

# The Relationship between Competition and Investment

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*One area that has generated debate is whether a market in which firms are subjected to conditions of competition would result in more investment compared to a market under a monopoly. The debate has also found its way into the realm of competition law reforms, which are generally intended to instil competition into the markets. Arguments against such reforms also include those put forward in supporting monopoly positions as creating better incentives for investment. This viewpoint paper summarises the two main arguments that are put forward in supporting either competition or monopoly characteristics as tools for attracting investment. It also makes an attempt at reconciling these arguments.*

## 1. Introduction

Competition policy and competition laws are generally conducive to both foreign direct investment and local investment, given their role in improving transparency in the regulatory system. Investment is generally a gamble about future outcomes. Hence, investors would prefer to have an opportunity to predict the future outcome of their investment. Transparency in the implementation of regulations having an impact on investment is a critical determinant in investment decision-making. Competition laws that are transparent and characterised by predictable implementation and consistent rulings on competition cases on the basis of non-discriminatory criteria can remove the uncertainty surrounding investment decisions.

However, it is important to note that transparency is not the only objective of competition policy and law but the core objective of competition policy and law is to ensure fair markets, which can be achieved by ensuring fair competition across all sectors of the economy. Often, investment promotion is one of the anticipated benefits of having competition in an economy, stemming from the belief of positive linkages between competition and investment. This is, however, still a subject of debate, with no apparent consensus on the generalisation that a market under conditions of competition is more conducive to investment than a market under conditions of monopoly. Empirical studies that confirm or reject such views are found in literature. One interesting study is by Bucci (2004), which, through an extension of the basic Romer Model of horizontal innovation and deterministic research and development activity,

concludes that at low initial levels of product market competition more resources can be allocated to the production of intermediates and especially to innovation<sup>1</sup> activity, while more competition reduces incentives to innovate. This is also supported by many other researchers who have concluded that the relationship between competition and investment can be characterised by an inverted U-relationship.

This idea of an inverted U-relationship can be regarded as a way of reconciling the two schools of thought on the extent to which markets that are under conditions of competition would fare better in promoting investment, compared to those under monopoly conditions. The inverted U-relationship can be a result of what is described as the 'ability' and 'compulsion' factors, with the former based on the notion that a monopoly is more poised to invest due to monopoly profits, while the latter is the argument that competition compels firms to invest more in order to stay ahead of their rivals.

## 2. Compulsion and Ability Arguments

The compulsion argument stems from the view that under competition it will be difficult for firms to use pricing as a tool for profit-making, as increasing prices might drive prospective buyers away to rival firms. They would have to invest in innovation activities in order to reduce costs and

<sup>1</sup> Although innovation may not necessarily be synonymous with investment, it is a form of investment if the fact that it results in new or better quality products as well as more efficient production methods is taken into account.

produce more output at prevailing market prices. Companies would, therefore, be constantly re-investing in new production technologies, new production processes and new products. This would, therefore, see companies devoting significant amounts to investment and, hence, competition would increase investment. The implication here is that the firm would be trying to escape competition by innovating, thus competition would reduce the pre-innovation rents by more than what it reduces the post-innovation rents. This is normally referred to as the *escape effect* (Friederiszick H *et al*, 2008).

Several products that are being subjected to competition have demonstrated the *escape effect* characteristics. The mobile handsets are an example, where new brands are being developed continuously, adding new technologies to accommodate value added services, such as internet connections, video facilities, etc. Investment in new airplanes in India by the national carrier, Air India, following the entrance of other private low cost carriers into the market in 2003 can be used as an example to support the compulsion argument. During the period 1996-2003, Air India International had an average fleet size of 28<sup>2</sup>. Since 2003, however, the national carrier began investing in new airplanes to keep up with competition and increase flight schedules. It had a fleet size of 35 in 2004, which had risen to 46 by 2007, with the average fleet size rising to 40 during the period. This was also happening at a time when the new low cost players were also investing in their own fleets, which saw the total fleet size for the industry rising from 138 in 2003 to 305 in 2007<sup>3</sup>. Competition, therefore, spurred new investment into the sector.

The ability argument is that firms under conditions of competition would not have the ability to invest, given that competition would erode their profits, which is a critical source of investment. As market

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<sup>2</sup> This excludes the fleet for Indian Airlines, which was a separate entity before it was later merged.

<sup>3</sup> Administrative Staff College of India, 'Competition Issues in the Domestic Segment of the Air Transport Sector in India', a presentation during a National Conference on State of Competition in the Indian Economy, organised by Competition Commission of India, 11-12 June 2009, New Delhi, India.

power is associated with profits, it is generally the expectation of some form of temporary *ex post* market power that incentivises investment. When capital markets are imperfect, or if borrowing is difficult or costly, it is the rent from market power that provides firms with the much-needed resources for innovative activities. Possession of market power also helps in reducing some of the uncertainty associated with competition, which reduces the incentives to invest due to fear of free-riding. The ability argument, also referred to as the Schumpeterian hypothesis, can be traced to Joseph Alois Schumpeter.

This notion can be supported by the Jamaican case, if the relevant market is broadly defined as the telecommunications sector: covering both the mobile and fixed line telephony. Privatisation in the sector brought about a private monopoly, Cable & Wireless (C&W) of the UK which operated in the Jamaican market from 1987 until 1996, when competition was ushered in. Results show that there was significant investment and a vast increase in net assets in the industry during the period of the monopoly, attributed to the monopoly rents earned by C&W. When competition was ushered in, lower prices and a vast increase in subscriber base were experienced, with teledensity increasing by about 1200 percent between 1994 and 2005. However, in 1995 the total gross investment in the telecommunication system was higher than the real value of gross investment in 2005. Thus, the private monopoly was doing more in spurring investment in the telecommunications industry than the opened up sector, even though the opening up to competition did better in providing access to consumers and driving prices down<sup>4</sup>.

### 3. Implications on the Relationship

The implication from this is that the relationship between competition and investment cannot be generalised across sectors - the one-size-fits-all approach would not work for investment policy formulation. If the objective is investment

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<sup>4</sup> CUTS (2007), "Political Economy of Telecom Regulation in Jamaica", based on 'Reforming and Privatising the Telecommunications Sector in Jamaica: Experiences of a Small Developing Country', by Cezley Sampson and Faye Sampson

promotion in a particular sector, the decision on whether to open up the sector for competition will depend on the sector-specific characteristics.

It can be demonstrated that in industries requiring effective interconnections between networks, characterised by economies of scale and network externalities, which rely on huge capital outlays due to costly infrastructures, monopolies may fare better in devoting more resources towards investment than firms under competition, as the *escape effect* costs cannot be recovered. This includes industries such as railways, fixed line telecoms, electricity and gas sectors in India. For example, it may not make much economic sense for a new player to enter and invest significantly in infrastructure network for rural electrification, where returns on the investment may take too long to come, while a monopoly may be willing to take the risk as this would simply imply connecting the rural population to the existing network. Thus, the opening up of the electricity sector to competition with investment attraction in rural areas as part of the objective may not yield intended results.

The rest of the industries (which do not display any natural monopoly characteristics) stand to benefit more from investment if they are opened up to competition, compared to monopolies, given that it is relatively easier for new firms to replicate the infrastructure of the incumbent firms. Thus, generally, there are more industries where competition would spur investment, compared to monopolies.

It is important, however, to mention that the fact that both competition and monopolies can spur investment under some conditions can be used to usher in more investment by creating conditions combining the two characteristics. One way is through introducing competition in the downstream markets, even if the upstream market is under a monopoly. This can be done by allowing non-discriminatory access to the monopolist's infrastructure by downstream firms. Such a move should be preceded by a separation of the functions

of the monopolist into upstream and downstream functions, for which it would become apparent that the investment into the upstream activities would be more under conditions of a monopoly than competition. The downstream activities, although heavily dependent on the upstream monopoly, would result in more investment, if opened up to competition. This would require concession contracts issued by the monopolist under conditions of fairness and openness.

#### 4. Conclusion

There are many benefits of competition to both consumers and business, as it results in the attainment of economic efficiency in production through efficient functioning of markets. Competition results in maximisation of economic efficiency (static, allocative and dynamic) through achieving efficient market outcomes in the form of lower consumer prices and better quality products. However, when it comes to investment attraction, the role of competition need not be generalised.

If the objective of the government is attracting investment, care should be taken to ensure that only those sectors whose characteristics are favourable to investment under competition are opened up to competition. While it is desirable to introduce competition in almost all sectors of the economy, it is equally important to note that there are sectors that are more conducive to investment under monopolistic conditions than under competition. Such sectors may, therefore, be allowed to bring in these benefits, while they are strictly monitored to ensure that they do not abuse their monopoly positions.

#### References

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