

Challenges, Opportunities and Strategies for Structural Transformation in Least Developed Countries¹

Justin Yifu Lin

Senior Vice President and Chief Economist, The World Bank

Least developed countries have performed well in recent years. They have grown at an average of 5.6 percent between 2000 and 2010.² Several non-oil exporting LDCs, such as Bhutan, Cambodia, Ethiopia and Uganda, had average growth rates in excess of 7 percent during this period. As a result, their income more than doubled. Still, LDCs face large challenges. A large part of their population is living in abject [poverty](#), struggling day by day to make ends meet. High and volatile food prices exacerbate this struggle. So does wide-spread un- or under-employment. Natural disasters, which tend to become more severe and frequent as a result of climate change, and civil unrest put further strain on people's daily lives. How can LDCs achieve "sustained, equitable and inclusive growth" and turn this coming decade into a "golden" decade for LDCs? How can all LDCs obtain growth rates above 7 percent and sustain them over the next 20 to 30 years? And what can their governments do to support this objective?

The quest for sustainable growth is nothing new. At the end of the 18th century Adam Smith published his famous book on the Wealth of Nations. The full title of the book was actually "An Inquiry into the Nature and Causes of the Wealth of Nations". Though the quest for growth clearly dates back to centuries ago, fast and sustained growth is only a phenomenon of recent times. Worldwide per-capita GDP growth was negligible before 1820. Only thereafter did global growth per capita reach one-and-a-half percent per annum, driven by a historic take-off of the Western European countries (Germany, France, Italy, the United Kingdom) and their colonial "offshoots" (Australia, New Zealand, the United States, and Canada). Then, Japan, a developing country in the 1950s, was able to achieve unprecedented growth rates 9.6 percent during the 1950s and 1960s, becoming the second largest economy by 1970. Still, Japan was an exception. Standards of living in all other countries lagged far behind the leading "G7" countries.

Various schools of first-generation development economists argued during the 1950s to early 1970s that market failures in developing countries hampered structural change which was considered a necessary condition for economic growth. They suggested that the government should intervene to correct these market failures and unleash structural change. This led to a series of government-led development experiments, many of which failed spectacularly. In response, second-generation development economists, starting from the late 1970s, rejected the structural approach in development thinking and emphasized the essential functions of the markets in allocating resources efficiently. They expected structural change to happen spontaneously as long as the government did not create unnecessary distortions. Economic liberalization and privatization became buzzwords under this new economic paradigm.

But then something unexpected happened in the second half of the 20th century. Several developing countries started to grow at high and sustained rates. The Asian Tigers grew in excess of 7 percent annually between the 1960s and the early 1990s. More recently, growth in several large countries, such as Brazil, China and India has taken off. Neither of these countries followed the recommendations of any of the previous development thinkers but implemented a pragmatic mix of a free market combined with a pro-active, facilitating government.

¹ Roundtable on "Economic Growth and Structural Change: Priorities for the Least Developed Countries", Columbia University, March 9, 2012.

² Excluding Angola and Equatorial Guinea.

The “[New Structural Economics](#)” is a framework that summarizes my way of thinking on sustainable growth strategies. It is a neoclassical approach to analyze the determinants and dynamics of economic structure, taking into account the lessons learnt from past growth successes and failures. It is based on the following considerations:

First, the optimal industrial structure of a country depends on its factor endowments. Upgrading the industrial structure requires changing factor endowments, introducing new technologies and adjusting “hard” and “soft” infrastructure to the new economic realities. “Hard” infrastructure refers to ports, roads and power stations, etc. “Soft” infrastructure includes, for example, educational, financial and legal institutions. World Bank research shows that upgrading “hard” and “soft” infrastructure does improve the export performance of developing countries. This is particularly true with respect to physical infrastructure and regulatory reform to improve the business environment. For example, improving the business environment in Bangladesh halfway to the level of India could increase its trade by about 38 percent – comparable to a 26 percent reduction in the value of tariffs on goods from Bangladesh ([Portugal-Perez, Wilson 2010](#)).

Second, developing countries should not aim at replicating the industrial structure or infrastructure of high-income countries. To the contrary, countries should implement a comparative-advantage following strategy, which attempts to facilitate the entry of new firms in industries that are in line with the economy’s comparative advantage.

Third, at each given level of development, the market is the basic mechanism for effective resource allocation. Only in a well-functioning market will prices reflect the relative abundance of factors, providing firms with correct signals. Developing country governments can play an active role in facilitating structural change. Their interventions should focus on three areas:

The first area is collection of information. Collecting and processing of information is costly, but disseminating it is almost free – especially in today’s world. The government should therefore collect and provide information that reduces the risks for firms to invest in new products or technologies. This type of information could include the costs of upgrading certain products, technologies or industries, estimates of the market size for new products, etc.

The second area is coordination of investments. We often find that even in countries with highly skilled unemployed workers, firms cannot find workers that have the skills they need. The government can play an important role in closing this type of gaps.

The third area is compensation for externalities. First-mover firms, if they fail, pay the cost of failure but generate valuable information for other firms. If they succeed, other firms are likely to emulate them, eroding first-mover rents quickly. In a developed country, a first mover can be rewarded with a patent if he introduces a new technology. In a developing country, this is unlikely to be the case. Their firms tend to produce within the technology frontier and tend to adopt technologies that are already available elsewhere. Some direct, temporary government support for pioneering firms may be justifiable.

Every developing country has the opportunity to accelerate growth if it follows its comparative advantage, takes a pro-active stance to upgrade factor endowments as well as infrastructure and facilitates technological adaption. Thirty years ago no one would have imagined that thirteen economies would be able to realize average annual growth of 7 percent or above for 25 or more years, quintupling their income in the process. Similarly, many LDCs will have the opportunity to realize growth rates of 7 percent or more for 25 or more years in the decades to come.