Manufacturing, Employment and Poverty

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Structure

• Motivation and context

• Manufacturing-employment-poverty nexus

• Opportunities/prospects for low-income countries

• Policy options for the G10 development agenda
Purpose/context

What is the potential role of manufacturing growth in employment generation and poverty reduction in low income countries?

How initiatives to promotion of manufacturing growth can be built into the G10 development agenda?
Context

The role of manufacturing in economic development: pendulum swings in the development policy debate

- During the first four decades of the post-World War period, the ‘Manufacturing-employment-poverty’ nexus was central to the development policy advocacy.

- From about the early 1990s, the ‘growth-poverty’ nexus gained prominence.
  - Sectoral emphasis shifted from manufacturing to agriculture (and also to services, in India).
• Renewed emphasis on manufacturing in recent years

‘Premature industrialization’ is a threat to employment creation and poverty reduction

China-India comparison has played a role
Manufacturing – employment – poverty nexus

Direct impact

- Greater capacity to create relatively better quality jobs for unskilled and semi-skilled workers compared to agriculture and informal services; employment in manufacturing requires mostly on the job training.
  
  In particular, traditional labour intensive industries contribute to disproportionately creating jobs for women (women empowerment)

- Labour productivity growth is generally faster in manufacturing
Indirect impact

Creates jobs in other sectors through forward and backward linkages within manufacturing as well as with services and primary sectors

Indirect effects are much more important than direct effects: Employment multipliers are usually higher than in other sectors (Evidence: 1 job in manufacturing creates 2 or 3 three jobs in the other sectors)
• The magnitude of the employment and poverty impact differ by the stage of development; the direct employment effect is greater for low income countries.

• At very low levels of income, labour force is concentrated in rural agriculture and informal services; manufacturing has a crucial role to play in bringing these people out of poverty. (Labour is the only income generating ‘asset’ owned by the poor)

• At higher levels of income, capital and technology intensive production become more important; the direct impact of manufacturing growth on poverty reduction through the creation of new jobs become less important.
Manufacturing (% of GDP) and Poverty, circa 2010
Opportunities/prospects for low-income countries

• Boarder consensus arising from the debate on ISI versus EOI:

Old-style import-substitution strategy has outlived its usefulness; export orientations is more conducive for rapid, self-sustained and equitable growth

‘Openness to foreign trade is a friend of economic development and growth, not an enemy, as many policy makers and economists had feared in the immediate post-war period’ (Rodrik 1995).

• The debate is now centred on the question of how to tackle the challenges associated with a policy regime shift from ISI to EOI.
• Mainstream view: ‘let factor endowment speak’ by getting product and factor prices right
  - liberalization, stabilisation, institutional reforms (improve quality of governance).

• Revisionist view greater/activist role for the state in the form of well-targeted and time-bound intensives.
  Market imperfections in the typical developing economy and dynamic externalities associated with infant industry protection call for right kind of intervention.
• There is evidence that well-targeted, time-bound interventions can promote industrial growth and employment, but the available evidence is ‘context specific’

• ‘Success stories’ have emerged only when the governments appropriately coordinated specific interventions with sound economy—wide policies.

• Industry/sector specific interventions have a greater chance of success compared to ‘picking-winner’ (firm-specific) targeting.
Export-oriented manufacturing: A typology

The following typology is helpful in understanding/analysing opportunities for export-oriented industrialisation for low-income countries:

(1) ‘resource-based’ manufacturing or manufacturing activities which involve further local processing of material previously exported in raw state;

(2) Traditional (labour-intensive) consumer goods (clothing, footwear, toys etc);

(3) Component production and assembly within vertically integrated production systems (‘global production sharing’).
(1) ‘Resource-based’ manufacturing

• Opportunities are naturally determined by the resource endowment in a given country.

• Most processing activities, particularly those in the mineral and chemical industries, are characterised by high physical and/or human capital intensity and may not therefore be suitable for location in a low-income country.

• Scale economy considerations also works against location of processing in a given country

• Agro-based processed food is a potential growth area for low-income countries
Processed food

- The past three decades have witnessed a notable compositional shift in world food trade.

- The relative importance of ‘classical’ food products (coffee, tea, sugar, cocoa and so on) have sharply eroded as a result of the rapid expansion of trade in products such as fresh fruits and vegetables, poultry, fish and dairy products, which are exported after being subjected to technologically sophisticated processes (‘processed foods’ or ‘ready-to-eat food’).
Powerful forces on both demand and supply sides have underpinned this development (It is a structural change):

- ‘internationalization’ of food habits

- advances in food technology, transport and refrigeration facilities

- ‘Supermarketisation’ of world food trade: Growing importance of international buyers/marketing chains in linking up food producers to overseas markets.
Why processed food deserve special attention when considering policy options for agricultural resource-rich countries

- Income and price elasticities of demand for processed food is much higher compared to most traditional primary agricultural products.
- The final stages of food processing is labour-intensive, in contrast to the production processes of the traditional resource-based products (such as minerals and timber)
- Superior to the traditional manufacturing exports in terms of net balance of payments implications (net export earnings) and addition to national income (value added).
- An effective vehicle for linking the rural economy in a positive way with the on-going process of economic globalization.
Policy challenge

A key determinant of a country’s success in process food exporting:
ability to comply with food-safety standards (or SPS standards)?

‘Measures of compliance regulations enacted by the governments to protect the health and safety of their citizens and the environment in which they live.’

The claim that ‘free trade is optimal’ is not relevant to the debate on the trade impact of SPS standards.

The policy focus should be on building supply-side capabilities
In principle, SPS standards (or other technical standards) can promote trade by facilitating market transactions (reducing information cost).

But they also can become a major impediment to trade, for two reasons.

Importing countries may deliberately craft SPS measures to impose a cost or other disadvantage on foreign competitors.

Temptation to do so is much greater when tariff barriers come down. (a increasingly important new form of protection)
Even when comparable SPS measures are applied to both domestic and imported goods, they can impede imports because of asymmetry in compliance cost.

Generally there are significant differences between domestic food safety standards in developing countries and international food safety standards (which are usually set in line with domestic food safety standards in developed countries) - ‘the standard divide’

Emphasis on food safety standards increases over time with increasing affluence of importing countries. (public demand for food safety is a ‘luxury’ economic good).
(2) Traditional labour intensive products

- For the typical developing economy, labour-intensive consumables (such as clothing, footwear, toys and sporting goods) are generally considered the natural starting point in the process of export-led industrialisation.
- In this product group, market potential for goods that are made to local specifications using local inputs is extremely limited. Such goods account for only a small and shrinking share of manufactured exports from developing countries.
- Export success depends crucially on the country’s ability to enter the fast-growing and highly competitive markets for made-to-order products.
(3) Component production and assembly within vertically integrated production systems (‘global production sharing’)

Global spread of component production and assembly within vertically integrated international industries (‘global production sharing'), an import facet of economic globalisation

‘Network trade’ (trade within global production networks) is the most rapidly expanding segment of world trade
Table 1: Global production sharing and the shift in manufacturing trade from developed to developing countries

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<thead>
<tr>
<th></th>
<th>1990-91</th>
<th>2010-11</th>
</tr>
</thead>
<tbody>
<tr>
<td>World network exports, US$ billon</td>
<td>12803</td>
<td>59070</td>
</tr>
<tr>
<td>Developing countries</td>
<td>1524</td>
<td>26641</td>
</tr>
</tbody>
</table>

Developing-country share in

| network exports (%)            | 11.9%   | 45.1%   |

Share of network products in total

| mfg. exports from developing countries (%) | 41.4%   | 60.1%   |
• Global production sharing opens up new opportunities for countries to participate in a finer international division of labour, to specialize in different slices (tasks) of the production process in line with their relative cost advantage

• In a labour abundant economy, assembly activities within global production networks tend to be relatively more labour intensive (and hence ‘pro poor’) compared to ‘conventional manufacturing’

[Conventional manufacturing: production of a good from start to finish in just one country]

• Successful integration of the manufacturing sector into production networks has played a key role in employment generation and poverty reduction in China and other high-performing East Asian countries
Policy challenge

- Relative labour cost is the most obvious determinant of developing-country engagement in global production sharing.
- But, a country’s success in joining global production networks does not depend on the availability of labour at relatively low wages alone.

Only a handful of developing countries are have been able to join global production networks (Table 2)
Table 2: Geographic profile of network trade, 2010-11 (%)

<table>
<thead>
<tr>
<th>Region</th>
<th>P &amp; C</th>
<th>Final</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Asia</td>
<td>42.8</td>
<td>37.5</td>
<td>40.3</td>
</tr>
<tr>
<td>Developing East Asia</td>
<td>33.7</td>
<td>27.6</td>
<td>30.9</td>
</tr>
<tr>
<td>China (PRC)</td>
<td>13.5</td>
<td>15.7</td>
<td>14.5</td>
</tr>
<tr>
<td>Taiwan</td>
<td>4.0</td>
<td>2.2</td>
<td>3.2</td>
</tr>
<tr>
<td>Korea, RP</td>
<td>5.6</td>
<td>3.7</td>
<td>4.7</td>
</tr>
<tr>
<td>Indonesia</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Malaysia</td>
<td>3.4</td>
<td>1.8</td>
<td>2.6</td>
</tr>
<tr>
<td>Philippines</td>
<td>1.8</td>
<td>0.4</td>
<td>1.2</td>
</tr>
<tr>
<td>Singapore</td>
<td>2.6</td>
<td>1.0</td>
<td>1.9</td>
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<tr>
<td>Thailand</td>
<td>1.4</td>
<td>1.8</td>
<td>1.6</td>
</tr>
<tr>
<td>Vietnam</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>India</td>
<td>0.4</td>
<td>0.2</td>
<td>0.3</td>
</tr>
<tr>
<td>NAFTA</td>
<td>16.2</td>
<td>16.6</td>
<td>16.4</td>
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<tr>
<td>EU15</td>
<td>29.3</td>
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<tr>
<td>World</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
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What are the other determinants?

- Human capital
- Service link cost
Human capital development

• Under global production sharing, firms in developed countries shift low-skill-intensive segments of the production process to developing countries

• But, low-skill intensive activities in the developed country are more-skill intensive than the labour-intensive activities in the developing country

• Human capital development is, therefore, a vital element in developing countries’ endeavour to join production networks

At the initial stage, availability of middle-level (supervisory) technical manpower is vital.

In the long-run, availability of high-level technical and managerial manpower is vital in industrial upgrading.
Lowering service link cost

Service link cost: the costs involved in coordinating production blocks/tasks located across borders.

Service link cost in a given country depends on a whole range of factors impacting on the overall business environment:

(i) Infrastructure and trade-related logistic (air transport is vital for electronics)
(ii) political stability and policy certainty
(iii) Property right protection, including enforcement of contracts
(iv) Liberalisation of trade and investment policy regimes (elaborate in the next two slide)
Foreign trade and investment liberalisation

Growth of global production sharing makes a strong case for concurrent liberalisation of trade and FDI policy regimes.

FDI and trade policies are co-determinants of the location choice of MNEs within production networks.

With the rapid expansion of global production sharing, the boundary between international trade and foreign direct investment have become blurred.
MNEs are the key players in global production sharing.

A close relationship between foreign direct investment (FDI) and trade in parts and components and final assembly.

In recent years, production sharing practices have begun to spread beyond the domain of MNEs:
- As production operations in host countries become firmly established, MNE subsidiaries have begun to subcontract some activities to local (host-country) firms to which they provide detailed specifications and even fragments of their own technology.

But, the bulk of global production sharing takes place through intra-firm linkages rather than in an arms-length manner.
Policy options for the G10 development agenda

• Both growth and the type /nature of growth matter for employment generation and poverty reduction.

• Rapid growth in export-oriented manufacturing (which is relatively more unskilled and semi-skilled labour intensive compared to agriculture and informal services) is a powerful force for poverty reduction.

• There is a need to help low-income countries to develop supply-side capabilities.
• There is a strong case for designing the G10 infrastructure agenda with a focus on improving trade related infrastructure in low-income countries (including that helps improving supply-side capabilities for meeting SPS stands, reducing services link costs)

(Focusing simply on increasing total infrastructure spending can be counter productive:
‘building roads to nowhere!’)

• Middle-level technical/managerial skill development into the G10 agenda for human capital development.
Thank you