

## 4 Regional Integration

Most LDCs remain predominantly rural. All have small economies, and most also have small populations. As the above discussion of industrialisation indicates, modern economies are characterised by scale economies which accrue in cities. Such scale economies are not confined to manufacturing: they also apply to the many service activities which in a modern economy employ most people. Countries that are small and predominantly rural are not well placed to reap such scale economies. Their populations are spatially dispersed and their national markets are too small. The costs of being small are partly that urban scale economies cannot be achieved, and partly that markets are too thin and therefore uncompetitive.

To overcome this problem there is a strong case for regional integration. By integrating markets regionally the size of the market is increased. Markets support a larger hierarchy of cities and also become more competitive.

However, despite these powerful benefits, to date regional integration among developing countries has been painfully slow: there has been plenty of lip-service and a multitude of integration schemes, but on the ground trade barriers have remained in place. Part of the explanation for this failure is that integration has been regarded as a strategy for industrialisation: a protected regional market would enable manufacturing to get established. This is the wrong rationale for regional integration.

Regional integration does not deliver industrialisation. It focuses on the wrong market: manufacturing is now a global activity, and the key markets for LDC manufactures are not LDCs themselves but the OECD and potentially the EMEs. As discussed in the previous chapter, barriers to imports, whether nationally or regionally administered, impede entry into global manufacturing because they raise the cost of

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imported inputs into production. Further, regionally focused industrialisation has proved to be politically divisive. Typically, industry has concentrated in the more developed countries of a common regional market, selling its production at prices above world levels to the LDC countries in the region. Naturally, LDC governments have been reluctant to take part in such arrangements.

The true case for regional integration is not primarily about manufacturing, but about urbanisation and market size.

### **Regional integration, urbanisation and productivity**

Productivity tends to be higher in large (and/or dense) clusters of economic activity. This is the reason why cities form. Firms and workers locate to gain the benefits of this productivity advantage, despite the congestion costs and other diseconomies associated with large cities. A number of mechanisms drive this productivity effect. Some are narrowly technical, for example the fact that dense activity economises on transport costs, and improves communications and learning. Firms are better able to connect with each other and workers are better able to connect with firms. Other mechanisms are to do with the impact of size on market structure, something discussed further below. Still others are to do with political economy: a city with a large business sector is likely to have a strong business lobby and so a business-friendly investment climate. The quantitative evidence of the productivity effect of city size comes largely from studies of cities in developed countries. The consensus view is that doubling city size is associated with a productivity increase of around 6 per cent. This is a large effect – moving from a city of 100,000 workers to one of 3 million is predicted to increase productivity by more than 30 per cent.

There are few studies for developing countries. One for Chinese cities finds even larger effects: moving from a city

of 100,000 workers to one of 1.3 million workers raises productivity by 80 per cent. However, tentative evidence for LDCs suggests that there the normal global relationship whereby larger city size raises productivity may not be occurring. Bringing people together in cities has two potentially offsetting effects. People bring income and skills, which increase market size, but they also place demands on living space which increases congestion. In most parts of the globe the former effect appears to dominate, so that the larger is the city the higher is productivity. But in LDCs the gains to market size may be fully offset by the additional costs of congestion. The degree of congestion generated by population growth depends upon urban planning and infrastructure investment. A likely implication is that LDCs have not paid sufficient attention to these policies for managing congestion. As a result, the large potential gains in productivity from city growth (as experienced in China), have not been realised. Not only are cities too small, but they are unproductive because of unmanaged congestion. Managing congestion, and especially acting in anticipation of urban growth, are likely to be good uses of public resources, both aid and domestic revenues. The persistent donor emphasis upon rurally directed social agendas has perhaps discouraged governments from providing the urban infrastructure that in other countries is deployed to offset congestion. Governments need to make this case more strongly with donors.

The political fragmentation of LDCs into small economies has repercussions for city size. Cities tend to be much smaller than in an integrated polity such as India. Collier and Venables (2010b) find that a merger of two similar size small countries, thereby doubling both population and area, would lead to a 75 per cent increase in the size of the largest city. To see the quantitative implications of this, suppose that initially there are ten separate small coun-

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tries, in each of which the largest city has a population of 3 million people. Combining these countries and letting city sizes adjust in line with the regularities found globally has dramatic effects on city size. In the newly integrated region, one of the cities that initially had only 3 million people would grow to become a mega-city of 19 million. Another would grow to 9.5 million and a third to 6.3 million. This massive growth would overwhelmingly come from a shift of population from rural to urban locations rather than from other cities. Six of the ten cities would grow overall as a result of regional integration, their combined populations rising from 18 million to 46 million. Of the increase in this urbanised population of 28 million, 90 per cent would come from a shift from rural areas. The other four cities would shrink a little, from a combined population of 12 million to 9.1 million.

This analysis suggests that the smaller size of LDC cities compared to those in other developing countries is due, in large part, to the fragmentation of countries. Our preceding analysis and the evidence from developed country studies implies that this has an adverse effect on productivity.

### **Regional integration, market size and competition**

Small economies are likely to have high levels of monopoly power. This reduces their attractiveness for new investment. Directly, the price effects associated with monopoly make investment goods expensive. Less directly, the lack of innovation associated with incumbent monopoly reduces the pressure to invest. Least obvious, but perhaps most important, monopoly creates the potential for opportunistic behaviour in transactions.

Evidently, a small market is likely to be less competitive than a large one as, given some firm-level economies of scale, fewer firms will operate. The effect will be particularly

pronounced in sectors closed to trade. For example, the typical LDC economy has a very highly concentrated banking sector: often four banks dominate lending and this is a small enough number to enable collusive oligopoly. The limited nature of the market also leads to a concentration of risks: banks are exposed to a high covariance of the risk of default.

Transport is another sector that is sheltered from international competition and that is often highly cartelised. A recent study of transport in Africa finds that trucking firms are able to charge exceptionally high prices even though their real costs are not abnormally high (Teravaninthorn and Raballand, 2008). Average prices per ton kilometre are US\$0.02 in Pakistan, US\$0.05 in China, US\$0.08 for the Mombasa-Kampala run and US\$0.11 for Doula-N'Djamena. Many LDCs have restrictive regulatory regimes and transport cartels. Breaking these can have a big pay-off. For example, in Rwanda the deregulation of the trucking industry reduced transport prices by an estimated 75 per cent. For some countries, a major factor supporting cartelisation is a treaty structure between countries designed to protect the national trucking industry from competition from neighbouring countries.

Monopoly power raises prices. A key price is that of capital goods. The higher the price of capital goods, the less physical equipment an expenditure on investment will purchase. This effect is big, as the price of capital goods can be three or four times higher in LDCs than it is in high-income countries. Why is there this price difference? In part it is due to thin markets and monopoly power in supply of equipment and investment goods. Because LDCs have low per capita incomes, small populations and low investment rates, their national markets for capital goods are much smaller than those of other countries. Collier and Venables (2010b) show that both small population and low per capita income substantially raise the price of capital goods.

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Thin markets and the resulting monopoly power thus increase the price of capital goods. They have further pernicious effects. One is that they create an incentive for incumbent firms to actively pursue strategies that deter the entry of new firms. From the perspective of firms that are already operating in a sector, if one firm devotes resources to keeping new entrants out of the sector, this is a public good. The strategies of entry deterrence may be the use of predatory pricing or the purchase of political influence. Evidently, from the perspective of society as a whole such behaviour is undesirable. In an industry with many existing firms the free-riding problem implies that the returns to any one firm from such anti-social behaviour are limited. But in a small market with an incumbent monopolist all the benefits to the existing industry are internalised and so the incentive to act to keep out new competitors is maximised.

Small and thin markets are also unattractive places to invest because investors are vulnerable to ‘hold-up’ – opportunistic behaviour by other firms with which they have to transact. Hold-up refers to the possibility that, once an investment has been sunk, the investor faces a monopsonistic purchaser of the output of the investment. Even if the purchaser and investor entered an agreement before the investment is undertaken, *ex post* the purchaser may act opportunistically, breaking the agreement and only offering a lower price. The investor will anticipate this possibility of hold-up, so may not make the investment in the first place. The only realistic way of overcoming the hold-up problem is to make sure that there are many alternative uses for the output of the project. In turn this depends upon the size of the market in which the output is sold. Hold-up is more likely the fewer people are competing for the output. This suggests that in small economies the threat of hold-up may be a major deterrent to investment. In agriculture, returns

to investment are reduced if there is a monopsonistic grain merchant. In manufacturing, if there are only a few potential purchasers of output it will deter investment. This gives rise to co-ordination failure – there is no incentive to enter on one side of the market until the other side has got more firms, and vice versa. And, in a small economy, even the return to the worst option, liquidating the investment, may be reduced by thin markets for second-hand capital equipment. Distress sales are likely to be more coincident because smaller economies are less diversified, further depressing the expected price. The hold-up phenomenon applies not only to goods markets, but also to labour markets; the incentive to take training is reduced if the skill acquired can only be sold to one employer.

These arguments point to the fact that smallness does not just create static monopoly/monopsony power, but also creates a fundamentally more risky business environment. Entry of new producers will be deterred by the predatory behaviour of incumbents and by the scarcity of outside options and consequent vulnerability to predatory and opportunistic behaviour.

### Implications for LDCs

Both the gains from urbanisation and those from more competitive markets imply that LDCs need regional integration far more than other economies. Yet to date they have made less progress than others. The damaging effects of regional integration on the poorest member countries come not from integration *per se*, but from protection of the regional market from global competition. *For LDCs the gains from regional integration come not from protection from global markets, but from the expansion beyond tiny national markets.* This suggests that within regional integration schemes LDCs should lobby for low external protection: high regional protection will

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redistribute income from LDCs to more developed member countries. Further, many of the gains for LDCs from integration will come from creating regional markets in services such as trucking, where protection from the global market is irrelevant.

The above should not be mistaken for an unqualified appeal for trade liberalisation. As discussed above, in order to break into global markets for manufactures, LDCs need protection *in those markets* from established producers. Firms producing in LDCs for these external markets also need supporting infrastructure and regulatory policies that are comparable to those of established competitors. But it does point to a need to rethink the traditional approach to protected regional markets.