilities through appropriate arrangements with Panchayats, local authorities, NGOs and other franchisees etc' (GoI 2005). Although this provision has significant implications for solving the problems in Indian electricity, both the Electricity Act and National Electricity Policy documents have made a passing reference to it. Both the documents are silent about how to manage local distribution in rural areas through Panchayat Institutions, users' associations, co-operative societies, NGOs or franchisees and what would be the role of regulatory commissions in the process.

Probably realising the importance of local management of distribution resources and problems with the restructuring model under 2003 Act and its implications for household consumers, the Ministry of Power has introduced a new scheme for rural electricity infrastructure and household electrification in 2005 called *Rajiv Gandhi Grameen Vidyutikaran Yojana* (RGGVY). Although the scheme has been focused on rural electrification, it has larger implications for the small consumers both at rural and urban areas. The scheme seeks, within five years, to electrify all villages and habitations, provide access to electricity to all households (MoP 2005). The scheme has been tied with the larger project of "Bharat Nirman" which seeks to build infrastructure facilities in rural India.

The significance of the scheme lies in the fact that it carries forward the social objective, set by the constitution makers of India, of making the service accessible to everyone. The scheme provides ninety percent capital subsidy to cover cost of electrification. The scheme provides subsidy for establishment of rural electricity distribution backbone (with 33/11 KV or 66/11 KV sub-stations), creation of village electrification infrastructure, and promoting decentralised distributed generation from conventional sources where grid connectivity is either not feasible or not cost effective. It requires the states to make adequate arrangements for supply of electricity and ensure that there is no discrimination in the hours of supply between rural and urban households. The scheme is being implemented through Rural Electrification Corporation and covers the entire country. The scheme stresses that revenue sustainability of the programme, that has been ignored in earlier programmes of rural electrification, will be ensured through establishment of franchises, who could be NGOs, users' associations, cooperatives or individual entrepreneurs with association of Panchayati Raj Institutions. RGGVY makes it mandatory to have franchisees in all newly electrified (under the scheme) areas and the franchisee model can also be extended to other areas including urban areas (MoP 2005). The provision for having franchises is made keeping with the Section 5 of the Electricity Act 2003. However, neither the 2003 Act nor the RGGVY clearly mention how it is going to be implemented. And both of them are silent about the role of state regulatory commissions in the franchisee model. During last two years, Rural Electrification Corporation along with Ministry of Power has initiated debates over the issue with help from several consultants. So far no standard model has been emerged. Various models have been put forth and it is open to the state utilities which one they choose. The prospective franchises are provided with the choice to

be treated as a separate licensee or to be linked to the distribution company of the area.[42]

Drawing on the experience of developing and underdeveloped countries, DFID (2002) Claims that attempts for providing electricity to all (particularly to poor) have failed due to 'lack of participatory planning to deliver what was appropriate to meet local demand, lack of understanding of the local context and situation,……and lack of local capacity to install, operate and maintain systems' (p. 21). This problem could be overcome through involving the users in planning and maintenance, and promoting local entrepreneurs in the electricity market. Although RGGVY seeks to promote local entrepreneurs through the franchisee model, it has neglected users' involvement. The franchisee model proposed under RGGVY could be more effective with an emphasis on users' involvement in the process. Users' participation could be ensured through establishment of local user committees. These committees will be responsible for monitoring of local service providers as well as planning for local distribution resources. The model, which combines users' involvement and local entrepreneurship for service provision, is known as "micro-privatisation".

In the next few paragraphs, the paper will argue that micro-privatisation will be helpful to establish a competitive retail electricity market in India, while taking care of the small consumers, distributing the benefits evenly among all consumers and to a certain extent it will solve some of the critical problems in Indian electricity. At this time it is necessary to remind that the main basis of the argument for competition and choice has been to transfer the power to the consumers. This objective could be better achieved in the micro-privatisation of distribution along with consumer participation.

Then the question arises what are the key features of the proposed model and how it is going to address the issues? How to ensure consumer participation? Before going into these questions we need to look into the experience of existing models. The first such participatory model for electric service delivery, popularly known as cooperative model, was introduced in United States during mid 1930s. In India, Orissa has such a model of micro-privatisation and consumer participation, which was introduced much before the RGGVY.

Rural Electric Cooperatives[43] in United States of America:[44]

Although nearly 90 percent of urban dwellers in US had electricity by the 1930s, only 10 percent of rural dwellers did. The unavailability of electricity in rural areas kept the rural economy stagnated and exclusively to agriculture. Industries and

---

[42] The Electricity Act 2003 treats franchisee as an agent of the distribution company and defines as 'a person authorised by a distribution licensee to distribute electricity on its behalf in a particular area within his area of supply' (GoI 2003). However, the RGGVY allows for franchisees as separate licensees as well as agents of distribution companies.

[43] The Statement of Identity defines a cooperative as 'an autonomous association of persons united voluntarily to meet their common, economic, social and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise.' As quoted in Hoyt (1996).

[44] Most of the information provided in this section is collected from National Rural Electric Cooperative Association's website http://www.nreca.org/, accessed on 8 May 2007.

factories as well as business establishments, obviously, preferred to locate in urban areas where electricity was easily available. Private utility companies, who supplied electric power to most of the nation's consumers, argued that it was too expensive to string electric lines to isolated rural farmsteads. They said that most farmers were too poor to be able to afford electricity. Even as late as July 1935, a report brought out by the service providers claimed that 'there are very few farms requiring electricity for major farm operations that are not now served'. Then President Franklin D. Roosevelt realised that living standards of rural people would continue to lag behind urban people without electric service. In response on May 11, 1935, he signed an executive order establishing the Rural Electrification Administration (REA) within the US Department of Agriculture, which helped the rural Americans across the country to form user owned electric cooperatives and provided loans to build a rural electric infrastructure. The first official action of the federal government for rural electrification came with passage of the Tennessee Valley Act (TVA) in May 1933. The Act authorised the TVA board to construct transmission lines to serve 'farms and small villages that are not otherwise supplied with electricity at reasonable rates'.[45] Later these electric cooperatives, in partnership with REA brought electricity to even the most remote corner of the country. In 1994, REA was abolished by a massive reorganisation of the Department of Agriculture and the responsibilities were transferred to a new agency called the Rural Utilities Service.

At present, 99 percent of the nation's farms have electric service. There are 930 electric cooperatives in US, serving 17 million consumers including businesses, homes, churches, farms, irrigation stems, and other establishments. The cooperatives are spread over 47 states and have been serving 40 million people, that is 12 percent of the total population. These cooperative together own assets worth US$97bn and own and maintain 43 percent of nation's electric distribution lines, covering three quarters of the nation's landmass. They also produce electricity at local level, contributing nearly 5 percent of the total electricity produced in US each year. Together they employ 67,000 people and pay more than US$1.2bn in state and local taxes. Over time, these cooperatives have made strong gains and since 1996 they have been out performing investor-owned utilities in nearly every category. They also promote innovations within. Keeping with the Energy Policy Act 2005, the cooperatives have increased their commitment to renewable and bio-based fuels (NRECA 2005).

These electric cooperatives are unique in that they are owned by and controlled by the consumers they serve. They adhere to seven guiding principles, viz. voluntary and open membership, democratic member control, members' economic participation, autonomy and independence, education, training, and information, cooperation among cooperatives, and concern for communities (Hoyt 1996). They have ensured a set of rights to the members, known as Electric Energy Consumer Bill of Rights which was approved at the 57th annual meeting in 1999. The important ones are: the right to have access to reliable, affordable and safe electric power; the right to join together to establish and operate a consumer owned not-for-profit

[45] The Tennessee Valley Act and massive public works under it motivated the Indian policy makers to go for a nationalised electricity sector immediately after independence.

electric utility; the right of consumer-owned not-for-profit systems to be treated fairly and recognised as a unique form of business; and the right to elect representatives to manage their consumer-owned form of business to best meet their needs.

Village Electricity Committees and Micro-Privatisation in Orissa

As part of the restructuring process, in August 1999, one of the private distribution company (WESCO) commissioned a pilot project on community participation in distribution business, covering only 100 villages in western Orissa. The project was guided by Xavier Institute of Management (Bhubaneswar). Impressed by success of the pilot project, in April 2001, DFID sponsored a project titled "Orissa Rural Community Electricity Supplies", which developed the model (referred as "Micro-Privatisation") with a focus on community participation and putting up micro-entrepreneur at local level. Under this model, a village is considered as a functional unit. An independent and voluntary users' group called "Village Vidyut Sangh" (VBS) is created to help in billing, revenue collection, efficient use of electricity, and checking pilferages. A local franchisee is put between the users and distribution companies to maintain the local distribution network. Although the model received good response from the beneficiaries, it lost its momentum in few years of its implementation. However, the model is still existing in some parts of Orissa and producing a mixed result.

The first stage of the model was creation of village committees. VBS is a loose arrangement of few authorised consumers in a particular village, in some cases more than one village, which includes 8 to 15 members depending upon the total number of consumers. The members as well as the president and secretary of the VBS are chosen by the consumers. Usually the members and the office bearers are selected randomly or on the basis of social respect commanded by them in the village. The local lines man is the ex-officio member of the VBS to represent the distribution company. The members select a person to be designated as "Village Contact person" (VCP) to do the job of meter reading and bill distribution. A limited honorarium is paid to the person by the distribution company. The VBSs are formally recognised through a letter from the distribution company, usually from the sub-division office. The prime responsibilities, along with other responsibilities, of the committees were to ensure proper revenue collection, ensure efficient energy consumption, and prohibit theft in the respective villages.

In the second step of the process, micro-entrepreneurs or franchisees were appointed as an agent of the distribution company for ensuring quality of power, maintenance of local distribution network, and to handle the complains at local level. These franchisees performed their duties on the basis of inputs received from the VBSs. While the franchisees had their own supervisors, the VCPs operated as a link between the franchisee and the VBSs. In return of their efforts, they were paid some incentive by the distribution companies. This model has some remarkable achievements in terms of increased revenue collection, improved metering and reduction in theft. This ultimately had some direct impact on quality improvement

in terms of reliable power supply, stability in voltage and reduced cases of transformer burnings. Thousands of village committees are existing in Orissa and some of them are put under franchisees. Studies suggest that the system is working well when both the steps of micro-privatisation are implemented and producing a positive result (Dash 2006). However, in most of the cases the village committees complain about lack of cooperation from the distribution companies and lack of resources to perform the committee functions. On the face of such restrictions, the model has resulted in improved metering and revenue collection; reduction in unethical use of electricity (use of cooking heaters) and thus improvement in voltage; dramatic reduction in unauthorised usage of electricity; and significant increase in legal connections. Wherever the distributions transformers are metered, the input energy supplied has reduced significantly (Gokak Committee 2003).

Proposed Model & Its Benefits

The proposed model of micro-privatisation, different from both the US model and Orissa model, seeks to promote micro-entrepreneurs at local level and establish independent users' committees to monitor the local providers, check loss and pilferage, and plan for local delivery mechanism. At the initial stage, franchisees would be put as micro-entrepreneurs. But gradually, the model will seek to develop the capacity of users to take over the business through establishing users' cooperatives. The franchisee should be promoted as separate licensees, not as an agent of the distribution company. The local distribution network should be contracted out to the franchisees, not sold off to them. The franchisees will be responsible for management and maintenance of distribution network. Neither they will own it nor they have to invest for development of it. The contacting out provision will ensure accountability of the franchisees, as they will have the threat of being kicked out if they under-perform. Contracting out provision will also introduce *ex*-ante competition- competition for the market through competitive tendering (Domberger and Jensen 1997). The state will own these distribution networks and invest for extension of grid connection to unelectrified areas.[46] But later, when the users became capable to manage and own these networks, it could be transferred to them.

The main criticisms against state provision of public goods have been the absence of choice for users and inefficiency in delivery. The proposed model is expected to provide choice to the users at least at the community or local level, if not at individual level. Participation of users in planning is expected to generate a collective preference for the service at the local level, reducing differences among individual users. On the other hand, participatory monitoring by the users will push the providers to improve quality and also contribute to efficiency in various ways. Drawing on Hirschman's (1972) argument, the users will be more likely to participate (or use "voice" option) as they do not have alternative providers (or "exit" option) in the current setting. Drawing on experiences in the US and Orissa, it

[46] The provision of 90 percent capital subsidy from central government under RGGVY could be used for grid extension. Another 10 percent could be arranged by the state governments, as it has been done.

could be argued that the micro-privatisation model could work in positive direction and would be helpful to establish a competitive retail market while extending the service to everyone. While doing so, in several ways, it will also enhance governance of the sector. This model is not only applicable to the rural areas, but also it can produce similar results in urban areas. The model is expected to enhance the performance of the sector in the various ways. The expected benefits of the model are listed below according to their feasibility and exclusiveness.

Firstly, it has been accepted that government owned large monopoly service delivery systems lack accountability to the users. As the "long-route" of accountability does not work in infrastructure service delivery system, there is a need to establish "short-route" of accountability between the consumer and service provider. This model will be able to ensure the "short-route" of accountability by establishing local service providers and monitoring them by local people. Unlike the earlier system, this model will also ensure transparency in the mechanisms.

Secondly, the objective to devolve the power to the consumers will be realised through this model, as the consumers, through the committees, will be able to decide on their local problems. They will have a control over the service provider. The users, in this model, will be able to decide on the quality and provider of service.

Thirdly, as the franchisees along with the committees will be able to monitor at the local level, theft will be reduced. At the same time proper metering could be done. As theft constitutes a major part of the losses, reduction in theft will increase the revenue by saving electricity. Another impact of theft reduction will be reduced load on distribution transformers, which will minimise the cases of transfer burning. That will contribute to the reduction in fixed cost of distribution. Monitoring at the local level will also contribute to increased bill collection. Ultimately all these will result in increased revenue for the franchisee, making the system financially viable. This will work better in case of small and local franchisees, than the incumbent distributors, as better accountability and cooperation is possible in a small system than in a large system.

Fourthly, by reducing thefts and losses the model is expected to save power, which will partially help the country to come out of the present electricity crisis. On the other hand, by making the distribution business financially viable it will stimulate investments in generation to meet the growing demand. This model will also require less investment in transmission network compared to other models. And it will reduce problems like mismanagement and corruption associated with large systems.

Fifthly, as discussed earlier by making distribution a remunerative business it will stimulate the service providers to extend the service to unelectrified areas and capture more consumers. This will meet social objective of extending the services to everyone. And as the price is expected to go down, the poor can also access to the service. However, the investment for grid extension will be done by the state, drawing from the funds available under RGGVY.

Sixthly, as the franchisees will be issued short-term contracts, there will be a fear of being thrown out if they do not perform well. The consumers (the committees) will monitor the performance of the franchisees and based on their recommendation further extension of the contract will be considered. This will provide a choice for the consumers to decide whom they want as their service provider. When they will not be satisfied with the existing provider, they can change their provider. As the franchises will be small units covering a few hundreds of consumers, it is expected that there will be takers for them, unlike the present distribution companies. Although this will not provide individual choice to the consumers, but it will definitely provide collective choice.

Seventhly, using the open access facility, while it is implemented, the franchisees can purchase power directly from the generators, providing the benefits of open access to small consumers. For that purpose, the franchisees should be treated as separate licensees, not as an agent of the distribution companies. By purchasing directly from the generators they will be able to provide electricity at a relatively low price. Of course this will require a fully competitive wholesale market, which is neither existing in India nor easy to establish. But at the same time it is expected that by making distribution financially viable it will attract more players in generation. The process will be facilitated by the delicensing of generation, as provided in the 2003 Act, and allowing smaller generators.

Eighthly, this model also allows the consumers to own the franchisees through cooperatives. When the committees or user associations are strong enough, they can join together to take over the business of distribution in their respective areas.

Ninthly, even though this model does not provide for a real competition where multiple service providers operate in one area, it provides a possibility for benchmarking competition. The service providers will compete among each other to perform well in order to capture the unelectrified areas and extend the contract.

Finally, the model is expected to reduce the problems associated with the standard model of competition and choice. Choice in provision of goods and services works best when users are well informed about the alternatives. Further, competition and choice are frequently associated with stratified public services, where higher-income and better-informed users get access to better public service (Besley and Ghatak 2003). These issues are quite important for electric service delivery in India as it may exacerbate the existing inequalities in access to the service. However, the proposed model is expected to reduce these costs significantly through involvement of users in the process. Users' participation is expected to solve the problem of poor information, while provision of single provider at local level will ensure equal quality of service for all in the region or community.

Conclusion

While the paper has referred to the US cooperative model to show the potentials of users' involvement in distribution, it does not propose cooperative model for India. Rather it proposes a private entrepreneur for local distribution, monitored by users' committees. This suggestion has been made on the basis of assumption that

Indian electricity users, particularly in rural areas, lack the technical and managerial capacity to operate electric cooperatives. That skill could be developed through the practice of micro-privatisation. That is why it is proposed that when the users gain required skill to operate a cooperative they can take over the distribution business by forming cooperatives. On the other hand it could be argued that the same benefits could be achieved through having users' committees under incumbent distributors; then why we need a franchisee or micro-entrepreneur? So far the large monopoly distribution systems have proved to be unaccountable and irresponsive to the users. The proposed small distributors are expected to be responsive to the users and they could be questioned by the users at local level.

To summarise, the model of micro-privatisation and community participation is expected to provide the benefits of a competitive retail market while reducing the costs of doing so and also promotes a competitive wholesale market. This model will not only benefit the small consumers, but also help the large industrial consumers to enjoy the benefits of open access and might remove the burdens of cross-subsidy from them. As the revenue of suppliers will be increased, the cross-subsidy amount or surcharge can be reduced and eventually eliminated. Thus the model removes the major barrier to implement open access. The model does not require a complete shift from the existing policies; rather it builds on the key provision of the Electricity Act-open access. Finally, the model, unlike international experiences, distributes the benefits of restructuring evenly among the consumers.

No system is free from flaws. Having said about the merits of micro-privatisation and consumer participation, now the paper will look into the problems with the model. Firstly, the model may not be completely free from political interferences as the local politicians might intervene in the process. Secondly, local elites may capture the committees as well as the franchisees and turn out it into "electricity *zamindaars*". Thirdly, while there will be experienced and more takers for urban areas, the less profit-making rural areas might be left out or taken over by inexperienced players.

Although the RGGVY is still silent about the roles of state regulators in the process, the regulators have to perform some important functions. Firstly, the regulators will be responsible for providing licenses to the franchisees on the recommendation of the consumer committees. The franchisees will be selected on the basis of competitive bidding. Initially, lack of experience of new entrants may create some problem for selection, which will be waived off gradually. However, the commissions will promote local entrepreneurs on the basis of recommendation from the local government institutions. Secondly, the regulators must perform their primary function of tariff setting. Although the franchisees will be allowed to have their own tariffs, they will be subject to a maximum tariff determined by the regulator. Unlike the present system, the franchisees should be allowed to have differential tariffs, as it will allow benchmarking competition possible. Thirdly, the regulators will be responsible to protect the system from political interference. They need to communicate with the committees regularly and get inputs from them. Finally, the regulatory commissions will make provisions to train newly formed franchisees and users committees.

References

Apt, J. (2005), "Competition has not Lowered US Industrial Electricity Prices", The Electricity Journal, 18(2).

Besley, T. and M. Ghatak (2003),"Incentives, Choice, and Accountability in the Provision of Public Services", Oxford Review of Economic Policy, 19(2), 235-249

Bhattacharyya, S. C. (2006), "Universal Electrification: Will the New Electrification Programme Succeed in India?", OPEC Review, 30(2), 105-123.

Cook, P. (2002), "Competition and its Regulation: Key Issues", Annals of Public and Cooperative Economics, 73(4).

CRC (2005), "Designing Competition Policy", CRC Policy Brief, 7.

Dash, B. C. (2006), "Governance of Power Sector: Orissa's Experiments with Village Electricity Committees", Economic and Political Weekly (January 10).

DFID (2002), "Energy for Poor: Underpinning the Millenium Development Goals", UK Department for International Development.

Domberger, S. and P. Jensen (1997), "Contracting Out by the Public Sector: Theory, Evidence, Prospects", Oxford Review of Economic Policy, 13(4), 67-78.

Dubash, N. K. ed. (2001), "Power Politics, Equity and Environment in Electricity Reform", Washington DC, World Resources Institute.

Dubash, N. K. and D. Singh (2005), "Of Rocks and Hard Places, A Critical Overview of Recent Global Experience with Electricity Restructuring", Economic and Political Weekly, 40(50).

GoI (1948), "Constituent Assembly of India (Legislative) Debates", Part II, Delhi, Government of India.

GoI (1956), "Industrial Policy Resolution", Delhi, Government of India.

GoI (2003), "The Electricity Act 2003", Delhi, Government of India.

GoI (2005), "National Electricity Policy", Delhi, Ministry of Power, Government of India.

Gokak Committee (2003), "Report of the Gokak Committee on Distributed Generation", Submitted to Ministry of Power, Government of India.

Gouri, G., R. Jayashankar and O. Fadahunsi, eds. (1993), "Efficiency Through Competition in Public Utilities: Policies for Restructuring", Ljubljana: International Centre for Public Enterprises in Developing Countries.

Hirschman, A. O. (1972), "Exit, Voice and Loyalty: Responses to Decline in Firms, Organizations and States", Cambridge: Harvard University Press.

Hoyt, A. (1996), "And Then There were Seven: Cooperative Principles Updated", Cooperative Grocer, January /February.

Kahn, A. E. (1998), "Electricity Deregulation: Defining and Ensuring Fair Competition", The Electricity Journal, 11(3).

Kale, S. S. (2004), "Current Reforms: The Politics of Policy Change in India's Electricity Sector", Pacific Affairs, 77(3), 467-491.

Lave, L. B., J. Apt and S. Blumsack (2004), "Rethinking Electricity Deregulation", The Electricity Journal, 17(October), 11-26.

Littlechild, S. C. (2000), "Privatisation, Competition and Regulation", London, The Institute of Economic Affairs.

MoP (2005), "Rajiv Gandhi *Grameen Vidyutikaran Yojana*", Delhi, Ministry of Power, Government of India.

Motta, M. (2004), "Competition Policy: Theory and Practice", Cambridge, Cambridge University Press.

Newbery, D. M. and M. G. Pollitt (1997), "The Restructuring and Privatisation of the UK Electricity Supply – Was it Worth it?", Public Policy for the Private Sector, 124, World Bank.

NRECA (2005), "Annual Report 2005", National Rural Electric Cooperative Association.

Singh, D. (2005), "Open Access in Electricity Distribution: Accessing the Financial Impact on Utilities", Economic and Political Weekly (September 10).

Sinha, S. (2005), "Introducing Competition in the Power Sector: Open Access and Cross Subsidies," *Economic and Political Weekly*, 40(7), 631-637.

Swain, A. K. (2006), "Political Economy of Public Policy Making in the Indian Electricity Sector: A Study of Orissa and Andhra Pradesh", M.Phil Dissertation, New Delhi, Centre for Political Studies, Jawaharlal Nehru University.

Thomas, S. (2002), "Why Retail Electricity Competition is Bad for Small Consumers: British Experience", paper presented at an international conference on Restoring Just and Reasonable Electricity Rates, Washington DC, 28-29 September.

World Bank (2001), "India: Power Supply to Agriculture", South Asia, Energy Sector Unit, South Asia Regional Office, World Bank.

World Bank (2006), "Reforming Public Services in India: Drawing Lessons from Success", New Delhi, Sage Publications.

7

Institutions and the Effectiveness of Competition Policy and Regulatory Regime in Kenya

NORMAN L. SHITOTE

Introduction

Kenya's economy began to transform from price control regime into a market economy in the 1980s, which spawned the need to introduce competition law. This led to the enactment of the Restrictive Trade Practices, Monopolies and Price Control Act in 1988 which entered into force in 1989. At that particular time, the Act was intended to be a transitional piece of legislation from price controls to the liberalised economic and business system.

The Monopolies and Prices Control Act, as it is commonly known in Kenya, provides for the control of restrictive trade practices, concentrations of economic power, and control of mergers and takeovers. It used to take care of price controls but have since been phased out. The Monopolies Act does not cover the abuse of dominant position. The Act exempts activities and practices which are conferred on any person by any legislative text. The investigation of possible contraventions of the Act is the responsibility of the Monopolies and Prices Commission being a department of the Ministry of Finance.

The Electricity Regulatory Board of Kenya (ERB) was established by the Electric Power Act in 1997, which vertically unbundled the former Kenya Power and Lighting Company into generation and transmission/distribution. The Act also liberalised electricity generation leading to the entry and participation of independent power producers. It also stipulated the composition of the decision-making body - the Board. In addition, the Act provides details concerning the establishment and staffing of a secretariat as well as funding of ERB. In accordance with the Act, ERB is a sector-specific regulatory body and therefore has the potential to provide sector-specific expertise and focus. The Board was appointed in January 1998 and key secretariat staff in June/July 1999.

The ERB depends however on the Ministry of Energy with regards to policy guidance with respect to the power sub-sector. As a safeguard against the abuse of trust reposed in it, parties aggrieved by the Board's decisions may seek recourse from the Minister for Energy, with the High Court of Kenya being the final arbiter. In addition, members of the Board may be removed from office for reasons such as misconduct, insolvency, conviction of criminal offence involving dishonesty, fraud or moral turpitude and incapacity.

The Communications Commission of Kenya (CCK) plays a critical role in the liberalisation of Kenya's postal and telecommunication sectors. CCK is the gateway

that encourages private investment in the sector and ensures that the rights and obligations of both operators and consumers are protected. The licensing of new players has given the consumers greater choice of service provision and a chance to enjoy fair prices.

As the link, CCK liaises with consumers, operators and service providers to ensure a level playing field in the sector. CCK also assigns frequencies to all licensed telecommunications operators as well as broadcasters utilising wireless technologies in the provision of their services, a technology that is fast becoming the norm in this region.

As consumer watchdog CCK ensures that standards of quality are maintained in both service and equipment provided. It ensures public service obligations are carried out while, at the same time, guaranteeing the protection of both consumer and investor interest.

Literature Review

Law and Economic Growth

Economic regulation involves making decisions on politically sensitive matters and also decisions that have important implications for regulated utilities and customers. Often, the interests of the stakeholders are conflicting. These conflicting interests need to be evaluated and balanced in an impartial and objective way, meaning that the regulatory entity must be, and must be perceived as, a neutral and disinterested party. The Acts in the above discussed bodies apart from the Restrictive Trade Practices, Monopolies and Price Control Act, anticipate fairly independent institutions and tacitly bestows on them independence from political authorities. In practice, such bodies are expected to have institutional autonomy.

In Kenya, regulation is generally undertaken by an industry regulator and/or competition regulator. In the case of the former, the industry regulator may have a multi-sector or single sector focus. Cost driven constraints may dictate a multi-sector focus, although interestingly, Kenya has opted for the more costly single focus, possibly because such a steep learning curve is presented. Moreover, expertise from industrialised countries is based largely on single-sector experience. The industry regulator generally has a fairly narrow remit in that its primary objective is to protect consumer interest within the industry that falls under its jurisdiction. Firms operating within a regulated sector do so in keeping with stipulated license guidelines prescribed by the regulator. By contrast competition policy orchestrated by the Monopolies and Prices Commission of Kenya aspires towards fair competition throughout the national economy, and has been described as having a three dimensional approach;

i) Structural policies aimed at keeping the industries into a competitive profile;

ii) Liberalisation policies focusing on removing legal barriers; and

iii) Conducting regulation that prohibits creation and abuse of monopoly power and cartelisation

Surveys of empirical studies on the relationship between legal and institutional variables and the economic growth in the developing countries reveal very mixed results (Messick 1999; Davis and Trebilcock 2001; Djankov et al. 2002; Shleifer et al. 2003). Perhaps surprisingly, the evidence that higher levels of democracy lead to higher growth rates appears not to be conclusive (Barro 1997). Nevertheless, studies of the rule of law and the quality of legal institutions do report positive correlations. The evidence suggesting that effective protection of the property rights of investors and officials operating within a framework of known legal rules are conducive to stronger economic development (World Bank 1997, Beck et al. 2001). A key variable is the perceived vulnerability or invulnerability of institutions to subversion by powerful citizens (Glaeser et al. 2003).

Despite objectives couched in the language of fairness and equity considerations, the regulatory role is perceived as having evolved to embrace redistribution functions that are less transparent. The government can always be said to be using regulation as an alternative to subsidising consumer spending through extracting a greater proportion of monopoly rent than might be justified under strict application of regulatory economics. This raises questions regarding the correct and appropriate relationship between public and private interest interfaces. In this context independence from the government is a critical component enabling effective regulation. Relative independence can be gauged through the extent of its powers; the clarity of roles described in regulatory legislation and the extent to which there is government accountability through the publication and justification of its decision making. Independence in itself, however, while representing an essential condition for effective regulation, is not a sufficient condition

The quality of the judicial process is assumed to be related to economic performance, and attempts have been made to derive reliable quantitative data on key variables and their impact on costs. Attempts have also been made to relate particular aspects of legal systems to economic development. Commercial law should lend itself well to analysis of this kind, but there has been a paucity of empirical work in the area. It has been shown that growth occurs in countries where secured creditors are guaranteed repayment of their loans (Levine 1999) and where corporate shareholders are adequately protected (La Porta et al. 1998). However, these and other studies (for example, Fafchamps and Minton 2001, Kamarul and Tomasic 1999) show that, in the absence of effective formal mechanisms for resolving disputes, there will often be resort to informal systems which in the context may be equally, if not more, effective.

The importance of effective, informal processes of disputes resolution might also provide a convincing explanation for the economic success in the People's Republic of China, notwithstanding perceived weaknesses there of the court system and the formal enforcement of legal rights (Clarke 2003). Results have been realised with the so-called "East Asian miracle" which has occurred notwithstanding the failure of

many legal reforms, based on Western models trying to penetrate commercial life (Pistor and Wellons 1999, Lindsey 2004).

Resort has been had, instead, to arrangements made between business elites and the governments, and sometimes by discretionary executive rulings, disputes being dealt with usually by informal negotiation aided by mediators. 'Formal law was used to the extent it complemented or supported this arrangement, but was ignored by economic and government agents alike and substituted with alternative rules, if it ran counter to it' (Pistor 1999).

At the risk of over-simplification of all this evidence, we can accept the generalisation that legal infrastructure is connected to economic growth, but it is not necessarily the legal infrastructure that emerges from Western models. The "rule of law" is important, particularly where it implies the stability of rulemaking, respect for basic property and contract rights and an independent judiciary with some ability to command compliance from government and politicians. At the same time, informal systems of dispute settlement and enforcement may prove sufficiently effective.

Institutional Theory

According to North (1991) an institutional theory is the one that seeks an understanding of the relationships between institutions, behaviour and outcomes. Institutional theories often elicit a somewhat misguided criticism for assuming that institutional features cannot be altered by the actors. The criticism is not empirically misguided because, often, decision-makers can and do change the structural arrangements under which they operate. However, the criticism is theoretically misguided inasmuch as it loses sight of the limited aim of institutional theories: structural features must be exogenous when the aim is to learn how and why contextual features affect choice processes.

The defining characteristic of a theory of institutions is that some of the essential contextual features that were assumed to be constraining in the foundational institutional theory become objects of choice within a somewhat more general theory of institutions. This necessarily partial endogenisation of institutional features is what distinguishes an institutional theory from a theory of institutions.

It should be obvious that a theory of institutions cannot exist without institutional theories. More precisely, in order to know why a certain institution exists, it is essential to know, with reasonable confidence, not only the consequences of the focal institution but also the consequences of alternative institutional arrangements that could have instead been crafted.

A political institution is a set of contextual features in a collective choice setting that defines constraints on, and opportunities for, individual behaviour in the setting. In the context of legislative models, for example, such features include but are not restricted to the following: Who may and may not initiate proposals? In what order are proposals considered? Under what conditions can proposals be amended? Who has veto rights? Can vetoes be overridden? By what fraction of votes? By

stipulating that contextual features proscribe as well as prescribe individual behaviour during processes of collective choice, this definition clearly allows for the possibility that "institutions matter." However, analysis of institutions does not (or should not) presuppose that different contextual features have different consequences for outcomes.

The crucial link between institutions (as contextual constraints) and outcomes (as consequences of collective choice) is behaviour. While the line between institutions and behaviour is not always easy to draw; it is well worth the effort to draw this line as sharply as possible to preserve the methodological distinction between the institution and the behaviour that transpires within it. A rule of thumb, therefore, is to regard as an institution only contextual features that, in a given decision situation, are believed to constrain individual choices. Having done that, and only that, notice that open but well-defined questions remain. Generally, the questions take the form: What are the consequences, if any, of the individual constraints on individual behaviour and, in turn, on collective choices? This proposed rule of thumb should not be construed as advocacy that the term institution should refer only to rigid, well-defined, constraining, immutable, formal, or structural features of collective choice. Rather, I suggest only that the line should be drawn comfortably on the firm side of mere patterns of behaviour. If it is not, institutions and behaviour become conceptually and analytically muddled, thereby making it exceedingly difficult to sort through what is assumed and what is derived in the ensuing formal argument.

This leeway in drawing the line between institutions and behaviour al regularities becomes troubling only if one insists on an ontological distinction between institutions and behaviour. The argument is that this distinction is better understood as a methodological one. For instance, depending on the research perspective, a congressional committee's gate-keeping authority may be interpreted as a constraint (for example, if we want to study the likelihood that a certain bill will be passed) or as a behaviour al regularity, for example, if we want to understand how legislative majorities decide on the internal organisation of legislatures).

In the Kenyan context, drawing the line between institutions and behaviour seems easier in the study of elections than in the study of legislatures. Examples of the relevant institutions include the ballot structure, the rules for translating votes into seats, district size, etc. In a given campaign, these rules can defensibly be assumed to be exogenous. This, in turn, allows the researcher to focus on the behaviour of voters and candidates. The distinction is less clear in the context of legislative models, however. Should the rights of recognition or of bill introduction be considered an institution? And what about seniority norms? Does it matter whether a norm has never been violated?

Institutions have the distinguishing feature of characterising incentives for certain types of behaviour as well as imposing constraints on such behaviour. It cannot be stressed enough that, in this sense, behaviour within the institution – not just the institution in isolation - determines whether institutions are outcome-consequential, or, as is more often uttered, whether institutions matter.

In Kenya's context, the Restrictive Trade Practices, Monopolies and Price Control Act is the principle legislative competition law, falling under the Ministry of Finance. This type of institutional arrangement has attracted substantial comments from stakeholders with respect to the need to have an independent competition authority. The stakeholders appear to be questioning whether the decisions of the competition authority should be binding or remain recommendations subject to the approval of another authority, Minister. This brings to the fore the question of how much the government should interfere in the workings of this very vital commission.

Institutional autonomy, freedom from political interference in the Commission's activities and the ability to exert influence on the Commission's decisions are sometimes seen to be interrelated. The implication is that a highly autonomous competition authority is seen to be free from political interference on decisions and initiatives. However, an authority seen to be too close to the government, thus towing the political line, will be positioned to have a stronger influence and input in government programmes which might for sure benefit the competition authority. This is the situation in Kenya since the Monopolies and Prices Commission is a department of the Ministry of Finance and hence a direct line tow of the political arm.

Although the Minister is expected to seek technical advice of the Commissioner in enforcing competition law, this has in certain circumstances may create regulatory uncertainty. For instance, the Minister may on certain occasions disregard the advice or not consult the Commissioner Since the Act does not make it mandatory for the Minister to seek the advice of the Commissioner.

According to North (1991) institutional environments are not monolithic, but often vary and conflict. Authoritative bodies may diverge – indeed, in liberal states, they are often designed to do so, providing "checks and balances" – and schemas and models may compete. The elements of institutions – regulative, normative, cultural-cognitive – may not be aligned, and one may undermine the effects of the other. The boundaries of organisational fields are often vague or weak, allowing alternative logics to penetrate and support divergent models of behaviour. Suppressed groups and interests may mobilise and successfully promote new models of structure and repertories of acting. Some of the most interesting work of the past two decades has helped to unpack the multiplicity of institutional arrangements, both between and within a given field, examining the intersection of structures, and documenting the transposability of schemas, as actors and ideas flow across field boundaries.

It is a fact that technical forces primarily shape the "core" functions, including work units and coordinative arrangements, while institutional forces shape the more "peripheral" structures, such as managerial and governance systems.

In the light of these conclusions, I have observed that while organisations can and do decouple work activities from accounting, control, and other review systems, the extent to which this occurs varies greatly, both over time and among organisations. Some institutional requirements are strongly backed by authoritative agents or by effective surveillance systems and sanctions.

Some of the possible reforms to regulatory structures correlate well with developments and tendencies occurring in industrialised countries (Vogel 1996); others point in the opposite direction. Some remain ambiguous. For a good example of the latter, take the much debated, though largely unresolved, question is whether a policy of decentralisation, associated with Western regulatory thinking, facilitates or hinders corruption. On the one hand, it is argued that decentralised decision-making must by its nature be more transparent than when carried out at a distance from the subjects affected – local information flows being more rapid – and therefore corruption is, in such circumstances, more difficult to conceal (Lederman, Loyaza and Soares 2001). On the other hand, if law enforcement is largely in the hands of a centralised authority, the very distance of the formal audit systems from the subject of investigation may limit its effectiveness: in remoter areas the authority of the law may simply not be recognised (Green 1997, p. 67).

Moreover, the "once-for-all" payment necessary to secure the cooperation of the central official may distort the economy less than the variety of payments at other levels: the bribe can control deviations from agreed patterns of corruption and render its effects less uncertain (Shleifer and Vishny 1993).

Related to the question of decentralisation is that of competition between regulatory offices and officials. Promoting some such form of competition would seem to offer a plausible, and not too costly, means of combating corruption or at least reducing the levels of bribes to be paid (Rose-Ackerman 1978). There is some empirical evidence to support this: the overlap in the power of local, state and federal authorities to control illegal drugs has been thought to reduce police corruption in the U.S.A. (Bardhan 1997, p. 1337); and a statistical study of corruption among the judiciary in Latin America suggests that this is less prevalent where there are viable alternative procedures for settling disputes (Buscaglia 1997). However care must be taken as to how competition is introduced: a series of alternative individuals or offices providing the same service, or perhaps overlapping services, would meet the objective (Bowles 2000) but adding further layers of bureaucratic decision-making would simply exacerbate the problem (Lederman, Loyaza and Soares 2001). Also a lack of clarity in the demarcation of public services can increase bureaucratic discretion, leading to more corruption (Wescott 2003, p. 261). Suggestions linked to the competition argument include using committees instead of single decision-makers; and regularly moving bureaucrats between various offices (Klitgaard 1988, chap.3).

Methodology

The questions being asked by the report were:

- What procedures are in place for regulatory institutions?
- Are enforcement procedures working?
- Is there a room for political manoeuvrability?

Kenya offers an excellent place for experiment on matters of competition and regulation. Politically, culturally and economically Kenya is the most stable nation around East and Central Africa and it is the hub of all business in the region acting as the link between the rich northern African states and the developed South Africa. The study was focusing on the impact of different regulatory regimes and how they are able to control for the industry-specific fair trade and competition in their business cycles.

Data from three sampled institutions allow examining the relationship between privatisation, regulation, market power and performance, as measured by profitability and technical efficiency. Initially, Kenya like any other country was a fully monopolised environment with total state control in all businesses. However, regulation and competition policy were introduced and there is enough data gathering points to study institutional change with respect to the Kenyan market

Information was obtained from the various annual reports and Acts of Parliament that govern the sampled institutions. Each of the institutions has a website with the exception of Monopolies and Prices Commission (although it has a page on the government website, Treasury site).

Limitations

ATEL is a young consultancy and limited funds meant that the study was mainly carried out around Nairobi city. Most organisations do not allow an independent study of their institutions in the current environment of liberalisation. It is possible to get information from reliable sources but professional verification becomes difficult due to suspicion more so when you are a very new and relatively unknown organisation carrying out the very important research.

Study Findings

Major Kenya regulatory institutions

Monopolies and Prices Commission

The Restrictive Trade Practices Act gives the overall powers to administer and enforce competition law and policy to the Minister of Finance. Section 3(2) of the Act subjects the Commissioner for Monopolies and Prices to the absolute control of the Minister. The Office of the Minister of Finance is the supreme organ in the administration of competition law. The Minister possesses absolute power to make orders in most aspects of restrictive trade practices, control of concentrations of economic power, as well as orders relating to mergers and takeovers. Although the Minister is expected to seek technical advice of the Commissioner in enforcing competition law, this has in certain circumstances created regulatory uncertainty. For instance, the Minister has on certain occasions disregarded the advice or not consult the Commissioner because the Act does not make it mandatory for the Minister to comply with the advice of the Commissioner. There are specific provisions in the Act which bestow certain powers on the Minister. Under section 17 of the Act, the Commissioner is required to submit his recommendations to the

Minister after his investigation in an allegation of a restrictive trade practice. Such a recommendation shall also include the record of the hearing.

The Minister upon receipt of such a recommendation may (under section 18) make an order through a notice in the Gazette, prohibiting a restrictive trade practice or order certain steps to be taken to address the competition concerns. Further, the Minister (under section 23) of the Act is required to keep the structure of production and distribution of goods and services in Kenya under review to determine where concentrations of economic power exists whose detrimental impact on the economy outweighs the efficiency advantages. In carrying out this function, the Minister may under section 24(1) of the Act make an order directing any person whom he deems to hold an unwarranted concentration of economic power in any sector to dispose of such portion of his interests in production or distribution or the supply of services as he deems necessary to remove the unwarranted concentration.

The Minister has also been given powers to approve mergers and takeovers. Section 27 of the Act requires prior merger notification to the Minister for any intended merger or takeover. The Commissioner is required under section 30 of the Act to evaluate an application of a merger and submit the same and his recommendation to the Minister for approval, pursuant to section 28 of the Act.

The elaborate powers given by the Act to the Minister have raised concerns to many stakeholders. It has been felt that this has weakened the effectiveness of the law and had led to wrong perceptions. The current debate is as to whether the Commission should be independent / autonomous or rather subject to the full control of the Minister. It is accepted that the design of a competition authority is linked to the traditions and institutional structure of the country, and could not, or only with difficulty, be set up in a different way than is customary for comparable public administrative bodies in the country. Building this institutional apparatus will require that the competition authority's position within the government be re-evaluated.

First of all, the competition authority would have to be delegated the power to implement competition policies at the national level. The competition authority would need institutional support to implement and enforce competition policy effectively. Secondly, those government policies that have the potential to maximise competition policy effects when combined, such as consumer protection, should be integrated with competition policy. Thirdly, the relationship between the competition authority and regulatory bodies in the various sectors should be redefined.

It is important that the competition authority is functionally and operationally independent from the government. If this independence is not achieved, both in fact and in the perception of the community, the competition authority will be, or be seen to be, influenced by the politics of the government of the day, and therefore subject to other political agendas. Such a situation needs not necessarily be in the interest of competition and achieving competitive market outcomes. Without independence, the agency may lack credibility and the community will not have the requisite degree of faith that their complaint or problem will be dealt with in a fair and

reasonable manner. Without this element of trust, the result may be a sceptical public and an ineffective regulator.

Kenya competition policy generally focuses on two main types of anti-competitive conduct, the abuse of a dominant position as evidenced through predatory pricing and the use of anti-competitive agreements, such as price fixing/market sharing agreements. These forms of anti-competitive conduct account for the greater proportion of infringements that distort competition and decrease industry contestability. Additionally, competition policies also focus on the conduct of regional governments, which through the provision of subsidies/state aid effectively distort competition by enabling domestic firms to sell at lower prices than foreign concerns. Kenya's competition policy has been blamed for trying to overprotect the COMESA firms when entering the Kenyan market much to the detriment of the local business sector. There is likely to also be a provision for merger policies that enable the emergence of dominant sellers. Such was the case once when Kenya sanctioned the worldwide merger of major accounting firms and later on the pharmaceutical firms on the pretext that there was nothing it could do to a global giant who was ready to take its trade away if Kenya did not comply.

Access to justice is at the heart of policy considerations that aim to safeguard the public interest. "Access to justice" embraces issues of equity, equality, access and participation that foster inclusion, widening participation and the safeguard of human rights. Ideally, public policy should convey an awareness of cost and information implications in order not to limit accessibility, hence participation. Placing information in the public domain raises public awareness and prompt response from incumbent firms, government and other stakeholders. Global competition policy has been criticised for an over-reliance on the western adversarial approach to conflict resolution that is an expensive and time-consuming system as against other more inclusive less hierarchical systems. The legal framework should therefore seek to incorporate the best aspects of alternative approaches in keeping with the socio-economic context in which policy operates.

ERB

Prior to the commencement of the Act KPLC through its successor company the East African Power & Lighting Co. Ltd. was the holder of validly issued power distribution licenses. These licences covered major load centres and surrounding areas. In generation KenGen, through its successor companies, KPC and TRDC, is the owner of two generating licenses. In accordance with the Act, these licenses are still valid, although it is expected that the licensees will apply for renewal of the respective licenses when and as the dates of their expiration draw near.

The existing distribution licences, although valid would have to be redrafted to bring them in line with modern distribution practice. Accordingly, ERB is in the process of developing a contemporary distribution licence. In addition, the Board has asked KPLC to submit a Customer Charter for consideration and adoption. The Board considers that attributes in such a charter would constitute invaluable performance measures. Schedule 10 of the Act vests on the Board the power to make

regulations for the better carrying out of its functions under the Act. Rules define the boundaries of permissible conduct and the consequences for non-compliance. In the case of the power sub-sector, these will usually comprise relatively detailed and specific rules governing tariffs, service standards, obligations to supply, etc.

These rules would normally be contained in licences and concession agreements, which are the instruments with the real powers to control the utilities. The consequences of non-compliance with these rules may include fines, requirements to compensate injured parties, cancellation of licenses or concessions, even imprisonment of corporate officers. The setting of rules is yet to be finalised although the necessary arrangements are being put in place.

Under present institutional arrangement the companies engaged in the business of generation, transmission and distribution of electric power are KenGen (generation) and KPLC both of which the government owns majority shareholding. There are also independent power producers who participate at the generation stage although all of them supply altogether less than 20% of the total electric power requirements of the country. These entities are all regulated under the broad framework created by the Electric Power Act 1997, with the boundaries of permissible conduct and the consequences for non-compliance defined by specific licence conditions. The licences include those validly issued before the commencement of the Act.

With respect to setting of tariffs, the Board approves power purchase contracts between generators (KenGen and independent power producers) and KPLC and also approves and sets the retail tariffs between KPLC and consumers. In this regard, in July 1999 the Board approved a two year interim power purchase agreement between the two companies, pending the establishment of more comprehensive and longer-term power purchase agreements (PPA). The Board also approved and set, after an extensive public hearing exercise, retail tariffs and rates which became effective on 1 August 1999.

A key objective of the power sub-sector restructuring is to create an enabling environment for private sector participation in the sub-sector. The fact that 31 international firms expressed interest to build, own and operate the proposed Nakuru and Eldoret generating plants implies that the investment environment in the power sub-sector is perceived as sufficiently attractive. Still, considering that the contribution by IPPs to the interconnected generation capacity will increase from the current 10% to about 25% by 2002/3, it is an imperative that the environment be made more attractive by establishing a regulatory environment that is fair, transparent and predictable.

The Act provides the broad framework for regulating IPPs. However, it is envisaged that regulation of IPPs will be achieved through, inter alia, ensuring that the bidding and award processes for projects earmarked for development by the private sector are fair and transparent, thereby resulting in the lowest cost of supply. In this instance the ERB would draw on the powers conferred by Section 121(1)(e) and (f) of the Act enforcing conditions of the licences which should ensure

compliance with 121(1)(c) any regulations formulated by the Board for the better carrying out of its functions under the Act. To date the Board has:

1. approved a Power Purchase Agreement (PPA) between KPLC and Tsavo Power Company (TPC) Ltd., the developer of a 75 MW diesel plant at Kipevu.
2. recommended to the Minister for Energy that TPC be issued with a power production licence.

The details of the licence were formulated by the Board, and are perceived to meet the requirements of the Board (and by extension the public), the Government and the developer. Ideally the regulatory systems should be established before the introduction of private investment in any sector. That this was not the case when the first two IPPs were licensed, and the fact that further IPPs are likely to be licensed before the promulgation of rules and regulations will pose a number of challenges such as how can licences already issued by the Ministry of Energy be amended to bring them in line with those under the regulatory regime? It is important that licence conditions are reasonably standard in order to ensure consistency in the application of licence conditions.

Could any regulations formulated by ERB have an impact on already signed PPAs and which were not subject to approval by the Board? In particular, how would the issue of a PPA clause conflicting with a regulation formulated after the signing of the PPA be resolved? Since energy charge is a pass through element, that is payments have been set to actual costs incurred for fossil fuel based projects developed by IPPs, how can incentives be introduced to encourage more efficient generation?

These points are particularly pertinent considering that PPAs are in most cases held harmless of change in law.

CKK

The Communications Commission of Kenya (CCK) was established in February 1999 by the Kenya Communications Act 1998 which also unbundled the monopoly operator along distinct functional lines; postal services and telecommunications services. The Act empowers CCK, to license and regulate telecommunications, radio communication and postal services in Kenya.

This responsibility translates to the following functions:

- Licensing operators in the telecommunications and postal services sector
- Regulating tariffs for monopoly areas
- Establishing interconnection principles
- Type-approving communications equipment
- Managing the radio frequency spectrum
- Formulating telecommunication numbering schemes and assigning them to network operators; and

- Implementing Universal Service Obligation for both postal and telecommunication services.

The communications sector has been undergoing a dynamic transition since full liberalisation in 2004. Consequently, the CCK has moved towards a more open licensing structure, which has translated into more licenses in the previously restricted sub-sectors of the industry. The increase in the number of players in the various licence categories has led to increased competition, which has resulted in a transition towards less intrusive regulation through increased self-regulation by the industry players. With the enhancement of competition, prices of various services have continued to decrease significantly, particularly in the segments hitherto reserved for Telkom Kenya such as National long-distance and International fixed services, Internet access and satellite connectivity. The Commission has also introduced two new categories of service providers known as Document Exchange and Call Centre operators respectively, to keep up with industry trends and developments.

The Commission, being aware of the changes within the sector, also recognises that the law needs to keep in step. In this respect, the Commission made proposals for amendments of both the Kenya Communications Act (KCA) 1998, and the Kenya Communications Regulations (KCR) 2001, which were forwarded to the Ministry of Information and Communications for consideration. Included in the proposals are issues of licensing and enforcement, interconnection and price regulation, numbering, consumer affairs, universal access, and postal services.

In the light of this background, I will now focus on the independence of these institutional structures relevant to regulatory systems and explain how they may affect general strategies for regulatory reform.

Independence of the Institutions

Monopolies and Prices Commission

Restrictive Trade Practices Tribunal: Apart from the Minister and the Commissioner, the Act provides for a Restrictive Trade Practices Tribunal. The Tribunal is a judicial appellate body appointed under section 64(1) of the Act. It is appointed every five years; the first appointment was made in February 1991. The Tribunal consists of the Chairman (who must be an advocate of the High Court of Kenya of not less than seven years' standing) and four other members. The Tribunal's main function is to hear appeals from Ministerial orders, which in practice arise from the recommendations of the Commissioner. The Tribunal has the power to overturn, modify, confirm and/or refer back to the Minister orders appealed against by aggrieved parties. The decisions of the Tribunal can be appealed to the High Court.

High Court of Kenya: Parties not satisfied with the Tribunal's rulings can appeal to the High Court against that decision within 30 days after the date on which a notice

of that decision has been served on that party, and that the decision of the High Court shall be final. The Commissioner, subject to the control of the Minister, is responsible for the control and management of the competition authority. The Commission is the regulatory authority with primary responsibility for enforcing the provisions of the Act. Its broad authority includes oversight of both the competition and price control provisions of the legislation (the price control function is now discarded).

The Act clearly states under section 3(2) that the Competition Authority is a Department of the Treasury. The Competition Authority's independence or autonomy is therefore not assured as it falls under the authority of the government. The actual appointment of the Commissioner is not provided for under the Act. It can be assumed that the Commissioner is appointed under the general civil service conditions which govern any other government employees. In fact, all the previous Commissioners and the current one were recruited through the civil service procedure.

Similarly the other staff and officers of the Competition Authority are appointed under the government civil service system. They are government employees working for the Ministry of Finance. They perceive the Commissioner as an institutional head, as they can still refer any personnel matter affecting them to the Ministry for remedy. Consequently, the situation exists whereby the administrative function of the Commissioner is shared with the Ministry whereas the law enforcement function is shared with the Minister of Finance. In practice, the Commissioner's powers are neither independent nor absolute. The Commissioner is placed under the general supervision of the Permanent Secretary in the Ministry of Finance. What is important is that the Commissioner's decision-making process should be free of political influence and based on sound competition principles.

The powers of the Commissioner as spelt out in the Act consist of receiving complaints from aggrieved parties, investigating complaints, hosting of public hearings, evaluation of cases and making recommendations to the Minister of Finance for the final determination. Section 14 of the Act provides for the powers of the Commissioner to investigate any complaint from any person who considers his or herself aggrieved as a result of a restrictive trade practice. The Commissioner may also in this instance initiate investigations. In carrying out his investigative duties, the Commissioner may authorise any person in writing to have access to documents or enter premises.

The Ministry of Finance plays a very important role in legislative process and staff appointments. legislative role, and also plays a role in staff appointments. The Treasury is also responsible for the budget of the Competition Authority. The robustness of dispute mechanism is doubtful in that most of the institutions in the dispute chain are directly under government ministries where the staff is politically manipulated.

It is observable that the Commission is totally reliant on the treasury budget to the extent that press statements and all media coverage always seem to concentrate on the minister as opposed to giving some airing to the Commission and its staff.

There is still a fear factor among businessmen of the Commission staff thereby hampering the efforts of staff from carrying out regular sectoral surveys. In Kenya, most commissions are formed in a "big bang" fashion where the head of state announces the formation of such a commission or board and hence bestows its first sense of authority. Having been inherited from the former Price Control Office, there is public suspicion on the Commission's staff and this is a very big hindrance to the commission's work.

The CKK

The CCK has a similar predicament as the Monopolies and Prices Commission in which the Ministry of Information and Telecommunications Technology has sweeping powers to overrule decisions arrived upon by the CCK.

The CCK has more independence though as compared to the MPC. It is able to make their own budgetary plans and is involved in recruitment of staff. More clearly, it is housed at its own premises and with complete facilities in terms of vehicles, maintenance and staff. The recruitment of CCK is not done under the civil service system and the salary structure is quite different from the main civil service one.

Staffing at the CCK is still controlled by the state and this has led to pending cases of applications. There is also an element of political influence with a recent case of the minister for ICT sacking the entire board of CCK following a tender gone wrong. The Communications Commission of Kenya (CCK) is one of the most professional outfits in government and has been doing a tremendous job of trying to open up the telecommunications sector under difficult circumstances. According to the Communications Act of 1998, the Chair and the board of the CCK have security of tenure. This however did not stop the minister from sacking the board. Political independence will thus remain elusive at many stages unless cabinet ministers are made to be non-politicians. The CCK will appear to have too much power vested upon it but as witnessed in a previous case, the politically correct business people will go round the CCK rules. In the case referred, one radio and television station blocked the channels of a rival for close to two days and no action was taken against the blatant aggressor since they are known friends of the high society in Kenya. In another incident, the CCK has threatened to withdraw the licenses of two TV stations for what it deemed inflammatory incitement and yet other stations were almost carrying out similar inflammatory commentaries during a heated referendum period.

The various cultural differences around the country would require that the CCK incorporate some informal mechanism of arbitration whenever a complaint appears to go out of the legal solution. This is because what might appear to be normal commentary in one region might be very inflammatory in another. This is not the case at the CCK and there appear to be no cultural balance in staffing of the licensing team.

It is observable that the CCK is not completely independent of the media houses and the people they serve. During the infamous raid of a media house in 2006 in the

city of Nairobi, the CCK did not come out with any statement as one would have expected in the developed world. This is perceived by the common person to mean that the CCK is still a total "prefect" of the government and cannot be relied upon to deliver the independent decision that the communications world require.

The ERB

The reforms of the power sub-sector have resulted in the separation of commercial, policy setting and regulatory functions, with the Electricity Regulatory Board (ERB) responsible for regulating the generation, transmission and distribution of electric power in Kenya. In the new arrangements, regulation therefore becomes the new border between the state and the power industry.

In general the principal requirements for effective regulation are statutes or permitting legislation, regulatory institutions and rules. Economic regulation involves making decisions on politically sensitive matters and also decisions that have important implications for the regulated utilities and their competitors, customers, investors and shareholders. Often the interests by the stakeholders would be conflicting. These conflicting interests would need to be evaluated and balanced in an impartial and objective way, meaning that the regulatory entity must be, and must be seen to be, a neutral and disinterested party. The Act anticipates a fairly independent Board and tacitly bestows on it independence from political authorities and regulated firms. The Board also has institutional autonomy.

The ERB however depends on the Ministry of Energy for policy guidance with respect to the power sub-sector. As a safeguard against abuse of the trust reposed in it, parties aggrieved by the Board's decisions may seek recourse from the Minister for Energy, with the High Court of Kenya being the final arbiter. In addition members of the Board may be removed from office for reasons such as misconduct, insolvency, conviction of criminal offence involving dishonesty, fraud or moral turpitude and incapacity.

Effectiveness of Kenyan Regulatory Institutions

Obtaining Information, Documents and Evidence

A major tool that the Monopolies and Prices Commissioner has access to, is the use of section 14(2), which confers power on the Commissioner or any other person authorised in writing by the Commissioner to obtain information, documents and evidence when investigating possible restrictive trade practices, and to make copies of those documents. Section 14(3) empowers the Commissioner or any person authorised by the Commissioner in writing to enter any premises and to inspect any documents in the possession or under the control of a person who the Commissioner has reason to believe is in charge of the premises.

Under section 23(3), the Commissioner may require any person possessing records relating to investigations of unwarranted concentrations of economic power to give the Commissioner copies of the records or alternatively to submit the records to the Commissioner for purpose of copying. Section 29(1) empowers the

Commissioner, when investigating a merger, to require any participant in any economic sector within which a merger or takeover is proposed to take place to grant the Commissioner or any person authorised in writing by the Commissioner access to records and make copies of those records.

Penalties and Offences

The Restrictive Trade Practices Act provides for both civil and criminal sanctions

for the contravention of the Act. Sections 21 and 26 of the Act make it an offence for any person, whether as principal or as agent, to contravene or fail to comply with an order made by the Minister in respect of a restrictive trade practice, or in respect of unwarranted concentrations of economic power. As regards a merger, section 27(3) makes it an offence to carry out a merger or takeover without an authorisation order from the Minister. In all the above three instances, the Act provides for jail sentences and fines.

The Monopolies Commission, being a government department, is solely dependent on government budgetary allocations. Unlike other autonomous Competition Authorities in the region, the Commission has no power to raise alternative funds (for example, through borrowing or by charging fees for the service it renders). This contrasts with ERB and CCK who were created under different Acts that permit them more independence and far much more muscle in their operations than the Monopolies Commission.

All the regulatory institutions are characterised by lack of sufficient skilled staff to carry out research on a regular basis and do analysis in all the sectors they operate. Under the present structure, KPLC which is currently the sole public electricity supplier, purchases power from electric power producers under long-term Power Purchase Agreements (PPAs). This power is then dispatched, distributed and ultimately supplied to eligible customers.

In the case of ERB capacity constraint means generation of electric power almost matches demand and there is no competition per se. This situation is likely to persist for some time due to the size of the market which makes competition inherently limited. Instead the electricity generation plant is, and will continue to be dispatched to meet demand, subject to some merit order.

The CCK spells more of the same situation in which the sole responsibility of issuing communications licences is vested into their hands and yet they do not have adequate staff on ground for this demanding duty.

Inter-relation between the Various Regulatory Bodies

Section 5 of the Restrictive Trade Practices Act has been interpreted as a wide exemption from the competition law. The exemption relates to trade practices that are directly and necessarily associated with the exercise of exclusive or preferential trading privileges conferred by an Act of Parliament, and those associated with the licensing of participants in certain trades and professions by Government agencies acting in accordance with an Act of Parliament. Regulated enterprises consider

themselves to be exempt from the competition law by virtue of this section. This then gives leeway for CCK and ERB to act independently of Monopolies and Prices Commission.

Revenue Raising

Revenue-raising by conventional taxation methods is difficult, costly and prone to corruption. Entry controls also create opportunities for corruption, the relatively simple process of receiving information, particularly in relation to registration systems, does not confer much power on officials over traders, because little or no decision-making takes place. No doubt, too, traders are less resistant to paying taxes if they are disguised as fees. There are, nevertheless, some disadvantages in using entry controls for fiscal purposes.

First, the higher the fee levied for registration or a licence, the larger the number who will avoid complying with the requirement and rather participate in the informal economy. If the entry control is imposed only as a fiscal device, that is simply equivalent to tax evasion, but if it has other, public interest, purposes then those purposes will be jeopardised. Secondly, to achieve the advantages claimed over conventional tax methods, the registration or licence fee will generally have to be flat-rate and that might not be easily compatible with fiscal policy. The latter might, for example, require that the amounts levied should vary according to the number of employees or the turnover of the firm. This has been the case with CCK with its wireless communications business and ERB with the independent power generators.

The institutions in Kenya do not seem to concentrate on raising funds from independent sources and heavily rely on the government hand to get their operational funds. Although licencing is meant to generate lots of funds, the rate at which it is done does not indicate any urgency. The Monopolies and prices commission on its own has no funds from any source apart from the scholarships that various donors offer to its staff. It is therefore a non-starter when it comes to having any projects like seminars, conferences and publicity awareness campaigns.

Corruption in Regulatory Regimes

There is a lot to be said as far as this section is concerned but I will restrict myself to the general views and observations by other scholars. Conventional strategies to constrain corruption are likely to be less effective in jurisdictions where corruption significantly infiltrates the criminal justice and law enforcement systems, where the resources available for monitoring the conduct of officials are relatively modest, or where the political will to adopt a "macro" approach to the corruption problem does not exist. An alternative strategy explores how institutional arrangements may be designed so as to limit the opportunities for corruption, or to render such opportunities less profitable. Now, of course, the problems that were identified in the last section do not become irrelevant; in particular there must be the political willingness to accept some reorganisation of regulatory arrangements. But that is

very different from what is required to effect major cultural changes and actively to pursue and punish culprits.

Deregulation is, of course, a major theme in Western regulatory developments and the first and most obvious, though not necessarily most significant, point is that, since many opportunities for corrupt transactions arise from regulation, a reduction in the amount or intensity of regulation should reduce the level of corruption.

Given also that in many jurisdictions private law is ineffective to deal with many types of market failures, there is a strong prima facie case for regulatory intervention. It is then a question of exploring how an excess of regulatory opportunities for corruption may be dismantled.

A prime example as found in our Kenyan economy is licensing systems. The licencing system is not totally inclusive of the stakeholders in the playing field. There is an indication that the pioneers in the market influence the licensing structures to favour them and to a large extent to hinder new entrants. A second possibility arises from the use of the criminal law to enforce regulatory regimes. In industrialised countries, the heavy cost of securing a conviction in the criminal courts may reduce its effectiveness as a deterrent; and for this reason administrative sanctions may be preferable. In this country, use of the criminal process has the added disadvantage that it creates a further opportunity for corruption. Evidence suggests that the level of bribes increases significantly when courts are involved in law enforcement.

It is very difficult to refuse to accept what word goes around that the CCK is at times compromised when it comes to issuing the now most sought after wireless telephony licence. During the recently concluded bidding process for a third private firm on the wireless market, one bidder forced the CCK to cancel one of its licencing processes meant to award a third mobile service provider. The competing firm successfully convinced the courts that CCK had used underhand tactics to award a third provider forcing the Commission to halt the whole process. Corruption cannot be proven since no receipts are issued but from the foregoing, one could claim that all is not what it appears to portray at the CCK. By halting the process, Kenya's courts were in agreement that more transparency was required in the tendering process.

In other respects, the need to constrain corruption suggests regulatory strategies which are incompatible with reforms taking place in industrialised countries. Regulatory discretion creates more opportunities for corruption than where regulatory requirements are the subject of clear and precise rules and contrary to prevailing Western thinking, in many African countries rules may be preferable to discretion. A similar observation applies to the choice between formal and informal rules. In industrialised countries, there has been a perception that the traditional command-and-control sets of formal rules are often too prescriptive and too rigid, firms often knowing better than regulators what can best meet the regulatory goal at lowest cost.

The policy implication seems to be fewer and simpler formal rules, but not informal rules. Finally, and perhaps more controversially, there is the question of

consultation processes. Within the Western tradition there has been an increasing emphasis on regulatees and third parties contributing to, and participating in, regulatory policy- and rule-making. The potential benefits, in terms of improved information flows, better transparency and greater accountability are substantial, but direct access to regulatory officials does of course increase the opportunity for corrupt transactions. However, in Kenya, adequately defining and policing the requirement of a "private" meeting, and maintaining in an accessible and transparent form the official record, may not in practice be achievable in many cases.

Conclusion

The foregoing shows that Kenya has already made significant progress towards the creation of a fair, transparent and predictable regulatory environment in the business environment. The government hopes to hasten this progress in order to realise the objectives of the free and non-restrictive trade practices sooner for the ultimate benefit of service and product consumers in Kenya, and perhaps in the region as well. In order to achieve this the government is expected to undertake a number of challenging tasks including development of model transmission and distribution licences, harmonisation of licence conditions in order to ensure parity for similar licensees and the development of a customer charter specifying acceptable performance standards. In addition the government is expected to overcome challenges associated with transition to new market structures

Institutional theories often elicit a somewhat misguided criticism for assuming that institutional features cannot be altered by the actors. The criticism is not empirically misguided because, often, decision-makers can and do change the structural arrangements under which they operate. However, the criticism is theoretically misguided inasmuch as it loses sight of the limited aim of institutional theories: structural features must be exogenous when the aim is to learn how and why contextual features affect choice processes. If the researcher wants to identify the institutional factors that explain a particular pattern of behaviour, the institutional features simply cannot be modelled simultaneously as causes and consequences of that behaviour.

My conclusions on licensing are different. I am sceptical of the argument that conditions in Kenya justify the much broader use of this regulatory instrument, as compared with industrialised countries, but reference to those conditions, particularly the opportunities which they create for private exploitation and corruption, helps to explain why licensing proliferates in African countries and why reform in this area might be difficult to achieve.

References

Australian Law Reform Commission (2002), "Principled Regulation: Civil and Administrative Penalties in Australian Federal Regulation", Report No 95.

Bardhan, P. (1997), "Corruption and Development: A Review of Issues", Journal of Economic Literature, 35, pp. 1320-1346.

Barro, R.J. (1997), "Determinants of Economic Growth, a Cross-Country Empirical Study", Cambridge MA: MIT Press.

Bowles, R. (2000), "Corruption", in: Bouckaert, B. and De Geest, G. (eds), "Encyclopaedia of Law and Economics", Cheltenham: Edward Elgar.

Breyer, S. & R. Stewart (1985), "Administrative Law and Regulatory Policy", 2nd ed. Boston: Little, Brown.

Buscaglia, E. (1997), "Corruption and Judicial Reform in Latin America", Policy Studies Journal 17, 273-295.

Clarke, D.C. (2003), "Economic Development and the Rights Hypothesis: The China Problem", American Journal of Comparative Law, 51, 89-111.

Davis, K.E. and M.J. Trebilcock (2001), "Legal Reforms and Development", Third World Quarterly, 22, 21-36.

Djankov, Simeon, Caralee McLiesh and Rita Maria Ramalho (2006), "Regulation and Growth", Economics Letters, 92(3), 395-401.

Fafchamps, M. and C. Moser (2003), "Crime, Isolation and Law Enforcement", Journal of African Economies, 12, 625-671.

Glaeser, E.L., J. Scheinkman and A. Shleifer (2003), "The Injustice of Inequality", Journal of Monetary Economics, 50, 199-222.

Government of Kenya (2003), "Restrictive Trade Practices, Monopolies and Prices Act", Cap 504, Laws of Kenya, Government Printer, Nairobi.

Government of Kenya (2006), "Electric Power Act 1997", Laws of Kenya, Government Printer, Nairobi.

Government of Kenya (2006), "Energy Act 2006", Laws of Kenya, Government Printer, Nairobi.

Government of Kenya (2001), "The Communications Act 1988", Laws of Kenya, Government Printer, Nairobi.

Green, R.H. (1997), "Bureaucracy and Law and Order", in: Faundez, J. (ed), "Good Government and Law: Legal and Institutional Reform in Developing Countries", London: Macmillan.

Klitgaard, R. (1988), "Controlling Corruption", Berkeley CA: University of California Press.

La Porta, R., F. Lopez-de-Silanes, A. Shleifer and R.W Vishny (1998), "Law and Finance," *Journal of Political Economy,* 106, 1113-1155.

Lederman, D., N. Loayza and R.R. Soares (2001), "Accountability and Corruption: Political Institutions Matter", World Bank Working Paper 2708.

Levine, R. (1999), "Law, Finance and Economic Growth", Journal of Financial Intermediaries, 8, 8-35.

Lindsey, T. (2004), "Legal Infrastructure and Governance Reform in Post-Crisis Asia: The Case of Indonesia." Asian-Pacific Economic Literature, 18, 12-40.

Messick, Richard E. (1999), "Judicial Reform and Economic Development: A Survey of the Issues", World Bank Res Obs 14,117-136.

North D. (1991), "Institutions, Institutional Change and Economic Performance", Series: Political Economy of Institutions and Decisions, Washington University, St Louis

Ogus, A. and C. Abbot (2002), "Pollution and Penalties", Research in Law and Economics 20, 493-512.

Pistor, K. and P. Wellons (1999), "The Rule of Law and Legal Institutions in Asian Economic Development", Hong Kong, Oxford University Press.

Schaefer, H. B. (2002), "Legal Rules and Standards", German Working Papers in Law and Economics Paper 2.

Shleifer, A. and R.W. Vishny, (1993), "Corruption", Quarterly Journal of Economics, 108, 599-617.

Vogel, S.K. (1996), "Freer Markets, More Rules: Regulatory Reform in Advanced Industrialised Countries", Ithaca and London: Cornell University Press.

Wescott, C. (2003), "Combating Corruption in South East Asia", in Kidd, J.B. and Richter, F.J. (eds.), Fighting Corruption in Asia: Causes, Effects and Remedies, edited. Singapore: World Scientific Press.

World Bank (1997), "World Development Report 1997: The State in a Changing World", New York: Oxford University Press.

8

The Role of Regulatory Agencies in Developing Countries:

A Game Theoretic Approach to the Regulation of Public-Private Contracts

OLIVIA JENSEN

Introduction

There is a long-standing debate over the relative advantages of regulation by contract and regulation by agency. This debate is sometimes construed in geographical terms, contrasting the "Anglo-Saxon" tradition of independent, discretionary regulatory agencies, and the "French" or "continental" model of specifying regulatory provisions in a public-private (PP) contract, although in practice, many regulatory systems fall between these two poles. Developing countries have experimented with these models and hybrid mixes when liberalising and restructuring utility sectors to allow private participation. Yet, the theoretical literature covers only the polar cases of regulation by contract and regulation by agency and does not address the hybrids. This paper takes a first step toward filling this gap. This effort is justified by the widespread use of hybrid models in developing countries.

This paper offers a first set of answers to this issue by setting out a simple model of government-firm interaction under a long-term PP contract. The model follows a game theoretic approach to understand bargaining between the two parties. I consider the findings of the model against four case studies of hybrid regulatory structures in the water sector in developing countries based on extensive field research in several South East Asian countries.[47] The case studies reveal that regulatory agencies in hybrid structures play multiple roles that support cooperation between governments and firms. These roles include arbitrating between the firm and the government in the event of a shock, arbitrating between competing political interests, reducing the politicisation and increasing professionalism of tariff setting, and increasing transparency in government-firm interaction.

In policy-making, the presumption has been until recently that PP contracts would lead to better welfare outcomes in the presence of a regulatory agency. This has been confirmed in several empirical studies (For example, Wallsten 2001). But recently, this view has been superseded by a 'pragmatic' stance, which sees regulation by contract and regulation by agency as viable alternatives.[48] In countries

---

[47] Field research was conducted in Malaysia, Indonesia, China and the Philippines in 2004 through more than 100 semi-structured interviews with governments, firms, regulators and civil society groups. Evidence collected on concession contracts in Macau, Shanghai, Shenzhen (China), Selangor (Malaysia) and Batam (Indonesia) is not reported here for reasons of space.

[48] For example, this view was expressed in the presentations of World Bank staff at the World Water Week conference, Washington DC, February 2005.

with weaker rule of law, preference has been given to regulation by contract, which is thought to reduce regulatory risks for the private investor. Unfortunately, this has resulted in contracts being implemented in circumstances where they are most likely to fail (Gómez-Ibáñez 2003). This paper does not argue against the use of contracts; instead, it argues that regulatory agencies can play a beneficial and even critical role in the implementation of PP contracts.

If developing countries are to meet the Millennium Development Goals, private finance and private management in utility sectors will be needed, and constructing a sound regulatory framework for PP contracts continues to be an important issue. Policies to create this framework must take into account the distinctive characteristics of the institutional environment in developing countries in order to be effective.

In this paper, I develop the intuition that regulation by contract is susceptible to opportunistic behaviour by both firms and governments as a result of the inherently voluntary nature of contracting (Williamson 1985). I show that if both government and firm have long time horizons, then the parties will be able to achieve a cooperative equilibrium in which they both comply with the contract. However, where the parties have short time horizons, both parties will have incentives to renege on the contract. If institutions are strong, they may impose sufficient penalties on non-cooperative behaviour to deliver a cooperative equilibrium. It is here that the regulatory agency plays a role in raising the costs to the parties of non-cooperative behaviour. In the absence of other supporting institutions, like a strong and independent judiciary, the regulator's role can be critical in achieving contract compliance.

In the next section, I offer a brief review of the literature from the fields of economics and political economy, addressing some key issues relating to the design and implementation of utility regulation in developing countries. The third section presents a simple model of interaction between governments and firms under a long-term PP contract using a rational choice, game theoretic framework, while the fourth section presents the effects of institutions characteristics on the outcomes of the game. The following sections of the paper introduce and present four case studies of concessions in the water sector in Asia and analyse these in the light of the model. Regulators are seen to play a variety of roles in constraining opportunism by governments and firms. The final section concludes and develops some policy recommendations for the design of regulatory structures in developing countries.

Theoretical Framework

At the outset, it will be helpful to clarify what is meant by regulation: in the context of this paper, 'regulation' refers to rules enforced by a government agency to control economic activity. As such, it falls between indirect methods of control like taxes and subsidies and direct control through the ownership of market entities. Economic regulation encompasses rules governing price, output, and industry structure, with the aim of redressing the market failure of natural monopoly. In the absence of economic regulation, private providers of network utility services would

be likely to exploit their monopoly position, at the expense of consumers. The discussion here focuses on economic regulation, although much of the literature can be applied also to other types of regulation.

The early literature on regulators developed in the US, which has a long history of private ownership in network industries. In the first half of the 20th Century, regulatory agencies were seen as agents of the public interest, protecting consumers from exploitation by monopolists (See McCraw 1975 for a review). Over time, however, critiques of regulation emerged. Stigler (1971) argues that the demand for regulation comes from industries and that regulation is designed and operated for their benefit. Regulatory agencies are 'captured,' in the sense that they regulate in the interests of the industries that they are intended to control. Posner (1972) refined the critique, arguing that capture by other groups was also possible. Peltzman (1976) formalised these ideas in a model of regulation that took into account the influence of both consumer and producer interests. These models are founded in a perspective of government agency behaviour founded in the traditions of public choice, associated with the names of Buchanan and Tullock (Buchanan and Tullock 1962),and Olson's collective action theory (Olson 1965). These theorists turned economic logic to the analysis of political phenomena and analysed government agencies as rational utility maximisers. This view of government informs the model that is developed in the next section.

Concerns about regulatory capture fed into Demsetz's influential paper, which showed how natural monopoly market failures could be addressed through 'regulation by contract' (Demsetz 1968). He argued that 'competition for the market' could be created by periodically re-bidding short-term monopoly contracts for service. Competitive tendering would ensure that prices were set at competitive levels. Although this solution is theoretically satisfying, it has rarely been implemented in practice due to two main concerns: competition for contracts may be ineffective because of collusion or incumbency advantages; and under-investment, depending on the observability and transferability of investment. In any case, the government will have a continuing role in contract administration (monitoring, enforcing and bargaining over unspecified contingencies) (Vickers and Yarrow 1991). Instead, regulation by contract has usually taken the form of one-off, long-term contracts, long enough to allow investors to earn adequate returns on their capital investments. This leaves the problem of unspecified contingencies in the contract. Most contracts contain some kind of tariff adjustment formula or process, but as contracts are always incomplete, as we know from Williamson (1985), this can result in opportunistic renegotiation.[49]

The literature on regulation developed in the US, and naturally focused on regulation in the context of the specific institutional environment of that country. The institutions of rule of law, separation of powers, checks and balances, democracy, a fair and competent judiciary etc. were taken for granted. Government agencies may have operated as rational utility maximisers, but they did so within the

[49] Renegotiation of infrastructure PP contracts is extremely common. See: Guasch, J. L. (2004). Granting and renegotiating infrastructure concessions : Doing it Right. Washington, D.C., World Bank.

constraints imposed by these institutions. The crucial role of these institutional constraints was not addressed in the literature for another two decades, until the work of Levy & Spiller (1994). Their paper distinguishes between two basic types of political institutions: parliamentary and presidential and their argument runs like this: in parliamentary systems with alternating majority governments, laws are easy to implement or reverse so the government will not be able to show commitment to a stable regulatory regime through primary law. In this case, governments should sign contracts with the private providers which can be enforced through ordinary commercial law. In presidential systems, laws are difficult to pass so the government can show commitment to a stable regulatory system by passing a primary law to create a discretionary regulatory body. Although this article made an important contribution to the debate, its narrow focus on one particular institutional dichotomy underestimated the manifold ways in which institutions impose constraints on public and private actors.

Laffont (2005) is the first work to consider the implications of institutions for regulation in a systematic way and to draw attention to the salient differences between developed and developing countries in this regard. He draws attention to the following characteristics of developing countries:

- sanctity of contracts;
- quality of the judicial system
- monitoring costs associated with the quality of auditing and accounting mechanisms
- transparency in the financial system
- cost of public funds
- corruption.

Other potentially significant attributes of developing countries drawn from the growth and infrastructure literatures include: protection for property rights (Acemoglu and Johnson 2003); the rule of law (Rigobón and Rodrik 2004); political stability, policy credibility and the existence of a sound regulatory framework (Easterly and Serven 2003); bureaucratic quality and the timing of elections (Guasch, Laffont et al. 2003). This is already a long list of attributes and the patterns of interaction between institutions add to the complexity of this analysis. Initially, it is therefore useful to approach the regulation-institution relationship qualitatively, to draw out which institutions affect regulation in particular cases.

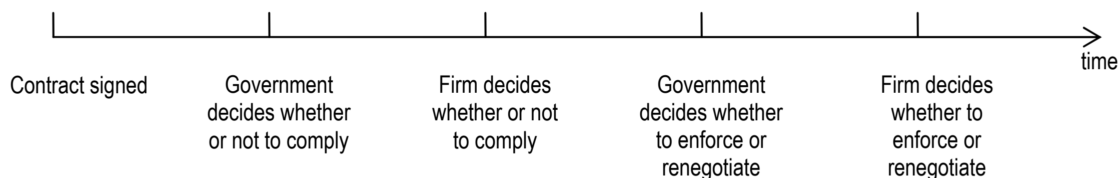
Given these attributes of developing countries, would we expect a regulatory agency to help or hinder the implementation of a PP contract? Some of these attributes will undermine any regulatory structure (weak rule of law, corruption, high monitoring costs, lower bureaucratic quality). Others are likely to be more problematic for a pure regulation by contract system (poor quality of the judicial system, poor enforcement of property rights). In the next section, a model of government-firm behaviour is presented, where there is no regulatory agency, and where other institutions impose only weak constraints on opportunism by the

parties, to show how regulation by contract can result in a non-cooperative equilibrium. I then explain why a regulator agency can help to relieve this problem.

The PPC Game

In this section, I set out a simple model of the interaction between the government and the firm. The PPC (public-private contract) game is played by two agents, the government and the firm. They play consecutively, in two rounds. Figure 8.1 shows the moves in the game.

FIGURE 8.1
Timing of Moves in the PPC Game



The model is based on the following assumptions:

(1) The players are unitary actors
(2) The players are both rational utility-maximising agents
(3) The game is played with full information.
(4) Players have a positive discount rate, δ, that is $0 < \delta < 1$. A pay-off of 1 at time t is valued more than a pay-off of 1 at time t+1
(5) The player with the higher discount rate is able to capture all the surplus, where no other constraints are in place. This assumption follows the result of Rubinstein's model of non-cooperative bargaining (Rubinstein 1982).

The following welfare functions are for the government and firm respectively:

$$U_{ga} = f\,[\delta_g\,(A_t) + \delta_g\,\Delta\,(B_t, C_t)$$
$$U_{fa} = f\,[\delta_f\,(A_t) + \delta_f\,\Delta\,(B_t, C_t)$$

Where:

$t = 1 \ldots n$
U_{ga} (U_{fa}) is the utility to the Government (Firm) from project A;
A_t (B_t) is the stream of returns from project A (B) in time t;
δ_g (δ_f) is the discount rate of the Government (Firm).

Following earlier models of regulation (Peltzman 1976), the government's utility depends on electoral support from voters and on financial support from special interest groups.[50] The model assumes that increases in consumer tariffs are unpopular with the public, and so reduce electoral support. Higher tariffs may also be unpopular with influential business interests, in which case these interests may reduce their financial support to the government. Improvements in service coverage and quality are assumed to be popular with the general public and with business interests. Thus the government's utility in the contract is the net utility from unpopular tariff increases and popular service quality improvements. The firm's utility is taken to depend on the returns on investment.

An important aspect of these welfare functions is the critical role played by the discount rate. If the firm's discount rate is very high, reflecting the fact that the firm places little value on returns gained far in the future, the firm will face a low total pay-off from cooperating under the contract. Likewise, if the government has a high discount rate, it does not value political gains made far in the future, and so will gain from not cooperating under the contract.

This property of the model reflects the particular structure of pay-offs from public-private infrastructure projects. In the early years of the contract, the firm will typically make sizable capital investments but will have low revenues. The firm will expect to make most its returns in the later years of the contract when capital investment is low and revenues are high. The government faces a similar pattern of utility pay-offs: in the early years of the contract, tariffs will be increased but it will take several years before capital investment feeds through into improvements in service quality that are felt by customers. This is the heart of the cooperation problem, which is illustrated in the two iterations of the model.

Figure 2 represents total utility pay-offs from the entire contract. Here, both parties maximise their utility by cooperating with each other. The implication is that, if the parties have sufficiently long time horizons, then they will be able to cooperate without the need for institutional constraints. Working through the game by backwards induction, we can see that easily that the players' optimal outcome is through full cooperation. The lower outcomes from non-cooperation imply that the parties have missed out on the gains they would have made: the firm would have earned a return on its investment and the government would have benefited from political pay-offs from improved quality of service.

The situation represented in Figure 8.3 shows the very different results when only the initial years (we can take this to mean the period until the first periodic review if there is one, or the first five years) of the contract are considered. Here, the government faces negative utility because it is obliged to take the unpopular action of raising tariffs, and the firm has a negative return on investment because it is making large capital investments. If the parties consider only the first period, then, we will find a non-cooperative equilibrium in which both renege on their

[50] Government here refers to the political leadership rather than the bureaucracy. In Peltzman's model, the politician maximises power (M) where M(p,Π) where p is price and Π is profit. M decreases with high prices and increases with high profits. The politician will choose the level of regulation that maximises M.

obligations. This would mean that the government would refuse to make promised tariff increases (or make them lower than expected) and the firm would cancel (or reduce) its capital investment plan.

The allocation of pay-offs for the options is explained in detail in Annex 8.1. The important point to note is that the cooperative equilibrium is achieved when the players have long time horizons, but where their time horizons are short, the players will settle in a non-cooperative equilibrium. In the latter case, institutions can constrain non-cooperative behaviour by imposing penalties on the parties. Regulatory agencies are one of the institutions that can effectively constrain behaviour and the range of ways in which they may do this is also addressed in the next section.

FIGURE 8.2: Long-Term Pay-Offs

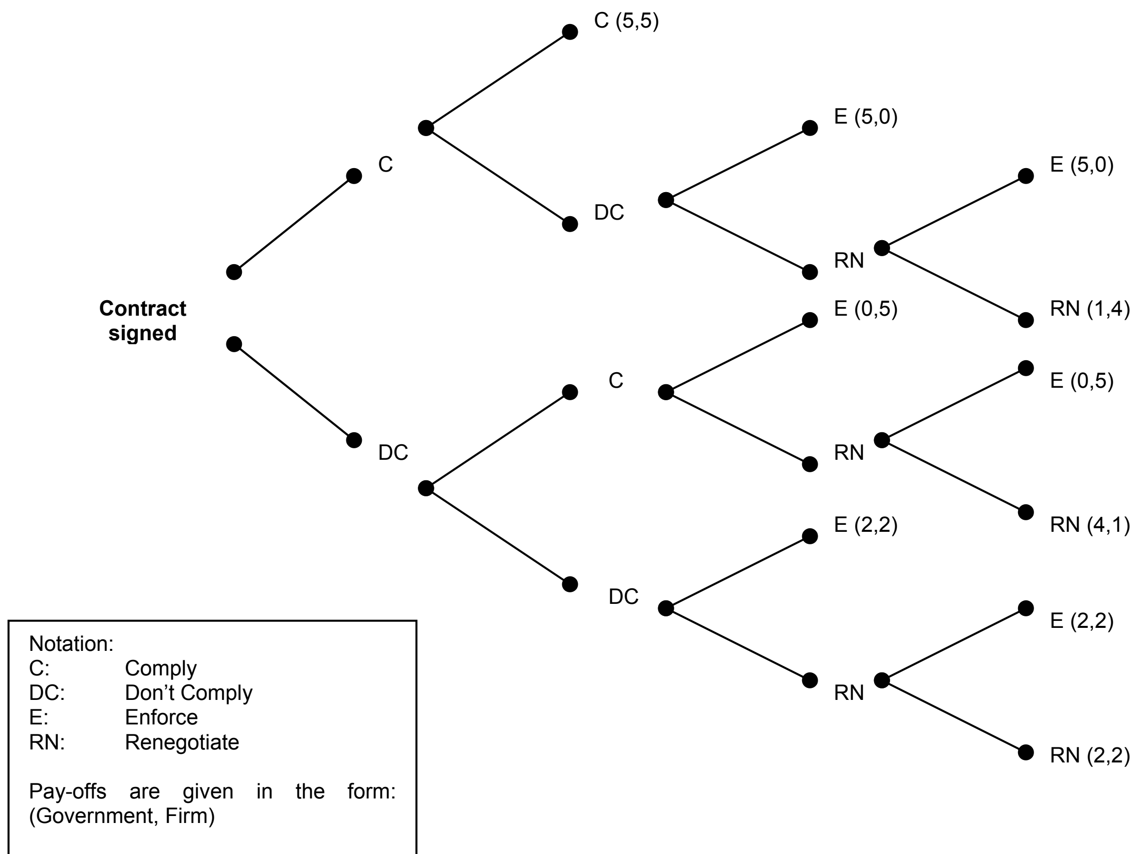
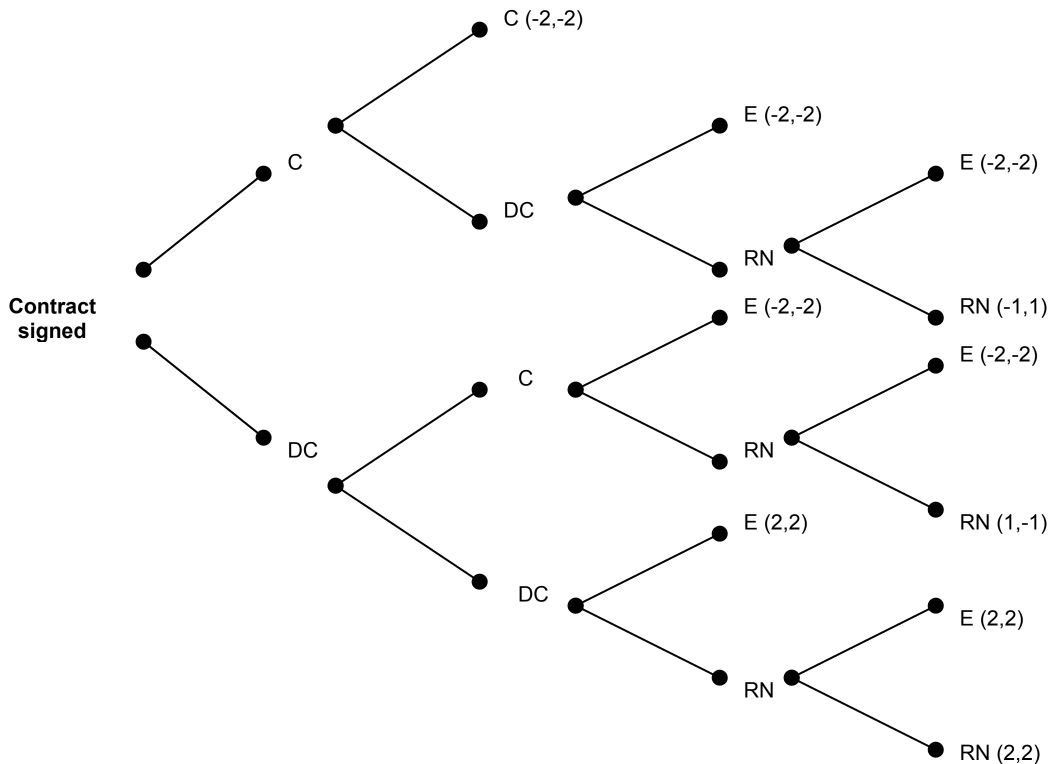


FIGURE 8.3: Short-Term Pay-Offs



Institutions

In the context of economic regulation, we focus on formal institutions, those codified or embodied in physical form. We may go further to distinguish between the institutional environment – the fundamental political, social and legal rules that establish the basis for interaction between individuals and organisations – and institutional arrangements, or organisations, which are the structures within which individuals or groups cooperate of compete (North and Thomas 1973).

Institutions become relevant when the actors do not have long enough time horizons to reach the cooperative equilibrium. Institutions influence the behaviour of the actors through two channels: first, through constraints, by imposing penalties on the parties for non-cooperative behaviour. Second, institutions matter because they affect the time horizons of the actors.

Focusing first on direct constraints, we can identify rule of law and the quality of judicial institutions as factors of prime importance. In an environment where the rule of law is weak, the cost to the parties of reneging on a contract is low. Similarly, in an environment where judicial enforcement is biased, incompetent, corrupt or inefficient, if the cost of trying to enforce a contract is high and the expected benefits of securing a favourable legal judgement (if enforcement of judgements is weak) are

low, the parties will face few constraints on uncooperative behaviour. Despite ongoing efforts, many developing countries have weak judicial institutions.

Under the Levy & Spiller frame of analysis, judicial institutions are all important in constraining opportunistic behaviour by the government. However, other types of institutions can complement or replace their role. Other institutions that effectively place constraints on uncooperative behaviour include the separation of powers and checks and balances in the political system. These will be important in imposing constraints on the behaviour of the government, as will the structure and quality of the bureaucracy. Effective constraints on the political leadership are not exclusive to either presidential or parliamentary systems. It is important here to distinguish between the powers of actors on paper, and the way in which these systems actually operate. The effectiveness of constraints will depend on a range of historical, political and other factors that are particular to a country, rather than to a formal structure. For the purposes of this analysis, the way the system actually operates is more important than the allocation of powers on paper. Thus we should not expect to see a consistent difference between presidential and parliamentary systems but we would expect to see consistent differences between countries which overall have weaker constraints on the political leadership, and those where the political leadership operate under strong constraints.

At the sector-specific level, the regulatory structure is of central importance, not just for its role in monitoring the implementation of the contract, but in constraining opportunistic behaviour of the parties under the contract. A regulatory agency may raise the costs of non-cooperation through several channels:

- If the agency has a statutory responsibility for monitoring the implementation of the contract, then its reputation and thus utility will be linked with compliance of both parties with this contract. The regulatory agency may therefore monitor the behaviour of both government and firm, not in terms of its direct benefits to the parties at any one time, but in terms of compliance with the original contract. Stronger regulators may have powers to bring legal actions or impose penalties on the parties in the event of non-compliance.
- If the regulator has only limited statutory powers, it may have an incentive to encourage public participation through information dissemination, public hearings etc, which will increase the effective power of the regulatory agency in relation to other branches of government or the regulated firms.
- The regulator can play a role in adjudicating between the parties in the case of a dispute or a change in the operating environment requiring the amendment of the contract. In countries where judicial remedies for disputes are not effective, the regulator offers an alternative mechanism.
- The regulator can enhance the legitimacy of a contract signed by one government, after a change in the political leadership. This is particularly important in countries where corruption levels are high.
- The regulator can act as an adjudicator between different agencies of government.

- A national level regulator can reduce the transactions costs of regulation by monitoring multiple contracts in the same sector (or even in several sectors).

The discussion above shows that both governments and firms may have incentives to renege on their contractual commitments in the absence of constraining factors. We would therefore expect that: regulatory agencies will play a more important role in weaker institutional environments and in situations of conflict between the parties, or between political agencies; and regulatory agencies with the power to impose penalties on both parties will be more effective in constraining uncooperative behaviour. The four case studies presented in the next section show how regulators do in fact play a valuable role in supporting cooperation under these conditions.

Empirical Evidence

In this section, I illustrate the model with case studies of PP contracts in the water sector in three developing Asian countries: Philippines, Malaysia and Indonesia. The water sector is well suited to the analysis of economic regulation as it comes close to an archetypal natural monopoly. The bulk of costs in providing the services are incurred in distribution, so there is very little scope to introduce competition to the sector, and economic regulation must be considered as a permanent arrangement.

Global experience with water regulation encompasses regulation by agency, regulation by contract and their hybrids. In the UK, for example, tariffs for fully privately owned companies are set by an autonomous national regulatory agency, while in the US, tariffs are set by state-level Public Utility Commissions, which follow procedures set out in administrative law. A handful of countries in Latin America have also created national level autonomous agencies to regulate the sector. But most developing countries have opted for a contract model, either with or without a dedicated monitoring and implementation agency.

The information in this section was collected through an extensive programme of field interviews, conducted over the course of 2004. Interviews were conducted with representatives of government, firms, the regulator and civil society groups and overall, more than 100 interviews were conducted. The interviews were semi-structured and designed iteratively, to allow information collected in earlier interviews to be cross-checked with others. A list of interviewees is given in Annex 8.2.

The case studies exemplify the different roles played by regulators in different institutional environments:

- Manila (Philippines) is a case of a regulator constraining opportunism by the parties during contract renegotiations;
- Johor (Malaysia) is an example of a regulatory agency in a stable institutional environment being created to pool scarce resources at the national level and harmonise the quality of regulation across the country;

- Subic (Philippines) demonstrates how a regulatory agency can adjudicate in conflictual relations between political leaders; and reduce short-term electoral pressures on the government to keep tariffs low.
- Jakarta (Indonesia) shows how a regulator with very limited powers can nevertheless play a role in arbitrating between the parties in disputes and increasing transparency surrounding the contract.

Of the four cases, three have undergone a transformation in the role of the regulator over the life of the contract.

- In Jakarta, the regulatory agency was created in the first round of contract renegotiation at the behest of the firms. The regulator's role has been strengthened subsequently through decrees.[51]
- In Subic, the regulator was created in a first round of renegotiation and was strengthened in a second round of contractual amendments.
- In Johor, legislation was passed in 2006 to create a national level regulator for water. This agency will replace state-level non-autonomous regulators.

The clear trend in this group of cases is towards establishing new regulatory agencies and giving more power and autonomy to existing regulators. This suggests that contracting parties are valuing regulation more highly than before.

Subic Bay

Time Horizons, Pay-off Functions & Institutional Constraints

Subic Bay area is a former US Army Base in the Philippines, which was converted into an economic development zone in 1992. It is governed by the Subic Bay Metropolitan Authority (SBMA), which has a charter, granting it special administrative status. Its charter grants it authority over regulatory, taxation and other matters, and gives it the power to award PP contracts for infrastructure independently of central government policies and laws. The SBMA is headed by the Administrator, who is appointed directly by the President. As a result, the Administrator's pay-off function is not directly affected by electoral popularity. However, the investors within the zone constitute an influential interest group at the national level and can appeal directly to the President to overrule the decisions of the Administrator in the zone. The investors used this influence early on in the life of the concession to except themselves from tariff increases. This demonstration reinforced the weight of business interests in the Administrator's welfare function.

After the 1998 Presidential election, the Administrator of the SBMA was replaced by the newly elected President. He sought to build up his own authority by calling into question the tariff adjustment process under the concession. Because he belonged to an opposing political camp to his predecessor, the costs of undermining the contract were lower, as he was able to cast doubt on the legitimacy of the

---

[51] This fits with Stigler's argument that regulation is demanded by firms (Stigler 1971).

contract. The new Administrator refused to accept the review process that had been conducted under the previous Administrator and initiated his own review.

The Subic concession covers the neighbouring city of Olongapo, as well as the Bay area. Olongapo is a typical municipality with an elected Mayor and the Mayor's pay-off function is affected by both electoral popularity and lobbying by interest groups, as we would expect. The Mayor's sensitivity to tariff increases, for example, was demonstrated in 1998 when the Mayor refused to allow new tariffs to be implemented in the city. An extra complication in the politics of the Subic contract derives from the relationship between the political leadership in the two areas. When the contract was first signed, the Administrator and Mayor were married, which contributed to cooperation between the two political entities. When the Administrator was replaced, the Mayor was re-elected and the relationship between the entities became highly acrimonious, but the water concessionaire was responsible for serving both jurisdictions. When tariff adjustments were finally approved by the SBMA under its new leadership, the City government refused to implement the tariffs and issued an injunction against the water company to prevent the tariffs being introduced. The firm reacted by cutting its capital investment programme.

Legal mechanisms play an important role in the Philippines' institutional structure. The threat of legal action or legal action itself is widely used by private parties to resist administrative actions (US Department of State 2005). In Subic, 'Temporary Restraining Orders' have been used by the parties involved to block the implementation of tariff increases and other aspects of the concession. However, these legal cases have been subject to counter-claims. The outcome has been to delay the implementation of tariff increases and the firm has reacted by holding back its capital investment plan.

Regulatory Provisions in the Contract

The main features of the regulatory structure are set out in the contract and amendments to the contract. The regulatory system has been modified several times (Interviews: Fairclough, De Vera). The contract specified a rate of return on investment of 24 percent for the firm over the life of the contract, but as of 2005, the private investors had not yet drawn any dividends.

Initially, the SBMA monitored the contract and was meant to review tariffs and approve any adjustments for both the City and the Bay area on an annual basis, based on financial and operational reports submitted by the company, but this system broke down after the change in leadership in the SBMA.

These problems in the initial years of the contract led the water company and the city government to seek to renegotiate the concession to modify the regulatory structure. The Olongapo government wanted to ensure that it played a role in the tariff-setting process and the water company wanted to reduce the discretion of the SBMA in the timing and extent of the tariff increases. This led to the creation of a regulatory body in 2000. The Regulatory Board (RB) is formally an agency of the SBMA and is accountable to SBMA but the SBMA and Olongapo City both appoint

two members each to the Board (Interview: N. Santos). The Board members select their own Chairman.

At the time it was set up, the role of the RB was to conduct the annual tariff review and make a recommendation to the SBMA, which would give final approval on tariff changes. Subsequently, the Administration recognised the need for tariff increases if the firm is to carry out adequate capital investment, but wanted to distance itself from being directly responsible for tariff increases (Santos, de Vera). The firm wanted the RB's autonomy to be strengthened to reduce the risk that the SBMA would suppress tariffs for political reasons. As a result, the contracting parties agreed an amendment to the contract in 2004 that allows the RB make final decisions on tariffs, after conducting public hearings (Interview: Gaza).

Role of the Regulator

The Subic Bay concession case shows a shift from pure contract-based regulation to hybrid regulation and demonstrates how, under the hybrid structure the regulatory agency contributed to stability and cooperation in the implementation of the PP contract, as we would expect in a weak institutional structure with political instability leading to short time-horizons. The regulator serves multiple purposes which allow the contract to function more effectively. Firstly, the RB allows the resolution of conflicting interests on the part of the SBMA and Olongapo City. The representatives of the two political entities are able to negotiate compromises within the RB, reducing the risk that either of the entities will refuse to implement the tariff determination. The appointment of RB members by political leaders leads to some politicisation of the board, but it also increases political commitment to the implementation of the tariff determination.

Secondly, by empowering the regulatory body to determine tariffs, the SBMA leadership has sought to distance itself from unpopular decisions to raise tariffs. Over time, the leadership hopes to benefit from investor approval for high quality infrastructure provision. Thirdly, the autonomy of the RB has reduced regulatory risks for the firm. Since the creation of the RB, tariff reviews have taken place annually in accordance with the terms of the contract (Interview: Gaza).

Johor

Political Time Horizon & Institutional Constraints

The Malaysian political system is characterised by greater political and institutional stability than the other two countries discussed in this paper. The ruling coalition, the Barisan Nasional, has been in power at the national level since independence. In the State of Johor, in the south of the Malaysian peninsula, UMNO (United Malays National Organisation) has been returned in four rounds of elections since 1990. Johor has the second highest GDP after the capital region (Government of Malaysia Economic Planning Unit 2001) and business groups are politically influential (Interview: Mahmood). Consumer groups and other non-governmental

organisations cooperate with the government and are not active critics of government policies (Interview: Ping).

This high degree of political stability gives the government a relatively long time horizon but as the standard of service for water services is comparatively high and coverage is 98 percent (Malaysian Water Association 2003), there is less scope for gaining extra political support from improving the quality or reach of services. The more pressing concern for the government has been the financial status of the water utility. By the early 1990s, Johor had become heavily indebted to the Federal Government for capital investment projects in the water sector and the Federal Government restricted Johor's access to further federal funds. (Interview: Ng). By awarding a concession contract, the State government sought to reduce its debt repayment burden from loans incurred under public ownership and to shift liabilities to bulk water suppliers to the private sector (Interview: Sa'ari).

Malaysia has a relatively fair and transparent judicial system compared to other countries in the region[52], although the independence of the judiciary to make judgements against the government has been called into question by commentators (Ho Khai Leong 2003, pp. 13-15) and by practitioners (Interview: Zahdi). However, Malaysia's good reputation with investors in terms of the rule of law and respect for contracts may act as an effective constraint on arbitrary actions by the political leadership at the national level. A similar phenomenon exists at the state level in states like Johor which are keen to attract foreign investment.

In Malaysia, the capital market also plays a role in constraining opportunistic behaviour. The concession company in Johor is a listed company and therefore must comply with financial reporting requirements. This increases the level of transparency about the firm's financial performance, which can help the firm to convince the government and the public that the firm is not earning unreasonable profits. It also demonstrates to the government the relationship between the level of tariffs and the firm's ability to raise finance to carry out capital investment (Interviews: Alwi, Zahdi).

Regulation Under the Contract

Prior to the award of the PP contract, the water utility was corporatised, that is restructured as a separate entity under commercial law. At the time of the corporatisation, a sector regulator, BAKAJ (Badan Kawal Selia Air Johor), was created, within the State Administration. BAKAJ is exclusively a monitoring body, and it does not have the power to set tariffs or approve investment plans. Its statutory powers were not extended at the time of the privatisation, but its access to information improved as a result of the reporting requirements on the firm (Interviews: Idris, Ng). Tariff and investment plan decisions are taken by the Economic Planning Unit, a department within the state bureaucracy, based on the ROR band of 14-18% specified in the contract. Tariff increases are approved by the state assembly (Interviews: Zahdi, Sa'ari).

[52] See: International Country Risk Guide (2005). ICRG Risk Indices.

During the concession, relations between the private company and the State Government have been generally cooperative (Interviews: Saari, Zahdi, Idris). The firm has had to lobby the administration for tariff increases, presenting arguments directly to the assembly and conducting public information tours to pre-empt opposition to increases from households (Interview: Zahdi). Periodic tariff increases have been approved in accordance with the provisions of the contract, but have been lower than originally envisaged, partly because the firm has managed to lower costs (Interview: Zahdi). An interest group representing manufacturing industry appealed to the state government to overrule a tariff increase in 2001 and a compromise solution was negotiated that capped prices for high-volume industrial users.

The state level regulatory structure will be superseded by federal level developments. In 2006, new laws were passed passing control over water issues and ownership of water assets from the state to the federal level. The laws also provide for the establishment of a national level economic regulatory agency, to take over tasks currently carried out by state governments, and the creation of an asset holding company to manage the assets. The national regulator and asset holding company are intended to resolve the sector's financial problems and to harmonise tariffs and quality of service across the country (The Edge 23 Jan 2006). The implementation of these new laws will require the termination or radical restructuring of the Johor contract. One option being considered is to replace it with an operations and management contract. The concession company has expressed its willingness to go along with this plan (Interview: Zahdi), but as of mid-2006, it was not clear what the Federal government's approach to existing contracts would be. Despite this uncertainty, the concessionaire has continued to raise finance and to carry out capital expenditure, while trying to position itself favourably to bid for any future contracts tendered by the federal government (Interview: Zahdi).

Role of the Regulator

The Johor contract shows how a cooperative equilibrium can be achieved due to a supportive institutional framework, where the regulatory agency has little role. As we would expect from the model, the role of the regulator is less important when the parties have sufficiently long time horizons, because they then have an incentive to cooperate, even in the absence of constraints. Nevertheless, the federal government has identified the need for more professional and independent economic regulation and so if shifting regulatory powers to a single agency. This reflects an intention to reduce local political intervention in tariff setting and to concentrate skilled human resources.

Political stability, prevailing rule of law and fewer information asymmetries as a by-product of the functioning capital markets combine to ensure that the Johor government has a sufficiently long time-horizon to achieve a cooperative equilibrium. The firm recognises this and so is willing to engage in capital investments that will ensure the quality of the service in the future. The possibility that the firm will have to re-tender for a contract as part of the national level

restructuring creates incentives for the firm to demonstrate its willingness to cooperate and to operate efficiently.

Jakarta

Time Horizons, Pay-off Functions & Institutional Constraints

Indonesia has undergone dramatic political and institutional upheaval during the period that the Jakarta water concession contracts have been operational. Between 1997 and 2006, the country was transformed from the highly centralised, authoritarian regime of Suharto to a decentralised regime with a nascent democracy and multiple competing centres of power under four different presidents. However, some factors have remained constant in Indonesia's political economy, like the influence of business interests on policy and regulation (Robison and Hadiz 2004).

The impact of these changes on incentives and constraints has inevitably been very broad. On the one hand, the fragmentation of power has imposed greater constraints on the agencies of the central government as they are no longer able to enforce policies or rules without the cooperation of other agencies (Robison and Hadiz 2004). On the other hand, the new system has relieved the constraints on local governments, autonomous government agencies and public corporations, as they are no longer under the control of the central government (Interviews: Hilwan, Widya). Democracy in Indonesia is in the early stages of development so it is difficult to judge the degree to which electoral support influences policy. During the crisis period, leaders were certainly very sensitive to public opposition to tariff increases, as electricity price increases sparked riots in Jakarta (Bird 1999), but subsequently utility tariffs have not been a critical issue for the general public (Interview: Sukhsmaningsih).

Other institutional constraints on opportunistic behaviour in Indonesia are weak: the judiciary has a reputation for bias and corruption and private firms have found it impossible to secure and enforce judgements against expropriation by the government during the crisis (Robison and Hadiz 2004).[53] As the Suharto regime was perceived to have been highly corrupt, privatisation contracts awarded by the regime were discredited and the reputation of public officials with the public was enhanced by disregarding the contracts (Interviews: Tutuko, Roswita). Accounting and auditing standards are also weak (Interviews: Weitz, Lanti, Anwar) which increases the degree of information asymmetry between the contracting parties and makes it easier to disguise non-cooperative behaviour.

Instability in the institutional framework and in the new political institutions has led to a high degree of political turnover, suggesting that politicians will have short time-horizons. This is a sharp contrast to the situation in Indonesia before the crisis. Suharto had been in power since 1967 and his leadership position was thought to be very secure (Bertrand 1997). Firms believed that they could ensure favourable regulatory treatment by establishing partnerships with Indonesian firms with close

[53] World Bank Investment Climate data finds a 60% confidence rate in Indonesia's judicial system, and 90% of cases for overdue payments unresolved.

links to the regime (Interviews: Rogers, Skelcher). After Suharto's departure, these partnerships became a liability and opened the firms to accusations of corruption (Harsono 2003).

Regulation Under the Contract

Under the contracts, contract monitoring and tariff-setting was the responsibility of the former public utility, Pam Jaya, which was also the contract signatory on the government side, and the owner of the water supply assets. This agency would propose tariffs, based on a ROR of 22.4%, and the Governor of Jakarta (an appointed position under the Suharto regime, an elected position since decentralisation reforms) would approve these. However, these contract provisions were not implemented: the economic crisis hit Indonesia and the Governor announced that no tariff increases would take place between 1998 and 2001. Pam Jaya does not have the power to overrule the Governor, so instead it engaged in renegotiations with the firms.

In the context of the renegotiation, the firms sought the creation of a Regulatory Body separate from Pam Jaya that would be able to monitor the implementation of the concession by both government and private contracting parties. However, the firms were concerned about the competence and neutrality of a new regulatory agency and so they deliberately circumscribed its powers. The RB's legal basis is grounded in the provisions of the revised contracts and in a decree issued by the Governor in 2001 (Gubernur Propinsi Daerah Khusus Ibukota Jakarta 2001), but there are inconsistencies within the contract, and between the contracts and the decree with regard to the functions of the regulator (Interview: Lanti). The revised contracts made provision for the RB to play some role in monitoring the concessionaires, and some role in the resolution of disputes but Pam Jaya remains primarily responsible for the core regulatory functions of performance monitoring and periodic reviews (Perusahaan Daerah Air Minum Daerah Khusus Ibukota Jakarta and Pam Lyonnaise Jaya 2001).

Since its creation, both private and government parties have sometimes chosen to bypass the regulator in preference for bilateral negotiations in their disputes, but on other occasions they have actively engaged with the regulator to dissolve tensions and to find alternative resolutions to the problem. (Interviews: Bouvier, Lanti, Weitz). The RB, meanwhile, has sought to build a role for itself and has drawn on links with the federal government and its role as the representative of consumer interests to bolster its influence (Interview: Lanti). In 2005, the RB's was strengthened by a second decree from the Governor, under which the RB was given the role of advising the Governor on consumer tariffs (Interivew: Lanti).

Role of the Regulator

The Jakarta RB provides an example of the positive role that an autonomous agency can play, even when its powers are heavily circumscribed. From the game, we would expect that the role of the regulator would be important in weak institutional environments. This is borne out in the case study in which the RB acted

as an arbiter in disputes and as a channel for consumers' opinions. However, the regulatory agency does not have the power to impose penalties on the contracting parties, which limits its effectivness.

Despite the RB's limited powers, and the tendency of the parties to bypass the RB in disputes, it has played a valuable role as a broker or facilitator in the negotiations between Pam Jaya and the firms. In 2003, talks over the periodic review came to a halt when the parties could not agree on figures for capital expenditure. The RB took the initiative in securing external consultants to advise on the review. However, one of the parties refused to cooperate with the consultants by providing information which undermined the credibility of the advice and led the parties to reject the recommendations of the consultants. The RB has played the role of arbiter on subsequent occasions, chairing meetings between the parties on the periodic review. This has been helpful in getting some of the parties to come to an agreement (Interviews: Krieg, Bouvier).

The regulator has also begun to play a role in increasing transparency in the concession by interacting with consumer groups (Interviews: Lanti, Anwar). The contracting parties do not have weak incentives to disclose financial information to the public because they rely on information asymmetries to strengthen their bargaining power in negotiations. The RB, by contrast, can enhance its own role in the regulatory system by positioning itself as the representative of the public in relation to the concessions. Gradually, by demanding more information from the contracting parties and channelling information on service quality from consumers, the RB may be able to narrow information asymmetries.

Manila

Time Horizons, Pay-off Functions & Institutional Constraints

The Philippines' political institutions are modelled on the US Presidential system and are characterised by checks and balances. The weakness of political parties and the personality-focus of elections interact with the institutional structure to give rise to strict constraints on the actions of the executive. During elections, presidents may campaign with highly populist policies, but as they are only able to serve a single term of 6 years, the pressure of electoral popularity may be weak in the later years of the president's term. These attributes interact with the role played by powerful business interest groups, which exercise considerable influence in the political system through financial support, media coverage and personal links, leading to highly particularist policy-making (Hutchcroft 1998).

These business interests are dominated by a small number of families with connections in politics and business, which have managed to retain their influence throughout the post-independence period (Roces 2000). Two of these families, the Lopez family and the Ayala family, were the original majority owners of the water concessions for Manila. As a result, the position of these families in the economic and political life of the Philippines, has had direct effects on the implementation of the water PP contract. Firstly, the concessions have received much more attention from civil society and the media as a result of their involvement, much of which has been

critical (Interview: Sangster). Actions taken by the government have been heavily scrutinised for evidence of corruption or bias. Secondly, the affairs of the family businesses have been inextricably tangled with events in the concessions.[54]

Judicial institutions play an important role in economic and political life in the Philippines, although the confidence level of investors in the courts is 66 percent.[55] Legal remedies are often used in commercial disputes and in disputes between public and private entities, but many contractual disputes are not resolved in the courts.[56]

In the Philippines, corruption does not only affect the implementation of PP contract through the expected channels of higher transactions costs. It also creates strong disincentives for officials to take decisions. This is because the Philippines has strict ant-graft laws which make government officials personally liable for decisions taken during their term in office. Under the provisions of the 1960 Act,[57] officials can be tried for corruption for actions which favour one private party over another, or are harmful to the government. This legislation has made government officials extremely reluctant to take decisions without approval from the highest political level (Interviews: Ortega, Sangster, Beatrix). In the case of a PP contract, this means that it is more difficult to amend a contract in order to restore the financial viability of a concessionaire after a negative shock, as this may be seen as favouring the firm and being 'harmful to the government.'

Regulatory Provisions in the Contract

The Manila concession contracts employ a hybrid regulatory structure. The provisions regarding adjustment of tariffs and performance criteria in a periodic review are set out in the concession contract. Tariffs are calculated on the basis of an 'Appropriate Discount Rate' set with reference to the firm's business proposals and to international comparators. In addition, the contract provided for the establishment of a Regulatory Office (RO), which is responsible for monitoring the concession and implementing the periodic review in line with the provisions of the contract. This hybrid model addressed concerns of investors that the regulator should not have discretionary powers and that contract monitoring should not be the direct responsibility of a government department (Dumol 2000). A drawback with this structure was that the RO was set up within the MWSS (Metropolitan Waterworks and Sewerage System), the former public utility and contract signatory

---

[54] Two examples will give the flavour of these interactions: Noli de Castro, a newscaster on the Lopez television news channel, ABS-CBN, was Gloria Macapagal-Arroyo's vice presidential running mate in the 2004 election; the Lopez's energy distribution business, Meralco, was forced to pay back taxes after a ruling by the Supreme Court, which brought the group to the verge of bankruptcy. The Lopez group was therefore unable to meet their liability for corporate guarantees under the water concession contract.

[55] The World Bank's Investment Climate Survey reports confidence levels in the judiciary system. The Philippines score of 66% compares is the same as the regional average, and higher than the global developing country average of 59%. See: http://www.enterprisesurveys.org/.

[56] The Investment Climate survey reports that 84% of cases for overdue payments do not reach resolution in the Philippines, which compares to a developing country average of 69% and a regional average of 57%.

[57] The Anti-Graft and Corrupt Practices Act (1960) specifically includes partial behaviour in relation to licenses and concessions in the definition of corrupt practices.

on the government side. This structure undermined the RO's ability to take independent decisions, as its decisions have to be approved by the MWSS Board before they can be implemented (Interviews: Ortega, Sakai). The influence of the former public utility in the concessions has been a continuing concern for the firms (Interviews: Beatrix, Sangster).

The role of the RO became controversial soon after the award of the contracts, when one of the concessionaires, Maynilad Water Services (serving the West zone of the city), faced severe financial difficulties. Maynilad had substantial foreign currency liabilities, which doubled when the Peso devalued during the Asian financial crisis. The Chief Regulator at the time engaged in negotiations with the concession to amend the contract. However, other officials felt that this went beyond the scope of authority of the regulator and the Chief Regulator handed over responsibility of the renegotiations to the political leadership (Interview: Esguerra). These renegotiations have been protracted and politically contentious, and ended in the government buying back a majority stake in the concession company in 2005.

The RO has successfully implemented the East concession, including the first periodic review (Interviews: Sakai, Rivera). However, it has been unable to fulfil its role in determining and enforcing tariff adjustments for the West concession. During the renegotiations, the RO tried to proceed with the periodic review, but its determination was ignored by the firm and it became irrelevant in the light of negotiations between the parties (Interviews: Sakai, Medalla, Tirona).

Role of the Regulator

The Philippines institutional environment gives rise to short time-horizons and risk averse politicians and public officials, so we would expect the regulator to be able to play a key constraining role in this case. In contrast to the other case studies discussed here, the regulatory agency for the Manila water contracts had a distinct sphere of authority right from the start of the contract. This gave it scope to penalise some non-cooperative actions by the contracting parties, but as its own legal basis is in the contract, its powers to limit or to conclude renegotiations are weak.

The design of the regulatory institutions was shaped by the International Finance Corporation (IFC, part of the World Bank Group), who was acting as advisors to the government for the concessions and took into account international best practice at the time (Dumol 2000). The regulator's scope for discretionary decision-making was deliberately constrained in the terms of the contracts in order to provide reassurance to the private investors. This constraint on the regulator was reinforced by the anti-graft legislation, which discourages officials from taking responsibility for decisions.

Could the RO have played a positive role in negotiating an amendment to the contract with the West concessionaire and reduced the transactions costs of the renegotiations process, if it had been given the power to do so? There are a number of reasons to think that it might: firstly, the RO had more information about the financial and operating performance of the concession than other government agencies, leading to lower information asymmetries in the renegotiation and

potentially limiting the scope for opportunism on the part of the firm; secondly, the regulator's reputation is tied to the successful implementation of the contract. When the West concessionaire failed to meet its contractual obligations, this would have had a negative impact on the reputation of the regulator, and would have given the RO incentives to conclude an amendment to the contract. The political leadership and other government officials, on the other hand, had incentives to delay any decision on renegotiation to avoid any negative effects, such as public disapproval or liability to corruption charges. Other political agencies like the MWSS, government departments or the executive itself are risk averse, because the potential penalty associated with a wrong decision in the Philippines is much higher than the potential penalty associated with a delay, or failure to take a decision. Finally, the regulator is not subject to electoral pressures that would lead it to prioritise short-term over long-term outcomes of the concession.

Conclusion & Policy Recommendations

This paper set out to show why *hybrid regulation* combining a long-term contract with a regulatory agency can lead to better outcomes from PP contracts than pure *regulation by contract* in weak institutional environments. The findings do not necessarily imply that developing countries should create discretionary regulatory agencies, as the absence of institutional constraints will be associated with other problems political and judicial institutions impose few constraints. However, the case studies have shown that even regulatory agencies with heavily circumscribed powers can contribute to the effectiveness of the regulatory regime.

In three of the four case studies presented here, the contract has been amended to set up a regulator and to transfer some certain powers and functions to the new agency. Hybrid contracts have been criticised as increasing the potential for conflict are for creating confusion. However, I have shown here that regulatory agencies can play a valuable role in reducing the potential for opportunism by the contracting parties. We should not therefore be surprised to see regulatory agencies being created to complement contracts.

The role of the regulatory agency stems from the nature of contracts as voluntary. In a pure contract model, the two parties can always agree to renegotiate the contract if it is in their interests to do so. The game model showed how it always will be in the interests of the parties to do so when their time horizons are short, because PP contracts typically involve costs for both parties in the initial years. Benefits take longer to emerge, so only parties with long time horizons will have incentives to cooperate. A regulatory agency, on the other hand, may be structured in such a way that it has incentives to enforce the original contract, even when both contracting parties will lose out from implementation in the short-term. Ideally, the regulator would have the power to impose penalties on the contracting parties for non-cooperation, and its objectives would be defined in terms of ensuring compliance with the contract.

The regulatory agency's role is particularly valuable where other institutional constraints are not adequate to constrain opportunistic behaviour. In countries

where accounting and auditing mechanisms, supervision by financial markets and monitoring by organised civil society groups takes place, the role of the regulator is less critical. However, these conditions are not met in many developing countries, where transparency is low and enforcement mechanisms are weak. In these countries, the regulator can help to increase transparency and act as a channel for the expression of consumer interest. Neither the government nor firm has an incentive to increase transparency or participation, but the regulator can use these to strengthen its own position within the institutional structure.

The cases above also show that the regulator can play a valuable role as arbiter between conflicting interests. These conflicts may be between different public agencies or political leaders, or they may be between In order to fulfil this function, the regulator must be a separate agency from the contract signatories, whether the contract signatory is a government minister or a public utility company.

In some cases, regulators with adequate skills and resources may be able to play a role in helping the contracting parties to adjust to shocks, again if the reputation of the regulator depends on the smooth operation of the contract. The regulator may have better access to information about the effect of the shock on the firm, allowing it to construct a more appropriate amendment while preserving the incentives embodied in the original contract, but without a direct interest in redistributing benefits between the contracting parties.

None of these points contradicts the very real concern that the regulator may be captured by government or private interests. However, the focus here is on hybrid regulatory structures in which the powers of the regulatory body are constrained by the provisions of the contract. Certainly, if the regulatory agency begins to play a role in the renegotiation of contracts, then there will be scope for discretion in its activities. But even there, a regulator with responsibility for ensuring the smooth operation of the contract will have an incentive to adjust a contract when a shock occurs. Without the regulatory agency, one party may act opportunistically by delaying any agreement for an amendment. In a pure contract regime, the other party may have too little bargaining power to force through an amendment.

These arguments imply that hybrid regulation offers advantages over pure contract regulation, especially in countries where institutional constraints on opportunistic behaviour are lower. Hybrid regulation may be seen as a transitional measure, while other institutions are strengthened, but the long periods of time needed to affect institutional changes means that the creation of a regulatory agency charged with ensuring the implementation of the contract will be a valuable investment in the success of PP contracts.

References

Acemoglu, D. and S. Johnson (2003), "Unbundling Institutions" National Bureau of Economic Research. Working Paper Series No. 9934, 1-[63].

Bertrand, J. (1997), "Business as Usual' in Suharto's Indonesia", Asian Survey, 37(5), 441-452.

Bird, J. (1999), "Indonesia in 1998: The Pot Boils Over," Asian Survey, 39(1), 27-37.

Brams, S. J. (2003), Negotiation Games: Applying Game Theory to Bargaining and Arbitration (Revised Edition). New York & London, Routledge.

Buchanan, J. M. and G. Tullock (1962), "The Calculus of Consent: Logical Foundations of Constitutional Democracy", Michigan, University of Michigan Press.

Demsetz, H. (1968), "Why Regulate Utilities?", Journal of Law and Economics, 11, 55-65.

Dumol, M. (2000), "The Manila Water Concession: A Key Government Official's Diary of the World's Largest Water Privatization", Washington, DC, World Bank.

Easterly, W. R. and L. Serven (2003), "The Limits of stabilization: infrastructure, public deficits and growth in Latin America, Washington, DC, World Bank.

Gómez-Ibáñez, J. A. (2003), "Regulating Infrastructure: Monopoly, Contracts and Discretion", Cambridge, Mass., Harvard University Press.

Government of Malaysia Economic Planning Unit (2001), Eighth Malaysia Plan 2001-2005.

Guasch, J. L. (2004), "*Granting and renegotiating infrastructure concessions: Doing it Right,* Washington, D.C.," World Bank.

Guasch, J. L., J.-J. Laffont, et al. (2003), "Renegotiation of Concession Contracts in Latin America", World Bank Policy Research Working Paper No. 3011.

Gubernur Propinsi Daerah Khusus Ibukota Jakarta (2001), Keputusan: Penyesuaian Tarif Air Minum Perisahaan Daerah Air Minum Daerah Khusus Ibukota Jakarta, Jakarta 1023/2001.

Harsono, A. (2003), "Water and Politics in the Fall of Suharto", The Center for Public Integrity.

Ho Khai Leong (2003), "The Political and Administrative Frames: Challenges and Reforms under the Mahathir Administration. Mahathir's Administration: Performance and Crisis in Governance", Ho Khai Leong and J. Chin. Singapore, Times Editions.

Hutchcroft, P. D. (1998), "Booty Capitalism: The Politics of Banking in the Philippines", Ithaca, NY, Cornell University Press.

International Country Risk Guide (2005), ICRG Risk Indices.

Laffont, J.-J. (2005), "Regulation and Development", New York, Cambridge University Press.

Levy, B. and P. T. Spiller (1994), "The Institutional Foundations of Regulatory Commitment: A Comparative Analysis of Telecommunications Regulation", Journal of Law, Economics and Organization, 10(2).

Malaysian Water Association (2003), "Malaysia Water Industry Guide", Kuala Lumpur Malaysian Water Association.

McCraw, T. K. (1975), "Regulation in America: A Review Essay", Business History Review, 49(2).

North, D. C. and R. P. Thomas (1973), "The Rise of the Western World: a New Economic History", Cambridge, Cambridge University Press.

Olson, M. (1965), "The Logic of Collective Action: Public Goods and the Theory of Groups", Cambridge, Mass, Harvard University Press.

Peltzman, S. (1976), "Towards a More General Theory of Regulation", Journal of Law and Economics, 19, pp. 211-240.

Perusahaan Daerah Air Minum Daerah Khusus Ibukota Jakarta and Pam Lyonnaise Jaya (2001), Cooperation Agreement Amended and Restated as of 22 October 2001 Concerning Clean Water Supply and Service Improvement for the Western Part of Jakarta (Contract), Jakarta.

Posner, R. (1972), "Economic Analysis of Law", Boston, Little Brown.

Rigobón, R. and D. Rodrik (2004), "Rule of Law, Democracy, Openness and Income: Estimating the Interrelationships", Centre for Economic Policy Research. Discussion Paper Series No. 4653: 1-28.

Robison, R. and V. R. Hadiz (2004), "Reorganising Power in Indonesia: The Politics of Oligarchy in an Age of Markets", New York, Routledge.

Roces, M. (2000), "Kinship Politics in Post-War Philippines: The Lopez Family, 1945–1989", Modern Asian Studies, 34, 181-221

Rubinstein, A. (1982), "Perfect Equilibrium in a Bargaining Model," *Econometrica,* 50(1), 97-110.

Stigler, G. J. (1971), "The Theory of Economic Regulation", Bell Journal of Economics and Management Science, 2, 3-21.

The Edge (23 Jan 2006), "Reforming the Water Industry", Kuala Lumpur.

US Department of State (2005), "Investment Climate Statement Philippines", Washington DC.

Vickers, J. and G. K. Yarrow (1991), "Economic Perspectives on Privatisation", The Journal of Economic Perspectives, 5(2), 111-132.

Wallsten, S. J. (2001), "An Econometric Analysis of Telecom Competition, Privatization and Regulation in Africa and Latin America", Journal of Industrial Economics, 49, 1-19.

Williamson, O. E. (1985), "The Economic Institutions of Capitalism", New York, Free Press.

Annexure A-8.1
Structure of the PPC Game

The PPC Game

This game theoretic presentation of the interaction of public and private actors in a long-term contract for utility services draws on the application of game theory to negotiation and arbitration of Brams (2003) and the non-cooperative bargaining theory of Rubinstein (1982).

Structure of the Game

The PPC Game involves the interaction of the government and the firm in a 2-player, multi-stage game. I show the outcomes of the game under three sets of conditions:

1. A single-play game representing the entire period of the contract (for example, 25 years.[58]). In this version of the game, cumulative pay-offs to the parties for all years in the duration of the contract are shown. [Figure 8.2]
2. A single-play game representing the initial years of the contract (that is the period before the first renegotiation, on average less than two years into the contract term, or the period before the first 'comprehensive tariff reviews,' often set at 5 years.[59] [Figure 8.3]

The game proceeds in four steps after the contract is signed. First Government decides whether it will comply (C) or not comply (DC) with the terms of the contract. This can be understood as representing the government's decision of whether or not to raise tariffs in line with the contract, for example. It could also be understood as the government's decision whether to maintain or reverse a tariff increase already granted under the contract. The firm then decides whether or not to comply (C, or DC). This can be understood as representing the firm's decision of whether or not to carry out the capital investment programme specified in the contract. In contracts that have requirements for service outcomes (like coverage or volume of treated water supplied), rather than explicit investment requirements, we can understand the firm's compliance as carrying out adequate capital investment to meet the specified service outcomes. Alternatively, we can conceive of the firm's compliance decision as whether to pay any concession fees that are due. Together, these decisions will determine the total utility generated in the relevant time period, which will then be distributed as pay-offs to the two players.

In the subsequent stages of the game, the parties bargain over how this utility is to be divided between them. In Stage Three, the government chooses between (E) – to enforce the contract, or (RN) – to renegotiate the contract. In the final stage of the game, Stage Four, the firm decides whether to enforce or renegotiate. The moves are

[58] See Chapter 2 for a description of the typical structure of a concession contract

[59] Again, see Chapter 2 for a description of comprehensive tariff reviews. Five years is usually considered to be a suitable planning period for a utility.

shown in Table 8.1. Although the government moves first every time, and the firm moves last, the game would yield the same results if the order in which the players moved were reversed.

TABLE 1:
Summary of Moves in the PPC Game

Stage	Player	Decision
1	Government	Comply or Don't Comply
2	Firm	Comply or Don't Comply
3	Government	Enforce or Renegotiate
4	Firm	Enforce or Renegotiate

Description of the Game

Long-term Pay-offs

Initially, I consider a single-play version of the sequential game, in which the game represents the entire duration of the contract. The extensive form of the game is illustrated in Figure 8.6.

Looking at Figure 8.2, we see that the equilibrium outcome is achieved when both parties cooperate and achieve pay-offs of (5,5). We find the equilibrium by ruling out the other branches of the decision tree. Say the government decides not to comply, and the firm also does not comply. At the interim pay-off of (2,2), both parties can hold out for the same amount of time, and their bargaining power is unchanged. But neither party receives more than (2,2) in this branch. The Firm can achieve a higher pay-off by complying with the contract instead, so we can rule out this branch of the decision tree.

Looking at the neighbouring branch of the tree, we see the pay-offs if the Government does not comply, but the Firm does. Government will receive an interim pay-off of (7,-2). At this interim outcome, the government will be able to hold out longer than the firm, and so it will have a stronger bargaining position. Government will choose to renegotiate in Step 3, as enforcement yields a zero pay-off for the Government. If the firm agrees to a renegotiation, the government will be able to appropriate most of the surplus, leaving the Firm the lowest possible positive pay-off (4,1). However, the Firm would be better off enforcing the contract, and so will choose to enforce. We see that if the Government chooses not to comply in Step 1 of the game, the Firm will choose to comply and enforce, leaving the Government with a pay-off of (0). Thus the Government will be better off complying in Step 1, and we can rule out both the right-hand branches of the decision tree.

If the Government complies, and the Firm does not comply, the Firm will get an interim pay-off of (-2,7). The Firm will be able to hold out for longer at this stage in the game and so can increase its bargaining power in a renegotiation. If the Government agrees to the renegotiation, the Firm can appropriate most of the surplus and achieve pay-offs of (4,1). However, the Government will choose to enforce the agreement, leaving the Firm with a pay-off of (5,0). The Firm will

therefore choose to comply with the agreement, ruling out this branch of the game. We are left with the left-hand branch of the game, in which both parties comply with the agreement and achieve an equilibrium from which neither has an incentive to depart.

We assume for now that the contract can be enforced. If the contract is enforced, the player(s) who has not complied with the contract loses his surplus. The extra surplus is transferred to the compliant party. If both parties are non-compliant, then the surplus is divided between them according to the original distribution of pay-offs. No further penalties are imposed. This represents a situation of 'first party enforcement' in which one of the two parties actively seeks enforcement. We consider the implications of introducing third party enforcement below.

Figure 8.2 shows that over the life of the contract, pay-offs to both players are positive, and are modelled as equal.[60] It is assumed here that the parties' have equal bargaining power in the original negotiation before the contract is signed, so they would agree a contract with equal pay-offs for both parties. If the Government raises tariffs ('C'), but the Firm does not invest ('DC'), then over the life of the contract the Government will suffer a negative pay-off, while the Firm will be able to take dividends from the initial years of the project and will end up with a higher pay-off over its lifetime. If the Firm invests ('C'), but the Government does not raise tariffs ('DC'), then the Firm will not be able to pay off its debts or take dividends and will end up with a negative pay-off, while the Government gains political support from the higher level of political pay-offs from improved service without suffering the consequences of having to raise tariffs. If neither side complies with the contract, that is the Government does not raise tariffs *and* the Firm does not invest, then the two sides will protect themselves from negative pay-offs but will achieve a lower level of pay-offs than if they had both cooperated, referred to earlier as a 'welfare-reducing' equilibrium.

If both parties have positive discount rates, they will prefer pay-offs sooner to pay-offs later, the Game will terminate if the players cannot raise their pay-offs by continuing to play. Thus if both players cooperate, neither can raise his own pay-off by continuing to play, and so the Game will terminate at Stage 2, after both parties have decided whether or not to comply with the contract, without proceeding to Stages 3 & 4.

Figure 8.2 shows that there is a single equilibrium of full compliance (C,C) delivering pay-offs of (5,5) to the parties. It is interesting to note that this equilibrium is independent of the quality of contract enforcement. Even if the contract cannot be enforced, the parties will still choose to comply with the contract as this delivers them the highest total pay-offs from the contract. The equilibrium result in this game suggests that it will be rational for the Government and the Firm to comply with their own contractual commitments, even in the absence of any external enforcement mechanism. Integrating reputational effects also does not change the equilibrium

[60] 'Equal' here implies only that the outcome is at the same level in the preference orderings of the two parties, for example, an outcome is the second best outcome for both Government and Firm. It does not imply that the parties would place an equal monetary value on the utility pay-off.

away from the full cooperation equilibrium; nor does the repetition of the Game (which would correspond to a contract that can be renewed).

If the parties are rational and have access to full information, and value pay-offs throughout the life of the concession (that is they have very low discount rates), they should therefore always comply with the contracts they have agreed to. Yet, empirical evidence shows that non-compliance is common. The explanation lies in the timing of pay-offs and the discount rates of the players, as Figure 8.3 illustrates.

Short-term Pay-offs

In Figure 8.3, the pay-offs relate only to the initial years of the contract. As noted above, costs are incurred by both parties in these initial years. For the government, raising tariffs has an immediate negative impact on political pay-offs, while the benefits of improved service quality take time to show through. Thus the pay-offs to both sides from compliance are negative, (-2,-2) in the game illustrated in Figure 8.3. Here we assume that the game is played only once, and consider the outcomes depending on the level of enforcement.

If both parties comply, the highest pay-offs they can achieve are (-1,-1), as would be the case in a renegotiation which reduces the contractual obligations for both parties. If one party reneges, and is able to use its bargaining power to renegotiate, it can still only achieve a maximum pay-off of (1), but only if the other party agrees to renegotiation. Instead, the other party will maximise its utility by enforcing the contract to achieve a non-negative pay-off, leaving the parties with (0,0). The parties can achieve their best utility outcomes (2,2) by not complying with the contract, and this is the equilibrium of the game. [61]

However, in this version of the game, the quality of external contract enforcement is critical in determining the equilibrium outcome. With only first and second party enforcement, the parties will achieve their highest outcomes with non-compliance and non-enforcement. If an external party can enforce the contract, and impose penalties on the parties that do not comply, then a fully compliant equilibrium can be reached, as illustrated below.

The comparison of Figures 8.2 and 8.3 demonstrates the critical role of time horizons in determining the behaviour of the government and firm under a long-term contract, and the importance of the effectiveness of enforcement mechanisms where discount rates are relatively high. In the long-run, it is in the interests of the parties to comply with the contract in order to get the maximum pay-offs, but in the short-run, the rational choice for both parties is not to comply with the contract.

[61] If this is a repeated game, then the non-cooperative equilibrium may be dominated by the cooperative equilibrium. This will be the case if the parties view the game as repeated indefinitely. This may be an appropriate way to model a contract for 50-100 years with the possibility of renewal at the end of that period, as for the concession in Barcelona, Spain.

Annexure 8.2:
List of Interviews Conducted

Name	Location	Position	Organisation	Date
Abidin, Zainal	Shah Alam	Director	Selangor Water Monitoring Dept	3 March 2004
Adam bin Abdul Hamid	Johor Bahru	Councillor, Public works and Utilities	State of Johor Executive Council	10 Feb 2004
Agustin, Angel	Manila	Regulator Customer Services	Metropolitan Waterworks and Sewerage Services Regulatory Office	2 June 2004
Agustin, Rina	Jakarta		Kimpraswil (Department of Settlements and Regional Infrastructure)	10 Sept 2004
Alikpala, Ramon	Manila	Executive Director	National Water Resources Board	3 June 2004
Anderson, Carey	Hong Kong	Chairman, Former Asia Business Director of Thames Water	China Water Company	7 April 2004
Andrews, Charles	Manila	Principal Water and Sanitation Specialist	Asian Development Bank	26 May 2004
Anwar, Alizar	Jakarta	Consultant	Jakarta Water Regulatory Body	6 August 2004
Arriens, Wouter	Manila	Lead Water Resources Specialist	Asian Development Bank	26 May 2004
Beatrix, Marc	Hong Kong	Development Director	Suez Environnement Asia	13 May 2004 14 May 2004
Bernardo, Romeo	Manila	Partner	Bernardo Associates	5 June 2004
Berthelot, Jean	Hong Kong	North East Asia Regional Manager	Natexis Banques Populaires	20 April 2004
Bouvier, Christian	Jakarta	Finance Director	Pam Lyonnaise Jaya	10 Sept 2004
Brenner, Werner	Jakarta	Management and Financial Advisor	PERPAMSI (Association of Indonesian Water Utility Companies)	25 August 2004
Burrell, Alix	Singapore	Director Project Finance Asia	BNP Paribas Singapore	16 March 2004
Cases, Philip	Manila	SAVP, Regulatory Affairs Group	Maynilad	2 June 2004
Chan Ngai Wen	Correspondence	Director	Water Watch Penang	1 February 2004
Chatib, Benny	Jakarta	Finance Officer	Jakarta Water Regulatory Body	9 Sept 2004
Clarke, Steve	Hong Kong	Country Manager, China Executive Director	Suez Environnement Asia Sino-French Holdings	19 April 2004
Cruz, Macra	Manila	Deputy Administrator	Metropolitan Waterworks and Sewerage Services Corporate Office	27 May 2006
de Guzman, Elaine	Manila	Chief Power Market Development Div.	Department of Energy	17 June 2004
de Vera,	Manila	Chairman	Subic Bay Water	16 June 2004

Name	Location	Position	Organisation	Date
Antonio			Regulatory Board	
Esguerra, Jude	Manila	Researcher	Institute for Popular Democracy	24 May 2004
Fabella, Raul	Manila	Dean, School of Economics	University of the Philippines	25 May 2004
Fairclough, Graham	Manila	Executive	Subicwater	12 June 2004
Fernandez, Jun	Manila	Director	Leighton Contractors	8 June 2004
Flor, Mai	Manila	Director Business Development	Ondeo Philippines	8 June 2004
Frauendorfer, Rudolph	Manila	Urban Development Specialist	Asian Development Bank	2 June 2004
Gaza, Jomar	Telephone	Legal Counsel	Subic Bay Metropolitan Authority	15 June 2004
Hilwan	Jakarta	Department of Construction and Investment	Kimpraswil (Department of Settlements and Regional Infrastructure)	31 August 2004
Johnson, Richard	Johor Bahru	Consultant to SAJH, Head of Operations	Thames Water (Malaysia)	4 February 2004
Krieg, Thierry	Jakarta	President Director	Pam Lyonnaise Jaya	24 August 2004
Lamacq, Sophie	Hong Kong	Regional Manager, South China	Veolia Water Asia	19 April 2004
Lanti, Achmad	Jakarta	Chairman	Jakarta Water Regulatory Body	11 August 2004 23 August 2004
Lazaro III, Angel	Manila	Former Chief Regulator	Metropolitan Waterworks and Sewerage Services Regulatory Office	16 June 2004
Lee Hock Guan	Singapore	Fellow	Institute of S.E.Asian Studies, Singapore	13 February 2004
Lee Koon Yew	Kuala Lumpur	Deputy Director	JKR (Public Works Dept) Water supply branch	4 March 2004
Leow Chi Pa	Kuala Lumpur	Director	JKR (Public Works Dept) Water supply branch	4 March 2004
Madinsa, Jaseni	Telephone	Chief Engineer	PBA Holdings (Penang water utility)	15 March 2004
Mahmood bin Haji Ismail	Johor Bahru	Branch Manager	Federation of Malaysian Manufacturers, Johor branch	6 February 2004
McCormack, William	Singapore	Partner	Shearman & Sterling Singapore	11 March 2004
McIntosh, Arthur	Manila	Consultant	Asian Development Bank	27 May 2004
Medalla, Felipe	Manila	School of Economics	University of the Philippines	11 June 2004
Mohammad bin Alwi	Johor Bahru	Chief Financial Officer	SAJ Holdings (Johor concessionaire)	19 February 2004
Mohd.Idris Kaparawi	Johor Bahru	Director	Badan Kawal Selia Air Johor (Johor water regulator)	11 February 2004

Name	Location	Position	Organisation	Date
Ng Ching Hai	Johor Bahru	Director Planning and Technical	SAJ Holdings (Johor concessionaire)	19 February 2004
Novari Lis	Jakarta	Head Planning Division	Perusahaan Daerah Air Minum Jakarta (Pam Jaya)	26 August 2004
Ortega, Homer	Manila	Member	Metropolitan Waterworks and Sewerage Services Board of Trustees	5 June 2004
Polloso, Estrellito	Manila	Finance Director	Metropolitan Waterworks and Sewerage Services Corporate Office	5 June 2004
Poltak, Situmorang	Jakarta		Association of Indonesian Water Works contractors of Jakarta (AKAINDO)	18 August 2004
Razali bin Abdul Aziz	Johor Bahru	Chief Operating Officer	Equiventures	12 February 2004
Redman, Carl	Macau	Director Customer Relations	Macao Water Company	08 April 2004
Reyes, Alfredo	Manila	Member	Metropolitan Waterworks and Sewerage Services Board of Trustees	8 June 2004
Rivera, Perry	Manila	Group Director Regulation and Planning	Manila Water	28 May 2004
Rogers, Terry	Singapore	Retired (former Director Asia)	Thames Water International	16 August 2004
Roswita	Jakarta	Consultant	Perusahaan Daerah Air Minum Jakarta (Pam Jaya) (retired)	1 Sept 2004
Sa'ari Mohd. Nooh	Johor Bahru	Deputy Director	UPENJ (Economic Planning Unit, Johor State)	7 February 2004
Safwan, Achmad Djiddan	Jakarta		KOMPARTA	18 August 2004
Sakai, Randolph	Manila	Acting Regulator Finance	Metropolitan Waterworks and Sewerage Services Regulatory Office	2 June 2004
Sangster, Colin	Hong Kong	Chief Financial Controller	Suez Environnement Asia	13 May 2004 14 May 2004
Santos, Eduardo	Telephone	Chief Regulator	Metropolitan Waterworks and Sewerage Services Regulatory Office	9 June 2004
Santos, Nathaniel	Manila	Member	Subic Bay Water Regulatory Board	10 June 2004
Schmidbauer, Stephan	Hong Kong		Bayerische Landesbank	20 April 2004
Sikar, Sjahrun	Jakarta	Thames Water Country Representative, Indonesia	Thames Water International	25 August 2004
Siregar, Kumala	Jakarta	Customer Relations Dir.	Pam Lyonnaise Jaya	24 August 2004
Skelcher, Gary	Singapore	Asia Director (former TPJ)	Thames Water International	16 August 2004
Subramaniam	Kuala	General Manager	PUAS (Selangor water	4 March 2004

Name	Location	Position	Organisation	Date
	Lumpur		distribution company)	
Sukarma, Risyana	Jakarta	Water and Sanitation Specialist	Water & Sanitation Program, SE Asia	10 Sept 2004
Suksmaningsih, Indah	Jakarta	Chairperson	YLKI (Indonesia Consumers Association)	04 August 2004
Tirona, Salvador	Manila	CFO	Maynilad	02 June 2004
Tutuko, Kris	Jakarta	Technical Director	Perusahaan Daerah Air Minum Jakarta (Pam Jaya)	12 August 2004
Valahu, Philippe	Singapore	Regional Manager Asia	Multilateral Investment Guarantee Agency	16 March 2004
Weitz, Almud	Manila	Urban Economist	Asian Development Bank	27 May 2004
Wermert, Stephen	Manila	Senior Structured Finance Specialist	Asian Development Bank	26 May 2004
Widya, Salusra	Jakarta	DG of Human Settlement and Housing	Badan Perencanaan Pembangunan Nasional (Indonesian National Development Planning Agency)	7 Sept 2004
Wind, Philippe	Macau	Chief Executive Officer	Macao Water Company	8 April 2004
Woodcock, Jim	Jakarta	Water and Sanitation Specialist	Water & Sanitation Program, SE Asia	6 Sept 2004
Yamamura, Shigeru	Jakarta		Japan Bank for International Cooperation	3 Sept 2004
Yniguez, Cesar	Manila	Consultant		17 June 2004
Yoong Jih Ping	Johor Bahru	President	Johor Consumers Association	10 March 2004
Zahdi, Ahmad Jamil	Johor Bahru	Chief Executive Officer	SAJ Holdings (Johor concessionaire)	19 February 2004
Zainuddin bin Mohd. Ghazali	Johor Bahru	Director Operations	SAJ Holdings (Johor concessionaire)	15 March 2004
Zhang Ming	Manila	Infrastructure Sector Coordinator	World Bank	3 June 2004
Zulkifli bin Ibrahim	Telephone	Asst Director Operations and Maintenance Unit	Water Supply Dept. Negeri Sembilan	2 March 2004

9

The Tripod of Independence, Autonomy and Accountability of a Regulator – An *Analysis of the Indian Competition Law*

S. CHAKRAVARTHY

Introduction

There has been a significant metamorphosis in the field of economic governance in India in the last two decades. For about four decades since India became a free country in 1947, the role of the government was pervasive in the sense that it was the policy maker, service provider and regulator. Over the last two decades, the role has shrunk in that it has become less pervasive. It is in the last mentioned role, namely regulator, that the metamorphosis is tellingly significant. Policy making is still the prerogative of the government and depends on its polity, democratic values (or lack of them), its understanding of the political-economic scenario within the country and without and its ability to lead and take decisions besides carrying the people on board. Providing services, particularly in the areas of power, water supply, railways and the like constituting essential services still rests with the government or its enterprises, albeit private providers are operating in a small way. In the area of other general services like telecommunications, civil aviation etc, increasingly private players are participating in a big way, the paradigm shifting from what was called in the 60s, 70s and 80s as attaining the 'commanding heights of the economy' to the current market economy widely popular among Industry and Business. Private investment, private service providers and suppliers form the new horizon in economic governance firmament. This has resulted in an imperative need for effective and efficient regulators. Government which was the main regulator in the four decades or more since India attained its independence in 1947, has now explicitly recognised that to regulate the markets directly would not be appropriate. Instead, the movement is to choose to regulate through independent regulators. Setting up of independent regulators has been, perhaps, the most important development in the field of economic governance in the last two decades.

This metamorphosis in the form of the movement introducing a hitherto unknown institution(s), namely, the independent regulator(s) in the fields of telecommunications, ports, power, competition etc has raised questions on their character and performance and on whether they have subserved the objectives for which they have been established. Regulator is an institution on par with other major institutions of democracy. As India marches towards market economy paradigm with the markets becoming important arbiters of economic decisions, one can prognosticate that the significance of independent regulators will enhance in the next few years or decade.

One important regulator is being ushered in by the new Indian competition law, namely, Competition Act, 2002 (Act, for brief). The regulator under the Act will be known as the Competition Commission of India (CCI, for brief).

This paper addresses the different aspects of the three dimensions that effectuate or retard the effectiveness and efficiency of regulators. The three dimensions are, as in the title of this paper, independence (autonomy), expertise and accountability of regulators and they constitute a tripod. After a theoretical treatment of the dimensions, an analysis has been made in the paper on how the Act has incorporated them or otherwise.

Raison d'etre for Regulation

Intervention in the market process is inevitable, given the reality of market failure in many countries, particularly the developing ones. Market failures warrant that crucial economic sectors are brought under the discipline of surveillance, regulation and intervention. But intervention may be seen to assume different forms in different economic milieu and there cannot be 'one size fits all'. If the economic sectors are left to unregulated markets, it can only be at the peril of consumer interest getting severely compromised or prejudiced. The form of intervention and also its nature and character would depend on the source of failure of the market. There could be two broad types of interventions. One type seeks to restore efficiency in a particular market through the creation of a sectoral regulator. Illustration of such regulators may be seen in the areas of power, telecom, insurance and the like. The other seeks to create an entitlement for competition through a competition law. Competition law is generally designed to foster competition in the market and to promote competitive practices in markets. It is intended to prohibit, if not eliminate, anti-competitive practices and to frown upon imperfect competition and take remedial measures as may be necessary. The two types of interventions essentially differ in their nature (Anant and Sundar 2005).

Worldwide, natural monopolies have been and are producing and supplying a few goods and delivering a few services, considered critical for the society, particularly utilities. The premise on which such an arrangement was conceived and established was the belief that monopolies foster economies of scale in production, supply and delivery of critical goods and services, though not all. The rationale centred round the economic theory that as output increases, the average cost of production of goods and delivery of services reduces. But in such a scenario, the flip side is that absence of competition would give the monopoly supplier of goods or monopoly renderer of services the opportunity to set prices, often unreasonably high, without commensurate improvement in quality or value for money. Consumer interest gets prejudiced as price setting (higher than reasonable) gets compounded by other monopoly/dominance dictated consequences like inefficient allocation of resources, poor quality of goods and services and operational inefficiencies. Recognising such a prejudice to consumer interest, many countries have reoriented or are reorienting their policies relating to economic governance. They set store on

economic regulation to stimulate competitive outcomes. Some of them have also come to believe, and rightly so, that market forces and competition can improve the production of goods and delivery of services without affecting the economies of scale. The economic reforms initiated by India in 1991 constituting Liberalisation, Globalisation and Privatisation have stressed competition in the market as an important component thereof. A report of the Ministry of Finance of the Government of India has noted that introduction of privatisation and de-regulation has been impelled by pragmatic and ideology-free policies (Ministry of Finance 1996).

The pragmatic policies were based on acknowledging government's inability to supply goods and render services efficiently in a commercially sound manner. Procedure rather than substance had primacy in the bureaucratic approach because of a preponderance of oversight committees and institutions like Parliamentary Committees, Vigilance Commission and Comptroller and Auditor General, all of whom, individually and severally, examined critically the commercial decisions of the government and the government enterprises. Furthermore, in the globalisation milieu with India having entered the WTO, it became imperative for the government to provide efficient and cost effective production and supply of goods and rendering of services by Indian enterprises, whether government owned or private owned. In the government's view, rightly, such an approach became necessary to enable India to successfully compete in the global market. Yet another dimension that necessitated a policy change was the need to attract large scale investments (in the manufacturing sector in particular) and to require the private sector to play a bigger role than hitherto. Thus the government had to re-shape its traditional policies of managing the manufacturing sector and the service rendering sector through monopolies or near monopolies by introducing competition and unbundling of services.

If the private sector was assigned a bigger role than before and the public sector a slightly smaller role (intention was not to do away with public sector but to reduce its *omni* presence), it became necessary to provide a level playing field and conditions for reasonable returns for the private and new investors. In a monopoly/dominant situation, government enterprises were extended a number of privileges and government subventions and even concessions like subsidised tariff, tax rebates, price preferences etc. Some of these privileges had to be disbanded or reduced to enable the lay of manufacturing and services landscape to be level for the private players *vis a vis* the government owned players.

Privatisation process is often visited with high transaction costs which need to be mitigated. The changes in the manufacturing and services environment were and are continuous and complex and consequently, a need arose to develop a workable framework for private sector players and public sector players to co-exist in a level playing field for efficient and economic supply of goods and rendering of services. Such a framework warranted the establishment of sectoral regulators, who could keep the balance even between the interests of both the public sector and the private sector players and stakeholders and, in particular, consumers. Sectoral regulators came into being, particularly in the utilities and services sector. The sectoral regulator had to be assigned the role of an outsider as he had to ensure that no

special privilege was shown to the government enterprises and to ensure that there was a level playing field for all participants. For which purpose, he has been enjoined to remain equidistant from the suppliers of goods and renderers of services including the government. Sundar and Sarkar (2000) have succinctly summed up the benefits of regulation as follows:

'Several benefits are likely to accrue out of a "rational and even-handed" regulation, which include building consumer trust and confidence; establishing better avenues for communication between the regulated utility and stakeholders (most often, it is the regulatory agency that fosters such dialogue through technical conferences, symposia, open hearings, etc.); ensuring a fair rate of return on the utility and just and reasonable rates for the consumer; encouraging better standards for delivery of services; and letting the utility and other stakeholders assist in developing them.'

The *raison d'etre* for regulation and for sectoral regulators set out above leans on the appreciation of the government that there is the need to separate the role of the government as a goods manufacturer and service provider and as a policy maker. Furthermore, competition has been introduced in many sectors as is evidenced in the unbundling of the power sector, the enactment of Electricity Regulatory Commission Act, 1998 [creating the Central Electricity Regulatory Commission (CERC) and the State Electricity Regulatory Commissions (SERC)], the establishment of the Telecom Regulatory Authority of India (TRAI), the Tariff Authority for Major Ports (TAMP) and the Securities Exchange Board of India (SEBI) etc.

Well before the conception and constitution of sectoral regulators, particularly in the utilities and service sectors, the need for a Competition Law and Competition Law Authority was recognised and India legislated a law and constituted an Authority for its implementation and enforcement. In 1969, India enacted the Monopolies and Restrictive Trade Practices Act (MRTP Act, for brief). Its principal objectives were to curb monopolies and entertain complaints of anti-competitive practices and adjudicate on them. But the MRTP Act did not have teeth to effectively eliminate anti-competitive practices and behaviour on the part of enterprises and firms. Finally, the government decided to enact a new competition law called Competition Act, 2002 to replace the old and ineffective Monopolies and Restrictive Trade Practices Act, 1969. The new law has yet to be enforced (except for advocacy functions) and has the primary responsibility to not only curb anti-competitive practices but also to foster competition in the market.

Thus India has sectoral regulators and competition regulator.

Tripod of Regulators

The thesis of this paper is that the foundation on which the edifice for regulators - both sectoral and competition - needs to stand has to bear well conceived three pillar columns, namely, Independence (autonomy), Expertise and Accountability, forming a tripod. All the three pillars have importance and therefore require treatment herein. Before addressing the various aspects of the three pillars, it needs to be noted that there is a perception that Independence and its close cousin,

Autonomy (first pillar) are not exclusive and are also synonymous. But they do bear a distinction. However, despite the distinction, they need to be treated as synonymous, as will be seen in the discussion that follows in the next paragraph.

Independence and Autonomy Distinguished

Independence and autonomy are not synonymous but distinguishable. The distinction is blurred but recognisable. Institutional efficacy demands functional independence. Functional independence carries with it an implied degree of freedom to make decisions and maintaining an arm's length relationship from interest groups. Autonomy may be regarded as a subset of independence. This requires some explanation. Independence generally comprises two elements, namely, automatic funding of the institution and fixed tenure for its head and members says a discussion paper (CUTS 2006a). The paper notes that '[t]aken together, these two elements confer an unparalleled freedom of action on the institution'. There could be some other elements but the aforesaid two are the most important. Autonomy, usually, does not need to have automatic funding as an element. If automatic funding is absent, independence is likely to be seriously undermined but autonomy may not be. Functional autonomy could exist even if there is no automatic funding. Independence is riveted to automatic funding because the institution is enjoined to perform the balancing act amongst conflicting interests and, in particular, State-owned enterprises (being one such interest group), which act cannot be performed in an entirely independent manner, were the institution be dependent on funding by someone at the latter's discretion. Suffice it to remember that independence is larger than autonomy and subsumes it.

Independence/Autonomy

This is the first pillar of the tripod. In order to effectively and efficiently discharge its duties, a regulator, perforce, needs some degree of freedom to be provided by the statute creating it. This degree of freedom or independence should not be absolute but should be circumscribed by the laws of the land and the policy of the government. Having said this, the regulator should not be dependent on the executive for survival. Its survival needs to be guaranteed by law.

As noted earlier, institutional independence has become imperative for the regulator to perform the challenging task of maintaining a judicious balance amongst conflicting interest and maintaining an arm's length relationship from interest groups. The statutes creating the institutional regulators may or may not explicitly mandate independence for them. In reality and practice, many regulators lack the requisite functional and organisational autonomy to be genuinely independent.

Independence may be viewed in terms of "negative freedom" and "positive freedom". The former is freedom from external coercion and the latter is freedom to do what one (the regulator) wants.

External coercion arises mainly from the discretion that the government has in making available to the regulator funds for its expenses. For instance, the new Indian competition law, Competition Act, 2002 states that the Central Government may 'make to the Commission grants of such sums of money as the Government may think fit for being utilised for the purposes of this Act' (emphasis added). This discretion takes the form of external coercion and prejudice the negative freedom referred to above. In particular, government could utilise this weapon of discretion to pressurise the regulator to decide a particular case, issue or dispute in a desired manner. For obvious reasons, government may not document its pressure but in subtle ways twist the arms of the regulator to decide a matter in a particular manner. Besides the said pressure, there could be other kinds of pressure constituting external coercion. Political pressure, 'old boy's network' pressure and the like are examples of external coercion, administered on the regulator subtly undermining negative freedom.

Positive freedom is not an unbridled freedom but is tethered to the confines of the statute creating the regulator. Within the contours of the statute, the regulator must have the freedom to adjudicate and pass orders on disputes or decide matters like tariff fixing etc. This positive freedom is imperative to the regulator, if it has to perform its assigned functions and be effective in the market. The different market players must have confidence and faith in the regulator holding the balance even and in ensuring a level playing field for them.

Governments, despite creating institutions as regulators and despite proclaiming their intention to accord them functional independence, in practice, are generally found to loathe loosening direct control over them. The Executive would like to keep the regulators in some kind of a check, be it through funding mechanisms or through arm twisting tactics of different kinds. Yet, it cannot be gainsaid that independence of regulators is the touchstone of their effectiveness, efficiency, transparency and accountability in the system. The discussion paper (CUTS 2006a) very succinctly observes:

'Institutional independence has an inverse relationship with external influences over the authorities. The lesser the influence, the greater will be the scope for functional autonomy. There could be a host of possible external influences, including those wielded by interest groups. However, the relationships these bodies maintain with the Government have always been at the centre stage of the debate. The Government can always discover ways and means to conveniently distort the nature and extent of functional autonomy of such institutions. Therefore, in practice, the extent of the vulnerability to Government influence actually determines the degree of independence for these institutions.'

Thus independence viewed in terms of negative and positive freedoms constitutes an important pillar for the regulator, both sectoral and competition.

Multiple Objectives – Social and Political

Taking the area of competition as an example, governments generally have multiple objectives. As a consequence of multiple objectives, public interest policies

and intrinsic pure competition principles often are seen to be in conflict with each other. Because of this, competition law gets diluted and also suffers inconsistent application. The myriad conflicting objectives are pursued by the stakeholders concerned through political contacts and pressure groups. Unless such pressures are reined in, the independence of competition policy authorities and competition law implementing agencies get severely undermined. Compromises and political interventions prejudice the benefits of competitive process, namely, economic efficiency.

An example of this is in Box 9.1 below, a Pakistan experience.

BOX 9.1: Compromise Inimical to Competition

The Monopoly Control Authority (MCA) in Pakistan has the responsibility, *inter alia,* to conduct enquiries into restrictive agreements and trade practices. When the cement manufacturers in Pakistan increased the sale price of a bag (50 kgs) of cement from Rs. 135 to Rs. 235 in October 1998, the MCA initiated an enquiry into the causes of the price increase after noting that the cement manufacturers were indulging in price cartelisation. The All Pakistan Cement Manufacturers Association (APCMA) informed the MCA that the reasons for the increase were increase in the cost of inputs and higher taxes. After collecting data, MCA found that the costs of inputs had not gone up except power tariff and that too only marginally. The taxation levels had actually been reduced. Cartelisation was manifest among the members of the APCMA and was against public interest, according to the MCA. MCA directed the cement manufacturers to cease cartelisation and revert to the pre-October 1998 price level. Furthermore, it imposed a fine on each manufacturer and ordered that the consumers be compensated against verifiable claims. However, the cement manufacturers refused to comply with the order of the MCA and challenged the same in the High Court and obtained stay orders. Thereafter, the Ministry of Commerce, disregarding the supposed independence of MCA, persuaded the latter to close the case. It held negotiations with APCMA, lowered excise duty on cement and fixed the price of a bag of cement at Rs. 200. In doing so, the Ministry of Commerce had given in to the pressure of the cement manufacturers' lobby (CUTS 2006). This compromise was clearly inimical to the independence of the competition authority and to consumer interest.

In developing countries, lack of political will has been recognised as one of the bottlenecks in adoption and effective implementation of competition and regulatory regimes. One needs to acknowledge and appreciate the fact that a democratic set up requires politicians and their parties to win elections to reach to policy-making positions. Therefore, they must satisfy aspirations of their electorates to whom they have to go back, at intervals, to seek a fresh mandate. In given contexts, one can easily comprehend, if not agree with, the reasons for politicians not allowing implementation of competition policy principles. By parting with certain hitherto enjoyed powers to the regulator, government loses the leverage it has, in satisfying sections of electorates and vested interests (vested interests are also often seen to fund the parties during elections). However, efforts are short in identifying potential gains for politicians out of promoting and implementing competition policy measures and in understanding as to how competition policy outcomes could help them retain/enhance their public image/support-base. What is required is an alignment between the 'competition policy outcomes' and the 'incentives for

politicians'. Accomplishment of this would go a long way in developing countries adopting and implementing competition policy principles on a fast track. For instance, where cartelisation has taken place and members of the cartel (generally with financial muscle and big pockets) fund the politicians in power, those in political power should be able to comprehend that cartels could devastate consumers, who really constitute the vote bank and that by proceeding against the cartel, a large number of consumers would benefit and consequently may patronise them in the long run. It is difficult to posit a strategy for this except to emphasise that by following an appropriate competition policy, the long term interests of consumers will be served and so too the interests of those in power.

In the Pakistan case, government itself had intervened much to the discomfiture of the regulator. While government should have the prerogative of making policy decisions, the field should be left free for the regulator to oversee if within the policy framework, all players have a level playing field. But this does not happen in real life, because the dividing line between policy and regulation is, more often than not, thin.

This is so, in particular, in the area of utility pricing. Utility pricing is a politically sensitive issue and government is used to taking decisions thereon guided by political exigencies. After the creation of regulators, utility pricing should be legitimately left to the regulator, who is enjoined to maintain a balance between the interests of the utilities, consumers, stakeholders and of course, the government. Unfortunately, that has not been the case in many areas and jurisdictions, as was evidenced in the Pakistan case.

This suggestion of leaving the area of pricing to the regulator brims with practical difficulties. Its feasibility could be in doubt in the milieu of politico-economic constraints. Again the argument of short term political gains against long term economic gains surfaces. In utility pricing, the party in power may like to subsidise certain sections of society (like the farmers) in supplying power. The cost of subsidy obviously has to be borne by some other consuming sector, like the manufacturing. If so, the economy will be required to bear the cross of extra cost (arising out of subsidising the agriculture sector) suffered by the manufacturing sector. This can manifest in two ways. One, by way of enhanced price for the consumers and the other, by way of the manufactured goods getting outcompeted by goods in import. But then one has to countenance the fact that certain sections of society do require to be given certain subsidies. In that case, it will be unfair to place the burden on some other sector. A way to redress the situation is for the government to reimburse the utility to the extent it had been advised to provide subsidy to a sector so that the burden is not unreasonably placed on someone else.

This raises the larger issue of governmental policies constituting a boundary for the regulator. By and large, it is axiomatic that government has the prerogative to lay down policies and policy framework. Particularly in democratic polities, people's will usually stands reflected in governmental policies. For instance, in the State of Andhra Pradesh, the Congress party promised before the elections in 1994 that free power would be made available for farmers. Notwithstanding the cost to the

exchequer, government after coming to power had to provide free power and it is continuing to do so even today. People's will cannot be easily brushed aside. Regulators are bound by policies laid down by the government. Given the sovereign authority for the government to lay down policies and express them, it is imperative that they are conveyed to the regulators in a transparent manner. The statutes creating the regulators need to specify the power of the government to lay down policies and specify the obligation of the regulators to be bound by them. Oftentimes, there is seen the ambiguity relating to the role and responsibilities of a regulator. Consequently, it would be eminently desirable to specify the regulator's mandate in the statute itself. When as suggested above, the role and responsibilities of the government are specified in the statute, the distinct turfs for the government and the regulator will be clearly understood by both. In the event there is any confusion between policy making and regulatory role, it should be resolved by the government issuing specific clarifications to avoid conflict-raising overlaps.

In this context, a question is likely to arise as to what constitutes 'policy'. Most, if not all statutes creating regulators in India, omit to define 'policy'. It becomes subject to interpretation with the attendant arbitrariness in so doing, be it the government itself, the regulator or the courts assuming the task of interpretation. The lack of clarity in this regard could undermine the independence of the regulator. The Chairperson of a regulator, if weak or if appointed on patronage by the government would, likely seek the interpretation of the government rather than attempt to interpret. Likewise, if he is a strong personality, he might tilt the balance in his favour, namely, that of the regulator. The Discussion Paper (CUTS 2006a) suggests a solution, as follows, though government may be loathe in accepting it, as it would like to hold the strings vis-à-vis the regulator.

'An independent authority law should clearly demarcate the respective domains of their functional responsibilities with the State policy. The possibility of Government interference in the functional domain of the authority, in the name of policy directives, needs to be eliminated. Even when issuing so-called 'policy directives', the law should make it mandatory for the Government to consult the authority concerned and it be given an opportunity to express views, prior to issuing such directives.'

Automatic Funding

Independence, as noted above, requires in the first place, automatic funding. Government functions through Ministries and Departments, who prepare their annual budgets not only for themselves but also for the institutions within their ambit. It is customary for the Ministries to consult with the institutions within their purview in preparing and providing for a budget for them. But there are variations in this regard in the statutes creating regulators.

For instance, the sectoral regulator for electricity, the Central Electricity Regulatory Commission in India under the Electricity Regulatory Commissions Act, 1998 enjoins the Commission to prepare its budget for each financial year showing its estimated receipts and expenditure and forward the same to the Central

Government (p.31). It is the Central Government that approves the budget. Furthermore, the expenses of the Central Commission including all salaries and allowances payable to, or in respect of, the Chairperson and the Members thereof are mandated to be charged to the Consolidated Fund of India (p. 11). Likewise, the State Electricity Regulatory Commission established under the same statute is enjoined to prepare for each financial year its budget, showing its estimated receipts and expenditure and forward the same to the State Government (p. 33).

In the case of competition regulator under the Competition Act, 2002, there is no provision for preparing a budget for the Competition Commission of India. The statute provides for the constitution of a "Competition Fund" into which will be credited government grants, costs and fees received from litigating parties etc (p. 51). As mentioned above, government has the discretion of making to the Commission grants as it thinks fit (p. 50). Obviously, the grant will have to be budgeted for by the government but the statute does not make it obligatory for the government to consult the Commission before preparing the grant budget. But in actual practice, government consults the Commission.

The illustrations above have been provided to stress the argument that most regulators are dependent on government making available funds for their functioning and for carrying out their responsibilities. It therefore cannot be gainsaid that there is the potential for abuse of the discretion in the hands of the government in funding the regulator's expenses and also that there is the possibility of prejudice to its independence.

Oftentimes, what is provided in the budget falls considerably short of the needs of the institutions, in terms of the objectives set for them. Short-funding of the budgetary needs of the regulatory institutions besides limiting the activities of the regulators render them to beseech the Ministries for additional allocations. This gets manifested in terms of the functionaries of the regulators frequenting the corridors of the Ministerial secretariat. Naturally the fall-out is the undermining of their independence. At least the potential for such undermining surfaces.

Most, if not all, regulators do not get the funds they need or the funds they seek in their proposals forwarded to the government. Categorical evidence is not forthcoming but this is what the author was given to understand when he spoke to some regulators[62]. Tellingly, a report of CUTS (2002) observes that the budget of the MRTP Commission 'is a negligible percentage of the Union Budget and the GDP'. The report has provided a Table (see next page) in support, which is self-explanatory.

An interesting aspect thrown up by the Table is that notwithstanding the order of resources made available to the Commission by the government, the Commission itself did not expend the same fully. This is because the government did not sanction certain expenditures in time before the year was out with the result the Commission could not spend the monies allotted relating to the sanction[63]. As CUTS (2002) has

62 The author spoke to the Chairpersons of TRAI and SERC (Andhra Pradesh) and Member, CCI.

63 The author was Member, MRTP Commission and had personal knowledge of monies being unused for want of sanction of expenditure by the government.

pointed out, '[T]he Commission manages the budget but has to seek permission from the Ministry to incur expenditure beyond a certain limit'. This is what constitutes lack of functional autonomy. It impacts the independence of the regulator. This is dealt with a little later in this paper.

TABLE 9.1
Annual Budget of the MRTP Commission

Year	Actual Expenditure (Rs. in billions)	Budget (Rs. in billions)	Budget of Central Govt. (Rs. in billions)	(3) as % 0f (4)	GDP (Rs. in billions)	(3) as % of (6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1996	10.48	11.08	2010.07	0.0005	13682.08	0.00008
1997	14.363	14.399	2320.68	0.0006	15224.41	0.00009
1998	16.724	17.728	2793.60	0.0006	17582.76	0.00010
1999	-	17.605	2980.84	0.00059	19569.97	0.00009

Reference: CUTS (2002)

Funding mechanism of a regulator could be in terms of two distinct methods. The first is earmarked funding. The other is empowering the regulated utilities to levy fees from the consumers. The first method guarantees a stable funding source for the regulator. In the second method, government sometimes sets a cap on the levy of fees. In Argentina, the cap on the levy of fees is 0.5% on sales tax on the telecommunication segment and 2.67% of the consumer bill in the case of the water regulator (Sundar and Sarkar 2000).

While budgetary constraints and financial crunch are often contributory factors for under-allocations in the budget for the institutional regulator, the problem could be resolved, if the expenses of the regulators, for instance in India, are approved by the Parliament and charged to the Consolidated Fund. In India, the Consolidated Fund is voted by the Parliament after a discussion of the draft budget. In other words, independence of the institutional regulator could be protected and sub-served by the Parliament voting its requirements and directly charging the same to the Consolidated Fund.

The line Ministry's role would be confined to making an exercise on the required budgetary allocation in consultation with the institutional regulator and placing the matter before the Parliament to vote. The exercise to be done by the Ministry needs to be linked to the objectives and activities set for the regulator on a realistic basis and whatever is decided after the exercise in consultation with the regulator must be placed before the Parliament for approval without any reduction or unilateral chopping. In a democratic polity, automatic funding needs to be understood as approval by the elected representatives of the people, namely, the Parliament with the government's role in carrying out the budgetary exercise being somewhat limited in the interests of the independence of the institutional regulator. Put in another way, government will not be allowed to veto the regulator's demand for

budgetary allocation arbitrarily, for which purpose, the mechanism of effective consultation between the Ministry and the regulator should be in place.

The line Ministry or Department of the government controls the budget and other financial sanctions of the regulator in most countries. Regulator's dependence on the line Ministry to get its budget approved is likely to limit its independence indirectly. In this context, it is desirable that the regulator is allowed to generate resources on its own through a fee, cess etc wherever possible and is also allowed to spend it. For instance, in India, the Insurance Regulatory and Development Authority (IRDA) and Securities and Exchange Board of India (SEBI) have been allowed to raise resources on their own. TRAI and CCI have been allowed to levy fees and charges and to set up their own fund. On the other hand, TAMP and CERC are wholly dependent upon the government for funding (CERC funds are charged to the Consolidated Fund of India). Even where a regulator is allowed to raise resources on its own, government may not permit it the freedom to spend the amount it raises, as is the case with IRDA (IRDA is currently having a dispute with the Ministry of Finance on this issue).

Staying with the issue of setting up of a fund for a regulator, some of the Members of Parliament, during the discussions[64] on the Electricity Bill, 2001 observed that a separate fund may result in lack of transparency and create doubts of financial probity or conduct of the regulator 'leading to lack of confidence and inviting public criticism'. They queried as to what was special about the electricity regulator that a separate fund should be created, when the Supreme Court and High Courts were functioning with their expenses being met out of the Consolidated Fund of India.

The TRAI Act, 2000 provides for crediting all the receipts, fees, interest and government grants to the 'TRAI General Fund'. In practice, however, the amounts are deposited in the Consolidated Fund of India, as government revenue. TRAI gets allocations of monies as government deems fit from time to time. This detracts from the independence of TRAI. The Competition Act, 2002 provides for the setting up of the Competition Fund into which will be credited government grants, fees levied by the CCI, costs etc. There is no uniformity in India regarding setting up of funds for regulators but there appears no harm to set up such funds in the interests of financial stability for the regulators, subject to taking care of the concern expressed in the ensuing paragraph.

One should be mindful of the possibility of a risk with the regulator using the said tool of raising resources and maximising the fees/cess as a part of fund-raising. A further risk lies in the regulator passing on the costs to the consumers, if it is allowed to charge fees for self-financing. One way out of this concern is for the government to set caps, as in Argentina, in the statute itself so that the regulator is under some check in raising resources to the detriment of the consumer. Subject to the cap, creation of separate funds for regulators is advisable.

---

[64] Please see http://164.100.24.208/debate/debtext.asp?slno=3221.
http://164.100.24.208/debate/debtext.asp?slno=5604.
http://164.100.24.208/debate/debtext.asp?slno=5625.

In this paper, emphasis has already been laid on the need for "automatic funding" in the interests of the independence of the regulator. The essence of "automatic funding" is the absence of dependence of the regulator on the Ministry and Department of the government for securing its budget and subvention of funds to it. Besides "automatic funding", the more crucial requirement for the regulator is the financial autonomy to meet its expenditure. While funding needs to be insulated from government interference through the route of "automatic funding", the regulator should have the power to apply the funds, as it deems fit in the discharge of its duties and responsibilities. Governments, true to their general predilections for control and oversight of the functioning of the regulators, retain the power to sanction expenditures for the latter. Sometimes such powers of sanction are for expenditures beyond a threshold limit or for capital expenditure. The illustration of the MRTP Commission in India not being able to spend even the monies allotted to it for want of sanction from the Ministry of certain expenditures bears testimony to the lack of functional autonomy of the competition regulator. Even in simple matters like participation in conferences, lack of functional autonomy rears its head for the MRTP Commission. Box 9.2 elaborates this.

BOX 9.2
Procedure Not Substance

MRTP Commission, the competition regulator under the MRTP Act, 1969 may like to participate in conferences within the country and abroad in order to update knowledge and skills for its Chairman and Members in the relevant technical area and also in regulation For this purpose, the regulator has to seek government approval prior to its participation in the conferences. In many instances in the past, delays in according approval and last minute clearances had occurred[65] with the result that the regulator found it difficult to meaningfully participate in the conferences. It is the regulator, who can analytically assess the scope, importance and usefulness of conferences for participation but, the government is likely to view participation in the conferences on the limited perspective of expenditure involved, the number of times the regulator has participated in the past etc. Though such considerations do have force, it should be left to the regulator to arrive at decisions to participate in conferences having regard to its professional requirements and to its needs for interaction with sister regulators of other countries. While procedure and its cousin control are important, they cannot be at the cost of substance and objectives in participation at conferences.

Independence is often regarded as freedom from any supervision or control by any authority. In many countries, particularly the developing ones, democracy may not be fully mature nor do their economies have the ability to adjust to the pulls and pressures of market economics. The regulatory authorities are independent only in name and to a limited extent, as their ability to balance the conflicting interests of the players in the market, the consumers and government gets circumscribed, if their directions or adjudicatory decisions have an adverse impact on the electoral fortunes of incumbent governments. Independence and autonomy constitute the cornerstone of an effective and efficient regulator. At the same time, one should not obfuscate the

[65] The author was member of the MRTP Commission and had personal knowledge of such happenings.

possibility of the regulator having unbridled power to question and annul government policies and objectives thus diluting the sovereignty of the Executive. There should be a balance. Care should therefore be taken to ensure that the regulator while being invested with adequate independence is not invested with excessive independence. There is the need for a balance between independence and larger public interest dimensions. Unbridled independence for the regulator is as undesirable as lack of independence.

To sum up, independent regulation implies that the regulator should be independent of the stakeholders and enjoined to discharge its responsibilities in the best interests of all, without any prejudice or leaning towards any particular stakeholder. In other words, the regulator is required to ensure a level playing field for different operators in the market and also a fair deal to both the consumers and the service providers including the government. Statutorily, the independence of the regulator must be guaranteed. Without independence, the credibility of the regulator will suffer and will not be effective. An important issue in this respect is the independence of the regulator in its relationship with the government. It is advisable to demarcate the turf between the government and the regulator in the statute itself. While the government should have the authority to make policy decisions, which will be binding on the regulator, the regulator should be allowed adequate degree of the freedom to effectively discharge its duties within the policy framework. The regulator's survival should not be dependent upon the pleasure of the government and its independence should be guaranteed by law and respected by everyone. This independence should not be absolute but subject to the laws of the land and policy of the government. A regulator should have the understanding that it is not a substitute for the government but has been established to perform a set of functions under the statute creating it.

Two Powers of the Government

There are two powers of the government which could prejudice the independence and autonomy of the regulator. One is the power to issue policy directives to the regulator. This power, in some cases, is incorporated in the statute creating the regulator. For instance, the Competition Act, 2002, the Electricity Regulatory Commission Act, 1998, the Telecom Regulatory Authority of India (TRAI) and the Tariff Authority for Major Ports (TAMP) in India incorporate such provisions. The policy directives are usually binding on the regulator even though as in the Competition Act, 2002, a mechanism is laid down for consultations, with the Competition Commission being given an opportunity to express its views before any directive is issued by the government. Notwithstanding the possibility of this power to give directives to the regulator prejudicing the independence of the regulator, one has to contend with the axiom that the government should have the prerogative to make policy decisions of a binding nature on the regulator. The policy decisions should be confined to non-technical and non-administrative areas and not to individual cases that may come up before the regulator.

The Standing Committee of the Parliament in India, after examining the Electricity Bill, 2001 recommended[66] that the Central Government or the State Government as the case may be, should have the power to give policy directives to the regulator. While cautioning the government that this power should be sparingly used, it suggested that all policy directives should be laid on the table of the House.

The second power relates to the power of superseding the regulator by the government. Any power of super session severely undermines the independence of the regulator. This kind of a power could be capable of being abused, if the government finds that some incumbent regulator is inconvenient or that he is not willing to get pressurised in an individual case or cases. Super session power is very pernicious in character and has no justification. The TRAI super session described in Box 9.3 below page is an illustration.

BOX 9.3
Super session of TRAI

Telecom Regulatory Authority of India (TRAI) was established under the TRAI Act, 1997. The Act protected the Members of the Authority, as their removal was subject to proven guilt in a judicial probe. In September 1999, TRAI said that the pricing of cellular phone calls should shift to a "calling party pays" regime which meant that calls from fixed phones to mobile phones would be charged at slightly more than the prevailing rates and that mobile subscribers would stop paying for incoming calls. This is a standard practice in most countries. A turf war broke up between the Government-owned Department of Telecommunications and TRAI. The Department of Telecommunications was the biggest service provider followed by Mahanagar Telecom Nigam Limited (MTNL), a government enterprise. MTNL argued that higher call rates were anti-people and proceeded to challenge TRAI's jurisdiction. The Court, which adjudicated on the issue of jurisdiction, found TRAI's powers limited and insufficient to ask for a shift in pricing regimes. The Court also observed that TRAI could only make recommendations to the government, which would then decide what was to be done.

The position therefore was that the TRAI could only set caps in a given pricing structure and determine as to how the various operators would share revenues and that it had no say in disputes between operators. The upshot of this was that the government scrapped the TRAI Act and sacked the incumbent Chairperson and the Members and decided to rewrite the TRAI law to create a pliant well-behaved TRAI. In the newly written law, TRAI Act, 2000 government empowered itself with the power of superseding the Authority in certain situations and of terminating the tenure of the Chairperson and the Members. The Damocles' sword of super session raises the concern that the regulator may not behave independently of the government and may be tempted to toe its line in the interest of its own survival.

Fixed Tenure

The second element in institutional independence is the fixed tenure of the head of the institution and its members. The factor "fixed tenure" needs to be viewed as a larger factor including the various parameters that govern the selection,

[66] See http://164.100.24.208/debate/debtext.asp.

appointment and removal of the head and members of the institutional regulator. Such parameters include

1. transparent selection process,
2. clearly stipulated qualifying and disqualifying criteria for selection,
3. prescribed tenure,
4. removal from office of the head and the members of the regulator on specific grounds.

For the institutional regulator to be independent, effective and efficient there is an unalloyed need to have a transparent selection procedure for selecting the people who will man the regulator as its head and members. Furthermore, the qualifications, experience and knowledge that should inform the selection will have to be clearly spelt out and the net cast wide to secure the right type of persons to constitute the regulator. If favouritism and patronage could be minimised, if not eliminated, in the selection, that itself would be a step forward in not only ensuring that merit would have the final say in the selection but also in ensuring independence of the institutional regulator. If those manning the institution are selected purely on merit considerations and suitability, they would not feel beholden to the Minister or the Executive for their appointment with the corollary that they would discharge their duties independently, independent of the pressures that may be brought on them by government functionaries.

There are different selection processes in different countries. By and large, the appointments of regulators are made by the government. In the US and Argentina, the Executive and the legislator jointly decide the appointment of regulators. The Executive selects the regulator in UK. In some countries, a collegium selection process is provided in the statutes creating the regulator. Here again, there could be differences on whether the collegium selection is binding on the Executive or otherwise.

In order to get the right persons to man the regulator and to minimise favouritism, patronage and politicisation of appointments, the collegium selection process is desirable. The collegium itself needs to be constituted rationally with experts in the relevant field and with men of eminence and integrity. The collegium should be enjoined to make its recommendations to the government (Executive), which desirably should be binding on the latter. For attracting the best available talent in the field (of the institutional regulator) the selection process should be transparent. This could be achieved through open advertisements, scrutiny of the applications and preparation of a panel of names by the collegium and finally, appointment by the Executive.

As indicated earlier, government would generally be not inclined to loosen its control over appointments of the Chairperson and Members of the regulator. The High level Committee (2000) appointed by the Department of Company Affairs to suggest a new competition law for India had advised the collegium selection approach and indeed, the Draft Bill of the law provided for the collegium. But when

the Bill was taken up for discussion in the Parliament, government chose to delete the collegium provision and ultimately when Competition Act, 2002 was passed by the Parliament, it was sans the collegium provision. Political considerations and the penchant for the government to keep the reins in its hand for the appointment of the persons constituting the regulator are likely to have impelled the deletion of the said provision from the Bill.

CUTS (2006a) in its Discussion Paper, has suggested, *inter alia,* that:

A Panel should be constituted to recruit capable personnel for manning independent institutions. Such a Panel should be comprised of renowned and undisputed personalities with diverse expertise. One-third members of this Panel should be replaced every alternate year.

The extension of the tenure should also be decided by the same Panel.

There are practical difficulties in adopting the collegium approach because of political reasons and bureaucratic constraints but India is progressing towards accepting this approach as is evidenced in the statute establishing the National Human Rights Commission. In the area of competition law, Competition Act, 2002 is likely to be amended with one of the amendments suggested being inclusion of the collegium selection procedure (the amending Bill is pending consideration by the Parliament).

Most statutes relating to institutional regulators stipulate fixed tenures for the head and members thereof. In India, the tenure is 5 years for the regulatory authorities in the power and port sectors. In the telecom sector, the tenure is 3 years. The Chairman and Members of the Monopolies and Restrictive Trade Practices Commission have five year tenure, which is renewable with an age cap of 65 years. The renewability clause is not in all statutes in India but is in some countries like Canada, Argentina and Israel. A rational approach to this issue of renewability is that the statutes would do well to have a provision for re-appointment of the head and the members through the prescribed selection process along with other candidates. The logic in support of this approach is that the expertise gained during the tenure of an incumbent head or member could be effectively utilised further. This should be, of course, subject to the age cap prescribed. It is suggested that there should be a uniform age cap for the head and members of the institutional regulator and that there should be no difference in the age caps between them.

Removal

Removal of a regulator incumbent should not be arbitrary. Legislation in several countries provides an authority with powers to remove from office a member of the regulator that has engaged in certain actions or has become unfit for the post. In Mexico, a regulator incumbent can be removed on charges of and sentencing for severe misdemeanour under criminal or labour legislation (Mexico 1992). For abusing one's position and acquiring other interests, a member of the Tribunal could be removed in India (India 1969). Imprisonment is a cause for removal in Thailand (Thailand 1979).

The commonly noted grounds for removal of an incumbent Chairperson or Member of a regulator are that he/she:

- is adjudged as an insolvent
- has engaged during his/her term of office, in any paid employment
- has been convicted of an offence involving moral turpitude
- has acquired such financial or other interest that is likely to prejudice his/her functions
- has abused his/her position as to render his/her continuance in office prejudicial to public interest, or
- has become physically or mentally incapable of functioning in office.

The TRAI Act, 2000 provides for the removal of the Chairperson or Members on account of their being prejudicial to public interest but before their removal, they would be given a reasonable opportunity to be heard. However, the Members of the Appellate Tribunal can be removed only in case of proven guilt by a Supreme Court enquiry. The removal of Commissioners under the Electricity Regulatory Commission Act, 1998 is allowed on the usual grounds listed above but it is subject to proven guilt after proper enquiry. The Chairperson and Members under the Securities and Exchange Board of India, Act, 1992 can face termination of their services after being served with a 3 months notice or after being paid the salary for the same period. Under the Competition Act, 2002, the Chairperson and Members could be removed in case of proven guilt in an enquiry conducted by the Supreme Court, where the incumbent has abused his position as to render his continuance in office prejudicial to the public interest or has become physically or mentally incapable of functioning in the office. In respect of other grounds like, insolvency etc, no enquiry by the Supreme Court is mandated in the said Act.

The process of removal should be transparent and action of removal should be on specific grounds like moral turpitude or abuse by an incumbent of his position as to render continuance in office prejudicial to public interest etc. While the government should have the authority to remove a regulatory incumbent, it should do so on advice from an independent authority such as the Supreme Court (Sundar and Sarkar 2000), particularly in respect of grounds at items 5 and 6 above. Protection of this kind will engender a measure of independence for the regulator.

Bar on Employment

Independence of institutional regulators may be strengthened, if the incumbents thereof are debarred from seeking and accepting appointments in the enterprises that fall within the ambit of the statutes creating them. The bar could be for at least one year and not more than 2 years. The period of the bar is rather subjective, but for practical purposes, the bar should operate for at least one year, so as to obviate the possibility of the incumbent functionary from passing an order in favour of a party to a case and from getting rewarded with an employment on a good remuneration on demitting office. Optimally a 2 year ban may be in order, as the heat of

adjudicating in favour of a party in order to reap a benefit would likely evaporate in the 2 year cooling off period. Indeed, the Indian Competition Act, 2002 is sought to be amended in respect of the provision relating to bar on employment on demitting office from 1 year to 2 years. The regulators should not also seek or accept employment even directly in the government in the interest of functional independence of the regulators. It has been noted earlier that regulators have the responsibility to ensure a balance between the interests of different players in the market, stakeholders and enterprises including government. The bar on employment in enterprises falling within the pale of the statutes concerned would go a long way in subserving and ensuring the independence of the regulator.

In some countries, legislation requires that the members of a regulator should not have interests which would conflict with the functions to be performed. For example, in Hungary, the members of the competition council cannot pursue activities for profits other than those dedicated to scientific, educational, artistic, authorial and inventive pursuits as well as activities arising out of legal relationships (Hungary 1996). A similar provision is available in the Mexican legislation (Mexico 1993).

Expertise

The second leg of the tripod is **Expertise**. No regulator worth the name can afford to be a 'generalist' in the negative sense of the term. Generalists are sometimes appointed as regulators, as in India. All India Service officers are known to be of the genre of generalists. Despite the high quality of competitive examinations used for recruitment of such officers, they do not possess any specialism except in the field of their educational degree at the time of recruitment. Even in the field of their educational degree, it would be improper to describe their knowledge as specialism, as they wouldn't generally have had an opportunity to practise their knowledge. After recruitment and some years of service, some of them may develop some specialism because of a series of postings and assignments in the same or related fields. But most of them are rotated between disparate Departments and Ministries (like Irrigation, Education , Social Welfare and so on) with the result that, however, competent they may be, the system does not let them acquire any specialisation in a field.

In India, as mentioned above, such generalists are sometimes chosen to man the regulator. It is not argued that they are unfit to be in regulatory posts but in the event they had no exposure to the field of regulation, they would need to educate themselves on information and knowledge in the field and also acquire the wisdom to deal with matters that come up for decision or adjudication before them. There have been exceptions where such generalists have proved themselves on the job. But one cannot push under the carpet the risk of non-specialisation (or to use a strong expression 'ignorance') in the regulator's job except on the peril of stakeholders' and consumers' interest.

Regulators require expertise in the relevant area and related areas. The statutes governing the regulator itself should specify the qualifications, experience and

knowledge required for appointments on the Tribunal. The fields to qualify for selection should be wide enough to provide for a multi-member and multi-disciplinary Tribunal. The basket of experience and knowledge in different but allied fields (allied to the main field of the regulator) would then constitute a pool of wisdom which would enable the regulator to address the relevant but varied aspects and issues that may govern the cases coming up before it. In the same breath, it needs to be mentioned that criteria for disqualification also would merit stipulation in the statute itself. This would include an existing interest in the regulated sectors, which will avoid a conflict of interest between the regulator and the stakeholders.

Regulation demands that the incumbents have exposure and knowledge in the area of regulation and also in the areas associated with decision-making. For instance, knowledge in the areas of economics and accountancy is likely to be highly relevant to and beneficial to the competition regulator. In the field of energy regulation, while knowledge in the area of electricity and energy would be germane, knowledge in industrial operations and finance would be of vital importance in regulatory efforts. This is the reason why the suggestion has been made above of providing for a basket of knowledge and experience at the very top level, namely, at the level of the regulator. As a single incumbent regulator cannot be expected to possess knowledge in the main field and related assisting fields, the regulator needs to be a multi-member and multi-disciplinary panel. The composition of the basket will naturally vary between regulators and will depend on the needs.

Another requisite for the regulator is integrity. It should be made imperative that only persons of proven and unimpeachable integrity and character are selected for which a vigilance clearance should be taken. If capable and efficient regulators are to be in place, it is imperative that there is political will to follow this suggestion. There is therefore, a strong need to educate the politicians and those who wield power on the desirability to have regulators with merit and probity. The responsibility of non-government organisations in this respect cannot be over-emphasised.

In these days of specialisation, it is not only the regulator that should be a multi-disciplinary body with its members drawn from relevant but different disciplines but that the organisation (of the regulator) should have experts to assist the regulator. A regulator needs inputs covering different disciplines like economics, accountancy, business, commerce, finance etc. This implies that the regulator should have necessary and relevant experts to assist it in its adjudicatory responsibilities. Analyses of various issues in the relevant disciplines are important inputs for the regulator to arrive at just and logical conclusions.

But, as experience demonstrates, the regulator is generally not empowered to employ or hire experts on a permanent basis or even on an *ad hoc* basis (for a limited period) without seeking the prior approval of the government. Approval, oftentimes, is not for merely hiring or employing experts but also for their selection and appointment. This hamstrings the regulator in its smooth functioning as government, because of financial constraints, may not allow the posts of experts to be created and, even if created, with the remuneration that prevails in the market.

Government pay scales and remuneration are way below the level prevalent in the market and consequently suitable persons with knowledge and ability will not get attracted or be available at government scales.

Another constraint faced often, particularly in India, is that the government foists on the regulator, officials from its various Departments, by sending them on what is known as "deputation". In other words, attracting outside talent (outside government) is conspicuous by its absence. This kind of an entry barrier shuts out available and good talent to be of assistance to the regulator. A post or assignment in the regulator's organisation is a kind of a quasi-government job and has its own attraction but government pay scales and remuneration are a stumbling block for would-be aspirants assuming that there is no entry barrier. Another problem is that a deputationist is unlikely to have his heart on the job, as he knows very well that his tenure is for a short period (on deputation) and that his parent Department has always a job for him, if he chooses to get back or is sent back from the regulator. Thus, in order to provide for outside talent to flow and be available, the policy of the government should be to do away with the mindset of having entry barriers. Furthermore, those who are drawn from outside as specialists should be allowed a salary structure that would be attractive to them. But this is easier said than done as government is generally loathe to give market remuneration, when most of its staff and employees are allowed much less. There is no easy solution but a way out is that 'good specialists' and 'good talent' are differently treated by the government on the ground that their inputs for the regulator are needed to administer justice to stakeholders and consumers and that they would not be interested were they offered government scales and remuneration. This is equally germane for the Chairperson and Members of the regulator. Good talent is required to compose the regulator. Selection and appointment of persons with inadequate merit and ability may hardly help the regulator in its effort at adjudicating disputes and cases that come up before it.

In the interest of independence of the regulators, they should be constraints-free in hiring the best experts of their choice and also be free of government's approval. Furthermore, as noted earlier, the salary structure and remuneration (including perquisites) of such experts should be left to and be determined by the regulators in order to attract the best expertise. The salary structure should not be subject to government control either.

The same is the case with the powers of the regulator to appoint the supporting staff in the organisation. Control exercised by the government in the area of sanction of the posts relating to the supporting staff and selection of personnel to man the posts has the consequence of the regulator suffering from inadequate and inefficient management to the detriment of its effectiveness and enforcement of its decisions. This observation is made in the context of Tribunals like the MRTP Commission in India suffering from inadequate staff and personnel with inadequate abilities. Subject to certain broad framework of staffing structure (framework should be decided by the government in consultation with the regulator having regard to the objectives set for the regulator), the regulator should have enough freedom and flexibility to hire and appoint the required staff and experts. To sum up, the

regulator should have sufficient organisational autonomy to achieve and sub-serve the objectives set for it by the statute creating it.

Having dealt with the need for independence/autonomy and expertise for the regulator, it is proposed to deal with another important dimension for the regulator, namely, **Accountability** in the following section. The regulator should be held accountable and answerable for its actions in implementing the statute creating the regulator and in expending the monies allotted to it and also the monies received by way of fees, cess etc.

Accountability

This constitutes the third leg of the tripod. Autonomy and accountability go hand in hand. Entrusting the regulator with sufficient autonomy has the objective of allowing it to take judicious decisions in a competent manner without any interference or pressure from the government - direct or indirect. There is enough evidence that in many competition law jurisdictions, governments are loathe to providing adequate autonomy to regulators. This reluctance is to an extent anti-thetical to the regulator's accountability. In other words, the government itself assumes accountability, as it is answerable to the elected representatives, namely, the Parliament or to the Head of the State like, the President. The line Ministry or Department keeps the reins to determine the budget, to sanction funds out of the budget from time to time and to approve expenditures for the regulator beyond a threshold limit on a case-by-case basis. With such controls, the government keeps the regulator fastened to its control and oversight decisions. Consequently, accountability is assumed by the government and not the regulator for such expenditures.

Taking this argument a little further, the line Ministry or Department is generally answerable to the legislature (Parliament) even in regard to functions that have been transferred to the regulator. This results in the Ministry or Department to continue to perform the transferred functions, not directly but through the stratagem of oversight. An adverse consequence of this is for the Ministry or Department to interfere with the regulator's functioning. The statutes creating the regulators sometimes specify the functions, hitherto within the power domain of the government, transferred to them. Since the legislation establishing the regulator is passed by the legislature and the legislature is committed to it, the functioning of the regulator should be, by and large, outside the pale of government oversight. Specification unambiguously of the powers of the regulator and those of the government in the statute itself should set the problem at rest. The concomitant corollary is that the Parliament needs to shy away from debating the functioning of the regulator in the latter's central task of adjudication and decision making on issues between parties. Once there is clear separation of functions between the government and the regulator in the statute itself, accountability transfers from the government to the regulator. This principle has to be reckoned even by the Parliament. But then the key issue is how to make the legislature realise this

separation of functions and not question the line Ministry on functions that have been transferred to the regulator.

Debates in the Parliament reveal the intensity of this problem. In India, during the passage of the Electricity Bill, 2001, some of the Members of Parliament queried the government as to how it proposed to provide electricity to the rural areas and as to how the poor people including those belonging to backward classes and tribes would get relief from the government, if decisions on these matters were left to the regulatory authority.[67] A suggestion was made during the debate that the statute itself should spell out the separation of functions between the government and the regulator. The Standing Committee of the Parliament after examining the Electricity Bill, 2001 recommended that 'since the Commission will perform crucial functions relating to the development and regulation of power sector that affects the common man, they should be made accountable to the Parliament and State Legislatures' (see footnote below). The Parliament/Legislature, therefore, is anxious to have oversight of the performance and functions of the regulator, even if it is aware that there has been separation of functions. During a meeting[68] organised by CUTS on regulatory issues, Mr S C Mahalik, former Chairman of the Orissa Electricity Regulatory Commission shared his own experience. He observed that some Members of the Orissa Legislative Assembly were not happy with some of his decisions and wanted the government to take action. But the government refused saying that the very Assembly had passed the Act empowering the regulator to take the said action and that it would not be prudent to demand action against the regulator, if its decisions were not acceptable.

Having said this, the only way out is to get the separation of functions categorically spelt out in the statute and continuously bring it to the attention of the Members of the Parliament/Legislature, hoping that over a period of time, the factum of separation of functions would be accepted and come to stay.

This paper has stressed the need and desirability of independence and autonomy to the regulator in the interests of consumers and stakeholders including the government. It goes without saying that if the independence and autonomy paradigm should inform the regulatory institutions, they should also assume full accountability in operating the given independence and autonomy. If the Chairperson and Members of the regulator are selected by a high level collegium and if the selected persons consequently have merit, knowledge and wisdom and have high integrity, there is no reason while they should not be conferred with independence and autonomy. Naturally, upon such conferment, the regulator should be made accountable for using and exploiting the conferred freedom.

Maintaining accountability is imperative in the area of incurring expenditures as public money is involved. In most statutes creating regulators in India, there are provisions providing for an external scrutiny by a specialised agency like the Comptroller and Auditor General of the regulator's accounts and expenses. The scrutiny of the Comptroller and Auditor General is, by and large, confined to the

[67] See http://164.100.24.208/debate/debtext.asp.

[68] CUTS (2005), Retreat meeting in Delhi, *Regulatory Autonomy and Accountability*, 7 May 2005.

accounts and expenses only and does not constitute an audit of the decisions and judgments of the regulator.

But maintaining accountability is more important is in the area of adjudicating cases and making decisions. While it is not the case of the author to make the regulator accountable for its adjudicatory decisions in terms of defending them in other fora, the regulator owes it to the country to ensure that it balances the interests of stakeholders in a fair manner and does not protect the interests of certain groups to the detriment of others, particularly, the consumers (Sundar and Sarkar 2000). Decisions and judgments of the regulator need to be reasoned and preceded by observance of rules, regulations and laid down procedures. All interested parties must be given a reasonable opportunity to present and articulate their stand and arguments in writing and orally (procedures must specify the right of contending parties) before the regulator arrives at its finding. Most important, the judgments and decisions should be covered by logic and reasons supporting them and should be published.

Regulatory regimes either adjudicate like courts or adopt what is known as consultative process. It is felt that sometimes, consultative process is preferable to regular formal hearings as in courts, as it has the advantage for a comprehensive discussion of issues with different stakeholders, is less expensive and less time-consuming (Sundar and Sarkar 2000). The regulators in cases of telecommunications and power (electricity) in India have the responsibility of fixing tariffs and have an eminently regulatory role and adopt the consultative process. MRTP Commission has essentially an adjudicatory role and does not adopt the consultative process. Consultative process does enhance accountability.

Needless to add that that the decisions of the regulator should be appealable (Smith 1997). The statute creating the regulator should categorically specify the appellate authority and revisional authority. Appeals should be preferably on questions of law and lie to an independent body or a court of law. The regulator being a body comprising eminent persons of ability and integrity, the court of law to which the appeal would lie should be the Apex Court or the one next to it in the hierarchy. This incidentally would ensure an appropriate status to the regulator. Normally the appellate court should not be required to deal with questions of fact unless any serious miscarriage of justice had taken place in assessing facts by the regulator or if new evidence surfaces (which could not be available or introduced at the trial stage for justifiable reasons) at the appellate stage. Appealability by itself contributes to accountability on the part of the regulator.

Accountability of the regulator to the Parliament/Legislature has a strong logic in democratic polities. The Parliament/Legislature has a legitimate right to directly review the functioning of regulators that are constituted by a statute of the Legislature and function independently of the line Department. Regulatory statutes generally provide for the approval of the regulator's budget by the Parliament as part of the line Ministry's budget, for the annual report of the regulator to be tabled in the Parliament and for select committees of the Parliament to perform a role on overseeing regulatory performance.

The discussions at the Retreat meeting organised by CUTS (2005) on 'Regulatory Autonomy and Accountability' noted that the system of accountability to the Legislature was not effective, that Legislative oversight was ex-post and that there was lack of adequate knowledge and expertise in the Parliament and its various committees. The reports placed on the table of the Parliament do not engage the attention of the Parliament, as is necessary. But there have been many occasions when the Minister became a target of the Legislature and was made to answer even on implementation issues, which were discharged by the regulator. An unfortunate fall-out of this was that the Minister tried to interfere in the functioning of the regulator and impair its independence (participants at the Retreat meeting referred to in footnote 6 articulated such occasions and interference).

The Standing Committee of the Parliament in India after examining the Electricity Bill, 2001 recommended that the regulator having been enjoined to perform crucial functions relating to the development and regulation of power sector that affects the common man should be made accountable to the Parliament and State Legislatures. It further recommended that their annual reports and programme of action should be placed before the respective House (see footnote 5).

CUTS (2005) noted that the regulator having been created by a statute of the Legislature and its accountability having been defined therein, the Minister should not be held responsible for the functioning of the regulator. The meeting suggested that the Legislature should make the regulator directly accountable to it. A further suggestion made by the meeting was that in order to oversee the functioning of the regulator, a Parliamentary Standing Committee on regulation is desirable to be established. The Committee's oversight responsibilities should be only on systemic and procedural issues. Care should be taken to ensure that the Committee does not oversee or even discuss individual cases. By and large, the regulator's decisions should be appealable to the higher Judiciary like the High Courts and the Supreme Court. The Parliamentary Standing Committee may also assume the responsibility of evaluating as to whether the regulator has been able to achieve the objectives set for it under the statutes creating it. The same Committee could discuss the annual reports submitted to the regulator and its performance.

Indian Competition Act, 2002 – An Analysis

The new Indian competition law, namely, Competition Act, 2002 (Act, for brief) is yet to be enforced in its entirety, and in particular, on its major provisions. The Act itself is being amended after certain provisions in the Act were challenged in the Supreme Court. But for the purposes of this paper, the Act as it stands has been examined in the narrative to follow, on the touchstone of Independence (Autonomy), Expertise and Accountability.

Independence (Autonomy)

Section 50 of the Act empowers the Central Government to make to the Competition Commission of India (CCI) 'grants of such sums of money as the Government may think fit for being utilised for the purposes' of the Act. The said

section mentions that making the grant will be 'after due appropriation made by Parliament by law in this behalf'. This implies that even after appropriation by Parliament, the government has the discretion to grant monies as it thinks fit. This certainly undermines the independence of the CCI. The stand taken in this paper is that subject to Parliamentary approval, the CCI should receive the grants from the government without any discretion for making any cut or modification by the government. Once the appropriation is made by the Parliament, the CCI should get the entire money so cleared by the Parliament. If the Government has the power to hold back a part of the money cleared by the Parliament, it can leverage the situation to its advantage. CCI should not be made to frequent the corridors of the Ministry to get subvention of grants already voted by the Parliament. Section 50 of the Act needs modification by dropping the words 'as the Government may think fit'.

Hopefully, when the Act is amended, this aspect of doing away with the discretion of the government will be taken care of.

Section 51 of the Act provides for the constitution of a "Competition Fund" into which the government grants would be credited in addition to fees, monies received as costs and the interest accrued thereon. This is a welcome situation but care should be taken by the CCI not to impose fees and to levy costs beyond what is justifiable merely to enhance income for itself.

There is explicit mention in section 51 of the Act that the "Competition Fund" should be administered by a committee of such Members of the Commission as may be determined by the Chairperson. The fund is supposed to be utilised for meeting the salaries and allowance payable to the Chairperson and Members, administrative expenses including the salary allowance etc of the officers and employees of the Commission and for meeting the expenses of the Commission in connection with the discharge of its functions and for the purposes of the Act. From a reading of the said section 51, it appears that the government will not control the manner in which expenditure is incurred. But the practice in reality in the Commission today (there is only one full time Member of the Commission), is that government approval for defraying expenses for certain purposes is sought by the Commission. For instance, prior approval of the government is insisted upon for the Member and the officials of the government to participate in conferences and seminars outside India. Likewise, for capital expenditure, the Commission seeks Government approval.

Rightly, it is the government which has the powers to appoint the Chairperson and the Members of the Commission. Section 9 of the Act stipulates that they would be selected 'in the manner as may be prescribed'. The expression "prescribed" means prescribed by the rules made under the Act. Government has adopted the procedure of selection by a selection committee but this procedure is set by the government itself and not by the statute. The High Level Committee on Competition Policy and Law (2000) appointed by the government had recommended the collegium selection process with the collegium consisting of the Chief Justice of India (or his nominee), Finance Minister, Minister in charge of competition law, Governor of Reserve Bank of India and the Cabinet Secretary. But the recommendation was disregarded and government constituted the selection committee as it desired. The only reason that

could be inferred for this is that government desired to keep the rein in its hands for the selection and appointment of the Chairperson and Members of the CCI. This deviation does have the potential of politicisation of selection and appointment of the posts of Chairperson and members of the CCI.

The High Level Committee recommended that the Chairperson of the Commission should hold the rank and be entitled to the pay and perquisites of a Judge of the Supreme Court. Similarly, the Members of the Commission should hold the rank and be entitled to the pay and perquisites of a Judge of the High Court. It further recommended that the term of the Chairperson and Members of CCI should be five years at a time with the maximum age limit for the Chairperson at 70 years and for the Members, at 65 years. An important observation of the Committee was that the Chairperson of the CCI can be from any of the fields/disciplines, as the competition law is a socio-economic legislation and is not just a judicial body to try and adjudicate on civil and criminal cases. In other words, it is not mandatory that the Chairperson should be only from the judiciary. As the Chairperson should be one who has considerable exposure and knowledge in International Trade, Commerce and complicated issues relating to Trade, the net needs to be cast very wide in order that an appropriate person is selected for this post (High Level Committee 2000).

The Act inheres some of the above mentioned observations of the Committee and provides for the Chairperson and Members to be chosen in the areas specified in the Act and also, *inter alia*, from those, who have been, or are qualified to be judges of High Courts. In other words, they need not be only from the judiciary. As stated, they could be from one of the disciplines listed for eligibility. But this approach was questioned in the Supreme Court. The casting of the net wide was the major challenge to the Act in the Apex Court. It was contended by the petitioner before the Apex Court that the Chairperson should be only from the Judiciary. As it was submitted by the counsel for the government that steps would be taken to amend the Act, the Apex Court disposed of the petition without deciding the various issues raised therein.

The status of the Chairperson and Members of the CCI has been left to the government for specification by statutory rules. It is understood that the government has prescribed the status of the Chairperson to be equal to that of a Judge of the High Court and that of the Members to be equal to that of a Secretary to the Central Government. Furthermore, according to the Act, the age cap for the Chairperson is 67 years and that for the Members is 65 years. These are significant departures from the recommendations of the High Level Committee. One is unable to find reasons or logic for the departures listed in this paragraph, but it may be trite to hold that they would likely undermine the independence of the CCI.

The Central Government has the power under the Act, to remove the Chairperson or Member of the CCI from office only after an inquiry by the Supreme Court, on the ground that the incumbent has acquired such financial or other interest as is likely to affect prejudicially his functions or has so abused his position as to render his continuance in office prejudicial to public interest. The Act further

empowers the Central government to remove the Chairperson or Member on the ground that the incumbent has been adjudged as insolvent, has engaged at any time, during his term of office, in any paid employment, has been convicted of an offence involving moral turpitude or has become physically or mentally incapable of discharging his functions (without the need for an inquiry by the Supreme Court). Once again, these provisions may not adversely affect the independence of the Commission.

The Act has created a bar for the Chairperson and Members for a period of one year from the date on which they cease to hold office, to accept any employment in, or connected with the management or administration of any enterprise which has been a party to a proceeding before the Commission under the Act. This is a salutary provision protecting the independence of the Commission. This bar period is sought be increased to 2 years in the Amendment Bill pending in the Parliament (please see discussions on this aspect, supra).

The proviso to section 23(3) of the Act is a restrictive provision in that it makes it necessary for the Chairperson to seek prior approval of the government to transfer a Member from one bench situated in one city to another bench situated in another city. If the Chairperson is selected by a high powered collegium [recommended by the High level Committee (2000)], such matters of transfer of a Member from one Bench to another should be left to him/her. There is no justification whatsoever to hamstring the Chairperson's power of administration and constitution of Benches. This has an adverse impact on the independence of the Commission. The Amendment Bill before the Parliament seeks to redress this.

Independence and autonomy for the Commission are imperative, if they should be effective and should promote a competition driven market. Section 56 of the Act provides for the super session of the Commission. This will undermine the independence and pressure-free functioning of the Commission. Already section 11 of the Act provides for the removal and suspension of Chairperson and Members of the Commission on specific grounds. Why is it necessary to clothe the Government with further powers of super session of the entire Commission? Government enterprises have been brought within the ambit of the law. Commission needs to be just in dealing with such enterprises, if they trench competition law. With the Damocles' sword hanging on them in terms of section 56, Commission may be under pressure to listen to the Government and even toe its line.

Section 56 of the Act needs to be deleted in the interests of effectiveness and independence of the Commission.

A provision is incorporated in the Act, that the Commission would be bound by government's direction on questions of policy. Section 55 of the Act deals with this. The proviso to this section gives an opportunity to the Commission to express its views before any direction is given by the government on questions of policy. Normally, this section should be regarded as coming in the way of independence of the Commission. But, there is a qualification to the areas of policy, on which government is empowered to give directions to the Commission. The qualification is that the government can give directions only in areas other than those relating to

technical and administrative matters. Though not explicit, the qualification apparently means that in individual cases and administrative matters, no direction can be given by the government. In all other matters, directions can be given which will be binding on the Commission. While in principle government policies should be beyond challenge under the Act, the risk in the way in which section 55 is worded is that government may be able to give a direction on how certain types of mergers should be viewed or what should constitute unfair or discriminatory conditions in purchase or sale of goods to fall under "abuse of dominant position" under section 4 of the Act. Arguably, one could perhaps take a view that such a direction will fall under technical matters in which case, government will not have the power to issue it. One possible solution to the said ambiguity is that the government and the regulator should sit together and decide the turf and document the same for future.

Expertise

Regulators, it has been stressed earlier, require expertise in the relevant area and related areas. CCI needs expertise in the field of competition. It needs inputs in areas, *inter alia*, of economics, accountancy, trade etc. The Act creating the CCI itself specifies the qualifications, experience and knowledge required for appointments on the Tribunal. The fields to qualify for selection are wide enough to provide for a multi-member and multi-disciplinary Tribunal. The basket of experience and knowledge in different but allied fields (allied to the main field of competition) constitutes a pool of wisdom which would enable the CCI to address the relevant but varied aspects and issues that may govern the cases coming up before it.

What is perhaps totally absent is the autonomy of the Commission to appoint officials at different levels and experts. The Commission has to seek the approval of the government for creating posts and for appointing officers and experts.

Though section 36(4) of the Act provides for the CCI to call upon such experts to assist it in the conduct of an enquiry or proceeding before it, as it deems necessary, but it does not empower the regulator to employ or hire experts on a permanent basis or even on an *ad hoc* basis (for a limited period). This implies that the CCI has to seek the prior approval of the government for such hiring. Approval, oftentimes, is not for merely hiring or employing experts but also for their selection and appointment. CCI may not be allowed to hire experts on other than government salaries. Government pay scales and remuneration are way below the level prevalent in the market and consequently suitable persons with knowledge and ability will not get attracted or be available at government scales. The Act is not categorical in these aspects and if past experience with the outgoing MRTP Commission is any guide, government will be calling the shots! So appears to be the case of selection and appointments of the supporting staff (like house keeping, administrative etc).

Accountability

Accountability in terms of regulatory process and procedure is built into the Act itself by making the Commission bound by the procedure laid down by the Code of Civil Procedure, 1908. While stating this, section 36 of the Act enjoins the

Commission to be guided by principles of natural justice and to regulate its own procedure. Perhaps, as the Commission commences its regulatory and adjudicatory functions, the detailed procedure and process will be laid down for observance. Such process, it may be expected, will incorporate steps to ensure accountability like opportunities to stakeholders to present their views, publication of the decisions of the Commission, requirement that the Commission should state clearly the reasons for its decisions and stipulation of the authority to whom appeals against the Commission's order will lie etc. Hopefully, the process will guarantee transparency in the Commission's working.

The Act requires the Commission to prepare an annual report giving a true and full account of its activities during the year and forward it to the Central Government. It also enjoins that a copy of the report should be laid before each house of Parliament. While this partly meets the accountability of the Commission in regard to its functioning and activities, what is more important is that the Parliament should consider the desirability of discussing the report after it is laid in both the Houses. Parliament needs to attach importance to the role and functions of the CCI and in that context discuss the report every year after it is tabled. Needless to add, that any discussion on the report of the Commission should not relate to individual cases but should relate to systemic issues, procedures and the extent to which the objectives of the Act have been attained or met. Any oversight on the CCI's working and functioning of the Commission should be preferably by a Parliamentary Committee, so that focused discussion would be possible. The Parliamentary Committee's view should be communicated to the CCI for such corrective action as may be needed.

A salutary provision is incorporated in section 52 of the Act, in terms of which the Commission is require to maintain proper accounts and prepare annual statements of accounts. The accounts of the Commission will be audited by the Comptroller and Auditor General of India and his report needs to be forwarded to the Government and also laid before each House of Parliament. It has been clarified in the section itself that the orders of the Commission in individual cases appealable to the Supreme Court would not be subject to audit by the Comptroller and Auditor General of India. This entire section 52 assists in taking forward the accountability of the Commission.

Finale

Having discussed the various aspects of the tripod dimensions, Independence (Autonomy), Expertise and Accountability, a sum up is attempted below:

1. Regulatory independence is important as regulatory decisions have a major impact on economic policy and on growth. Independence is the means that government generally employs to achieve the objectives of the regulation.

2. Regulator needs to be independent, as the objectives of regulation are to protect consumers from abuse by firms with significant market power, to

protect investors from arbitrary action by government, to improve economic efficiencies, etc.

3. Regulatory independence can be secured by having a clear legal mandate in the statute creating the regulator. The functions and responsibilities of the regulator and of the Government need to be specified in the statute itself.

4. The grant of funds to the regulator and also its budget should be approved by the Parliament after the line Ministry and regulator discuss and arrive at the figures. After this stage, they should no discretion with the Ministry for reducing the budget or funds for the regulator.

5. Financial autonomy should be given to the regulator to incur expenditure for discharging its responsibilities enjoined by the statute. The statue should prescribe the criteria for appointment of the Chairperson and Members constituting the Tribunal. These would include qualifications, experience and fields of relevance for the regulator.

6. The selection procedure should be through a collegium of eminent persons to be specified in the statute itself and be transparent. Outside talent should be attracted and made available to man the regulator.

7. Fixed tenure for the regulator and protection against arbitrary removal need to be a part of the statute.

8. Regulator should have the power to select and appoint experts and supporting staff with flexibility on remuneration levels particularly for experts.

9. The regulator should be accountable for the expenditure of monies granted to it by the government. The oversight by an external agency like Comptroller and Auditor General needs to be made a part of the statute.

10. Accountability of the regulator for its judgments and decisions can be ensured by mandating the regulator to record the same with adequate reasoning and arguments and causing them to be published and to be made accessible to the public.

11. The regulator should be required to prepare an annual report and place the same on the table of the Parliament/Legislature.

12. It is desirable for the Parliament to discuss the annual report particularly with a view to evaluating whether the regulator has subserved the objectives set by the statute. The Parliament should be able to address the systemic issues relating to regulator's performance with a view to redressing the problems.

It cannot be gainsaid that the tripod of Independence (Autonomy), Expertise and Accountability is a *sine qua non* for the effectiveness and efficiency of the regulator in the larger interest of the consumer and the public.

References

Anant, T. C. A. and S. Sundar (2005), "Interface between Regulation and Competition Law", in: "Towards a Functional Competition Policy for India", CUTS Centre for Competition, Investment & Economic Regulation, Jaipur.

CUTS (2002), "Reorienting Competition Policy and Law in India", CUTS Centre for International Trade, Economics & Environment, Jaipur.

CUTS (2005), "Report on Regulatory Autonomy and Accountability", Retreat Meeting, May 07, 2005 in Delhi, CUTS, Jaipur.

CUTS (2006), "Competition Regimes in the World – A Civil Society Report", CUTS Centre for Competition, Investment & Economic Regulation, Jaipur.

CUTS (2006a), "Institutional Independence in India," Discussion Paper, CUTS Centre for Competition, Investment & Economic Regulation, Jaipur.

High Level Committee (2000), "Report of the High Level Committee on Competition Policy and Law", Department of Company Affairs, Government of India, New Delhi.

Government of Hungary (1996), Act No. LVII on the Prohibition of Unfair and Restrictive Market Practices, Budapest.

Government of Thailand (1979), "Price Fixing and Anti-Monopoly Act", B.E. 2522, Bangkok.

India (1969), "Monopolies and Restrictive Trade Practices Act", Government of India, New Delhi.

Mexico, (1992), "Federal Law on Economic Competition 1992", Government of Mexico, Mexico City.

Mexico (1993), Internal Rules of the Federation Competition Commission under 'Federal Law on Economic Competition, 1992', Government of Mexico, Mexico City.

Ministry of Finance (1996), "The India Infrastructure Report, Policy Imperatives for Growth and Welfare", Ministry of Finance, Government of India, New Delhi.

Smith (1997), "Utility Regulators, the Independence Debate", World Bank, Washington DC.

Sundar S. and S. K. Sarkar (2000), "Framework for Infrastructure Regulation", Tata Energy Research Institute, New Delhi.

10

A Quantitative Evaluation of Effectiveness and Efficacy of Competition Policies across Countries

SERDAR DALKIR

Introduction

Competition[69] laws and a policy focus on domestic competition have spread across many countries especially within the past two decades.[70] Developments within individual countries often paralleled, and, in some cases, were influenced, by developments within multinational bodies such as the European Union (EU) and by policy assistance and/or policy advice from international organisations such as the World Bank, the EBRD, and the OECD.[71] Because of this spread in competition laws and policies, there is an increasing need for independent evaluations of such laws and policies.[72]

This paper proposes a quantitative, cross-sectional, framework for ex-post evaluation of competition policies from relevance, effectiveness and efficacy perspectives. The evaluation has two levels that focus on an intermediate output and a final outcome, respectively.

The intermediate output is defined as 'competition policy implementation[73] and enforcement effectiveness.' Implementation of competition policies is achieved through the use of a mechanism (or technology) that enforces the existing competition laws and regulations through resource use (for example, agency budget). For the purpose of this study, the success of the intermediate outcome is measured by the level of domestic competition index assigned to each country by the World Economic Forum ("the WEF index"). The links from (a) legal infrastructure

[69] Unless noted otherwise, "competition" as an adjective is used as a synonym for "antitrust."

[70] For example, Dutz and Vagliasindi (1999) note that during the period 1990-1996, "competition laws have been adapted in 22 of the 26 transition economies of Central and Eastern Europe and the former Soviet Union."

[71] The EU, the World Bank and the EBRD offer technical assistance to their respective member countries to for strengthening competition policy definition and implementation, and policy enforcement, of their members. OECD has been dispensing policy advice to its members for introducing more rigorous competition and deregulation; see, for example, Crampton (2003), who cites OECD's 1997 Regulatory Reform Report for the statement that "reform should be built on a foundation of competition policy."

[72] This is not to say that evaluations of antitrust policy have never been attempted by national or multinational bodies and international organizations. In fact, some multinational bodies and international organizations, such as the World Bank, have a reputation for the importance they place upon and the support they give to evaluations of past and present policy and advice. These evaluations, however, presumably reflect the national perspective, or the membership composition, of these bodies and organizations.

[73] "At least in this paper, the term "implementation" is meant to include "advocacy." As noted by a CUTS/CDRF symposium discussant (Prof. Eleanor Fox):
The successes of competition advocacy are a major factor in assessing effectiveness. For example, in Ireland, for a number of years, advocacy in getting the government to liberalize markets was more significant than enforcement actions – and probably did more good towards efficiency and competitiveness.

(competition laws) to implementation, and (b) from resource use (for example, competition agency budget) to implementation are evaluated. A positive link is interpreted as an effective intermediate output.

The final outcome is defined as 'national competitiveness to attract foreign direct investment (FDI).' For the purposes of this study, the success of the final outcome is measured by FDI inflows. The link from a country's effectiveness to achieve the intermediate output to the level of FDI inflows (in logarithmic terms) is estimated. A positive link is interpreted as an efficacious final outcome.

Differences in countries' competition policy effectiveness and differences in countries' policy efficacy have implications for policy priorities both within and across groups of countries. For example, if a significant effectiveness gap exists between the developing and the developed countries, it is natural to ask whether and to what extent this gap can be explained by the amount of resources allocated to competition agencies.

This study measures differentials in competition policy effectiveness and differentials in policy efficacy (1) between the developing and the developed countries, (2) between the European Union members and others, and/or (3) between the recent European Union members or candidate(s) and the more senior EU members. The analysis begins with two primary questions: (i) Are differences in competition policy effectiveness between countries explained exclusively by competition agency budget and staff numerosity as direct inputs? and: (ii) are the gaps in policy efficacy between countries explained exclusively by differences in competition policy effectiveness between countries? Each of these primary questions is associated with a secondary question: (i) Which variables other than direct inputs might significantly explain differences in competition policy effectiveness? and: (ii) which variables other than competition policy effectiveness might explain the differences in policy efficacy? The statistical technique of multiple regression analysis is used to research these questions.

Competition Policy Implementation and Enforcement Effectiveness

The decision to use the WEF rating as a measure of (perceived) effectiveness is consistent with other recent research; see, for example, Hylton and Deng (2006). When evaluating competition policy effectiveness, two natural hypotheses to test are that effectiveness of competition policy in a country will increase with (1) the extent of competition laws and (2) the amount of resources allocated to competition policy implementation and enforcement (for example, the agency budget). This study first considers the relationship from the extensiveness of competition laws, to implementation and enforcement effectiveness. As explained in the Results section below, a visual inspection of the two variables suggests that a positive relationship may exist under some assumptions. However, the present data do not support a statistically significant relationship between the two variables.[74] The study then

[74] Hylton and Deng (2006) present tentative or preliminary evidence that the scope of a country's competition law is positively associated with the perceived intensity of local competition, measured by the WEF rating. In view of the possibility of a statistical bias due to endogeneity (that is, the scope of the law itself being

estimates a statistical relationship from competition agency resource use, to implementation and enforcement effectiveness. It derives an "effectiveness gap" (or "effectiveness premium") for each country in the sample, defined as the difference between the actual level of effectiveness and the predicted level of effectiveness based on input use.

This study then researches whether systematic gaps in implementation effectiveness exist between groups of countries that cannot be attributed to differences in resource use. Its primary conclusion is that there are simultaneous gaps in the implementation effectiveness between (1) developing versus developed countries, (2) EU versus non-EU countries, and (3) recent EU members and candidates versus more senior EU members. These gaps are not explained by differences in the level of resources allocated to competition policy implementation and enforcement across countries.

The study also researches whether implementation effectiveness is also a function of time. If so, countries with extensive competition laws and/or relatively large enforcement budgets but a low level of implementation effectiveness (such as the recent EU members and the candidates) can expect to strengthen their implementation effectiveness over time.

Policy Efficacy

As noted above, the measure of policy efficacy used in this study is the sample countries' level of FDI competitiveness. The relevance of the existence and enforcement of competition laws and policies on private capital's incentives to invest and innovate is not *a priori* apparent. For this reason, the direction (or the magnitude) of the relationship between competition policy and competitiveness to attract FDI is not theoretically clear. This study estimates a relationship between competition policy effectiveness and final outcome efficacy, and derives an "efficacy gap" (or an "efficacy premium") for each country in the sample, defined as the difference between the actual level of efficacy and the predicted level of efficacy based on competition policy effectiveness.[75]

As a measure of the efficacy of final outcome, "FDI inflows" has its weaknesses. As noted by a panel discussant in the CUTS/CDRF symposium (Eleanor Fox), antitrust is likely to be a policy adopted in conjunction with many other liberalising

influenced by the perceived intensity of competition), they also estimate instrumental variables regressions. Their instrumental variable regressions (which avoid the bias due to endogeneity) fail to show a statistically significant association.

[75] Reducing the efficacy gap may require actions at the level of a country's general governance and minimizing general risk and uncertainty for the country as a whole. For example, Nicholson (2004) observes: "the larger Western economies [...] shoulder, in general, relatively stronger rule of law, intellectual property protection, control of corruption, and other indicators of institutional maturity, which may positively interact with antitrust regimes" (p. 11). As another example, Maskus (2000) emphasizes possible complementarities between antitrust regimes and property rights, market liberalization, deregulation, and technology development policies. The maintained hypothesis of this paper is that effective antitrust implementation and effective governance in other areas contribute to efficacy in separately identifiable ways. This would imply that a significant reduction of the efficacy gap is almost certain to require a higher level of effort than ensuring effective implementation of competition laws and policies only.

policies. Deregulation of markets in which competition will work, and lowering of trade barriers, are likely to be measures that overwhelm any effect of competition law enforcement, even if there is a provable positive effect of competition law enforcement on FDI competitiveness. Moreover, macroeconomic stability may be an important additional factor in its own right that explains FDI inflows (Simon Evenett). In the light of these and similar comments, this study attempts to statistically control for the effect of such policies and factors through the use of numerical indicators that measure the extent of economic freedoms and macroeconomic stability in each country.[76]

The study concludes that a positive relationship exists between effective implementation of competition laws and policies and an efficacious final outcome, while statistically accounting for the effects of other policies and factors through additional numerical indicators. Another conclusion is that efficacy may also be a function of binary variables (for example, EU membership).

Policy Implications

Results of this study have important policy implications. They suggest that the gaps between the developed and the developing countries cannot be bridged merely by increasing the size of the competition agencies' budgets. Reorganising agencies' spending priorities as well as developing extra-agency initiatives can be complementary means to bridge these gaps. Examples of extra-agency initiatives include civil society organisations, ability of private parties to initiate lawsuits under the competition laws, and ability to collect private damages from violators.

This study's results indicate that increasing competition effectiveness is relevant for national competitiveness. Moreover, efficacy can partially be increased through a binary transformation in a country's status (for example, EU membership). Conversely, an efficacy gap may persist as long as economic and other types of conditions preclude a binary transformation.

Organisation of the Paper

The rest of the paper is organised as follows. Section II presents the paper's policy evaluation framework and quantitative indicators used; it also selectively surveys existing empirical literature on the (implicit or explicit) use of FDI inflows as a measure of policy efficacy, either generally or with specific reference to policies aiming increased investment. Section III comments on the sample and the methodology. Section IV presents results and Section V concludes.

[76] In the best-case scenario, a zero (or moderate) correlation between competition policy and other policy areas will enable one to identify the separate effect of competition policy effectiveness on outcome efficacy. In the worst-case scenario, a high (positive) correlation between competition policy effectiveness and effects of reforms in other policy areas will preclude identifying a secular relationship between competition policy effectiveness and outcome efficacy. However, since a high correlation will also imply that competition policy effectiveness is on average associated with effectiveness of other policy reforms, identifying the direct effect of competition policy will not be as important as confirming a positive overall effect, from a practical point of view.

Background: Evaluation framework and quantitative indicators

Figure I. demonstrates a schematic view of the ex-post policy evaluation framework used in this paper. In this framework, competition laws and available resources for enforcement are represented as inputs to an enforcement technology. Effective and consistent use of a suitable enforcement technology is expected to result in an optimal intermediate output. Enforcement may result in a suboptimal intermediate output if the enforcement technology being used is not suitable for the task, compromising effectiveness and leading to a welfare loss.[77] In this framework, a suboptimal (inefficacious) final outcome may be observed even when the competition enforcement technology is suitable and effectively implemented. This outcome may arise if governance in other policy areas is ineffective or policies are inadequately coordinated across policy areas.

Measurement or ranking of countries with respect to intermediate and final outcomes is probably essential for a systematic evaluation of competition policy effectiveness and efficacy across countries. This is not a simple task, primarily because it requires some form of quantification along the pertinent dimension.[78] And, many quantitative variables or indices that can be used for this purpose are usually imperfect (for example, biased due to a combination of measurement error, truncation, and endogeneity).[79]

Quantitative Measures for Evaluating the Effectiveness of the Intermediate Outcome (Competition Implementation and Enforcement) Relative to the Inputs

Nicholson (2004) discusses surveys and comprehensive analyses of inputs and outputs of competition enforcement. He discusses research by Kee and Hoekman (2003), Evenett (2002), Lapachi (2002), Dutz and Vagliasindi (2000), Fingleton et al. (1998), Pittman (1998), Graham and Richardson (1997), Hoekman (1997), and Jenny (1995). As a new measure to assess the presence of competition laws across countries, he introduces the Antitrust Law Index (ATLI), the sum of each country's binomial scores for the presence of particular laws.[80, 81]

---

[77] Of course, an inconsistent, unpredictable and erratic use of a given technology may also result in a suboptimal outcome.

[78] Measurement usually implies cardinality. In contrast, countries can be ranked using either a cardinal or an ordinal scale.

[79] A CUTS/CDRF symposium discussant (Eleanor Fox) noted that in the United States the question is generally posed in terms of whether antitrust helps or hurts consumers; that there has been debate on this point; and that even that narrower proposition has been hard to quantify and is usually done anecdotally.

[80] He notes that the countries with the highest index values do not necessarily represent the strongest antitrust laws; and that the impetus for adopting antitrust laws appears related to the imposed guidelines of supranational bodies, in particular the requirements of the European Union. He mentions Ginarte and Park (1997) and Rapp and Rozeck (1990) as examples of research on intellectual property rights which use a comparable methodology.

[81] This paper researches whether a positive link exists between "extensiveness of competition laws" and the effectiveness of competition law an policy. A visual inspection of the two variables suggests that a positive relationship may exist under some additional assumptions. However, the present data do not support a statistically significant relationship between the two variables. This finding is consistent with both Nicholson (2004) and the expectations of at least one CUTS/CDRF symposium discussant (Prof. Eleanor Fox), who noted that "extensiveness" of competition laws tells us nothing about effectiveness of competition law and policy; that competition laws are commonly applied against cartels and they also are commonly applied

For quantification of the inputs and the intermediate outcome (that is, implementation and enforcement effectiveness), this paper uses, and where possible, supplements, the following four variables discussed and displayed by country in Nicholson (2004): the *ATLI* (described above); *competition agency budget size* and *competition agency staff count* compiled by Global Competitiveness Review (GCR); and a *domestic antitrust effectiveness rating* compiled by the World Economic Forum (WEF).[82] In addition, years in which countries enacted competition laws for the first time have been compiled from the International Competition Network, the Global Competition Forum, and Dutz and Vagliasindi (1999).[83]

Nicholson (2004) also includes a "regime/institution score" determined by the GCR Survey. This score is positively and significantly correlated with the WEF rating;[84] this finding confers an independent degree of reliability upon the WEF rating, as the comments received from symposium discussants would seem to imply.[85] This positive and significant correlation also renders the GCR Survey largely redundant as an additional indicator; the cross-sectional variation reflected by the GCR Survey is adequately represented by the WEF rating, to a statistically reasonable degree.

---

against abuses of dominance, protecting firms without power from abusive restraints; and that even if aggregate efficiency is the only goal, a spare competition law might be more effective than an extensive one.

82 Nicholson (2004, p. 7) describes the WEF ratings as follows:
A comprehensive set of countries is covered in a survey conducted by the World Economic Forum (WEF), but is limited to a relatively subjective and simple valuation of the broad characterization of anti-monopoly policy. The WEF surveyed business leaders in 2001 to rate the effectiveness of antitrust policy in various countries, asking them to rate "antimonopoly" policy from "1=lax and not effective and promoting competition" to "7=effectively promotes competition". The results are published in the Global Competitiveness Report 2001-2002, and replicated in Table 2.
Nicholson also includes a "regime/institution score" determined by the GCR Survey. This score is positively and significantly correlated with the WEF rating; this finding confers an independent degree of reliability upon the WEF rating. This positive and significant correlation also renders the GCR Survey largely redundant as an additional indicator; the cross-sectional variation reflected by the GCR Survey is adequately represented by the WEF rating to a reasonable degree for the purposes of this paper.

83 For most countries, the enactment or effectiveness years are from the International Competition Network or the Global Competition Forum websites although the value for Canada has been revised to reflect the initial enactment of the Canadian anti-monopoly law; the value for Poland is from Dutz and Vagliasindi (1999).

84 Within the sample, the coefficient of correlation between the GCR score and the WEF rating is 0.80 with a level of statistical significance less than 1%. While the WEF rating is defined for 48 countries in the sample, the GCR score is defined for only 25 countries, 23 of which also have a WEF rating.

85 For example, in the words of Prof. Eleanor Fox:
How should effectiveness of competition law and policy be measured? The WEF index […] is of doubtful help. Intensive studies of the details of what an agency does and fails to do (for example hands off position on conduct and ventures of SOEs) is much more revealing and may be necessary. OECD, UNCTAD, and other peer reviews are very helpful; even then, these must sometimes be discounted because the reviewers may be trying to be supportive of the agency. While much more remote and subjective, the Global Competition Review[']s ratings of how agencies are doing is of some help – and better help than WEF because by a more expert group that understands the intricacies. Of course, in some few nations, non-governmental enforcement is also a factor in antitrust effectiveness – whether positive or negative.
Prof. Fox also asked "should not effectiveness competition law and policy be seen in terms of a nation's own goals?" Similarly, another panel discussant (Mr. Joseph S. Hur) noted that "success" may not have an identical meaning across jurisdictions. This study takes it as a given the subjective nature of the WEF rating as an indicator of competition policy effectiveness.

Quantitative Measures to Evaluate the Efficacy of the Final Outcome Relative to the Intermediate Outcome

This study uses countries' levels of FDI inflows as a quantitative indicator of final outcome (national competitiveness to attract FDI).[86, 87] Mehta and Evenett (2006) define competitiveness as 'many features of a nation's corporate performance compared to firms located abroad.' They emphasise 'firms, not nations, compete and so properly understood competitiveness is not a characteristic of government or state, but of the firms within a jurisdiction.' They note 'by fostering competition between domestic firms, governments are thought by some to foster national competitiveness.'[88, 89]

The direction or the magnitude of the relationship between competition policy and FDI is not immediately clear. FDI flows have been empirically associated with privatisation (Sader 1995 and 1993), foreign investment flows have also been thought related to deregulation and market liberalisation (Crampton 2003, p. 15). Complementarities in attracting FDI may exist between competition regimes and property rights, market liberalisation, deregulation, and technology development policies (Maskus 2000 and Nicholson 2006). However, it is also recognised that in the absence of an effective competition policy, privatisation (Crampton 2003, p.2; citing Wallensten 1999), deregulation or liberalisation (Crampton 2003, p. 18) are not sufficient to ameliorate welfare losses arising from anticompetitive conduct.

All else equal, investors would be attracted to market power[90] and anti-liberal protections, as long as they can benefit from these. Investors would be dispelled by market power if they believe that the distribution of market power (across markets or across firms in a market) can harm their interests. For example, investors may believe that incumbent firms in a market can use their market power to exclude entrants. Such a belief would tend to diminish the investors' willingness to enter into the market. Investors would also prefer competitive upstream and downstream

86 This definition of competitiveness is more specific than that in Mehta and Everett (2006); the latter includes many features of corporate performance, such as "share of world markets, the rate of innovation, and the level of import penetration." This paper shares the view in Mehta and Everett (2006) that competitiveness is a characteristic of firms within a jurisdiction. Since most FDI inflows are measured and reported on a country basis, the relevant jurisdiction is hypothesized as a country. This hypothesis is statistically tested in Section IV below.

87 A strand of the existing literature analyzes countries' relative competitiveness and/or the process of competition between countries (for example, regulatory incentives) to attract FDI. For example, Inal (2003) surveys various definitions of competition and discusses some of the quantitative indicators that are present in that literature. The analysis presented in this paper partially overlaps with that literature; the present analysis also differs from that literature because, unlike the latter, it specifically focuses on the "ambient" effect of antitrust policies (antitrust implementation and enforcement) on FDI inflows. This paper's focus on the FDI inflows as a measure of efficacy also differs from that of the literature on the determinants of FDI.

88 They reference U.K. and EU white papers on this point.

89 A panel discussant in the CUTS/CDRF symposium, Prof. Eleanor Fox, noted that "good" antitrust should improve efficiency of firms established in countries around the world that do business in the particular jurisdiction among others; that good antitrust applies equally to firms, no matter where they come from or where the goods or services come from; but competitiveness is usually used as a comparative term, to imply advantages to one country.

90 Market power is defined as the power to sustain price over the competitive level for a significant duration of time.

markets.[91] Risk aversion may also affect the magnitude and the direction of the relation between market power and FDI. If potential entrants are risk averse, then the likelihood of entry into a market can be expected to increase with the degree of evenness (symmetry) of the distribution of market power across markets and across market participants, as well as the entrant's degree of certainty that it will enjoy a given level of market power.

A *CUTS – C-CIER* briefing paper (CUTS – C-CIER 2005) underlines that the observed direction of the relationship between competition effectiveness and investment inflows can be either positive or negative. The paper looks at two different examples: soft drinks in India and cement markets in Zambia. The first example narrates that in the absence of adequate competition laws or effective implementation and enforcement, foreign entry (direct investment) can be correlated with market conditions suitable for an increase in market concentration. (In India, foreign entry into the soft drinks market resulted in a virtual duopoly between the two foreign entrants, Pepsi and Coca-Cola.) In this case, the FDI inflow would appear negatively correlated with competition effectiveness (or positively correlated with an absence thereof). The second example illustrates how well implemented and adequately enforced competition laws can avoid an increase in the market power, while maintaining the FDI inflow. (In Zambia, new entry by Lafarge did not increase market concentration and possibly created cost efficiencies thanks to a timely intervention by Zambia Competition Commission.) In this case, the FDI inflow would appear positively correlated with competition effectiveness.

The work that is most closely related to this study in the investigation of the relationship between competition policy effectiveness and FDI is Nicholson (2006). His results support the hypothesis that many pro-market policies produce incentives to encourage technology transfer. He evaluates the impact of intellectual property rights (IPRs), anticorruption measures, and effective competition policy on both FDI and licensing. His measure of competition policy effectiveness is the WEF index. (However, his FDI measure, 'counts for activity by firms engaged in FDI or cross-border licensing agreements in 1995,' is related but not identical to this paper's measure of FDI.) He finds that competition effectiveness has significance for both FDI and licensing in non-OECD countries. He concludes 'competition policy may be considered useful as a tool for developing countries to acquire technology.'[92]

Dutz and Vagliasindi (1999), Khemani (2003) and Crampton (2003) are three examples of studies that use measures of final outcome other than FDI. These three studies research the relationship from competition effectiveness to average firm efficiency, national income, and R&D intensity, respectively.

Dutz and Vagliasindi (1999) define a range of competition policy implementation criteria along *enforcement*, *competition advocacy* and *institutional*

[91] This is because double mark-ups will tend to reduce sales and profits. In addition, the level of existing market power in a vertically related market may lessen the profitability of incremental market power in the market of entry, because any additional profit due to increased market power will have to be "shared" by the upstream or the downstream firm (the supplier or the distributor).

[92] He discusses research by Fox (2000), among others.

effectiveness dimensions. They also provide an assessment of the effectiveness of competition policy implementation across eighteen countries, split equally between Central or Eastern European or Baltic countries and the former Soviet Union countries, using data from each country's competition authorities. They find a robust positive relationship between effective competition policy implementation and expansion of more efficient private firms.[93] They stress 'having a competition law on the books, or having an up-and-running competition agency, is not a sufficient condition for effective implementation' (p. 9).

For a cross section of countries Khemani (2003) presents visual relationships between average industry competitiveness (alternatively, prevalence of new entry into the industry) measured on a scale of 1-7, and per capita GDP (alternatively, GDP growth rate). He concludes that competition in domestic markets through either inter-firm rivalry or new entrants is positively associated with higher levels (alternatively, higher growth rates) of per capita GDP.

Crampton (2003) emphasises that in the long run 'innovation accounts for most of the improvements in average living standards that flow from greater competition. This applies in both developed and developing economies'; he also states that 'pro-competitive reform explained more than one third of the excess R&D intensity in the US, Japan, German and Sweden relative to the OECD average and provided a large positive contribution in the U.K., Canada and Ireland. Conversely, excessive regulatory restrictions to competition in Italy and Greece were estimated to account for one third and two thirds, respectively, of the shortfall in R&D intensity relative to the OECD average.'[94] The specific pro-competitive policies that were analysed in the referenced study, and whether competition policy is one of them, are not made clear in Crampton's remarks.

Although each of the measures of final outcome used by the three studies discussed immediately above (namely, average firm efficiency, national income, and R&D intensity) is suitable for evaluating the effect of competition policy implementation on static or dynamic efficiency or national prosperity, the specific aim of the present study is to research the relationship between competition policy implementation and national competitiveness measured by FDI inflows. There is a large volume of literature that discusses the determinants of FDI inflows. The remainder of this subsection presents a selective survey of these studies, with a particular emphasis on the developing countries.

Goldberg (2004) selectively surveys the literature on FDI with a particular emphasis on the financial sector. She concludes that multinationals and FDI in emerging markets generally have important effects on the host countries, with particularly notable effects in financial services. These effects include improved

---

93 On the other hand, they do not find a robust effect of competition advocacy. They comment "this is a most difficult area to implement effectively across all transition economies. It requires the competition authorities to gain expertise not only in traditional anti-trust enforcement but also in the other industry oversight (especially network infrastructure industries). It also requires sufficient resources to be spent on effective education." (ibid.)

94 He cites to para. 18 of G. Nicoletti (2002) "The Economy-wide Effects of Product Market Policies," paper presented at the OECD-World Bank Services Experts Meeting, OECD Headquarters, Paris.

allocative efficiency, technology transfer and diffusion, wage spillovers, institution building, altered macroeconomic cycles, and overall economic stability. Allocative efficiency is enhanced when foreign investors enter markets characterised with high entry barriers and reduce monopolistic distortions. Increased competitive pressures and demonstration effects may spur local firms to enhance technical efficiency. In financial services, a positive association between FDI and institutional development is expected through improved supervision and regulation, although there may be a lag due to initial conditions (for example, the level of preparedness of the supervising agency to evaluate the new products and the new processes introduced by foreign entrants). The employment and growth effects of FDI depend on the type of investment (greenfield vs. merger or acquisition), and in the case of an acquisition, on the soundness of the acquired institution.

Singh and Jun (1995) empirically analyse various factors that influence direct investment flows to developing countries; they examine qualitative factors. Their findings differ between the group of countries that have historically attracted high FDI inflows and others that have not. For the first group, they find that qualitative indices of political risk and business operation conditions, and exports in general and manufacturing exports in particular, are significant determinants of FDI. For the second group, they find that socio-political instability measured by lost person-hours because of a labour dispute has a negative impact on investment flows.

Banga (2003) addresses the effectiveness of selective government policies and investment agreements in attracting FDI flows to developing countries, and whether FDI from developed and developing countries respond similarly to developing countries' policies. He examines the impact of fiscal incentives, deregulation and bilateral and regional investment agreements, while controlling for host countries' economic fundamentals. He finds that while FDI originating from a developed country responds to deregulation, FDI with a developing country origin can be attracted by fiscal incentives and lower tariffs.

Neven and Siotis (1993) discuss the role of European competition policy in monitoring the intervention of member states towards FDI; they find that current subsidies to attract investment are not excessive in the presence of strong distortions in the labour market.

To find the impact of private practices on FDI inflows, Noland (1999) reviews documentary evidence from various countries and econometrically analyses industry-level FDI inflows into the United States and Japan. He concludes that general economic conditions or specific policies facilitated by private practices are likely to discourage FDI. Industry concentration is negatively but not robustly associated with FDI. He also finds that for these two countries R&D expenditures are positively associated with FDI flows.

Various OECD papers address effectiveness and efficiency of incentives in attracting FDI. OECD (2002) advocates the use of general investment subsidies rather than incentives available to FDI only. Charlton (2003) finds that it is difficult to assess whether, or in what cases, the efficiency gains from competitive bidding for mobile capital outweigh the costs to the international system, and surveys examples

of inter-regional and international competitive bidding for investment. OECD (2003) assesses the degree to which developing countries compete against each other and against the most highly developed economies in attracting FDI through incentives. It concludes that while developing countries compete with each other, few directly compete with developed economies; also, competition for individual investment projects seems confined to a few sectors, for example, car production.

Dahl (2002) examines FDI in the Southern African Development Community (SADC) in the 1990s and considers possible incentives for FDI. He concludes that FDI may be attracted to countries belonging to integrated regional groups; that resource-driven investments in Southern Africa seem to be primarily driven by factors such as FDI regimes, privatisation, low cost labour and per capita GDP growth, rather than general economic fundamentals; and that "soft parameters" such as administrative barriers and the overall poor image of Africa may be important.[95]

Maskus (2000) reviews the theory and evidence on how protection of intellectual property rights may influence FDI flows and technology transfer. He notes that strong intellectual property rights (IPRs) can be an effective incentive for FDI inflows; complementarities may also exist between IPRs and market liberalisation, deregulation, technology development policies, and competition regimes in attracting FDI. He advises governments to devote attention and analysis in order for assuring that their countries will achieve net gains from stronger or additional IPRs and licensing over time.

FitzGerald (2002) examines whether countries' regulatory competition in property rights, market access rules, environmental protection, and labour standards for attracting FDI affects the level and "quality" (for example, technology level, degree of stability, employment creation) of the investment they receive, and whether such competition leads to a welfare loss for the nominal winners and losers. He concludes that for some poor countries, regional arrangements may be more effective than international rules. He states that the published empirical evidence is ambiguous on the existence, effect and consequences of regulatory competition. Critically, he emphasises that the usual measure of FDI is 'changes in equity stake that include acquisitions and exclude third-party finance" and as such, it does not reflect capital formation by multinational corporations.[96] He warns that any empirical study which posits a positive relationship between high regulatory standards and foreign investment[97] cannot exclude the possibility of a spurious association unless it controls for per capita income or market size.[98]

---

[95] He states that most of the developing countries that were in the "top ten" with respect to FDI inflows in year 1999 fulfilled the following criteria: regional group membership, per capita income growth, foreign market access, skilled labour force, low-cost unskilled labour, high level of GDP, fiscal discipline, favourable corporate tax structure, and political stability (p. 3).

[96] He states: "in particular, large privatizations in developing and transition countries, and mergers in industrial countries, have distorted the published FDI figures seriously during the past decade" (p. 12). Although the empirical consequences of this proposition should be studied, they go well beyond the aims of this paper.

[97] That is, a study which negates the existence of a "race to the bottom," that is, cutthroat regulatory competition.

[98] 'All regulatory standards – whether on property and competition, on environmental protection or on labour standards – tend to improve with a country's income level. In addition, small countries are clearly in a

Charlton (2003) reviews the role of investment incentives, analysing their main benefits and costs. He notes that regulatory competition between countries can have both positive and negative effects on both domestic and international welfare; a negative outcome would occur either when a government offers an incentive package such that the value of the concessions exceed the value of the benefits to the host economy, or when it uses inefficient incentive instruments. He concludes that since no individual government has an incentive to unilaterally reveal the value of their incentive packages in the absence of similar and simultaneous action by other governments, explicit international coordination may help to improve disclosure standards.

Waldkirch (2003) uses industrial branch level data from Mexico to examine the degree to which FDI is attracted to particular sectors in a country on the basis of available domestic skills. He finds a direct correlation between skill differences and FDI across sectors.

Blonigen and Wang (2004) examine whether the determinants and effects of FDI are systematically different for less developed countries than for developed countries. Using a semi-logarithmic functional form, they interact their exogenous variables with a developed county dummy variable; they find that the underlying factors that determine the location of FDI activity across countries vary systematically across the two groups of countries. Their aggregate data support the growth effect of FDI only for the less developed countries. They also find that FDI is more likely to crowd in (less likely to crowd out) domestic investment in less developed countries relative to developed countries.

Sample of Countries and Methodology

The agency budget variable is available for 38 countries in Nicholson (2004). Turkish Competition Agency (2004) and World Bank (2004) have been used to include Turkey as the 39th country. The WEF rating is defined for 49 countries; 35 countries comprise the overlap between the WEF rating and the agency budget variables. The ATLI is defined for 52 countries; 42 countries make up the overlap between the WEF rating and the ATLI. The FDI analysis variables are defined for 47 countries.

This paper first reviews the empirical relationships between policy effectiveness measured by the WEF rating and the following "input" variables: the ATLI, size of the enforcement budget, and size of the enforcement staff. The relationship between size of the budget and effectiveness of the intermediate outcome is graphically displayed and statistically estimated. Then, this relationship is re-estimated while controlling for additional explanatory variables (economic development status,

weaker negotiating position with regard to large companies and large neighbours. Thus we would expect to see the incentive for a government to engage in regulatory competition to decline with both income and size. But income levels and market size are agreed to be the main attraction for FDI itself. So we would in fact expect to observe a statistical correlation between regulatory standards and inward FDI even if there were no causal connection' (FitzGerald 2002, p. 2; emphasis in the original).

incidence and duration of EU membership, and duration of competition laws). Lastly, the relationship from effectiveness (measured by the WEF rating) to efficacy (measured by FDI inflows) is graphically displayed; this relationship is also statistically estimated while controlling for additional explanatory variables.[99] Table 10.1 below displays the summary statistics for the variables used in either analysis (between the inputs and the intermediate output, or between the intermediate output and the final outcome).

TABLE 10.1
Summary Statistics of the Variables used in Statistical Analyses

Variable	N	Min	Max	Mean	Median	Standard Dev.
Agency budget (in US$mn)	35	0.18	307.00	24.35	5.30	54.67
Staff/National Income	35	0.01	3.00	0.62	0.39	0.69
EU country	47	0	1	0.49	0	0.51
EU recent member or candidate	47	0	1	0.21	0	0.41
Developed country	47	0	1	0.49	0	0.51
Years since legal enactment or effectiveness	47	2.00	115.00	17.85	11.00	23.30
WEF rating	47	3.10	6.60	4.66	4.60	0.92
Inflation, consumer prices (annual %)	47	-1.07	54.4	6.55	3.59	9.38
Population, total (millions)	47	1.36	285.32	40.07	18.73	56.00
GDP per capita, PPP (constant 1995 international $)	47	2,768	32,554	14,869	13,462	8,929
Economic Freedom Index	47	46.07	82.41	66.57	67.34	8.83
Venezuela (oil exporter)	47	0	1	0.02	0	0.15
FDI inflows, 2001 (in US$mn)[a]	47	-3,277	124,435	11,775	3,266	22,384

[a] The dependent variable in the FDI model is the logarithm of FDI inflows (2001), hence any country with a negative value of the FDI inflow variable is automatically excluded from estimation.

Results

Competition Policy Implementation and Enforcement Effectiveness as a Function of Policy Inputs and Other External Variables

Figure II plots the ATLI on the horizontal axis and the WEF rating on the vertical axis. Relative sizes of data points and of the country names (relative size of the typeface) correspond to the age of competition laws in each country. Years of enactment (or legal effectiveness) of the laws are stated in parentheses next to the names of the countries. This picture hints at a rough distribution of the sample

[99] There is the question whether the WEF rating is a catchall variable that measures the efficacy of a country's general governance, rather than reflecting the efficacy of a more narrowly defined competition (antitrust) implementation. More than one CUTS/CDRF panel discussant emphasized this possibility in their remarks. In light of their remarks, to guard against this possibility, the statistical relationship between effectiveness and efficacy is estimated while accounting for the degree of a country's economic stability and the extent of economic freedoms in a country, as measured by a combination of numerical indicators.

countries with respect to the historical nature of market competition in each country.[100] Start at the northeast and proceed clockwise. The northeast corner represents "competition by choice," defined as an effective outcome built upon strong legal foundations. The closest example is the United States. The southeast corner represents competition issues having arisen as a "historical necessity." The closer is a country to the southeast corner the greater the likelihood of having seemingly strong legal foundations but lacking an effective outcome. All of the recent EU members and candidate countries that are included in the sample fall closest to this corner. The southwest corner represents "policy inertia." The causes and the nature of this inertia possibly differ across the countries, yet the result is similar: a weak legal structure and a poor intermediate outcome. Finally, the northwest corner represents "competition as a historical accident," typified by a low ATLI value (few competition laws) yet a competitive economy at least as measured by the WEF rating.[101] Some of the closer examples are the Netherlands, the U.K., and New Zealand.

A positive relationship between competition legislation and an effective intermediate outcome would certainly add realism to the expectation that at least some of the countries currently with a relatively high ATLI value but a relatively low WEF rating (that is, countries currently closer to the southeast corner) can hope to achieve effectively competitive markets through effective and consistent application of their competition laws. Such a positive relationship is not apparent from Figure II. However, a positive relationship between ATLI and the WEF rating could arise if individual (constituent) states of the US, many, perhaps all, of which have independent competition laws and enforcement mechanisms, are included in this picture. Many of these individual states are presumably characterised by similar ATLI-WEF combinations as the federation itself; they are putatively represented as smaller marks around the data point representing the US as a whole.

Figure III depicts the relationship between direct input use measured by agency budget size and intermediate outcome measured by the WEF rating. Figure III has "agency budget" (US dollars, in logarithms) on the horizontal axis and the WEF rating on the vertical. The straight line represents the best semi-logarithmic fit. A positive relationship can be observed. In addition, diminishing returns to budget size are implied by the convexity of a semi-logarithmic relationship.

The difference between an observed and an expected WEF value (the residual) is tentatively interpreted as an "effectiveness premium" (in the case of a positive residual) or an "effectiveness gap" (in the case of a negative residual). According to this interpretation, countries such as Latvia, Japan, Korea, Mexico and Turkey should be able to achieve higher WEF ratings given their respective competition agency budgets. These countries suffer from an effectiveness gap that is potentially

---

[100] The four corners are meant to represent the four extremes of possible combinations of ATLI and WEF ratings, rather than four possible categories of countries.

[101] EU countries with high WEF ratings might have benefited from effective implementation of EU's antitrust laws, which are not captured in their respective ATLI values. This point applies as well to EU countries near the northeast corner (for example France) as to those near the northwest corner. I thank Jennifer M. Morrison, Esq., for pointing this out.

attributable to relatively inadequate enforcement technologies.[102] On the other side of the spectrum, countries such as Ireland, the U.K., and the Netherlands are performing even better than expected on the basis of their competition budgets alone. These countries enjoy an effectiveness premium that is potentially attributable to relatively adequate enforcement technologies.[103]

The average magnitude of the effectiveness gap is reduced by controlling for the level of economic development (per capita income). Figure IV depicts a separate relationship between agency budget (horizontal axis) and competition policy effectiveness (vertical axis) for the developed and the developing countries. Countries with a per capita income greater than ten thousand US dollars are referred to as "developed" while the rest are referred to as "developing."[104] The developed countries are grouped in the uppermost section of Figure IV; all but two have an effectiveness rating of five or higher (the exceptions are Slovenia and Korea). The developing countries are grouped in the lower section; all but one have an effectiveness rating of less than five (the exception is Chile). Each of the two lines represents the average (expected) level of effectiveness corresponding to a given level of the agency budget for either type of country. The higher of the two lines represents the expected level of effectiveness for a developed country with a given agency budget. The lower line represents the expected effectiveness level for a developing country with a given agency budget.

Within the budget sizes displayed in the figure, a secular gap of at least one point is apparent between the expected levels of effectiveness for a developing country and a developed country with identical agency budgets. While there seems to be a positive relationship between agency budget and competition policy effectiveness for both types of countries, raising the competition policy effectiveness of a developing country to the expected level of effectiveness for a developed country with an identical agency budget would appear to necessitate an increase of many orders of magnitude in the developing country's agency budget.[105] An

---

[102] For some countries, an alternative or additional explanation may be absence of an adequate legal infrastructure.

[103] The US enjoys a small effectiveness premium. This may partially be thanks to private plaintiffs' right to sue under the antitrust laws in the United States However, countering this "private enforcement" premium are the antitrust enforcement budgets of the individual states. The budget figure for the US does not include these resources; see Nicholson (2004), footnote 20. The budget figure for the US does include federal resources allocated for consumer protection (by the US Federal Trade Commission); see ibid. footnote 19.

[104] A member of the audience in a CUTS/CDRF symposium noted that another (more relevant?) research question is the difference between the least-developed countries and other countries. The hypothesis that competition policy effectiveness in the average least-developed country is statistically identical to competition policy effectiveness in the average less (but not the least) developed country was tested. It was found that this null hypothesis could not be rejected when controlling for other relevant variables. This point is addressed in greater technical detail in the Results section below.

[105] For a developing country with an agency budget of one million dollars, the expected level of effectiveness is about 4. The expected level of effectiveness for a developed country with the same budget size seems to be about 5.3. Achieving an effectiveness rating of 5.3 would appear to necessitate an agency budget of as much as one trillion dollars for the average developing country, all else the same. Although this calculation may not be very precise in a statistical sense, it does highlight the magnitude of the discrepancy between the expected levels of effectiveness between the developing and the developed countries. This example strikingly illustrates that bridging this gap does not appear as practically possible by increasing the antitrust agency's budget only (the average GDP in the sample of developing countries is only 0.23 trillion dollars –

interpretation of this effectiveness gap between the developed and the developing countries is that the first group of countries is on average equipped with more suitable enforcement technologies than the second group.

Figure V depicts a similar discrepancy when the sample of countries is restricted to EU members and candidates. Recent members or candidates of the Union are grouped in the lower part of the figure; they all have effectiveness ratings of less than five. Other, more "senior" members are grouped in the upper part; they all have effectiveness ratings of five or more. Each of the two lines represents the average (expected) level of effectiveness corresponding to a given level of the agency budget for either type of country. The lower of the two lines represents the expected level of effectiveness for a recent member or candidate with a given agency budget. The higher line represents the expected effectiveness level for a "senior" member with a given agency budget.

Within the budget sizes displayed in the figure, a secular gap of more than one point is apparent between the expected levels of effectiveness for the two types of countries with an identical agency budget size. While there seems to be a positive relationship between agency budget and competition policy effectiveness for both types of countries, raising the competition policy effectiveness of a recent member or candidate to the expected level of effectiveness for a "senior" member with an identical agency budget would appear to necessitate an increase of many orders of magnitude in the former country's agency budget.[106] An interpretation of this effectiveness gap between the recent members or candidates and the more "senior" members is that the first group of countries is on average equipped with less suitable enforcement technologies than the second group.

The extensiveness of competition laws (measured by the ATLI variable) was not found to be significantly associated with competition effectiveness (measured by the WEF rating), and was therefore excluded from statistical estimation. The numerical relationship between the WEF rating and the competition enforcement agency inputs is estimated using three alternative model specifications. The first model includes only two agency variables: logarithm of the budget – denoted as Log(budget) – and agency staff count relative to national income.[107] The second model also includes

less than a quarter of the level of antitrust budget necessary for an expected effectiveness rating of 5.3 for a developing country).

106 For a recent member or candidate with an agency budget of three million dollars, the expected level of effectiveness is about 4. The expected level of effectiveness for a "senior" member with the same budget size seems to be about 5.5. Achieving an effectiveness rating of 5.5 would appear to necessitate an agency budget of as much as three hundred billion dollars for the average recent member or candidate, all else the same. Again, while this calculation is probably not very precise statistically, it does highlight the magnitude of the discrepancy between the expected levels of effectiveness between the two groups of EU members. This example strikingly illustrates that bridging this gap does not appear to be practically possible by increasing the antitrust agency's budget only (the average GDP in the sample of the recent EU members or candidates is less than one trillion dollars, or about three times the level of antitrust budget necessary for an expected effectiveness rating of 5.5 for a recent EU member or a candidate.)

107 National income is implicitly defined by two of the variables in Table 3 of Nicholson (2004): Agency Budget and Budget/National Income. Staff relative to national income is defined as 1000*staff/(budget/(budget/National Income)), where budget is the Agency Budget variable in Table 3 of Nicholson (2004). National income is being expressed in billions of US dollars in this calculation since Nicholson (2004)'s Budget/National Income variable scales down National Income by a factor of 10–6.

three dummy variables indicating EU membership (including candidacy), whether the country is a new EU member or an EU candidate, and whether a country is "developed", defined as having a per capita GDP in excess of $10,000 in year 2002. The results are displayed in Table 10.2 below.

TABLE 10.2
Parameter estimates for the WEF rating equation
(the dependent variable is the WEF rating).

Model Specification	Variable	Parameter estimate	Standard error	t-stat	Significance level [a]
WEF.1	Log(Budget)	0.18	0.08	2.39	0.02
	Staff/National income (GDP PPP, in US$bn)	-0.39	0.21	-1.92	0.06
WEF.2	Log(Budget)	0.07	0.05	1.47	0.15
	Staff/National income	0.06	0.15	0.41	0.69
	EU member or candidate	0.44	0.22	1.98	0.06
	Recent EU member or candidate	-0.90	0.33	-2.74	0.01
	Developed country	0.95	0.24	3.99	0.00
WEF.3	Log(Budget)	0.02	0.05	0.43	0.67
	Staff/National income	0.08	0.14	0.56	0.58
	EU member or candidate	0.67	0.24	2.84	0.01
	Recent EU member or EU candidate	-1.01	0.31	-3.21	0.00
	Developed country	0.73	0.25	2.91	0.01
	Log(Years)	0.25	0.12	2.10	0.04

[a] Rounded to the next lowest significant digit; *for example* a significance level of 0.0049 (or less) is shown as 0.00.

The first two rows of Table 10.2 (not counting the label row) display the results of the first model specification. In this model, the WEF rating increases approximately one and a quarter point (1.25) with every doubling of the agency budget,[108] while keeping a constant ratio of staff size to national income. This result is significant at the 5 percent level of statistical significance. In addition, given budget size, country's WEF rating *decreases* with the number of the agency staff members relative to national income. This result is statistically significant at the 10 percent level but not at the 5 percent level. This result does not mean that implementation effectiveness can be raised by reducing the competition agency's employment, but rather that agency staff size is correlated with other variables that characterise countries with low implementation effectiveness.[109]

[108] The difference between the expected levels of effectiveness for a country with an agency budget of X dollars and another country with an agency budget twice as large (2X) can be calculated using the parameter estimate on the first row of Table II as 1.8 * [Log(2X) – Log(X)] = 1.8 * [Log(2) + Log(X) – Log(X)] = 1.8 * Log(2) = 1.8 * 0.69 = 1.25.

[109] It is natural to hypothesize that competition agency staff numerosity is significantly correlated with the agency budget. This statistical occurrence is technically known as multicollinearity of explanatory variables. Such correlation, if present, would minimize the individual statistical significance of each explanatory variable. In part as a precaution against this possibility, the agency staff is expressed relative to national

The next three rows of Table 10.2 display the results of the second model specification which includes three dummy variables for developed countries, EU members and candidate(s), and *recent EU member or EU candidate*. The average level of effectiveness for developed countries is nearly one point above that for the developing countries, controlling for agency size both in terms of dollars and staff.[110] Given agency size, being a member of, or a candidate for, the EU increases the WEF rating by a little more than 2/5[ths] of a point (0.44), but being a recent member or a candidate *reduces* the WEF rating by nearly the same amount (–0.46 = 0.44 – 0.90). This result is consistent with effective implementation being a function of time. When the developed country variable and the two EU variables are included among the explanatory variables for WEF, the agency variables become statistically insignificant. This is because the correlation between each of the agency variables and the three dummy variables is near, and sometimes in excess of, the correlation between the agency variable and the dependent variable (the WEF rating).

The relationship between the WEF rating and time is tested more directly in the third model specification. This specification includes the logarithm of *years* as an additional explanatory variable.[111] *Years* is defined as the number of years elapsed since a country's competition laws were enacted or became effective for the first time. This variable has a coefficient estimate of 0.25 that is significant at the 5 percent level. All else equal, a country's WEF rating is expected to increase about one-sixth of a point (0.17) with every doubling of *years*.[112] Table A.1 in the Appendix displays statistical software printouts for these three specifications.

In the first model specification in Table A.1, the R^2 statistic equals 0.30. This implies that the budget and the staff variables explain nearly one-third of the cross-sectional variation in the WEF ratings. In the second model specification in Table A.1, the R^2 statistic equals 0.77. This implies that the agency variables, the EU membership variables, and the developed country variable together explain more than three-fourths of the cross-sectional variation in the WEF ratings. The R^2 in the third specification is 0.80, which implies that the agency variables, the years variable,

income. The statistical correlation between this variable (staff relative to national income) and the budget variable is approximately -0.3 in the sample, which is not especially high. Severe multicollinearity would be indicated if explanatory variables are statistically significant jointly but not individually. Neither of the individual variables in model WEF.1 is especially insignificant. This suggests that multicollinearity between the budget and the staff variables is not a serious problem. A desirable property of the multiple regression technique is that it produces unbiased estimates of the coefficients even in the presence of multicollinearity.

110 The null hypothesis of an identical average competition policy effectiveness between the least-developed countries and the less (but not the least) developed countries was statistically tested. This was accomplished by simultaneously including in the regression model a variable for "developing country" status (defined as GDP per capita $\leq$ US $10,000 in 2002) and another variable for "least developed country" status (defined as GDP per capita $\leq$ US $2,000 in 2002). Although the first variable was (negative and) statistically significant, the second variable was (negative but) not statistically significant. Therefore, the null hypothesis of an equal average competition policy effectiveness between the least developed and the less (but not the least) developed countries could not be rejected when controlling for the other explanatory variables in regression model specification WEF.2.

111 I thank Dr. Refet Gürkaynak for suggesting this model specification.

112 The difference between the expected levels of effectiveness for a country with Y number of years and another country with twice the number of years (2Y) since the enactment or the effective date of antitrust laws can be calculated using the parameter estimate on the last row of Table II as 0.25 * [Log(2Y) – Log(Y)] = 0.25 * [Log(2) + Log(Y) – Log(Y)] = 0.25 * Log(2) = 0.25 * 0.69 = 0.17.

the developed country variable, and the EU variables together explain nearly four-fifths of the total variation of competition policy implementation effectiveness across countries.[113]

The divide between the developed and the developing countries as well as that between the recent EU members or candidate(s) and the more "senior" EU members may indicate gaps in policy design, implementation and enforcement that cannot be bridged merely by allocating more resources toward the existing competition enforcement mechanisms in the countries that are currently placed at the lower half of each divide.

FDI Competitiveness Efficacy as a Function of Effectiveness and Other External Variables

Figure VI demonstrates the relationship between implementation effectiveness of competition laws and policies, and the final outcome (FDI inflows relative to GDP). The horizontal axis is the WEF rating and the vertical axis is the FDI inflows as a percentage of GDP (World Bank 2004b). The straight line represents the best linear fit. A positive relationship is clearly observed. Moreover, there are no apparent diminishing returns.

In Figure VI, the difference between an observed and an expected FDI value (the residual) is tentatively interpreted as an "efficacy premium" (in the case of a positive residual) or an "efficacy gap" (in the case of a negative residual). According to this interpretation, countries such as Germany, Japan, Korea, Greece and Turkey should be able to achieve higher FDI inflows (relative to GDP) given their respective WEF ratings. These countries suffer from an efficacy gap that is potentially attributable to relatively ineffective governance in areas other than competition policy.[114] For such a country, competition policy implementation and enforcement can be characterised

[113] The estimation is based upon only those countries for which both the dependent and the independent variables have non-missing values. Three important sources for potential biases in regression coefficient estimates are omitted variable bias, measurement bias, and endogeneity bias. A relatively high value of the R2 statistic indicates that omitted variables are not a significant source of variation compared with the variables included in the model. The variables included in the model are relatively straightforward to measure, and are likely exogenous at least when measured on a year-to-year basis, as they are here. The "reasonable" values of the t statistics are also consistent with a nonexistent or an insignificant bias due to endogeneity. Additionally, non-uniform variance (heteroscedastic) residuals can result in a loss of statistical efficiency. For each of the models in Table II, a specification Chi-square statistic was computed. The statistically insignificant results of these computations indicated that if no specification errors are present, then the null hypothesis of uniform variance (homoscedastic) residuals could not be rejected. Moreover, a non-normal distribution of the residual term can render invalid a test of statistical significance (such as the t test or the F test). Truncation of the left-hand side variable may be a source of non-normal disturbances when the dependent variable is "quasi quantitative," as the WEF rating. However, a visual inspection of the distribution of the WEF rating does not indicate that the lower and the upper bounds (1 and 7, respectively) are constraints that are binding on the WEF rating. (That is because the WEF rating does not seem to have an abnormally high frequency -- a mass or an accumulation point -- at or near either of the two bounds.) A commonly used statistical test for determining whether the dependent variable is sampled from a normal distribution is the Kolmogorov-Smirnov test. The result of this test indicated that the WEF rating can reasonably be considered normally distributed when the threshold probability value for not accepting normality is 1% or less.

[114] At least for some countries an efficacy gap may be related to "politicization of antitrust enforcement." For example, the heads of the US antitrust agencies are political appointees. This effect may partially be offset by private plaintiffs' right to sue under the antitrust laws in the United States.

as "ahead of the times" relative to governance effectiveness in areas other than competition policy. At the other side of the spectrum, countries such as Ireland (an outlier), the UK, and the Netherlands are performing even better than expected on the basis of their WEF ratings. These countries enjoy an efficacy premium that is potentially attributable to relatively effective governance in areas other than competition policy.

Next, the numerical relationship between FDI inflows and the WEF rating was estimated.[115] The dependent variable is the natural logarithm of *FDI inflows (2001)*.[116] The explanatory variables are:

1. *competition effectiveness variable:* the WEF rating,
2. *economic stability and liberalisation variables:*
   a. a dummy variable indicating "high inflation,"[117], [118]
   b. a dummy variable indicating a high value of the Heritage Foundation's Economic Freedom Index[119]
3. *market size variables:*
   a. population size (in natural logarithms)[120]
   b. sample rank of the per capita GDP in constant 1995 dollars[121]
4. *political block and country variables:*
   a. a dummy variable indicating EU membership or candidacy
   b. a dummy variable indicating Venezuela (oil exporter).[122]

The results are displayed in Table 10.3 below. The WEF rating is significant and positive.[123] Its point estimate implies that every unit increase in the WEF rating

[115] The estimated link between antitrust effectiveness and FDI inflows would capture effectiveness of other factors (for example economic stability or reforms in other areas), provided that: (1) the estimation methodology does not explicitly account for those factors, and (2) antitrust effectiveness is significantly correlated with those factors and reforms. To guard against this possibility, the estimation methodology explicitly accounts for economic stability and reform variables.

[116] United Nations (2002) Annex Table B.1. "FDI inflows, by host region and economy," year 2001.

[117] Defined as an annual rate of change in the consumer price index in excess of 8%. Source: World Bank (2004c).

[118] Technically, a high rate of inflation is a characteristic of economic instability (rather than stability). An alternative to defining a "high inflation" variable would have been to define a "low inflation" variable. A "low inflation" variable would have had a one-to-one correspondence with the current "high inflation" variable. Specifically, for each country in the sample, "high inflation" + "low inflation" = 1 (that is because either "high inflation" = 1 and "low inflation" = 0, or "high inflation" = 0 and "low inflation" = 1). Therefore, "low inflation" = 1 – "high inflation." The estimated coefficient of a "low inflation" variable would have been identical in absolute magnitude to the coefficient of the "high inflation" variable displayed in Table III, but with the opposite sign. The values of its t statistic and significance level would also have been identical to those of the "high inflation" variable displayed in Table III.

[119] Defined as an index value in excess of the sample median. Source: The Heritage Foundation website.

[120] Source: World Bank (2004d).

[121] Source: World Bank (2004e).

[122] The sample includes two oil exporting countries as defined in United Nations (2002) Annex Table B.1., footnote k. They are Indonesia and Venezuela. Since the FDI inflows variable has a negative value for Indonesia, the only oil exporting country that is included in the regression analysis underlying Table III is Venezuela.

[123] The statistical significance of the WEF variable supports the hypothesis that when measuring the relationship between competition policy effectiveness (measured by the WEF rating) and competitiveness to attract FDI,

increases the FDI inflow by 66% (calculated as the exponential of the coefficient value 0.505).[124] This estimate implies that the level of the WEF rating has a significant and positive impact on the level of the FDI inflow independent of and in addition to other factors measured by the economic stability and liberalisation variables, the market size variables, and the political block and country variables.[125]

TABLE 10.3
Parameter estimates for the FDI inflow equation (the dependent variable is the natural logarithm of FDI inflows for year 2001).

Model Specification	Variable	Parameter estimate	Standard error	t-stat	Significance level [a]
FDI	*Competition effectiveness variable*				
	WEF rating	0.51	0.19	2.68	0.01
	Economic stability and liberalisation variables				
	High inflation (CPI inflation > 8 percent)	-0.54	0.29	-1.84	0.08
	High Economic Freedom Index (EFI > sample median)	0.29	0.23	1.26	0.22
	Market size variables				
	Logarithm of total population	0.65	0.08	8.36	0.00
	Sample rank of per capita GDP (PPP, constant 1995 dollars)	0.04	0.01	2.98	0.01
	Political block and country variables				
	EU member or candidate	0.67	0.22	3.11	0.00
	Venezuela (oil exporter)	1.72	0.70	2.47	0.02

[a] Rounded to the next lowest significant digit; *for example* a significance level of 0.0049 (or less) is shown as 0.00.

Of the stability and liberalisation variables, the "high inflation" variable is negative and statistically significant at the 10 percent level whereas the "high EFI" variable is positive but not statistically significant at the 10 percent level.[126] The

the smallest relevant collection of firms (that is, the smallest relevant jurisdiction) is not larger than a country.

[124] A Hausman-Wu test failed to reject at the 5% level the null hypothesis that the WEF rating is exogenously determined relative to FDI inflows. The instrument set included all the variables displayed in Table III and the variable "recent EU member or candidate." The first-stage R2 was 0.73 and the first-stage adjusted R2 was 0.68. The correlation between the predicted and the actual WEF ratings was 0.86.

[125] In a different version of the FDI regression model, the lagged (year 2000) dependent variable was introduced as an additional explanatory variable. The coefficient of the lagged dependent variable was positive and highly significant. Even accounting for the lagged dependent variable, the WEF coefficient was estimated as 0.30 with a t statistic of 1.87, which indicated a statistical significance at the 7% level. At a 10% or lower significance level, only two other explanatory variables were found significant; they were the logarithm of the population and the EU variable. This version of the model had an R2 of 0.91 and adjusted R2 of 0.88. Table A.2 in the Appendix includes the statistical software printout for this version of the FDI regression model in addition to the version displayed in Table III.

[126] The Heritage Foundation website also provides data on the individual components of the composite index (EFI). These components are labelled "Regulation," "Trade," "Fiscal," "Gov't," "Monetary," "Investment,"

correlation coefficient between "high inflation" and the WEF rating is -0.46, which is higher (in absolute magnitude) than the correlation coefficient between "high inflation" and logarithmic FDI inflows, -0.40. The correlation coefficient between "high EFI" and the WEF rating is 0.42, which is also higher than the correlation coefficient between "high EFI" and logarithmic FDI inflows, 0.33. For either of the "high inflation" and "high EFI" variables, the magnitude of the variable's correlation with the WEF rating relative to the variable's correlation with the logarithmic FDI inflows explains the moderate levels of the *t* statistic and statistical significance for that variable in Table III. Despite a moderately high correlation between either of these two variables and the WEF rating, the WEF rating retains a relatively high *t* statistic and statistical significance thanks to its relatively high correlation with the dependent variable, 0.73.

These correlations indicate that:

1. macroeconomic stability is positively associated with an effective competition policy, it is also positively associated with FDI inflows to an almost equal degree,
2. overall economic liberalisation is positively associated with an effective competition policy, it is associated with FDI inflows to an also positive but lesser degree,
3. competition policy effectiveness is positively and significantly associated with FDI inflows.

Both of the market size variables (the logarithm of the population and the sample rank of per capita GDP, PPP in 1995 dollars) are positive and significant. The EU variable and the "Venezuela (oil exporter)" variable are also positive and significant. The positive and statistically highly significant coefficient of the EU variable may be due to a high level of intra-EU FDI flows;[127] this coefficient's magnitude and its level of statistical significance may also reflect the effectiveness of the EU superstructure as well as any positive externalities among the member countries in attracting FDI inflows. The R^2 was 0.86, implying that the variables displayed in Table III explained 86% of the variation in FDI inflows.[128] Table A.2 in the Appendix displays the statistical software printout.[129]

"Financial," "Property Rights," and "Corruption." In another version of the FDI regression model, the "high EFI" variable (reflecting a value of the composite index in excess of the sample median) was replaced jointly by "high trade" and "high financial" variables (indicating a "Trade" component index value or a "Financial" component index value in excess of the respective median value in the sample). In this version, FDI inflows were found to be negatively related to the "high trade" variable and positively related to the "high financial" variable, although neither was significant at the 10% level. This did not qualitatively affect the magnitude or the statistical significance of the WEF variable.

[127] Intra-EU FDI flows constituted nearly a quarter of all FDI inflows to the EU-25 countries during years 2001 through 2004 (source: Eurostat, "Direct investment inward flows by main investing country").

[128] The adjusted R2 was 0.83.

[129] The estimation is based upon only those countries for which both the dependent and the independent variables have non-missing values. Three important sources for potential biases in regression coefficient estimates are omitted variable bias, measurement bias, and endogeneity bias. A relatively high value of the R2 statistic usually indicates that omitted variables are not a significant source of variation compared with the variables included in the model. The variables included in the model are relatively straightforward to measure, and are likely exogenous at least when measured on a year-to-year basis, as they are here. The primary variable for which endogeneity may have been an issue is the WEF rating. The endogeneity of the

Conclusion, Policy Implications and Future Research

Outcome efficacy is ultimately determined by interactions between a country's competition policy and other institutions, contracts, and policies. For example, consider incumbent carriers' refusal to lease excess capacity to a new entrant in mobile telecommunications.[130] Competition authority of the host country might consider enforcement action that would effectively force the incumbent carriers to lease their excess capacity to the entrant on a non-discriminatory basis. Ceteris paribus, a case could be made that such enforcement action may reduce the level, and/or delay the timing, of FDI entry into telecommunications infrastructure. However, if infrastructure competition is contractually mandated by the initial agreement between the entrant and the host government, then this kind of enforcement action can be argued as less likely to reduce or delay FDI entry into infrastructure.[131]

Furthermore, the link between competition policies and outcome efficacy is probably determined at a market level. Specifically, FDI might be attracted to market power in the market of entry. FDI might also seek competitive conditions in markets that are vertically related to the market of entry. Theoretically, the relative extents of the market power effects in the market of entry and vertically related markets on the investment incentives would depend on the nature of the vertical relationships in each specific case. An uneven (or uncertain) distribution of market power across markets and/or market participants may also repel risk-averse potential entrants.

The returns to effectiveness are explained largely by the qualitative variables indicating "developed country," "EU member or candidate" and "recent EU member or candidate." Effectiveness gaps between the developing versus the developed countries, and between the recent EU members (and candidates) versus other EU members may be interpreted as indicating a need for technical support in the design and implementation of competition policies, and a need for increased effectiveness in the enforcement technology, for the developing countries and the recent EU members and candidates.

Available statistical evidence supports the proposition that effective implementation of existing laws is also a function of time. As a result, countries such as recent EU members and EU candidate(s) that are currently placed close to the southeast corner of Figure10.2 can reasonably expect to strengthen implementation

WEF rating was tested; and the test failed to reject at the 5% level of significance the null hypothesis that the WEF rating is exogenously determined relative to FDI inflows. Additionally, non-uniform variance (heteroscedastic) residuals can result in a loss of statistical efficiency. For the model in Table III, a specification Chi-square statistic was computed. The statistically insignificant result of this computation indicated that if no specification errors are present, then the null hypothesis of uniform variance (homoscedastic) residuals could not be rejected. The high t statistics of the coefficients are consistent with the absence of multicollinearity as a problem. Moreover, a non-normal distribution of the residual term can render invalid a test of statistical significance (such as the t test or the F test). The result of a Kolmogorov-Smirnoff test of normality indicated that the logarithmic FDI variable is normally distributed.

[130] Turkish Competition Agency actually investigated such a case; in 2003 it decided in favour of the entrant (a consortium with foreign investment participation) and issued fines and injunctive relief. See the chapter on Turkey in CUTS (2006).

[131] In the Turkish competition case mentioned above, the entrant had agreed to build its own infrastructure within five years of entry.

effectiveness over time, and thus migrate toward the northeast corner in Figure 10.2. Extra-agency initiatives may accelerate this transformation. Examples of extra-agency initiatives include civil society organisations, ability of private parties to initiate lawsuits under the competition laws, and ability to collect private damages from violators.[132]

With respect to efficacy, statistical findings support the relevance of competition laws, policies and effective implementation for increased welfare in the dynamic sense.[133] Moreover, these findings indicate that in addition to competition policies, efficacy is also a function of binary variables (for example, EU membership), which are not always determined on the basis of economic criteria only.

Statistical analyses presented above have important policy implications. They suggest that the gaps between the developed and the developing countries cannot be bridged merely by increasing the size of the competition agencies' budgets. Reorganising agencies' spending priorities as well as developing extra-agency initiatives can be complementary means to bridge these gaps. Increasing competition effectiveness is relevant for national competitiveness. Moreover, efficacy can partially be increased through a binary transformation in a country's status (for example, EU membership). Conversely, an efficacy gap may persist as long as economic and other types of conditions preclude a binary transformation.

This study does not address the question of competition agency efficiency (for example relative to the minimum cost or the time duration required to process a given type of case). Neither does this study attempt to determine the circumstances under which a competition agency may have the greatest effect on competitive conditions (for example, relative to initial competitive conditions) in a country. These are among the pertinent questions and issues that may direct future research.

---

[132] The decision whether to allow private parties to sue under the antitrust laws is at the discretion of each individual country.

[133] These findings can also be interpreted as supporting the conjecture that investors on average expect an unfavourable and/or uncertain distribution of market power across markets and firms.

References

Banga R. (2003), "Impact of Government Policies and Investment Agreements on FDI Inflows", Working Paper 116, Indian Council for Research on International Economic Relations.

Blonigen, B. A. and M. Wang (2004), "Inappropriate Pooling of Wealthy and Poor Countries in Empirical FDI Studies", NBER Working Paper No. 10378 Internet: http://www.nber.org/papers/w10378.

Charlton, A. (2003), "Incentive Bidding for Mobile Investment: Economic Consequences and Potential Response", OECD Development Centre Working Paper No. 203.

Crampton, P. (2003), "Competition and Efficiency as Organizing Principles for all Economic and Regulatory Policymaking", Latin American Competition Forum Working Paper No. 2.

CUTS (2006), "Competition Regimes in the World: A Civil Society Report".

CUTS C-CIER (2005), "Foreign Direct Investment and Competition Policy", Briefing Paper No. 2/2005.

Dahl, J (2002), "Incentives for Foreign Direct Investment – The Case of SADC in the 1990s", Namibian Economic Policy Research Unit (NEPRU) Working Paper 8.

Dutz, M A and M Vagliasindi (2000), "Competition Policy Implementation in Transition Economies: An Empirical Assessment," European Economic Review, 44(4-6), 762-772.

Dutz, M A and M Vagliasindi (1999), "Competition Policy Implementation in Transition Economies: An Empirical Assessment", European Bank for Reconstruction and Development Working Paper No. 47.

Evenett, S. J. (2002), "How Much Have Merger Review Laws Reduced Cross Mergers and Acquisitions?", Unpublished manuscript, World Trade Institute, Berne.

Fingleton, J., Fox E., D. Neven and P. Seabright (1998), "Competition Policy and the Transformation of Central Europe", Centre for Economic Policy Research, London.

FitzGerald, V. (2002), "Regulatory Investment Incentives", QEH Working Paper Series No. 80. Revised version of paper DAFFE/IME/RD (2001) 24 commissioned by the OECD Department of Financial, Fiscal and Enterprise Affairs for the Committee on International Investment and Multinational Enterprises.

Fox, E. (2000), "Antitrust and Regulatory Federalism: Races Up, Down, and Sideways", New York University Law Review, 75(6), 101-126.

Ginarte, J. C. and Park W. G. (1997), "Determinants of Patent Rights: A Cross National Study", Research Policy, 26, 283-301.

Global Competition Forum, Internet: http://www.globalcompetitionforum.org/

Goldberg, L. S. (2004), "Financial-Sector Foreign Direct Investment and Host Countries: New and Old Lessons", FRB of New York Staff Report No. 183.

Graham, E. M. and J. D. Richardson eds. (1997), "Global Competition Policy", Washington, DC: Institute for International Economics.

Hoekman, B. (1997), "Focal Points and Multilateral Negotiations on the Contestability of Markets", in: K. E. Maskus, et al., eds., Robert M. Stern and His International Economic Legacy. Ann Arbor: University of Michigan Press.

Hylton, K. N. and F. Deng (2006), "Antitrust Around the World: An Empirical Analysis of the Scope of Competition Laws and Their Effects", Boston University School of Law Working Paper Series, Law and Economics, Working Paper No. 06-47 (forthcoming, Antitrust Law Journal, 2007).

Inal, A. G. (2003), "A Study into Competitiveness Indicators", REF Report, Istanbul. Internet: http://ref.advancity.net/En/Moduller/Makaleler/MakaleForm.aspx?KodAl=0&mdId=184

International Competition Network, Internet: http://www.internationalcompetitionnetwork.org/

Jenny, F. (1995), *Competition and Efficiency,* in: B. Hawk, ed., "International Antitrust Law & Policy", Annual Proceedings of the Fordham Corporate Law Institute.

Kee, H. L. and B. Hoekman (2003), "Imports, Entry, and Competition Law as Market Disciplines", CEPR Discussion Paper No. 3777.

Khemani, R. S. (2003), "Some Perspectives on Competition Policy for Developing Economies", Speaking Notes for the Second Annual Meeting of the International Competition Network.

Lapachi, K. (2002), "An Examination of the Present Competition Law of Georgia Using Pittman's Criteria", Antitrust Bulletin, 47(1), pp. 187-215.

Maskus, K. E. (2000), "Intellectual Property Rights and Foreign Direct Investment", University of Adelaide, Centre for International Economic Studies Policy Discussion Paper No. 0022.

Mehta, Pradeep S and Evenett S. J. (2006), "Promoting Competition around the World: A Diversity of Rationales and Approaches", in: CUTS (2006).

Neven, D. J. and G. Siotis (1993), "Foreign Direct Investment in the European Community: Some Policy Issues", C.E.P.R. Discussion Paper No 798.

Nicholson, M. W. (2006), "The Impact of Industry Characteristics and IPR Policy on Foreign Direct Investment", Unpublished manuscript, Transylvania University.

Nicholson, M. W. (2004), "Quantifying Antitrust Regimes", Unpublished manuscript, US Federal Trade Commission.

Noland, M. (1999), "Competition Policy and FDI: A Solution in Search of a Problem?", Institute for International Economics Working Paper 99-3.

OECD (1997), "Technology and the Economy: The Key Relationships", Paris.

OECD (2002), "The Economics of International Investment Incentives", Article prepared by Professor Magnus Blomström, Stockholm School of Economics, NBER and CEPR.

OECD (2003), "Incentives-Based Competition for FDI in Developing Countries: Findings of a Joint WAIPA/OECD Questionnaire", Directorate for Financial, Fiscal and Enterprise Affairs, Paris.

Pittman, R. (1998), "Competition Law in Central and Eastern Europe: Five Years Later", Antitrust Bulletin, 43(1), 179-228.

Rapp, R. and R. Rozek (1990), "Benefits and Costs of Intellectual Property Protection in Developing Countries", Journal of World Trade, 24, 75-102.

Sader, F. (1993), "Privatization and Foreign Investment in the Developing World 1988-92", World Bank Policy Research Working Paper WPS 1202.

Sader, F. (1995), "Attracting Foreign Direct Investment into Infrastructure: Why Is It So Difficult?", Foreign Investment Advisory Service Occasional Paper 12.

Singh H. and K. W. Jun (1995), "Some New Evidence on Determinants of Foreign Direct Investment in Developing Countries", World Bank Policy Research Working Paper WPS 1531.

Turkish Competition Authority (2004), "Year 2003 Operational Report (in Turkish)", Ankara.

United Nations (2002), "World Investment Report 2002", New York and Geneva.

Waldkirch, A. (2003), "Vertical FDI? A Host Country Perspective", Unpublished manuscript, Oregon State University.

Wallensten S. (1999), "An Empirical Analysis of Competition, Privatization and Regulation in Telecommunications Markets in Africa and Latin America", World Bank Policy Research Working Paper No. 2136.

World Bank (2004a), World Development Indicators CD-ROM, Washington, D.C.: International Bank for Reconstruction and Development.

World Bank (2004b), "Gross foreign direct investment (% of GDP)", Series id: BG.KLT.DINV. GD.ZS, year 2002.

World Bank (2004c), "Inflation, consumer prices (annual %)", Series id: FP.CPI.TOTL.ZG, year 2001.

World Bank (2004d), Population, total, Series id: SP.POP.TOTL, year 2001.

World Bank (2004e), GDP per capita, PPP (constant 1995 international $), Series id: NY.GDP.PCAP.PP.KD, year 2001.

Annex 1

FIGURE I: Ex-post Policy Evaluation Framework: A Schematic Demonstration

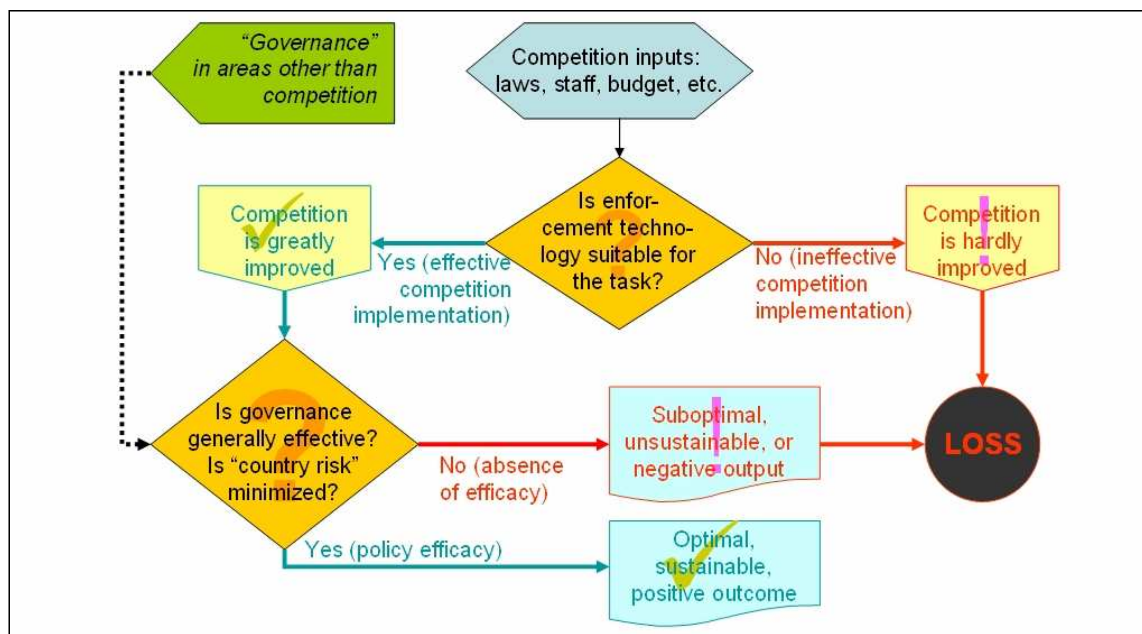


FIGURE II: Four Corners of The International Antitrust Landscape, in Three Dimensions

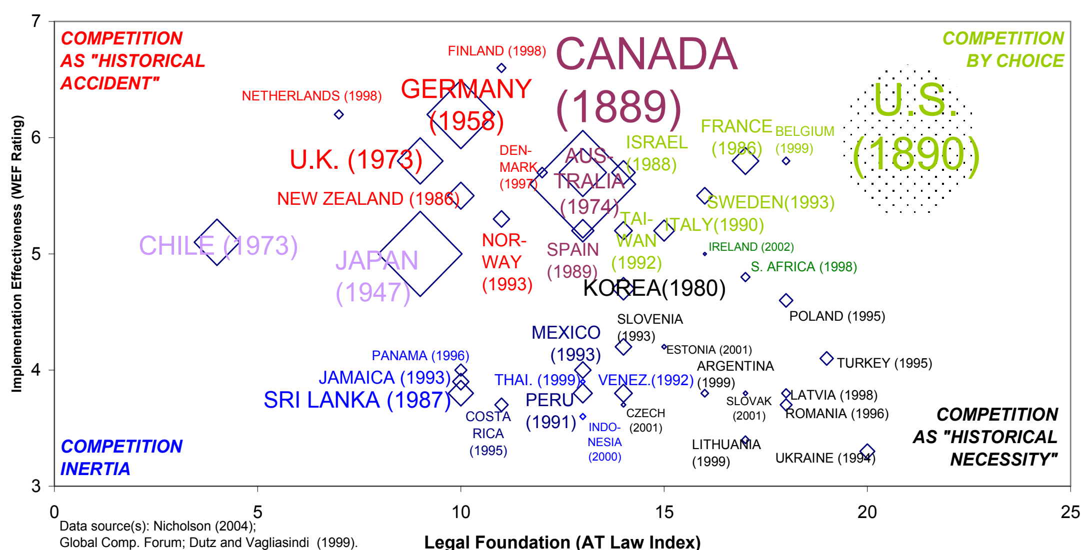


FIGURE III: Effectiveness As A Function Of Budget

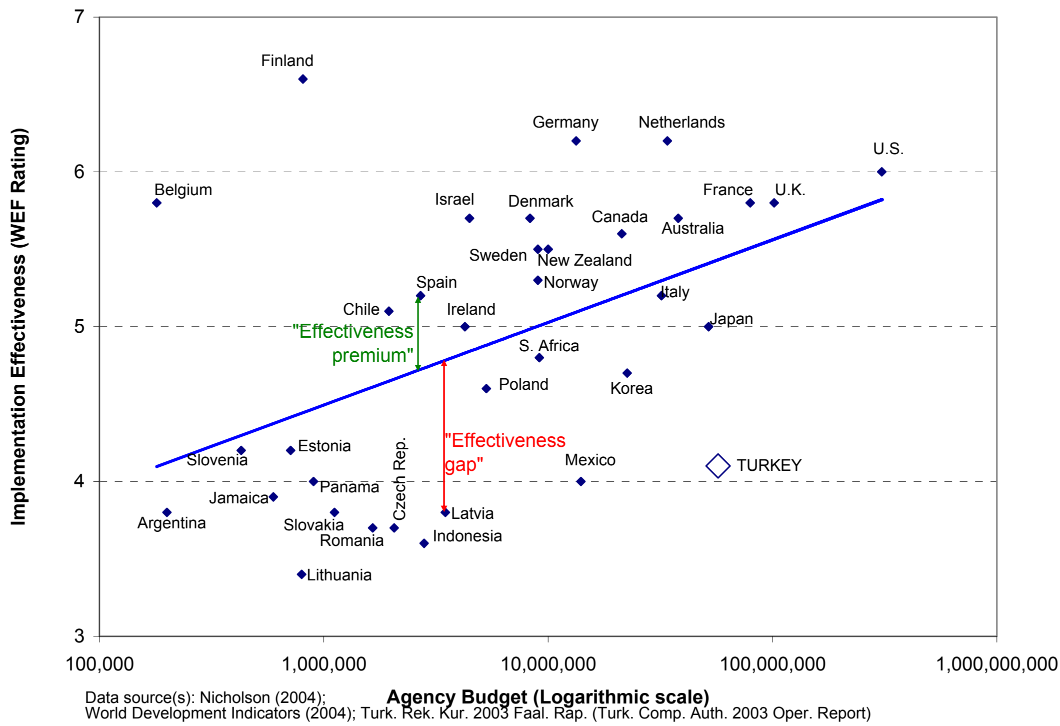
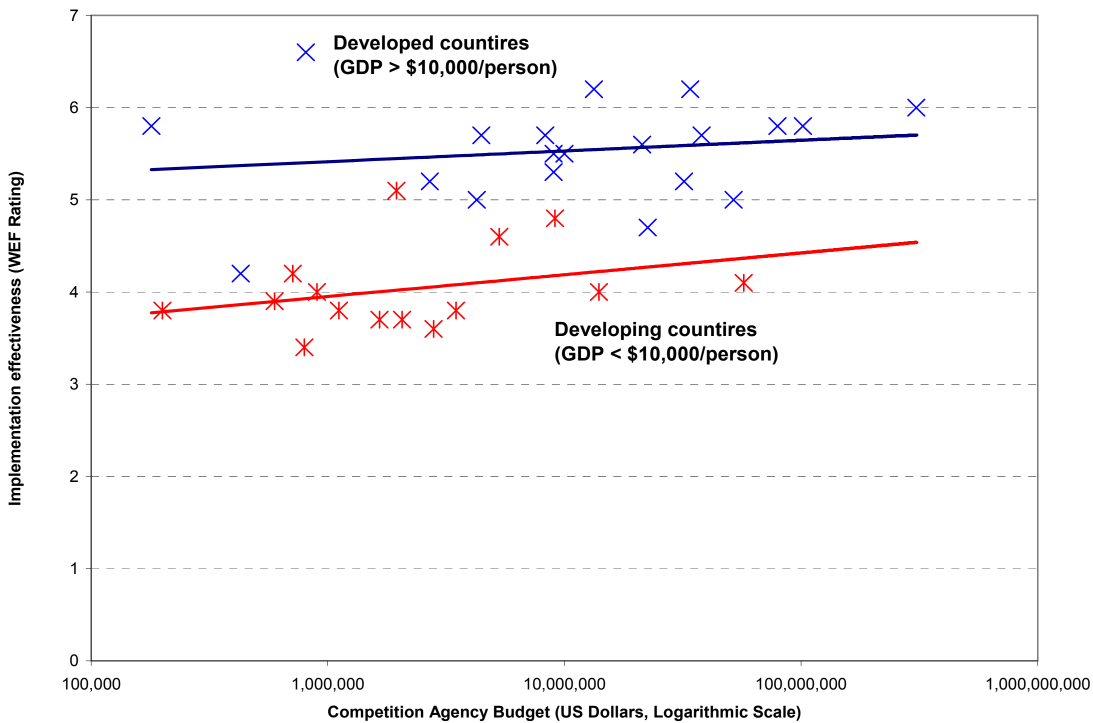
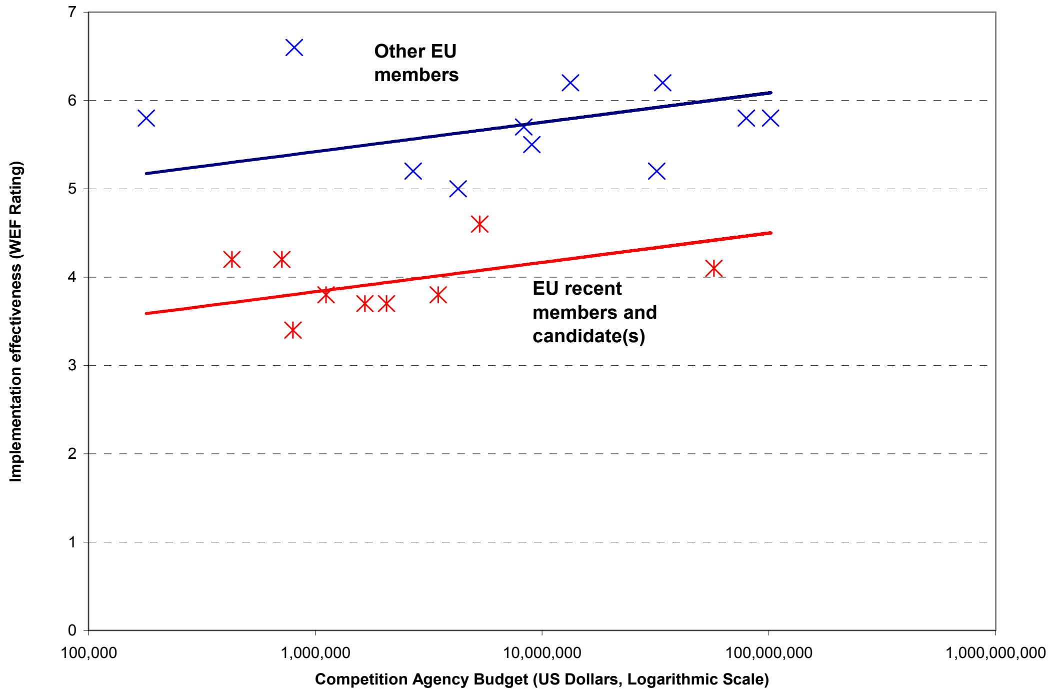


FIGURE IV: Effectiveness Gap: Developed Countries Vs. Other Countries



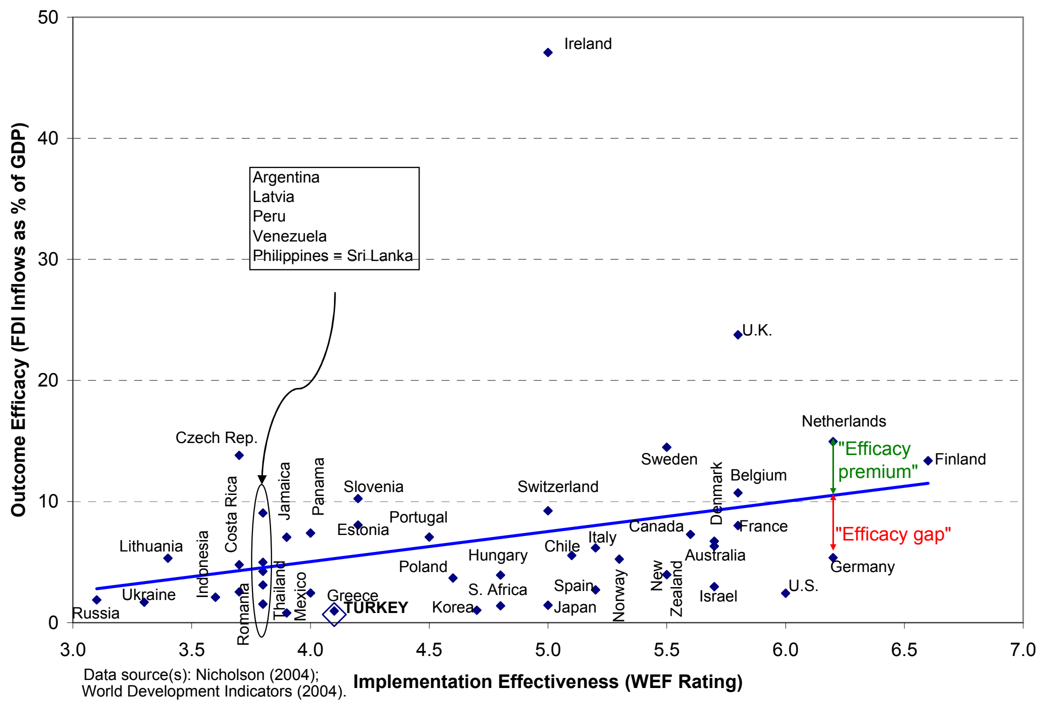
Data Source: Nicholson (2004); World Bank (2004)

FIGURE V: Effectiveness Gap: Recent EU Members and EU Candidate(S) Vs. Other EU Members



Source: Nicholson (2004); World Bank (2004)

FIGURE VI: Efficacy as a Function of Effectiveness



Annex 2

TABLE A.1: Ordinary Least Squares estimation of the effect of an increase in the agency budget and staff size on antitrust implementation effectiveness (measured by the WEF rating)

Dependent Variable = WEF rating

The SAS System 17:11 Saturday, June 3, 2006 18

The REG Procedure

Descriptive Statistics

Variable	Sum	Mean	Uncorrected SS	Variance	Standard Deviation
Intercept	35.00000	1.00000	35.00000	0	0
LogBudget	543.62698	15.53220	8559.27673	3.39865	1.84354
staff_NI	21.78930	0.62255	29.78163	0.47696	0.69062
WEF	171.20000	4.89143	865.68000	0.83139	0.91181
EU	20.00000	0.57143	20.00000	0.25210	0.50210
New2EU_Candidate	9.00000	0.25714	9.00000	0.19664	0.44344
DC	20.00000	0.57143	20.00000	0.25210	0.50210
LogYears	85.54067	2.44402	241.84958	0.96431	0.98199

Descriptive Statistics

Variable	Label
Intercept	Intercept
LogBudget	
staff_NI	
WEF	WEF
EU	EU
New2EU_Candidate	New2EU_Candidate
DC	
LogYears	

Correlation

Variable	Label	LogBudget	staff_NI	WEF	EU
LogBudget		1.0000	-0.3186	0.4687	-0.1286
staff_NI		-0.3186	1.0000	-0.4180	0.1862
WEF	WEF	0.4687	-0.4180	1.0000	0.0431
EU	EU	-0.1286	0.1862	0.0431	1.0000

New2EU_Candidate	New2EU_Candidate	-0.3083	0.5833	-0.6200	0.5095
DC		0.4355	-0.3938	0.8269	0.0667
LogYears		0.5956	-0.3216	0.5496	-0.3937

Correlation

Variable	Label	New2EU_ Candidate	DC	LogYears
LogBudget		-0.3083	0.4355	0.5956
staff_NI		0.5833	-0.3938	-0.3216

The SAS System 17:11 Saturday, June 3, 2006 19

The REG Procedure

Correlation

Variable	Label	New2EU_ Candidate	DC	LogYears
WEF	WEF	-0.6200	0.8269	0.5496
EU	EU	0.5095	0.0667	-0.3937
New2EU_Candidate	New2EU_Candidate	1.0000	-0.5473	-0.4341
DC		-0.5473	1.0000	0.5006
LogYears		-0.4341	0.5006	1.0000

The SAS System 17:11 Saturday, June 3, 2006 20

The REG Procedure

Model: MODEL1

Dependent Variable: WEF WEF

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	8.48032	4.24016	6.86	0.0033
Error	32	19.78710	0.61835		
Corrected Total	34	28.26743			

Root MSE	0.78635	R-Square	0.3000
Dependent Mean	4.89143	Adj R-Sq	0.2563
Coeff Var	16.07609		

Parameter Estimates

Parameter Standard

Variable	Label	DF	Estimate	Error	t Value	Pr > |t|
Intercept	Intercept	1	2.26893	1.25253	1.81	0.0795
LogBudget		1	0.18467	0.07717	2.39	0.0228
staff_NI		1	-0.39486	0.20600	-1.92	0.0642

The REG Procedure

Model: MODEL2

Dependent Variable: WEF WEF

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	21.65575	4.33115	19.00	<.0001
Error	29	6.61168	0.22799		
Corrected Total	34	28.26743			

Root MSE	0.47748	R-Square	0.7661
Dependent Mean	4.89143	Adj R-Sq	0.7258
Coeff Var	9.76160		

Parameter Estimates

Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	Intercept	1	3.12514	0.79338	3.94	0.0005
LogBudget		1	0.07497	0.05092	1.47	0.1517
staff_NI		1	0.06102	0.15026	0.41	0.6877
EU	EU	1	0.43831	0.22103	1.98	0.0569
New2EU_Candidate	New2EU_Candidate	1	-0.89705	0.32719	-2.74	0.0104
DC		1	0.95203	0.23845	3.99	0.0004

The REG Procedure
Model: MODEL3
Dependent Variable: WEF WEF

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	6	22.55906	3.75984	18.44	<.0001
Error	28	5.70837	0.20387		
Corrected Total	34	28.26743			

Root MSE	0.45152	R-Square	0.7981
Dependent Mean	4.89143	Adj R-Sq	0.7548
Coeff Var	9.23084		

Parameter Estimates

Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	Intercept	1	3.32277	0.75610	4.39	0.0001
LogBudget		1	0.02336	0.05404	0.43	0.6688
staff_NI		1	0.07911	0.14235	0.56	0.5828
EU	EU	1	0.66960	0.23613	2.84	0.0084
New2EU_Candidate	New2EU_Candidate	1	-1.00939	0.31397	-3.21	0.0033
DC		1	0.72703	0.24954	2.91	0.0069
LogYears		1	0.25289	0.12014	2.10	0.0444

TABLE A.2: Ordinary Least Squares estimation of the effect of antitrust implementation effectiveness (measured by the WEF rating) on FDI inflows

Dependent Variable = Logarithm of foreign direct investment inflow (2001)

```
The SAS System                                22:16 Friday, March 30, 2007

The REG Procedure
```

Descriptive Statistics

Variable	Sum	Mean	Uncorrected SS	Variance
Intercept	46.00000	1.00000	46.00000	0
WEF	215.20000	4.67826	1044.98000	0.84929
highinf	9.00000	0.19565	9.00000	0.16087
LogPopTotal	765.21577	16.63513	12808	1.74333
RankGDPpercapPPP1995intldollars	1127.00000	24.50000	35719	180.16667
hiefi	23.00000	0.50000	23.00000	0.25556
EU	23.00000	0.50000	23.00000	0.25556
VZ	1.00000	0.02174	1.00000	0.02174
LogWIRFDI01	379.11430	8.24162	3234.55719	2.44540
LogWIRFDI00	390.94767	8.49886	3495.63026	3.84488

Descriptive Statistics

Variable	Standard Deviation	Label
Intercept	0	Intercept
WEF	0.92157	WEF
highinf	0.40109	
LogPopTotal	1.32035	
RankGDPpercapPPP1995intldollars	13.42262	
hiefi	0.50553	
EU	0.50553	EU
VZ	0.14744	
LogWIRFDI01	1.56378	
LogWIRFDI00	1.96084	

Correlation

Variable	Label	WEF	highinf	LogPopTotal
WEF	WEF	1.0000	-0.4572	0.0725
highinf		-0.4572	1.0000	0.0554
LogPopTotal		0.0725	0.0554	1.0000

RankGDPpercapPPP1995intldollars		0.8165	-0.4726	-0.0182
hiefi		0.4245	-0.3836	-0.0513
EU	EU	0.2051	-0.0548	-0.2482
VZ		-0.1436	0.3023	0.0439
LogWIRFDI01		0.7341	-0.4001	0.5037
LogWIRFDI00		0.7531	-0.4577	0.4223

The SAS System 22:16 Friday, March 30, 2007

The REG Procedure

Correlation

Variable	Label	RankGDPpercap PPP1995intldollars	hiefi	EU
WEF	WEF	0.8165	0.4245	0.2051
highinf		-0.4726	-0.3836	-0.0548
LogPopTotal		-0.0182	-0.0513	-0.2482
RankGDPpercapPPP1995intldollars		1.0000	0.4208	0.2604
hiefi		0.4208	1.0000	-0.1304
EU	EU	0.2604	-0.1304	1.0000
VZ		-0.1965	-0.1491	-0.1491
LogWIRFDI01		0.6964	0.3323	0.2012
LogWIRFDI00		0.7571	0.4304	0.1645

Correlation

Variable	Label	VZ	LogWIRFDI01	LogWIRFDI00
WEF	WEF	-0.1436	0.7341	0.7531
highinf		0.3023	-0.4001	-0.4577
LogPopTotal		0.0439	0.5037	0.4223
RankGDPpercapPPP1995intldollars		-0.1965	0.6964	0.7571
hiefi		-0.1491	0.3323	0.4304
EU	EU	-0.1491	0.2012	0.1645
VZ		1.0000	-0.0104	-0.0073
LogWIRFDI01		-0.0104	1.0000	0.9297
LogWIRFDI00		-0.0073	0.9297	1.0000

The SAS System 22:16 Friday, March 30, 2007

The REG Procedure
Model: MODEL1
Dependent Variable: LogWIRFDI01

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	7	94.11543	13.44506	32.08	<.0001

Error	38	15.92758	0.41915
Corrected Total	45	110.04302	

Root MSE	0.64742	R-Square	0.8553
Dependent Mean	8.24162	Adj R-Sq	0.8286
Coeff Var	7.85544		

Parameter Estimates

Variable	Label	DF	Parameter Estimate	Standard Error	t Value
Intercept	Intercept	1	-6.27736	1.36706	-4.59
WEF	WEF	1	0.50513	0.18853	2.68
highinf		1	-0.53674	0.29192	-1.84
LogPopTotal		1	0.64855	0.07758	8.36
RankGDPpercapPPP1995intldollars		1	0.03893	0.01309	2.98
hiefi		1	0.28791	0.22885	1.26
EU	EU	1	0.67377	0.21694	3.11
VZ		1	1.71815	0.69693	2.47

Parameter Estimates

Variable	Label	DF	Pr > |t|
Intercept	Intercept	1	<.0001
WEF	WEF	1	0.0108
highinf		1	0.0738
LogPopTotal		1	<.0001
RankGDPpercapPPP1995intldollars		1	0.0051
hiefi		1	0.2160
EU	EU	1	0.0036
VZ		1	0.0183

The SAS System 22:16 Friday, March 30, 2007

The REG Procedure
Model: MODEL2
Dependent Variable: LogWIRFDI01

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	8	99.59024	12.44878	44.07	<.0001
Error	37	10.45277	0.28251		
Corrected Total	45	110.04302			

Root MSE	0.53151	R-Square	0.9050
Dependent Mean	8.24162	Adj R-Sq	0.8845
Coeff Var	6.44915		

Parameter Estimates

Variable	Label	DF	Parameter Estimate	Standard Error	t Value
Intercept	Intercept	1	-2.88272	1.36171	-2.12
WEF	WEF	1	0.30172	0.16153	1.87
LogWIRFDI00		1	0.47480	0.10785	4.40
highinf		1	-0.15727	0.25469	-0.62
LogPopTotal		1	0.32024	0.09808	3.27
RankGDPpercapPPP1995intldollars		1	0.00784	0.01286	0.61
hiefi		1	-0.01900	0.20040	-0.09
EU	EU	1	0.37390	0.19068	1.96
VZ		1	0.53229	0.63241	0.84

Parameter Estimates

Variable	Label	DF	Pr > |t|
Intercept	Intercept	1	0.0410
WEF	WEF	1	0.0697
LogWIRFDI00		1	<.0001
highinf		1	0.5407
LogPopTotal		1	0.0024
RankGDPpercapPPP1995intldollars		1	0.5458
hiefi		1	0.9250
EU	EU	1	0.0575
VZ		1	0.4054

11

Towards Harmony between Regulation and Competition Agencies: Experience from Turkish Telecommunications Industry

ALPER KARAKURT AND USSAL ŞAHBAZ

Introduction

In this paper, reviewing two cases from Turkish telecommunications industry, in order to foster liberalisation in infrastructure industries in developing countries, we suggest several conditions for an effective collaboration of sectoral regulatory agencies and competition agencies: (1) a clear division of powers between regulatory and competition authorities, preferably by an act or a joint communiqué; (2) formal communication mechanisms between two bodies; (3) competitive market design in the privatisation stage.

Regulation of infrastructure industries, namely telecommunications, electricity, natural gas, and water sectors is a hot issue in many developing economies. Large-scale privatisations and establishment of independent regulatory bodies for infrastructure industries has been a recent trend in many developing economies. Most of those countries also enacted competition laws and established independent agencies to avoid practices restricting competition, abuse of dominance and anti-competitive mergers. Consequently, in some countries, competitive process in some infrastructure industries is under the oversight of two distinct bodies: a competition authority which has economy-wide powers and a sector-specific regulator.

In this paper, by reviewing Turkish experience in telecommunications industry, we suggest that a co-existence of independent regulation and competition authority may be beneficial to make utilities industries competitive, provided that the borders between jurisdictions of two independent authorities are clearly drawn and collaboration / dispute resolution mechanisms are clearly defined. Absence of these conditions may lead to legal uncertainty and institutional conflict that may hinder competition in these markets.

First section of the paper provides a conceptual framework of tensions between competition authority and sector-specific regulator. Section 2 provides information on the legal and regulatory framework of Turkish telecommunications industry. Section 3 presents two case studies from Turkish telecommunications industry and offers a synthesis about the collaboration mechanisms between competition agencies and sectoral regulators and section 4 concludes.

Regulation vs. Competition

Creation of competitive market structures in infrastructure industries is vital for sustainable economic growth as competition in these industries will provide lower prices and efficient supply of important inputs to the other sectors of economy. Meanwhile, regulation of utilities is a complicated issue. In many instances, more regulation is preferred to free-market, since pricing, access and universal service issues are very sensitive for these industries (Siclen 2000). Consequently, infrastructure industries are generally over-regulated. There are two broad categories for the factors that result in overregulation: firstly, there is a time inconsistency problem concerning the competitive process. The outcomes of competition policy are obtained in the long-run, while political authorities are generally concerned with short-run. This time inconsistency results in a conflict between several other objectives of government and establishment of competitive markets. For instance, government may want to maximise revenue from privatisation of a public utility company, while establishment of a competitive market prior to liberalisation will lower that revenue (OECD 1999). Secondly, the decision making and regulatory mechanisms may be captured by vested interests in the industry. This regulatory capture may stem from either direct involvement of market actors in the regulatory process or their indirect effect through their links within bureaucracy (Viscusi et al. 1995).

Activities of the competition authority to establish competitive market structures provide an important mechanism to balance the government's or regulator's objectives. The establishment of more competitive markets will enhance long-term productivity and growth; while, government's short-run objective to maximise privatisation profit, for instance, acts as an indirect tax on consumers, since the new owner of the utility firm will enjoy monopoly profits to cover its privatisation payments rather than engaging in competitive pricing. Concerning the regulatory capture problem, as also acknowledged by OECD (1999), in general, economy-wide agencies are more immune to regulatory capture than sector-specific regulators. As a result, a competition authority should balance any anti-competitive capture of regulators towards a more competitive market structure, if the regulator's actions are not exempt from competition scrutiny.

During the liberalisation of the telecommunications industry, regarding the share of powers by competition agencies and sectoral regulators, a variety of models are applied in different countries. In some instances, like Australia, all powers (including ex-ante regulation) are vested at the competition agency. An excellent comparative review of experiences of Australia, New Zealand, United States and Chile can be found in Kerf and Geradin (2000).

Although co-existence of independent regulation and competition authority might make utilities industries competitive, there exist natural tensions between the independent competition authority and sectoral regulators, as outlined above. In the remainder of the paper, we will provide examples of these tensions from Turkish experience in telecommunications industry, which witnessed substantial reforms

towards liberalisation in the last decade[134], and provide a framework for their co-existence by utilising these experiences.

Legal and Regulatory Framework in Turkish Telecommunications Industry[135]

The first two players in the Turkish mobile telephony market, Turkcell and Telsim, began their operations in 1994. Initially the two operators had revenue sharing agreements with the government-owned fixed-line operator, Turk Telekomünikasyon A.S. (TTAS). In 1998, the revenue sharing agreements were replaced by 25-year concession agreements signed between the operators and Ministry of Transport.

The monopoly of the Turk Telekomünikasyon A.S. (TTAS) over the fixed line infrastructure and voices services has ended at the end of 2003. An independent regulatory body, The Telecommunications Authority (TA), was established by the Telecommunications Law[136] in 2000. TA was authorised to issue regulations for the telecommunications industry, determine operators which are responsible to provide interconnection and roaming services, regulate or set tariffs, monitor compliance and impose fines in case of non-compliance. It also replaced the Ministry of Transport as the party of the concession agreements signed with the mobile operators.

On the other hand, the economy-wide anti-trust powers are vested in Turkish Competition Authority (TCA), an autonomous administrative agency established by The Competition Act of 1994[137]. The Competition Act has provisions parallel to the EU competition regime. It prohibits agreements restricting competition and abuse of dominance, and establishes a merger control regime. The decision-making authority of the TCA is the Competition Board. TCA's power virtually covers all markets and all forms of economic activity.

For telecommunications industry, the law does not draw a clear border between the tasks TA and TCA. *Regarding ex-post competition investigations,* Telecommunications Law provides the TA with the authority to investigate anticompetitive practices in the industry, while the economy-wide authority of TCA – stemming from the Competition Law - still encompasses telecommunications industry. Telecommunications Law (article 16) does not deny TCA's authority in the sector, but merely obliges it to the TA's opinion into consideration before taking any decisions regarding the telecommunications industry. On the contrary, it does not

---

[134] The liberalisation in Turkish energy markets has been relatively slow compared to telecommunications market, as in most countries. In the provision of water, liberalisation efforts are negligible. Partly because of this reason, more conflicts between regulatory and competition agencies appeared in telecommunications industry, which will be the focus of this paper.

[135] For an extensive review, see Atiyas (2005). Another recent paper by Atiyas and Doğan (2006) analyses the links between regulatory environment and competitive outcomes in the Turkish mobile telephony industry.

[136] 'Law Amending Certain Articles of the Telegram and Telephone Law, Law on Organisation and Responsibilities of the Ministry of Transport and Wireless Law, Law on Savings and Aid Fund of the Posts Telegraphs and Telephone Administration and Organisational Charts attached to the Decree with the Force of Law on the General Cadrees and Procedures' Act No: 4502, Date of Adoption: 27.1.2000. Internet: http://www.tk.gov.tr/doc/4502english.doc.

[137] The Act on the Protection of Competition. Act No: 4054, Date of Adoption: 7 December 1994. Internet: http://www.rekabet.gov.tr/word/ekanun.doc.

require the TA to seek the opinion of the TCA. *Regarding the ex-ante regulation,* the TA's authority is clear. Nevertheless, in certain cases if 'the occurrence of serious and irreparable damages is likely until the final decision,' TCA has power to 'take interim measures which have a nature of maintaining the situation before the infringement and which shall not exceed the scope of the final decision.'[138] This power to take interim measures can be interpreted as if the authority of TCA extends to the ex-ante regulatory area. A protocol was signed between two authorities to set rules on their coordination but the protocol has never been effectively implemented[139].

Two Case Studies from Turkish Telecommunications Industry

Case Study I: The National Roaming Case

The national roaming case was brought by the new entrant into the mobile telecommunications market, Aria, against the incumbent operators, Turkcell and Telsim. Aria, a joint venture of Telecom Italia and a prominent Turkish bank, entered the market in 2001, seven years later than the two incumbent operators, and has been promised a national roaming right in its concession agreement until it establishes its own nation-wide network, which it was obliged to do within three years. Apart from general competition law concerns regarding essential facility, the roaming issue is explicitly stated in the Telecommunications Law (article 10), which requires 'mobile telecommunication, data operators or operators of other services and infrastructure as determined by the [Telecommunications] Authority are also required to satisfy reasonable, economically proportionate and technically feasible roaming requests of other operators.' This law makes Turkey one of the few countries where an explicit policy of mandatory roaming exists.

Roaming is very critical for new entrants in the mobile telecommunications market. Delays in attaining full coverage would seriously increase the cost of attracting subscribers, and the resulting delay in revenues would jeopardise the viability of the new entrant against the incumbents which are strengthening their dominance through the network externalities provided by new subscribers. After unsuccessful negotiations with incumbents, Aria applied to TA in early 2001. After another stage of unsuccessful negotiations, in October 2001, TA determined the terms and conditions of the roaming agreement and asked the parties to accept them. Aria accepted, while the incumbents declined and filed applications to the International Court of Arbitration at the International Chamber, arguing that their initial concession agreements (signed in 1998) with the Turkish government did not involve a mandatory roaming obligation. In the meantime, they also sought for a preliminary injunction decision at the local administrative courts, arguing in case they are forced to accept mandatory roaming before they win the international arbitration (which they eventually lost in 2003), they may incur unrecoverable losses.

[138] Article 9/4 of Competition Act.

[139] Atiyas (2005) offers an explanation for this situation: 'At the risk of oversimplifying, one can say that the Telecommunications Authority is of the opinion that the Competition Authority does not have the authority to carry out competition investigations in the telecommunications sector. This position has not been openly stated in any policy document, but seems to be reflecting the dominant feeling at the TA.'

Incumbent operators obtained preliminary injunction decisions from the local courts within a couple of weeks. Consequently, Telecommunications Authority has been unable to force the incumbents to open their facility to Aria.

After these unsuccessful attempts, Aria filed a complaint to the TCA in December 2001. Aria argued that the two incumbent undertakings have a jointly dominant position in the market, and their refusal to supply roaming services constitutes an abuse of dominance and hence a violation of the Competition Act. The TCA had two issues to decide on before taking the case. First, TCA had to decide whether the case is at TCA's jurisdiction or not. TCA decided that the ex-post competition investigations are clearly within TCA's jurisdiction and hence started an investigation according to the Competition Law. Second, TCA had to consider Aria's request for interim measures (under the Competition Act) to end infringement by forcing the incumbents to sign roaming agreements. The Board refrained to impose such an obligation in order not to breach the ex-ante regulation power of TA. Meanwhile the TA's roaming order was already halted by the courts and was ineffective.

The TCA's investigation lasted one and a half year until June 2003[140]. The incumbents were found to have abused their dominance by declining Aria's requests for roaming and they faced the ever-large fine that TCA imposed in a case[141]. The Board also has the power to force the undertakings to terminate their infringement of the Competition Act once the infringement is established[142]. In this stage, although it had power to determine the conditions of the roaming agreement between the parties, the Board again refrained to breach the jurisdiction of the regulatory authority and asked the TA to do so.

Meanwhile, deprived of national roaming, Aria was unable to attract new subscribers and because of its losses went to international arbitration against Turkish government. At the end, the issue was resolved through meetings of prime ministers of Italy and Turkey, as Turkish government compensated the Telecom Italia's losses in Aria by merging it with the state owned fourth mobile telecommunications operator. In summary, although it was promised in its concession agreement, Aria, a new entrant to mobile telecommunications market, was denied of its right to access to infrastructure for two years. It would have established its own infrastructure in three years according to the very same concession agreement. However, after two years of regulatory and antitrust battle, Aria left the market.

The case presents several points on the institutional structures and relations of the sectoral regulator and the competition authority: Firstly, apart from the relations

140 Investigation procedures of TCA are set in Competition Act. Three written pleas are submitted by the investigated parties during the investigation period which lasts 6 months, and can be extended for another 6 months by the Competition Board. After the investigation stage, within 30 to 60 days, an oral hearing is conducted. The one and a half year period mentioned covers these steps in addition to the preliminary analysis conducted before the investigation.

141 Decision no: 03-40/432-186. Date: September 6, 2003.

142 Competition Act, Article 9/1: 'If the Board, […] establishes that articles 4, 6 and 7 of this Act are infringed, it notifies the undertaking […] concerned of the decision encompassing those behaviour to be fulfilled or avoided so as to establish competition and maintain the situation before infringement […].'

of the two bodies, the case illustrates typical unfavourable circumstances related to judiciary in developing countries regarding regulatory or antitrust rules. Since judges lack economic approach to cases and expertise in dealing with regulatory decisions, and since the judiciary process takes too much time and during this period incumbents may have opportunity to use their basic legal protection rights to maintain the *status quo*. This may lead to exclusion of new competitors in dynamic markets where time of entry is crucial for success, which had been the case for Aria.

Secondly, regarding the termination of the infringement at the end of the investigation, the competition authority had *legal* right to determine specific conditions for access to infrastructure. Although the investigation committee proposed measures to be undertaken and avoided by the incumbents, the Competition Board decided that establishment of roaming conditions are in the jurisdiction of the sectoral regulator and decided to ask TA to do so. But the TA's attempt to this respect was already halted by the court.

Lastly, the sectoral regulator and the competition authority apparently did not have good (formal/informal) communication channels. Absence of a clear dialogue mechanism between the two agencies made the effective division of tasks and collaboration impossible.

Case II: Privatisation of the Fixed-Line Telephone Operator

The second case illustrates an experience of good inter-agency communication and effective cooperation: collaboration between TCA and Turkish Privatisation Authority (TPA) on reviews of acquisitions through privatisations. The collaboration of two agencies is based on a communiqué of Competition Board[143]. This communiqué also establishes a strict time table for TCA and TPA while delineating their respective roles in the privatisation transactions. With that communiqué, TCA has the jurisdiction in both ex-ante and ex-post privatisation proceedings. Ex-ante review is achieved by TCA, in the pre-notification stage, by forming its opinion on the conditions of the bid in order to make them compatible with the competition legislation. After the bid, TCA reviews the first three bidders. Although the ex-ante opinion of TCA is not binding on TPA, competition authority may not approve the transaction after the bid in the notification stage. This mechanism has been very successful in maximising the role of TCA in the establishment of competitive market structures after privatisations. Regarding telecommunications industry, this dialogue mechanism, up to now, has been beneficial through the privatisation process of Turk Telekom A.Ş. (TTAS), the fixed line telephone operator. Below, we first review this experience and then suggest that it is possible to get inspiration from this partnership in designing a collaboration mechanism between competition and regulatory authorities.

The fixed line operator's privatisation is a typical case of a potential conflict between short-term revenue-maximising government and long-term promotion of competition because of the time-inconsistency problem as explained in Section 2.

143 Communiqué No. 1998/5. See http://www.rekabet.gov.tr/word/tebligeng11.doc for the full text.

Privatising infrastructure monopolies in "monopoly" form is a transfer of monopoly rents to the acquirer and hence raises the price of the privatised undertaking. Nevertheless, such a privatisation strategy will yield a lot of competition problems in the future, especially about the access to infrastructure issues. Hence, a competitive market design in the privatisation process is an efficient way of sustaining effective competition in infrastructure markets. An active involvement of competition authority in the privatisation process may be beneficial in this market design process.

TTAS held the legal monopoly right in fixed line telephone services in Turkey until 2004. It also operated the cable TV infrastructure. Attempts to privatise TTAS date back to early 1990s but had not been successful as courts annulled numerous efforts. In every attempt, government tried to privatise TTAS with all its monopoly position and legal rights on infrastructure.

During the consultative process between competition and privatisation authorities, TCA foresee that the cable TV infrastructure may be viable alternative to fixed line telephone network[144]. The cable TV network, has transformed its function through technological process making two-dimensional transmission possible and with its voice and broadband internet services developed as a potential competitor to the traditional fixed-line network. TCA requested divestiture of fixed-line and cable TV networks (including legal rights to own and operate them) in order to be sold to different owners. The Telecommunications Authority argued that such a divestiture is not necessary; however it does not have primary authority in privatisation process. The privatisation process has been completed in line with the opinion of TCA, as fixed-line network was privatised, while cable TV network was divested and kept under state ownership to be privatised later. Upon TCA's opinion, the fixed-line network was not sold to the dominant player in mobile telecommunications markets, again in order to sustain competition between converging infrastructures.

There can be three takeaways from the involvement of competition authority in privatisation process: First, market design is crucial for promotion of competition in infrastructure services and in each case, although each infrastructure is a natural monopoly on its own, there can be room for a more competitive market design such as discovering alternative networks and separating their ownership. Such design can be achieved on case-by-case basis and with active involvement of competition agencies in the process. Second, in order to balance the revenue-maximisation motive of government, the competition agency's role should be clear in legal terms. Otherwise, legal uncertainty will avoid an effective market design. Competition agency's role should involve both consultation prior to privatisation and approval after it. If prior consultation role is not given, the competition agency will face only the options that are given to it. However, prior consultation process provides an opportunity to the competition agency to involve in the design process and offer

144 For the full text of the TCA opinion (August 4, 2004) see http://www.rekabet.gov.tr/pdf/ttasozellestirmesi.pdf (in Turkish). For an English summary, see the 2004 Annual Report of the TCA, Internet: http://www.rekabet.gov.tr/word/annual2004.doc (page 19).

more competitive alternatives. As the privatisation of infrastructure utilities is a market design process rather than a mere acquisition, active involvement in the first stages is crucial for promotion of competition. Third, a more competitive market design will reduce the room for competition infringements in the future, hence further reducing risk of conflict between regulation and competition agencies.

Towards a Synthesis

While designing a formal collaboration mechanism between competition authority and sector-specific regulatory agencies, It is possible to get inspiration from TCA – TPA partnership. Two points are crucial in this design: First, the establishment of clear rules about the roles of two institutions and procedures of collaboration by a formal communiqué or a law minimises legal uncertainty. Second, if authorities over ex-ante protection of competition and ex-post competition investigations are clearly separated, there will be no ambiguity regarding the jurisdictions of the institutions. In this regard, it would be natural for the ex-post investigations to be in the jurisdiction of the competition authority and ex-ante regulation in the authority of the sector-specific regulator. Nevertheless, it will be better to make it compulsory for the sector-specific regulator to take opinion of competition authority while taking steps to protect competition, and vice-versa for the competition agency. This opinions may not be binding, but the exchange of opinions will have two functions: (I) it will provide more competition insight to the regulator and more sectoral insight to the competition agency; (II) it will supply coherence between ex-post actions of the competition authority and ex-ante actions of the regulator. Lastly, as explained in Section 1, involvement of competition agency reduces the risk of regulatory capture problem.

Conclusion

In this paper, by reviewing Turkish experience in telecommunications markets, we suggest that a co-existence of independent regulation and competition authority may be beneficial to make utilities industries competitive provided that some conditions are fulfilled: (1) a clear division of powers between regulatory and competition authorities, preferably by an act or a joint communiqué, leaving ex-ante regulation to the jurisdiction of former and ex-post competitive investigations to the jurisdiction of the later; (2) formal communication mechanisms between two bodies; (3) competitive market design in the privatisation stage. Clearly, fulfilment of all those conditions necessitates liberalisation in utility industries to be set and maintained as a clear government policy. The proposed co-existence model will minimise the institutional conflicts, while promoting competition in these industries.

References

Atiyas, I. (2005), "Competition and Regulation in the Turkish Telecommunications Industry", TEPAV Working Papers, Internet: www.tepav.org.tr.

Atiyas, I., Doğan, P. (2006), "When Good Intentions are not Enough: Sequental Entry and Competition in Turkish Mobile Industry". Internet:

http://www.digital.sabanciuniv.edu/elitfulltext/3011800000714.pdf.

Kerf, G., Geradin, D. (2000), "Post-Liberalization Challenges in Telecommunications: Balancing Antitrust with Sector-Specific Regulation", World Competition 23, 27-77.

OECD (1999), *Relationship Between Regulators and Competition Authorities,* DAFFE/CLP (99)8.

Siclen, S.V. (2000), "Privatization and Deregulation of Regulated Industries and Competition Policy", Presentation at the 5th Workshop on Competition Policy in Seoul, Korea.

Viscusi, W.K., Vernon, J.M. and Harrington, E. (1995), "Economics of Regulation and Antitrust", London: MIT Press.

circ

Enhancing Knowledge,
Strengthening Capacity