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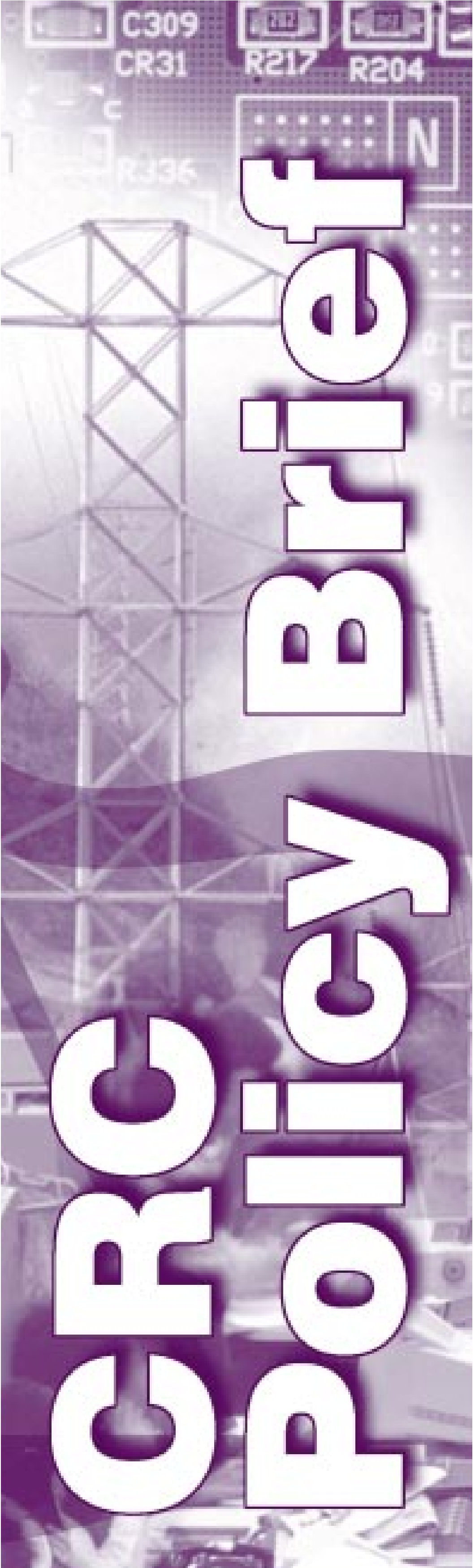

Competition, innovation and poverty

If we are serious about driving down levels of poverty in the developing world then we urgently need to take a fresh look at competition. Developing countries have only recently started to focus on competition policy. This creates both an exciting opportunity and a potential risk. Exciting because policies are not yet set in stone so there is a real opportunity to create a self-sustaining pro-poor policy. Potentially threatening because if we fail to look beyond popular but damaging concepts of competition and a narrow conception of the market we will fail again, as we have largely failed for the last 25 years of economic reforms, to make significant progress towards eliminating poverty in the developing world.

Competition for poverty reduction

Poverty reduction can only occur in developing countries if their economies grow relative to the industrialised nations and so account for a greater share of world production of goods and services. This means the things they do which are productive must grow faster than their less productive activities. For this to happen these activities must take place within a competitive environment which facilitates structural change. Obviously, for poverty reduction, the way the fruits of the economic pie are distributed among the population is also highly significant.

What's so perfect about perfect competition?

We cannot hope to create policy to encourage competition if we cannot agree on what competition is. There has always been debate about the meaning of competition but for the last 75 years one particular viewpoint has dominated all others. According to this view the most important thing about competition within a particular sector is that it drives the market price of a product down towards how much it actually cost to produce it. And competition between different sectors works so as to establish the same level of profit in all of them.

This way of looking at competition is concerned with a theoretical end point of competition. It focuses our attention on an imaginary scenario where all competition is actually over and what has been achieved is a perfectly balanced situation where very little changes and such small changes as may occur do not last for any significant length of time.

No country has ever established such a situation of 'perfect competition'. There is no empirical evidence to suggest that any country ever could. Also, while there is no country in the world whose economy fits this model, the gap between it and reality is arguably at its widest in less developed countries. And, most crucially for our purposes, it is indisputable that no rich country ever experienced such a situation as it struggled to expand its economy. And yet this theory of competition is so dominant that there is a real possibility that developing countries will in effect strangle their economies by adopting competition policies which try to force them into this straightjacket.

Competition and change in the real world

We argue that the only effective way to think about competition is to start by describing the real world. We need to understand why the economic world changes in the way it does and identify the sources, processes and consequences of change and how these relate to each other. For surely changing the economic world is what drives us? Far from living in some economic utopia where maintaining the status quo is our priority we inhabit a world of gross disparities, where conspicuous consumption sits side by side with

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conspicuous starvation, a world where radical economic change is an ethical imperative and is what we seek.

Understanding competition is key to understanding economic change. When people talk about competition in an everyday sense they usually have some sort of contest in mind. Contests have three typical characteristics – the contestants taking part, the agreed rules of the game and the fact that the outcome is always, to some extent at least, uncertain. Competition within an economy is indeed a contest. Enterprises are the contestants and, as in all contests, there are important differences between them. Using their own production methods and operating procedures and driven by their own strategic aims they purchase the necessary inputs and try to sell their goods and services through the market. Some enterprises are more successful than others – they have managed to develop a competitive advantage.

This competitive advantage is not something that simply belongs to the enterprise. It is the result of how the market has evaluated their goods and services compared to the goods and services of their less successful rivals. If the rules of the market change then so will the distribution of competitive advantages between enterprises. Also, although typically enterprises set their own prices, it is the market that sets the limits on this. The more the market participants are able to share information about offers to buy and sell the less will enterprises be able to vary their prices independently. The information structure is therefore very important in the competitive process. It can be seen that the organisation of the market has a central part to play in this description of real world competition. However it is not the only important influence.

In any given market enterprises compete for business. Over a period of time some new enterprises will enter the market, some of the existing enterprises will fail and leave the market and some of the existing enterprises will survive. Some of the surviving enterprises will innovate so that they are different at the end of the time period from what they were at the beginning. Both selection and innovation processes are at work here. The selection processes are what cause the survivors to grow or decline in size at different rates and result in some enterprises being eliminated entirely. The innovation processes involve the arrival of new entrants and the changes in the surviving enterprises.

When this situation is analysed what becomes clear is that economic change depends on variety. It is because the entry and exit rates are different and because the surviving enterprises grow at different rates that structural change happens. This process of displacement, replacement and self-transformation is the result of the competition which the enterprises are all involved in.

In order for this structural change to constitute development in any desirable sense it is necessary for enterprises with superior characteristics to displace less productive ones. Therefore one of the most important goals of competition policy should be to help make this happen and this requires innovation to be widespread in an economy.

Innovation – the route out of poverty

Let us look a little more closely at how enterprises develop competitive advantage. There are three broad categories of competitive advantage. First is the profitability of a line of business. Because in the real world enterprises are different it is possible for profits to be made that are not due to an abuse of market power, but instead reflect some kind of superior behaviour by the enterprise. Second is the enterprise's ability to invest in and therefore grow their business. Here an enterprise can be doing better because it has invested more and been able to capture a larger share of the market. The third kind of competitive advantage arises from the enterprise's ability to innovate and so transform its business.

Over the long term it appears that the ability to generate and follow through a series of innovations is the most important kind of competitive advantage. It also seems to be the most difficult to sustain and this is a good thing because, if innovation only depended on resources, an enterprise that got ahead would stay ahead and take over the market. In fact innovation is unpredictable. It depends on imagination and lucky breakthroughs as well as investment in research and development. It is often associated with new entrants to a market who behave in some ways differently and so add to the variety among the contestants. Innovation redefines the ways that profits can be made and so reshapes the structure of the market.

Entrepreneurship, the introduction of new productive combinations, is the driving force of an enterprise economy. It depends, critically, on the institutions of the market. If the market is open then it is possible to make innovative challenges to established positions. In an open market too, relative profitability is likely to be short-lived as further new entrants appear and existing enterprises respond by innovating. If the market is efficient it will work so as to favour those contestants who are efficient and effective in meeting the needs of purchasers.

Innovation is the driving force of competition. Competition, far from being some mythical state of balance, is a dynamic process, a voyage of exploration into the unknown in which successively superior (or inferior) products and production methods are introduced and consumers discover who meets their particular needs and how (and who does not). The market process is always an experimental process. Capitalism should not be judged according to how efficiently it allocates resources at any given point in time but rather in terms of how able it is to create and use resources and opportunities over time. The central driving force of this restless capitalism is innovation i.e. creative destruction from within.

A question not worth asking

How competitive is Country X? Is it possible to establish how competitive one country is compared to another? The World Economic Forum (WEF)'s attempt to rank countries according to their competitiveness has caused much interest and debate among policymakers in developing countries. It has also been heavily criticised.

WEF seems to take for granted that all countries have efficient markets and that their route to success should involve open competition in international markets. But in fact developing countries do not all have efficient markets and indeed there may well be a variety of reasons why their governments should intervene selectively in order to meet their development goals. (Such intervention should not of course strive for perfectly balance but instead aim for the highly unbalanced growth path invariably associated with development.)

The broad way that WEF defines national competitiveness also does not distinguish between activities that compete with one another and those which do not. And, rather than a coherent theory of competitiveness, what is presented is a collection of factors that are associated with competitive success with some vague ideas of how they might relate to each other.

It remains unclear, therefore, what is actually being compared across countries to produce this ranked list. For these reasons it is highly doubtful that such measures provide any rational basis for policy design.

The problem with such national measures of competitiveness is not just that the WEF methodology is suspect (though it is). The underlying problem is that it is not nations which compete in markets but particular sectors of their economies which compete in particular markets. A country may be highly competitive in, say, bauxite production and very uncompetitive in software development. What useful information do we gain by 'averaging' many different levels of competitiveness across an economy?

Macroeconomic theories of development miss the point – that development is a process of self-transformation from within. Economies only grow insofar as they develop and they never develop in a uniform fashion across all sectors. No national economy has ever grown by increasing the growth of all its activities at the same rate. We can measure in macroeconomic terms but by definition we cannot use them to understand either development or its regulator, competition. Therefore there is no point in trying to understand development except by paying attention to the properties of a particular economic system in relation to its capacity for self transformation.

Competition policy for development

It is only recently that developing countries have begun to engage with competition policy. The question is not whether they should have such a policy but what its purpose and structure should be. The danger is that they will be forced to adopt the wrong model of competition, one that hinders development.

Development fundamentally depends on the generation of new economic opportunities and the speed with which these can be realised through investment in people and productive capacity and the growth of markets. Therefore competition is central to the development process. It is a regulator of development, a method of reallocating resources to different uses, a way of generating much-needed structural change. If the general objective is to support development, raise the average standard of living and reduce inequality we argue that the best competition policy is a pro-innovation policy.

The urgent questions for competition policy include:

- What are the rules of the economic game and how much do they depend on the institutions of the market place?
- What makes for a good set of rules?
- What shapes the behaviour of the contestants? How differently can they behave and what processes result in more differences?
- What are the uncertainties that make economic contests unpredictable?
- Where does organisational and behavioural innovation fit in to the competitive scheme of things?

As already noted, for competition between enterprises to result in development we need the enterprises who are 'better', i.e. more productive and with above average technical and organisational characteristics, to enjoy above average growth. The more efficient the market the more likely is this to happen.

This is because, in an efficient market, access to information is so quick and easy that no enterprise can charge more than any other for a particular product. This ensures that better quality products and lower prices attract customers more quickly and, similarly, higher wages and better conditions attract employees more quickly. Lower prices and higher wages give enterprises more opportunities to expand but less ability to invest. Each enterprise resolves this dilemma with more or less skill according to their technological and organisational capacities. The enterprises who do this most skilfully are the most likely to enjoy above average growth – and the more perfect the market the more likely they are to do so. Therefore an essential component of competition policy is action to improve markets.

Entry, exit and acquisitions

One way of improving markets is to make it easier for new contestants to enter the fray. It is true that often barriers to entry are unnecessarily high. Burdensome, excessively bureaucratic form-filling may be required. The process may be corrupt – failure to have the right connections or the ability to grease the right palms may be enough to keep would-be entrepreneurs out of the market. Traditionally, competition policy has prioritised lowering such barriers to entry. But, however successfully barriers may be lowered, if there are few suitably equipped enterprises poised on the other side ready to leap over them, there will be little impact on market competition and therefore little contribution to development.

Competition policy needs to focus more on the supply of potential entrants by stimulating enterprise in general and innovative enterprise in particular. Support for forming scientific and technological capabilities is not enough. Potential entrants need help to identify possible markets, to lead and organise the business process and to access productive assets. Enterprises already operating need similar help to enable them to innovate and grow as market conditions change.

As well as focusing on innovation based entry it is important to remember that exit is also essential in a healthy competitive process and that subsidising unviable enterprises distorts this. Rules of insolvency and bankruptcy are therefore necessary elements of competition policy. It is an uncomfortable fact that competition inevitably creates losers as well as winners and that when enterprises collapse people lose their livelihoods. But propping up ailing enterprises undermines the very process of economic growth – therefore governments need to find other ways of supporting those for whom competition has led to disaster.

It is not unusual to find business activities which would have a better chance of survival if run by a different enterprise. The trading of business activities between enterprises is an essential component in building their competitive characteristics and should not, in itself, be considered illegitimate. Although mergers and acquisitions should always be treated with caution, especially when they involve enterprises which are already large, the ability to efficiently add to or subtract from a set of business units can contribute to effective competition just as well as stifle it. There is a tendency to automatically assume that cooperation between enterprises constitutes undesirable collusion but this is not a well thought out position. Such assumptions are best avoided and individual cases treated on their merits.

Handling monopolies

It is already apparent that, in seeking to make real world economic competition more closely resemble some unattained and unattainable state of "perfection", competition policy can become unhealthily obsessed with the abuse of market power. As soon as the number of enterprises active in a particular sector falls below some pre-determined number or the profits of a particular enterprise rise above the norm it is assumed that abuse is occurring and corrective action must be taken.

We are not saying that abuse of market power is never a problem. Of course enterprises have an interest in preventing their customers switching to their existing rivals and in preventing potential rivals from entering the market. And of course governments have an interest in preventing and penalising such behaviour. This in itself is sufficient reason for active competition policy. However, as we will argue below, neither the number of enterprises active in a particular sector nor the existence of above average profitability are sufficient to correctly diagnose the abuse of market power. In fact making such a diagnosis on this basis and taking 'corrective' action is much more likely to stifle than encourage competition. And in stifling competition such action will hinder development.

Natural monopolies arise in various circumstances, including sectors where businesses experience high fixed costs in comparison to income. Water, gas and electricity supply all come into this category. Traditionally such natural monopolies have been state-run but more recently they have been included in internationally-promoted privatisation drives. A future CRC Policy Brief will focus on specific issues that arise from utilities privatisation. Here we consider the more general question of how competition policy deals with monopolies – natural or otherwise.

The need to control prices and quality in monopolies became important after the technological developments associated with the industrial revolution. In the 19th century exploitative behaviour by private monopolists tended to be handled using ad hoc enquiries and the power of negative publicity rather than through the legal system. Where natural monopolies were publicly owned, the accompanying internal procedural rules were often not spelled out in public.

More recently, as part of the international pressure on developing countries to privatise more of their economies, regulators have become involved in imposing direct price and quality controls. Public franchising has also been used. Typically this requires enterprises to compete by bidding to acquire monopoly rights. Such bids usually include commitments relating to both prices and quality.

The innovation challenge

How does an enterprise develop its competitive characteristics? The different ways that all its employees gain knowledge and skills and the ways these are organised into the distinctive capabilities of the enterprise are important. Partly this will depend on how well the enterprise is able to cooperate with external agencies to acquire useful skills and knowledge. The wider the variety of potentially useful collaborators that exist, the better for the enterprise.

The innovation challenge is not just about catching up with developed countries in established areas of world production it is about developing an internal capacity for independent technological development and business knowledge. It is about learning to learn which takes time and requires resources. As well as adapting technology to local conditions, there needs to be investment in adapting organisations and institutions. What is needed is not a competitive economic *structure* but a competitive economic *process* in which there is a high rate of business experimentation and this is facilitated by a rich ecology of innovation-supporting institutions.

As well as targeting specific sectors or industries and improving factor markets, policy needs to encourage particular activities across sectors where markets are missing or difficult to create. The need for new innovation policies in developing countries is heightened by changing trends, rapid technological change and deregulation.

Innovation systems focus on activities outside the enterprise that shape its innovative capabilities. They are not only national level organisations but also locally organised interactions. They provide instituted support for the competitive process and, as part of the market process, can be expected to self organise and self transform as the innovation problems change. If market processes do not work well, innovation systems probably will not either and are likely to degenerate into science and technology support systems with little connection to business development.

What initially matters is a process of rivalry driven by alternative conjectures about how economic problems can be solved in different ways. It is the supply of new conjectures, the capability to apply them in practice and the open nature of markets in adapting to these new opportunities that matter for competition and development. But markets are not enough. Innovation systems are needed to connect enterprises with other knowledge holding and generating organisations. Competition policy for development may have little to do with traditional agendas whose main concern is the abuse of monopoly power.

By extension science and technology policy and enterprise policy are complementary to competition policy. State-led technology policies have recently been employed with varying degrees of success in East Asian and Latin American countries. Is such an approach to policy still possible? The move towards liberalisation and deregulation in most developing countries is making such approaches more difficult and constraining their ability to develop their own trade, industrial and technology policies. Not only does policy design in general need to be more careful it may need to be more responsive to changing circumstances. See CRC Policy Briefs 2 and 3 for a discussion of how regulatory governance and regulatory impact assessment can contribute to pro-poor policy making.

The institutions of the market economy should be judged by how well they help discover new uses for economic resources. It is the market's role in creating incentives for change and facilitating change that matters. But markets are the instruments, not the outcome. It is innovation, broadly conceived, that is the root of all economic progress and so it is the link between innovation and competition that matters for competition policy.

The selection of policy alternatives cannot be static for there is no policy that can remain relevant over a long time. Policy learning mechanisms are needed that allow policy makers to monitor and evaluate policies and to anticipate and effectively react in advance to future changes. Competition authorities must be sensitive to differences between what drives competition in different industries, the role of innovation in competitiveness, the policies needed to promote innovation and the effect of competition on the innovation process.

How do we measure competition then if we cannot rely on just assessing the market structure i.e. by counting the number of enterprises active in a particular sector? It is that the market structure is *changing* as measured by the rate of change of such a concentration index. What is the test for competition being pro-development? It is that the market structure is evolving in such a way as to increase the efficiency and effectiveness with which resources are used.

Although there is much talk of creating an appropriate 'climate' or 'culture' where competition can flourish, much of the current literature fails to recognise that innovation and creativity are what really drives development. This insight opens up many fruitful lines of attack for those whose primary goals are economic growth and poverty reduction.

So, competition policy covers the regulation of the market process, determining the scope of markets and the rules of the game, and maintaining the openness of markets. It extends beyond markets into the wider conditions that influence innovation and enterprise. Recent debates in the WTO and elsewhere on establishing competition law in developing countries are unlikely to be fruitful unless a narrow 'within market' perspective on competition is abandoned in favour of one which focuses on innovation and enterprise.

Successes and failures

It is instructive to look at what has happened to competitiveness and innovative practice in the East Asia region. Some countries here have become competitive in particular sectors both in terms of trade and innovation. Both Korea and Singapore compete successfully in international markets in various hi-tech industries. But such success in innovation has been built on previous export success and experience of international trade. Other countries such as Malaysia, Hong Kong and Thailand compete successfully in various markets so have the necessary trade experience. However they have not been able, so far, to convert this into innovatory excellence to any great extent.

We found no evidence to suggest that innovative behaviour can be achieved by state decree. The idea that a seriously innovative technological push can be stimulated by policy change remains unproven. Learning by doing seems to be an important part of the process. Nevertheless it is easy to see that the East Asian countries which have made the best progress towards developing competitive markets are those whose governments have intervened carefully and selectively to encourage competition and innovation.

In Latin and South America, during the same period, the results of a lack of any international support for effective, strategic state intervention in the market are obvious. IMF-promoted strategies with their emphasis on privatisation and deregulation, their ideological commitment to the superiority of unfettered market forces and their insistence on a severely restricted role for the state have spectacularly failed to achieve either economic growth or poverty reduction. Argentina and Mexico have seen their competitiveness in some sectors such as electronics decrease during this period.

Evidence from East Asia suggests that carefully designed state intervention has enhanced competition rather than inhibited it. Countries which have achieved more competition in their domestic economies have, perhaps not surprisingly, also seen their competitiveness in international trade increase. In South Korea and Singapore, increasing levels of competition are highly correlated with innovation and trade success.

This CRC Policy Brief draws heavily on the CRC Working Papers below:

No 2. Cook, P. *Competition and its Regulation: Key Issues*. 2001

No 33. Cook, P. *Competition Policy, Market Power and Collusion in Developing Countries*. 2002

No 36. Metcalfe, J. S., Ramlogan, R. and Uyarra, E. *Economic Development and the Competitive Process*. 2002

No 35. Ogus, A. *Comparing Regulatory Systems: Institutions, Processes and Legal Forms in Industrialised Countries*. 2002

No 72. Cook, P. and Uchida, Y. *The Effects of Competition on Technological and Trade Competitiveness: A Preliminary Examination*. 2004

which are all available on the CRC web site at: **http://idpm.man.ac.uk/crc/public.html**

CRC Policy Briefs are intended to provide those involved in development policy and practice with a clear understanding of the main issues and findings presented by CRC research and publication programmes on regulation, competition and development. They have been prepared by **Sarah Mosedale**, under the editorial direction of CRC staff, on the basis of CRC published outputs.

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