



ISSUES IN BRIEF

Free Trade and Inclusive Development: Lessons from the Indian Experience



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One of the central elements in the development of any country is the creation of economic activities that transform the production structure by significantly increasing labor productivity, or the amount of production per worker. By helping to absorb more people into quality employment, the creation of such activities helps to generate a more inclusive and sustainable path of long-run economic growth. While economists and policy-makers accept the necessity of this transformation, there are differing views on the policies that developing countries should follow to achieve this transformation.

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Many Western countries and institutions, such as the International Monetary Fund (IMF) and the World Bank, argue that minimizing the role of the State in economic activity, and opening up the economy to external markets is vital to achieving this transformation. But other economists (e.g., Prebisch 1959, Cimoli and Correa 2002, and Ocampo 2005) stress that active industrial and employment generation policies are also essential ingredients for this transformation, and that it is necessary to complement liberalization with such policies.

Recent evidence suggests that the latter view is gaining evermore traction. Drawing from new research (Nabar-Bhaduri 2011) on the Indian experience where weak productivity improvements and employment growth

have persisted even after market liberalization, this policy brief complements past findings for Latin American countries that have experienced similar problems following the adoption of liberalization (e.g., Cimoli and Katz 2001, and Cimoli and Correa 2002). This evidence suggests that liberalization alone will not generate a sustainable and inclusive path of long-

“... liberalization alone will not generate a sustainable and inclusive path of long-run development in developing countries ...”

run development in developing countries with high instances of unemployment, and where significant numbers of the population are engaged in precarious forms of employment.

Liberalization, Industrial and Employment Policies

Proponents of liberalization argue that it promotes production efficiency by fostering competition and checking corruption; allows developing countries to expand their economic activities by overcoming the demand constraints of their home markets; and generates more employment (see, for example, Krueger 1980). According to these arguments, liberalization, especially in trade, enables more efficient firms (having a higher labor productivity and lower costs) to expand at a much faster rate. Also, by lowering production costs, liberalization makes it more difficult for inefficient firms (having excessively high costs) to survive in an environment of greater competition. These two effects reallocate economic activities towards more efficient firms, and thereby increase industrial and aggregate productivity in an economy.

Indeed, by fostering greater competition, liberalization may reduce the inefficiencies and corruption that sometimes arise under large bureaucratic frameworks designed to oversee economic activities in a more closed economy. Furthermore, since the level of demand may often be low in a developing country, liberalization may provide access to additional markets.

However, less certain is whether the dynamics unleashed by liberalization will help to generate quality employment on a large scale in a developing country; make these employment opportunities accessible to as many people as possible; foster economic activities where the domestic value-addition is high; develop domestic technological capabilities; and promote technological diffusion within the country. Some economists argue that without deliberate policy efforts to promote research and development (R&D) and diversification in production capabilities, liberalization may introduce patterns of specialization that destroy domestic technological capabilities and linkages between different sectors and industries, (see, for example, Ocampo 2005). It may cause a developing country to specialize in activities that have a limited ability to foster technological progress.

For example, a country rich in natural resources may center its economy around natural resource-based primary commodities. A country may also begin to import technologically superior machinery and equipment, instead of directing efforts towards R&D that would facilitate the domestic production of such equipment. Finally, it may specialize in assembly-type activities that significantly rely on imported parts (as in the Mexican automobile industry). Thus, unless complemented by industrial policies that promote diversity in investments and manufacturing, liberalization can create specializations that may block the process of growth. As a result, a few sectors in the economy may show an increase in labor productivity following liberalization (e.g., natural resource-based industries like mining and oil; and assembly-type industries like automobiles), while the remaining sectors may retain low levels of productivity (e.g., agriculture, and information technology-based industries). In such a scenario, without active industrial and employment policies, inequality in employment would persist, and large numbers of the population would continue to depend on precarious forms of employment for survival in the longer run.

The Present Empirical Evidence

The experience of Latin American countries suggests that liberalization on its own may not be able to address these wider development issues and generate a sustainable path of long-run economic growth. Post-liberalization, Latin American countries have tended to specialize in natural resource-based industries and assembly-type activities with the share of these

industries in total manufacturing output increasing by significant amounts. These production activities have often involved a low domestic value-addition and weak linkages between domestic sectors since they have significantly relied on foreign sources of technological change and productivity growth (Cimoli and Katz 2001, and Cimoli and Correa 2002). The adverse impact of these developments has been reflected in the poor productivity and economic growth performance of the Latin American countries in the post-liberalization period. As Cimoli and Correa (2002) show, the average rate of GDP growth in the Latin American region declined sharply from the pre-liberalization (1950-80) rate of 5.5 percent to around 3.3 percent during 1990-2000.

Even in the case of East Asia, often cited as an example of the superiority of liberalization, some studies (e.g., Amsden 1989 and Wade 1990) have emphasized the role of government intervention (e.g., subsidies, trade restrictions, administrative guidance, the establishment of public enterprises and the allocation of credit) in helping East Asian countries to successfully pursue a growth strategy that focused on international markets.

Table 1 shows the average rate of productivity growth (relative to the U.S.) in the manufacturing sector for East Asia and Latin America over three time periods. The periods 1975-90 and 1990-2005 were also times during which Latin American countries began liberalizing their economies. As seen in Table 1, in both these periods, productivity in Latin American manufacturing has fallen. Contrasting the Latin American experience with the comparatively better productivity performance of East Asia provides additional evidence to suggest that complementing liberalization with active industrial policies is crucial in enabling a country to improve its productivity performance.

More recently, there has emerged empirical evidence from India, which further supports the view that liberalization needs to be complemented by industrial and employment generation policies if the process of economic growth is to be made more sustainable and inclusive (Nabar-Bhaduri 2011).

Table 1: Average Productivity Growth in Manufacturing (Relative to U.S.) in East Asia and Latin America

	1951-75	1975-90	1990-2005
East Asia		2.1%	0.6%
Latin America	1.05%	-3.3%	-2.1%

Source: Author's calculations based on Timmer and de Vries (2009).

Notes: 1) For some East Asian countries, data on manufacturing value added and employment was missing for the 1950s and 1960s. Hence Table 3 only shows the productivity growth for the periods 1975-90 and 1990-2005. 2) For East Asia, the relative productivity growth rate is calculated as the growth rate of the labor productivity ratio between East Asia and the US. Likewise for Latin America.

India's Economic Policies Pre- and Post-liberalization: A Brief Overview

The major tenets of India's pre-liberalization industrial policies included:

- the licensing of industrial activity;
- reservation of key economic activities for the state;
- import substitution strategies aimed at developing industry and self-reliance;
- controls over the foreign direct investment (FDI) and technology transfer of large domestic firms;
- labor market interventions to protect labor; and
- the promotion of small scale industry to ensure that the poor have access to the benefits of development.

These policies played a vital role in developing India's self-reliance, allowing the development of basic and heavy industries (such as iron and steel, machinery and other production equipment, power and cement) crucial to the long-term growth of any economy. However, licensing also fostered a bureaucratic framework that gave rise to corruption. Measures to address this problem began in the late 1970s with some relaxation of the licensing requirements. But the State continued to play a prominent role in industrial allocation (Kaplinsky 1997).

In mid-1991 there was a major policy shift, triggered by the foreign exchange crisis in July, with India on the verge of defaulting on its external debt payments. The policy reforms covered all the major aspects of the Indian economy - finance, the public sector, subsidies, agriculture, banking and manufacturing. In manufacturing, the reforms signaled the end of the license raj and the reservation of many areas of economic activity for the state. Restrictions on the inflow of foreign capital and technology transfer were relaxed, as were restrictions that had been previously imposed on large industrial houses. The reforms eliminated the quantitative restrictions on the imports of raw materials, machinery, and other production equipment. There was also a sharp reduction in tariff rates, although tariff rates on consumer goods remained high. The exchange controls that had existed prior to 1991 were simplified and the partial convertibility of the Indian rupee was established (Kaplinsky 1997).

Productivity and Employment Performance in Indian Manufacturing and Agriculture Post-liberalization

According to the conventional arguments for liberalization, these reforms should have improved productivity and efficiency in Indian manufacturing, and generated more employment. However, the actual evidence tells a different story.

Table 2: Average Productivity Growth (Relative to U.S.) in Indian Manufacturing

	Average Productivity Growth
1961-75	0.8%
1975-90	0.3%
1990-2005	-1.15%

Source: Author's calculations based on Timmer and de Vries (2009).

Note: The relative productivity growth rate is calculated as the growth rate of the labor productivity ratio between India and the U.S.

In the post-liberalization era, efforts to reorganize Indian industry to compete effectively in an environment involving greater foreign competition have faced various challenges, which have limited the growth of output, exports, productivity and employment in the manufacturing sector. In the 1990s, reduced bank lending to the Indian commercial sector, the disappearance of development financial institutions, an underdeveloped private bonds market and manipulations of the stock market made it difficult for industrial entrepreneurs to raise the finance to adjust their production structure and capital equipment so as to improve their production efficiency. The persistence of inadequate infrastructure, anti-dumping measures and non-tariff barriers for industrial products in other countries, and the bias of the Indian government's foreign direct investment (FDI) policies and fiscal concessions towards services are other factors that have made it difficult for a majority of industrial enterprises to make an effective transition from operating in a sheltered domestic environment to one characterized by greater competition (Rakshit 2009).

Table 2 shows the average rate of productivity growth (relative to the U.S.) in the Indian manufacturing sector for three time periods.

Table 2 shows that productivity in the Indian manufacturing sector has fallen by 1.15 percent during 1990-2005. Although the average rate of productivity growth in Indian manufacturing was low during the periods 1961-75 and 1975-90, productivity was nevertheless growing in these periods, unlike the post-liberalization period.

Table 3 shows the average rate of productivity growth (relative to the U.S.), and Table 4 shows the average rate of employment growth in 13 major Indian manufacturing activities for the pre-liberalization and post-liberalization periods. In both tables, activities showing productivity improvements (or an increase in average productivity growth) are indicated in boldface. As seen in Table 3, out of 13 manufacturing activities, in the post-liberalization period, productivity has improved in only four activities: apparel and leather and allied products; wood products, furniture and fixtures; primary metals; and motor vehicles and other transportation.

Table 4 shows that in each of these activities, the employment growth rate has decreased in the post-liberalization period. In fact, it has turned negative (i.e., total employment has fallen) in

two activities: wood products, furniture and fixtures; and motor vehicles and other transportation.

Table 4 further shows that only four manufacturing activities have shown a higher rate of employment growth in the post-liberalization period: food and beverages and tobacco products; chemical products; fabricated metal products and machinery; and miscellaneous manufacturing.

Except for miscellaneous manufacturing, the magnitude of this increase in employment growth has been relatively small in the post-liberalization period. In fact, it has been less than one percentage point for two activities – chemical products, and fabricated metal products.

For miscellaneous manufacturing, the larger magnitude may reflect the fact that the 1998 Indian National Industrial Classification (NIC 1998) defines miscellaneous manufacturing to include a wide range of activities such as the production of medical instruments, watches, clocks, jewelry, musical instruments, sports goods, games and toys, stationery articles, articles of personal use, etc. Thus overall, in the post-liberalization period, both productivity improvements and employment growth have been concentrated in a few manufacturing activities, with employment showing an increase in only four activities that have not shown an improvement in productivity.

In developing countries like India, a significant fraction of the population is also engaged in subsistence agriculture. The average size of agricultural land holdings is generally small and fragmented relative to the number of people working on them.

Table 3: Average Productivity Growth (Relative to U.S.) in Indian Manufacturing Activities

Activity	Pre-liberalization (1977-90)	Post-liberalization (1991-2002)
1. Food and beverage and tobacco products	6.07%	1.98%
2. Textile mills and textile product mills	2.27%	-2.76%
3. Apparel and leather and allied products	-3.09%	57.7%
4. Wood products; furniture and fixtures	1.52%	5.84%
5. Plastics and rubber products and petroleum	3.57%	0.407%
6. Chemical products	6.07%	3.6%
7. Nonmetallic mineral products	6.73%	5.82%
8. Paper products and printing	6.3%	-2.3%
9. Primary metals	1.57%	3.57%
10. Fabricated metal products and machinery	7.23%	2.49%
11. Electrical equipment, appliances, and components	6%	0.69%
12. Motor vehicles and other transportation	4.87%	6.3%
13. Miscellaneous manufacturing	10.16%	4.48%

Table 4: Average Employment Growth in Indian Manufacturing

Activity	Pre-liberalization (1977-90)	Post-liberalization (1991-2002)
1. Food and beverage and tobacco products	1.24%	2.3%
2. Textile mills and textile product mills	-0.048%	-1.55%
3. Apparel and leather and allied products	4.2%	3.05%
4. Wood products, furniture and fixtures	0.053%	-2.03%
5. Plastics and rubber products and petroleum	5.1%	1.6%
6. Chemical products	1.46%	1.9%
7. Nonmetallic mineral products	1.44%	-1.46%
8. Paper products and printing	1.1%	-0.63%
9. Primary metals	2.3%	1.26%
10. Fabricated metal products and machinery	-1.15%	0.24%
11. Electrical equipment, appliances, and components	2.8%	-0.43%
12. Motor vehicles and other transportation	1.92%	-0.36%
13. Miscellaneous manufacturing	-1.96%	10.67%

Source: Nabar-Bhaduri (2011).

Note : For each activity, the relative productivity growth rate is calculated as the growth rate of the labor productivity ratio between India and the U.S.

Labor productivity in the agricultural sector therefore tends to be very low, sometimes close to zero. As such, even though employment growth has increased in low-productivity Indian manufacturing activities, this may still be regarded as a relative improvement if more people are moving from agriculture to manufacturing.

Table 5: Average Rate of Productivity Growth (relative to the U.S.) and Employment Growth in Indian Agriculture

	Pre-liberalization (1977-90)	Post-liberalization (1991-2002)
Average Rate of Productivity Growth	-0.83%	0.234%
Average Rate of Employment Growth	1.3%	-0.47%

Source: Nabar-Bhaduri (2011).

Note : The relative productivity growth rate is calculated as the growth rate of the labor productivity ratio between India and the U.S.

Table 5 shows the average productivity growth (relative to the U.S.) and employment growth in the Indian agricultural sector. The average rate of employment growth in the Indian agricultural sector has turned negative (i.e., employment has fallen) in the post-liberalization period. It is therefore possible that there has been some shift of labor from the agricultural sector to manufacturing activities. Although this shift may be into manufacturing activities which have not shown productivity improvements, a comparison of Tables 3 and 5 shows that the average productivity growth for each of these activities is still higher compared to the low productivity growth observed in

the agricultural sector in the post-liberalization period (0.234 per cent). Thus, the growth of employment in low-productivity manufacturing activities may be a partial improvement as it may have facilitated some shift of the workforce from the agricultural sector where productivity performance remains very low into manufacturing activities where productivity performance has been relatively better. Nevertheless, the ability of such concentrated improvements to address the unemployment problem and transform the production structure is going to be small.

The Need to Complement Liberalization with Industrial and Employment Generation Policies in Developing Countries

Both the previous Latin American findings and the Indian experience discussed in this policy brief suggest that liberalization alone may not be able to transform the production structure of a developing economy, and productively absorb its surplus manpower. As mentioned earlier, some studies have also stressed the role of active government policies in enabling East Asian countries to achieve a path of sustained long-run economic growth.

Thus, increasing evidence suggests that for globalization to serve as a transmitter of structural transformation, and promote a more sustainable and inclusive path of long-run economic growth in developing countries, liberalization needs to be complemented by industrial and employment generation policies. Employment generation policies could take the form of:

- large-scale infrastructural development projects; and
- rural development programs.

Such programs would both generate more jobs and foster rural development, and thereby contribute towards making the growth process more inclusive.

Industrial policies need to be geared towards establishing an industrial base (in developing countries that lack such a base), and accelerating the growth and expansion of industry. Such policies will help to develop self-reliance, improve the technological capabilities and production efficiency of different industries, and generate more employment opportunities through an accelerated rate of industrial growth. They are also likely to make a developing country's merchandise exports more competitive in the long-run and thus contribute towards improving

its performance in international trade. Some forms that these policies could take include:

- investment in the development of basic and heavy industries, and efforts to promote domestic production of machinery and equipment.
- active research and development (R&D) programs by the State, which could involve collaborations between the public and the private sector.
- credit policies that will make it easier for industrial entrepreneurs to replace outdated or inefficient capital equipment.
- subsidies to firms for investing in R&D.
- establishment of development financial institutions.
- development of specific bank lending schemes for the commercial sector.

Indeed, even the World Bank has recognized the role of similar policies in fostering East Asia's long-run economic growth. However, it tries to downplay the significance of such policies, arguing that the growth miracle was more the result of "getting the fundamentals right", and export-promotion policies rather than policies aimed at developing specific industries (Page 1994). What the World Bank missed is that it is precisely such selective policy interventions aimed at developing specific industries that can help to develop the long-run external competitiveness of a developing country in non-traditional areas, and also help to generate more employment. For instance, high levels of protection and public ownership, public expenditures on R&D and subsidized credit played a huge part in developing the competitiveness of the Brazilian steel, aircraft and shoe industries (Rodrik 2004). In China, publicly-funded R&D played an important role in enabling China to emerge as a competitor to be reckoned with in the consumer electronics industry (Rodrik 2006). Now, the World Bank has come close to full circle on the role of industrial policy in economic development, with its new director of research Justin Lin (a Chinese economist very close to the Chinese experience) calling for a 21st century industrial policy (Lin 2010).

Just as important as industrial policy is the political economy of industrial policy. Amsden (1989), Wade (1990) and others have argued that a nation needs performance requirements to avoid rent seeking; public-private partnerships to embed the government in the market and avoid the "picking winners" problem; and government accountability mechanisms.

Finally, it should be pointed out that since some developing countries face a shortage of skilled manpower, technical know-how and financial institutions, there is also a need for global institutions such as the IMF, World Bank, and even the World Trade Organization (WTO) to direct efforts towards promoting greater cooperation and dialogue in R&D programs between the developed and developing countries. Fostering the long-run development of endogenous technological capabilities and promoting technological diffusion within a developing economy should be central to this dialogue. However, unlike the current practice of these institutions, such efforts must respect the right of developing countries to policy autonomy, including protection if the objectives of industrialization, and sustainable and inclusive growth warrant such policies. The ability of such policies to work is again to be found in the Chinese experience where requirements of joint ventures between domestic and foreign firms helped to develop the export competitiveness of China in industries like mobile phones and computers (Rodrik 2006). Ultimately, striking a balance between liberalization and active industrial and employment generation policies is vital to generating a long-run development path that is both sustainable and humane. ●

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References

- Amsden, Alice. 1989. *Asia's Next Giant: South Korea and Late Industrialization*. New York: Oxford University Press.
- Cimoli, Mario, and Jorge Katz. 2001. "Structural Reforms, Technological Gaps and Economic Development: A Latin American Perspective." Paper presented at the DRUID-Nelson and Winter Conference, Aalborg, Denmark.
- Cimoli, Mario, and Nelson Correa. 2002. "Trade Openness and Technological Gaps in Latin America: A 'Low Growth Trap.'" Working Paper Series, no. 2002/14, Laboratory of Economics and Management (LEM), Sant'Anna School of Advanced Studies, Pisa, Italy.
- Kaplinsky, Raphael. 1997. "India's Industrial Development: An Interpretative Survey." *World Development* 25(5): 681-694.
- Krueger, Anne. 1980. "Trade Policy as an Input to Development." *American Economic Review* 70(2): 288-292.
- Lin, Justin Yifu. 2010. "Six Steps for Strategic Government Intervention." *Global Policy* 1(3): 330-331.
- Nabar-Bhaduri, Suranjana. 2011. "What Lies Beneath: A Case for Disaggregated Analysis in Evaluating Structural Policy Shifts." *International Journal of Political Economy* 40(1): 68-85.
- Page, John M. 1994. "The East Asian Miracle: An Introduction." *World Development* 22(4): 615-625.
- Prebisch, R. 1959. "Commercial Policy in the Underdeveloped Countries." *The American Economic Review*, 49(2): 251-273.
- Ocampo, Jose Antonio. 2005. "The Quest for Dynamic Efficiency: Structural Dynamics and Economic Growth in Developing Countries." In *Beyond Reforms: Structural Dynamics and Macroeconomic Vulnerability* edited by Jose Antonio Ocampo, 3-44. Washington D.C.: United Nations Economic Commission for Latin America and the Caribbean.
- Rakshit, Mihir. 2009. "Services-Led Growth: the Indian Experience." In *Macroeconomics of Post-Reform India: Selected Papers, Vol 1*, Mihir Rakshit, 140-178. Oxford University Press.
- Rodrik, Dani. 2004. "Industrial Policy for the Twenty-First Century." Faculty Research Working Paper Series 04-047, John F. Kennedy School of Government, Harvard University.
- Rodrik, Dani. 2006. "What's so Special About China's Exports?" Faculty Research Working Paper Series 06-001, John F. Kennedy School of Government, Harvard University.
- Timmer, Marcel P. and Gaaitzen J. de Vries (2009). "Structural Change and Growth Accelerations in Asia and Latin America: A New Sectoral Data Set" *Cliometrica*, 3(2):165-190. Available at <http://www.rug.nl/feb/onderzoek/onderzoekscentra/ggdc/data/10sector>
- Wade, Robert. 1990. *Governing the Market: Economic Theory and the Role of Government in East Asian Industrialization*. Princeton, New Jersey: Princeton University Press.