3 Using Trade Preferences to Help LDCs Break into Global Manufacturing

Trade preferences for LDCs continue to be part of the world trading system. Under the Generalised System of Preferences (GSP), LDCs have access to most OECD markets and historical ties have been recognised in schemes such as the European Union's Lomé and Cotonou agreements. Recent years have seen several major extensions of preference schemes. The EU's Everything but Arms scheme, initiated in 2001, gave duty free access to LDCs in almost all products. The USA introduced the African Growth and Opportunities Act (AGOA) in 2000, improving market access for eligible sub-Saharan African countries. The USA also operates the Caribbean Basin Initiative (CBI) and the Andean Trade Promotion Act.[1]

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These schemes have two main elements. One is the trade preference – the granting of market access at reduced tariff rates and with less restrictive quotas, possibly going all the way to duty and quota free market access. The other is constraints on participation. These define eligible countries and products, and also impose rules of origin (ROOs). There has frequently been a tension between these elements, with the constraints severely reducing the effectiveness of preferences as an instrument of economic development. These constraints are likely to be particularly important for manufactured products and redesign of preferences is needed if they are to facilitate developing country participation in a globalised world trading system.

The benefits of trade preferences accrue through two mechanisms. The one usually emphasised is a transfer of rent to recipient (developing) countries. Instead of being received

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by the developed country importer as tariff revenue or quota rent, the preference margin is instead transferred to producers in exporting countries. The magnitude of the rent transfer has been calculated by various researchers. A recent study estimates an upper bound (preference margins x the value of trade) of only US$500m accruing to LDCs.[2] This is too small to be worth serious policy attention.

However, preferences can also generate benefits through a second mechanism: there may be a significant export supply response, creating employment in developing countries. This is the focus of the present paper. While the rent transfer mechanism depends upon the existing quantity of exports, the supply response mechanism depends upon the potential of unrealised opportunities. For many LDCs this distinction between actual and potential exports approximates to that between agriculture and manufactures. For most LDCs, their current rents from trade preferences depend upon market access for their existing agricultural exports, whereas preferences in manufactures might enable them to break into markets that they have scarcely entered. Of course, rents for agricultural exports will also generate some quantity effect. However, the potential magnitude of the quantity effect is far greater in manufacturing exports.

One reason for the greater potential is liberation from diminishing returns to scale. Production of manufactures for the domestic market encounters diminishing returns due to the constraint of small market size. Traditional agricultural and resource-based exports encounter diminishing returns because of limited endowments of suitable land and hence declining resource base per worker. By contrast, employment in manufacturing exports can be expanded without running into diminishing returns to scale due to markets or endowments. The other reason for the greater potential is that manufacturing exports are subject to scale thresholds which

can generate multiple stable equilibria. The scale thresholds arise because of well-documented external economies that advantage those firms that are located within a cluster of similar firms. Potentially viable export locations may be uncompetitive relative to established clusters and so never develop unless induced. Hence, not only may trade preferences in manufactures generate a large supply response, they may switch a location to a new equilibrium and so have permanent effects even if they are only implemented temporarily.[3]

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The importance of manufacturing and other modern sector exports to the wider process of economic growth is now supported by a good deal of evidence. The Asian experience is well documented, and a number of recent studies point to the role of exports in growth accelerations (Hausmann *et al.*, 2005). Jones and Olken (2006) identify growth accelerations, and show that these are associated with an average 13 percentage point increase in the share of trade in income (over a five-year period), as well as an acceleration of the rate of transfer of labour into manufacturing. Pattillo *et al.* (2005) point to the association between growth accelerations and trade growth in sub-Saharan Africa.

How can trade preferences be designed to maximise their effectiveness in stimulating a manufacturing supply response? Manufacturing supply response is not a simple matter of moving up a supply curve, but depends on a wide range of complementary inputs, some of which can be imported and some of which must be developed domestically, often involving increasing returns to scale. Trade preferences can have a catalytic role, but only if they are designed to allow the import of complementary inputs, and to operate in countries with the skills and infrastructure to be near the threshold of global manufacturing competitiveness.

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How modern manufacturing works

Modern sector production is not simply a matter of transforming primary factors into final output. It requires primary factors and many other complementary inputs, ranging from specialist skills and knowledge to component parts. These are frequently supplied by many different countries, with design, engineering, marketing and component production occurring in different places – a process known as fragmentation of production. Furthermore, productivity levels in these different activities are not exogenously fixed. They are shaped by learning and by complementarities with other activities.

Modern global manufacturing production is 'fragmenting' – a process known as unbundling or splitting the value chain (UNIDO, 2009). Different stages involved in producing a particular final good are now often performed in many different countries. Particular tasks may be outsourced (or offshored) and can be undertaken in different places. This occurs in response to productivity or factor price differences and may take place within a single multinational firm or through production networks of supplier firms. Fragmentation implies that comparative advantage now resides in quite narrowly defined tasks. For some products tasks may be undertaken in parallel and then assembled in a single place. For others a sequential production process still applies, under which each task adds value to a product that crosses borders at each stage. In this case, the partially completed product is an essential input to the task to be performed at the next stage. The effect of tightly restrictive ROOs is to prohibit participation in production processes of this type. Tightly restrictive ROOs leave countries unable to use preferences to exploit a comparative advantage in a narrowly defined task; instead they have to undertake a wide range of tasks domestically to meet ROO requirements, but this wide range of locally performed tasks, some of which are liable to be more

costly than the world standard, then makes the activity globally uncompetitive.

The fragmentation of global manufacturing is good news for LDCs because it enables them to break in one task at a time. However, the other major trend, clustering, is bad news. Clustering arises because increasing returns to scale are often external to the individual firm, meaning that firms in a particular location gain from the presence of other firms in related activities. One set of mechanisms creating these external returns to scale is technological externalities arising as firms learn from other firms, observing and borrowing best practice technique. The knowledge discovered need not be sophisticated technology: it might simply be discovery of the fact that it is possible to undertake a particular type of business profitably in a particular location. This has a demonstration effect which underlies theories of social learning and which Hausmann and Rodrik (2003) have termed 'economic development as self-discovery'.

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In addition to technological externalities, there are a number of pecuniary externalities associated with provision of complementary inputs. As a cluster of firms grows, so specialist input suppliers develop, markets for intermediate goods become thicker, transport and infrastructure support improves and workers have a greater incentive to acquire skills.[4] For example, consider a downstream industry that requires specialist inputs from upstream firms, or specialist skills from its workers. If there is only one firm in the downstream industry there will be no incentive for upstream suppliers or workers to invest in improving quality or acquiring skills, since they will be 'held up' by the monopsony power of the downstream firm. Only once the downstream industry is large enough is there an incentive for its suppliers to upgrade and thereby raise the productivity of the combined operation. Research on cities suggests that, over a wide range

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of city sizes, each doubling of size raises productivity by between 3 and 8 per cent. The effects often operate over quite a small spatial range – within a city or travel-to-work area. The benefits may be shared among a number of sectors (as with improved transport or more regular shipping services), but are often quite sector or task specific.

An important consequence of spatially concentrated increasing returns is that comparative advantage is, in part, *acquired* rather than fundamental. A particular location may have no inherent advantage in a sector or task, but as a cluster starts to develop, so costs fall, creating the comparative advantage.

Implications for LDC governments

Fragmentation and clustering imply that modern sector export growth is likely to be uneven. Activity may be concentrated in small spatial areas – cities will acquire particular specialisations. There will be threshold effects; establishing a new activity in the face of existing competition may be quite difficult, but once it gets established costs start to fall and growth can become extremely rapid.[5] An extreme example of product and spatial concentration is the city of Qiaotou, producing 60 per cent of the world's buttons. As for threshold effects, Bangladesh shipped its first consignment of garments to the USA in 1978, had exports of US$600 million by 1990 and more than US$6 billion by 2005, employing 2.5 million people.

What are the implications of these facts for LDCs wanting to break into manufacturing but having low levels of both hard and soft infrastructure, such as countries in sub-Saharan Africa? Successful participation in production networks and fragmented production processes requires a business environment that delivers security, contract enforcement and protection from predation. It also requires a level of infrastructure

that can support continuous production and reliable delivery. However, the fact of spatial concentration means that it is not necessary that high quality infrastructure is provided everywhere – it can be provided in selected areas or in special economic zones. This is positive for those LDCs that hope to break into manufacturing, since it economises on these scarce inputs. Infrastructure (and institutions) can be targeted so that some areas work well, and this is more efficient than spreading infrastructure at a uniformly low level.

That modern global manufacturing enables countries to specialise on a narrow product or task range is also positive for new entrants. Instead of having to learn and acquire comparative advantage in all stages of a product's production, fragmentation makes it possible to progress incrementally, first learning narrow tasks, such as production of a particular type of garment using imported textiles and yarn. However, barriers to trade in intermediate goods are a critical obstacle to this. The barriers may arise because of domestic import restrictions, because of high trade costs due to geography and infrastructure, or because of rules of origin. They all have the effect of inhibiting participation in global production networks.

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Co-ordination failures imply that getting started is hard: it is only once a threshold has been passed that increasing returns start to reduce costs. This calls for some sort of catalytic action to overcome initial obstacles and get to the threshold level. This in turn has implications for trade and industrial policy in general and trade preferences in particular.

Past discussion of industrialisation strategies for new entrant LDCs has generally focused upon the trade policies of their own governments. Changes in their trade policies are indeed a necessary part of catalytic action, but not in the form most commonly envisaged. For an LDC-based firm to succeed in exporting a new manufacturing 'task', it would

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need to be able to import without restriction all the complementary upstream tasks. Hence, the catalytic trade policy for LDC governments is to remove their current tariffs on manufactured inputs. For example, in West Africa the Economic Community of West African States (ECOWAS) imposes a uniform 10 per cent tariff on all such inputs. While 10 per cent may appear modest, suppose that in the absence of trade impediments an Africa-based firm chooses to import inputs constituting half of the value of its output, so that the tariff raises its total costs by 5 per cent. Now consider what this implies for what the firm can afford to pay as labour costs. Even in labour-intensive manufacturing, labour costs typically only constitute around 16 per cent of total cost. Hence, to keep its total costs constant in the face of the tariff on inputs, the firm would need an offsetting reduction in its labour costs to 11 per cent. Thus, to compete with firms based in a location that was identical, other than that it did not impose tariffs on inputs, the firm would need to pay wages that were around one third lower. Of course, Africa's problem arises precisely because its locations are *not* currently identical to those of Asia – they have higher costs due to the lack of clusters. Tariffs on inputs intensify the problem rather than resolve it.

Should an astute government adopt a tariff structure with zero tariffs on inputs but positive tariffs on final goods? There are several reasons why such a strategy would also fail. First, the country's niche in the long chain of manufacturing 'tasks' that eventually generate a final product is unlikely to be precisely the final 'task'. For any task prior to this the protection would be useless. And products which are 'final' to one industry are 'inputs' to another. As the above examples demonstrate, modern manufacturing niches are so specialised that the domestic market for them in the typical LDC is too small to be a significant inducement to relocation. How

important is the prospect of a price premium in the Tanzanian market for buttons in determining whether firms selling on the global market should relocate their production from Qiaotou? Even in the unlikely event that such protection would be significant, the political difficulties for the Tanzanian government of imposing high tariffs on buttons alongside free trade in all the myriad inputs that button producers want to use would surely be overwhelming.

An alternative style of industrial policy for an LDC government would be to subsidise the costs of production rather than protect the domestic market. But such policies have a poor track record. As a claim on government expenditure it would have to compete with manifestly pressing social needs. Further, the most conventional form of subsidy, tax incentives for investment, subsidises capital and this can be at the expense of employment. Untargeted production subsidies would be expensive because existing production for the domestic market would qualify, but targeting requires information that is typically not available to government, and a degree of discretion that risks eliding into corruption.[6] Perhaps the most effective way of targeting a subsidy towards exporting firms is to provide good quality infrastructure for geographically-defined export zones, but since Asian governments already do this, it may be merely a necessary, but not sufficient, condition for inducing relocation.

Unlike these forms of industrial policy, trade preferences in OECD markets are not under the control of LDC governments; like aid, they are an instrument of development policies under the control of OECD governments. However, they have some major advantages over the policies that are available to LDC governments to provide the (temporary) advantage needed to get cluster formation. First, they are relatively immune from recipient country political economy problems, since they are set by foreign, not domestic, govern-

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ments. Thus, there is no way in which their level can be escalated in support of failing firms. Second, since trade preferences support exports, they offer a performance-based incentive – firms benefit only if they export. Firms therefore face the discipline – on quality as well as on price – imposed by international competition. Rodrik (2004) argues that this discipline has been an important positive factor underlying the success of export-oriented strategies, as compared to import substitution. Finally, they are fiscally costless to LDC governments and virtually costless to OECD governments and so do not compete with government spending on social needs or with aid.

Is there any evidence that trade preferences have had a positive effect on modern sector production? Before answering this question we need to be clear about what effects we expect. Preferences will be valuable if countries are able to participate in fragmentation and production networks. This is facilitated by liberal ROOs and by geographical proximity, as well as by standard determinants of comparative advantage. Even if these circumstances are met, their effects might be concentrated in a few sectors, regions or countries, and only set in above some threshold.

Mauritius is the only African country to have decisively penetrated global markets in manufacturing, in the process transforming itself from an impoverished sugar island to Africa's highest-income economy. Famously, this performance defied the forecast of Nobel Laureate James Meade that the country was condemned to poverty. Subramanian and Roy (2003) investigate the reasons for the take-off. They find that export manufacturing success was the foremost proximate reason for economic success. In turn, the success in manufacturing was triggered by two coincident strategies. The Mauritian government granted duty free inputs for manufactured exports; Subramanian and Roy find this to

have been quantitatively important. However, they find that the OECD decision to grant Mauritius trade preferences in garments through the multi-fibre agreement (MFA) was even more important. Crucially, the MFA gave Mauritius privileged access to OECD markets relative to established Asian producers. The MFA ended in 2004, but Mauritius is now well-established in OECD markets and has gradually shifted to more complex manufacturing 'tasks'. The temporary preference scheme was thus critical in permanently transforming the Mauritian economy.

The African Growth and Opportunities Act, which gives trade preferences to African countries in the US market, offers duty free access for a wide range of products. AGOA is not restricted to LDCs, and is currently available to 38 African countries, including Kenya, Nigeria and South Africa.[7] AGOA ROOs are strict (varying across products, but generally with inputs having to come from the USA or other AGOA countries). However, they were relaxed for apparel under the 'special rule' clause. This allows eligible countries to use fabric imported from third countries in their apparel exports to the USA so that the ROO is just a 'single transformation requirement' (i.e. the transformation from fabric to garment must be undertaken in the eligible country). This special rule is temporary and has been renewed under a series of waivers. The special rule now applies to 25 African countries (including Kenya and Nigeria, but not South Africa). Study of the effects of AGOA is particularly informative, as it can be compared with the EU's trade preferences under the Cotonou agreement and EBA. These are in many respects similar, but (a) have more restrictive ROOs for apparel, and (b) have a somewhat different country coverage, with only LDCs being eligible. Collier and Venables (2007) show that AGOA has been highly successful in expanding African apparel exports to the USA, whereas EBA has failed

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to do the same for African exports to the EU. They attribute this predominantly to the more liberal ROOs for apparel provided by the 'special rule' of AGOA than are available under EBA. In other words, trade preferences, even if temporary, can be effective in helping new entrants to break into global manufacturing. However, they need to be combined with generous ROOs and limited to countries that have not already broken into global markets.

For Africa and other currently unindustrialised LDCs to diversify their exports into manufacturing may require a catalyst to create clusters of activity and lift them to threshold productivity levels. Forty years of African domestic protectionism has failed to induce such clusters. However, the evidence suggests that – given the right conditions – it is possible for African countries to accelerate their modern sector export growth. Designing policy to promote such growth requires recognition of a number of features of modern global trade: fragmentation, increasing returns and the consequent lumpiness of development. Domestic policy and international policy complement each other. Domestic policy needs to ensure a good business environment and infrastructure, but this can be spatially concentrated. International policy needs to redesign trading arrangements with ROOs that do not penalise narrow specialisation. Two of the past initiatives in trade preferences for African manufactures, the MFA and AGOA, have both demonstrated their effectiveness. However, at the time when the MFA was launched, few African governments had adopted the complementary policies needed for success, and the MFA has now ended. The key feature that made AGOA effective, the apparel special waiver, has now been renewed, but AGOA applies only to the US market and to selected African countries.

The experience of trade preferences has demonstrated that as devices for transferring income ('rents') to LDCs they

are largely ineffective. For this purpose they are simply not worth prioritising as an objective. However, the experience has also demonstrated that as devices for pump-priming the entry of a country into global manufacturing, in particular the manufacture of apparel, they can be useful. For them to work three conditions need to be in place.

First, the rules of origin need to be sufficiently generous that LDC specialisation in one or two tasks in the production of a product is eligible. However, ROO should not be so generous that the only activity that takes place in the LDC is relabelling of products manufactured elsewhere. The AGOA rules of origin appear to be about right.

Second, the governments of LDCs need to complement privileged market access by encouraging the formation of a cluster of firms in an export processing zone (EPZ). Although EPZs have been the standard approach for breaking into manufacturing used in Asia, in several LDCs they have a very mixed record. An EPZ is only likely to work if it provides an efficient location for production: an EPZ which is badly located and inadequately serviced cannot be made to work just by granting tax concessions. Tax concessions are much less important that genuine reductions in the costs of production. The most effective form of inducement is to select a good location at a well-functioning port. Firms should then be clustered in this location: attempts to spread manufacturing thinly around the country on considerations of equity are likely to be doomed to failure. Once a good port location has been selected, costs of production can be reduced through the provision of adequate physical infrastructure and efficient administration of services such as customs and regulation. To increase the confidence of firms in this provision it may be helpful to commit to certain standards of service, such as the maximum time taken for customs clearance. The necessary infrastructure may well be a good use of aid, and this would

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encourage practical policy coherence on the part of OECD governments – their trade policies would be aligned with their aid policies.

Third, unfortunately, privileged market access can only work to pump-prime new entrants to manufacturing if all established producers are excluded. As in the UNIDO proposal of 2009, the remit of the scheme has to be confined to least-developed-in-manufacturing countries (UNIDO, 2009). This is because if even one established producer is included in the scheme, their initial cost advantage from having an already formed cluster of producers will make new entrants uncompetitive: international firms will take advantage of the privileged access by expanding production in the established cluster. While most established manufacturing clusters are in emerging market economies, a few are in LDCs, such as the apparel cluster in Bangladesh. Unfortunately, it is essential that such producers not be included in the coverage of the scheme.

Subject to these three conditions the appropriate market for privileged access is as near to being global as is politically possible. *The minimum reasonable political goal for privileged market access is for all least-developed-in-manufacturing countries to be included in a common, OECD-wide scheme*. A common scheme would be more effective than piecemeal different schemes with individual OECD countries: it would be easier for firms to understand and use, and politically more robust. Since the objective is to pump-prime the formation of clusters, it is not necessary for the scheme to be permanent. A temporary scheme might be easier to negotiate, being more acceptable both to the USA and to countries not covered (such as Bangladesh), and less liable to opposition in the WTO (where AGOA already has a waiver). A common OECD-wide scheme would involve harmonising the American scheme AGOA, with the EU schemes, EBA and economic

partnership agreements (EPAs). This is a timely moment to request the EU to rethink its trade preferences: the European trade schemes are manifestly in a degree of disarray and there is a new European Commission that is not necessarily so committed to past arrangements.

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While a common OECD scheme is a reasonable minimum negotiating objective, ideally it should include *preferential access to the emerging market economies (EMEs)*. Collectively, the EMEs are now a large and fast-growing market and so it would be advantageous for LDCs to gain access to them. Politically, it is important to accelerate the process whereby EMEs reconceptualise themselves from being fellow victims alongside LDCs of an international system in which they are powerless to recognise their new status as significant players who should share the responsibility for assisting LDCs. For the EMEs, the most appropriate form of assistance for LDCs is their trade policies. Their markets are far more protected from LDC products than those of the OECD, while liberalising them selectively towards LDCs would not involve significant fiscal costs.

A common, OECD-wide privileged market access scheme for those developing countries yet to break into manufacturing was initially proposed in Collier and Venables (2007). It has recently been endorsed by François Bourguignon (former Chief Economist of the World Bank) and by Nancy Birdsall (President of the Center for Global Development).