JOBS, INDUSTRIALIZATION, AND GLOBALIZATION

February 9, 2017

Hinh T. Dinh
Economic Growth and Transformation, USA
OCP Policy Center, Rabat, Morocco
Indiana University, USA

JOBS, INDUSTRIALIZATION, AND GLOBALIZATION

I. Objectives and Background
II. Summary of the Book
III. Low Income Countries
IV. Middle Income Countries
V. Case Study of Vietnam
VI. Government Role

I. Objectives and Background

- Previous work (books, articles) focused on low income countries, starting with Light Manufacturing in Africa Project

- Current study addresses industrialization issues in the low, middle, and high income countries
- Low income countries: to create as many jobs as possible in the modern sector
- Middle income countries: to climb up the valued added chain and to reach the high income status ASAP
- High income countries: to continue productivity growth while maintaining employment for middle-income class.

II. Summary of the Book

- For the least developed countries, industrialization remains the major route, if not the only one, to create jobs, to raise income while acquiring the necessary investment in human capital to get to the next stage of modernization. Countries endowed with natural resources, too, need to create long lasting growth through investment in human capital.

- For the middle-income countries, the recent fragmentation of production and consumption brings new challenges to their industrialization path and requires a total re-assessment of the policy package traditionally used for economic development. This presentation will focus on this set of countries.

- For the advanced countries, especially the US, modern industrialization involves shedding unskilled labor at an accelerating pace caused in part by rising competition from emerging countries and in part by automation. This led to rising discontent and eventually to anti-globalization policies. More importantly, the future of modern manufacturing entails new technology and a lot of uncertainties that did not exist in the past. These countries require new policy reforms to protect workers, to keep a viable middle class that serves as a foundation of democracy and prosperity.

- Key issue for all countries is how to achieve structural transformation

Structural transformation

- In a simple decomposition of labor productivity, one can show how important the structural transformation effect is. Assuming an economy with n sectors (McMillian and Rodrik 2011, Vries, Timmer, and Vries 2014)

$$(1) \qquad \Delta Y_t = \sum_{i=n} \theta_{i,t-k} \Delta y_{i,t} + \sum_{i=n} y_{i,\text{t-k}} \Delta \theta_{i,t} + \sum_{i=n} \Delta y_{i,t} * \Delta \theta_{i,t}$$

Where the left hand side is the change in economy-wide labor productivity, defined as GDP divided by the labor force over the period concerned. The first term on the RHS measures the "within effect", or change in sector productivity due to capital, technology, etc., assuming there is no change in sectoral employment. For example, in the agriculture sector, an improvement in yield due to new types of seeds would lead to a positive change in this "within effect", even if there is no change in the labor share in the sector. The second term reflects the change in productivity brought about by the sectoral gain or loss in employment, assuming there is no change in productivity over the period. As such, it measures the pure effect of labor movement on overall productivity change. The third term is the dynamic structural change. This term is positive if the economy progresses along the structural transformation path, i.e., resources are being moved from low productivity to high productivity sectors. It is negative if the reverse happens, i.e., resources are being moved from high to low productivity sectors.

- The structural transformation effect is the sum of the second and third terms. It is negative In many economies (including low and high income countries).

III. Low Income Countries
Main Messages

- Structural adjustment is important: the impact of productivity improvement through inter-sectoral allocation of resources is more important than intra-sectoral allocation of resources (such as more investment in any particular sectors) in low income countries.
- Second, for this to happen, there have to be more jobs opened in the higher productivity sectors so that idle or laid-off workers can move there.
- Third, it is important to recognize that moving to rising productivity sectors (such as finance and/or high valued service sectors) is not an optimal strategy, simply because there will be more surplus workers as more efficiency is achieved, unless these sectors are expanding at a fast rate.
- In fact it can be shown analytically that the best structural transformation is one in which activities are moved from low to higher, but constant, productivity such as manufacturing.
- Job creation therefore is at the core of the strategy to raise growth and structural transformation in low income countries.

Main Messages

Two other features of low income countries (SSA) strengthen the policy conclusions above.

- First, the population dynamics in these countries, with young and rising youth with high aspirations, puts increasing pressures on the authorities to create jobs.

- Second, many countries in this group are resources-based, and already have unemployment problems. So the job creation issue is at the forefront of the policy agenda.

- Following previous work (Dinh et al. 2013), we argue that, for low-income countries, light manufacturing—with its low capital requirements, limited scale economies, readily available technology, and sales possibilities in domestic and international markets—retains potential as a springboard and the best hope to expand output, employment, productivity, and exports.

- But unlike the conventional wisdom, we propose a targeted, stepwise approach where the binding constraints in these sectors are identified and targeted to be eliminated or reduced. The chapter discusses how these constraints are eliminated in Asian countries, and the policy lessons for SSA countries.

Binding Constraints

At a broad level, six binding constraints to light manufacturing emerge:

input cost & quality

industrial land

finance

trade logistics

entrepreneurial skills

worker skills

Policy Lessons for Low Income Countries

- Creating a supportive environment for manufacturing
- Filling knowledge and financial gaps through foreign direct investment (FDI) and networks
- Using substitution policies and sequencing
- Starting small and building gradually
- Establishing islands of success by keeping targeted policies selective and within a country's limited resources

IV. Middle Income Countries

- Between 1950 and 2015, only 4 countries (out of some 160 countries) made it to the high income group from completing both the lower and upper middle income cycles: Hong Kong, Singapore, South Korea and Taiwan. It took these four countries an average of 32 years to go from when they first became lower middle income to their graduation into the high income group (Felipe et al. 2012).

- In contrast, the entire world was in lower middle income category for the first 1600 years (Maddison 2007). The Netherlands was the first one that reached lower middle income status in 1700. It subsequently spent 128 years in this lower middle income group.

- European countries that became lower middle income group before 1950 took an average of 71 years in this income group before they transitioned to upper middle income.

- The advantage of “backwardness”

Middle-Income Trap

• There appear to be two types of middle income countries caught in the trap. There are ‘‘old timers”, countries such as Argentina and Brazil that have been lingering at the middle income level for a century. Argentina in 1920 had much higher per capita income than Italy or Australia at that time. At the other end are ‘new comers” such as Thailand and Malaysia since the late 1990s where GDP per capita has slowed down after a long period of catching up with upper-middle income countries.

•The former group appears to exhaust the “structural transformation” room which led to a “premature industrialization”. Agenor (2016) identifies the possible causes for the middle income trap:

- diminishing marginal returns to capital
- exhaustion of cheap labor and imitation gains (Agenor and Dinh 2013,2015)
- insufficient quality of human capital (Tran 2013), inadequate contract endorsement, distortive incentives and lack of access to finance and to advanced infrastructure.

Agenor argues that since these traps are stable equilibria, policy reforms must be sufficiently bold.

Middle-Income Countries (cont.)

•The "old timers" did not seem to focus on manufacturing, the production of which tends to accelerate the structural transformation process though knowledge creation and dissemination. But the "new comers" face challenges from globalization and the intensification of vertically specialized industrialization (VSI) and associated global value chains (GVC).

•First, the growth pattern for these countries was based on labor intensive, assembly type of production in which domestic producers are confined to low-value activities and in which foreign buyers supply the intermediate goods. The benefits of foreign technology and foreign expertise have therefore not permeated into the domestic sector.

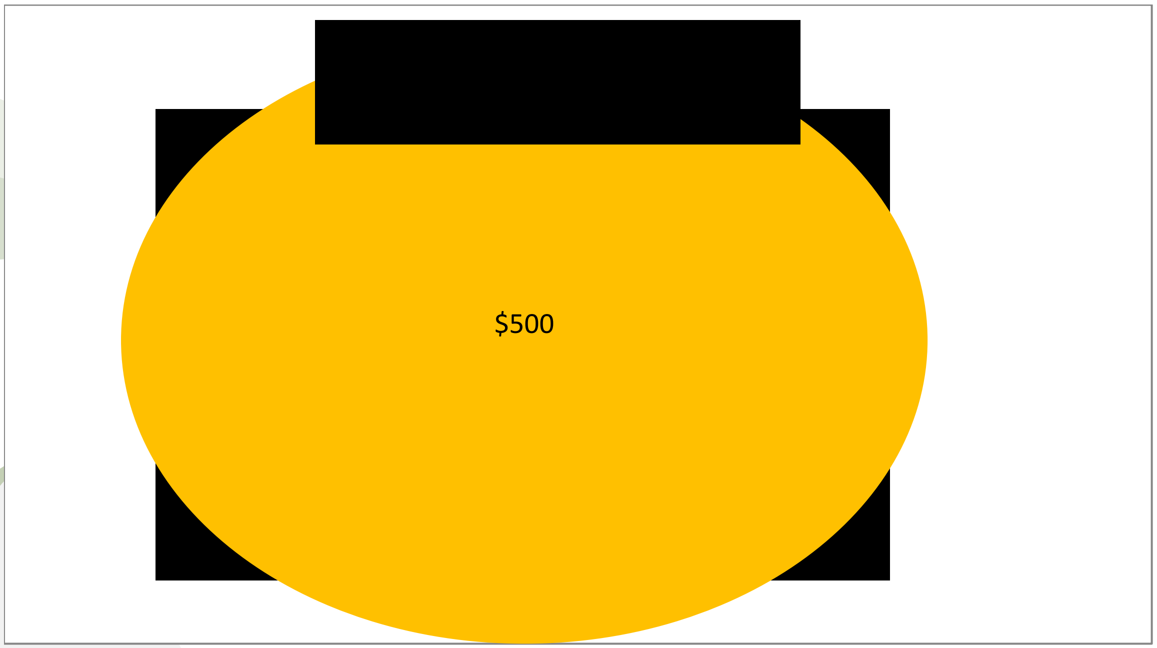
•Growth and structural transformation must entail growth of the domestic industries through moving into higher-value added tasks, either within the same industry or to other industries. In this context, maximization of output (objective of the firm) is different from the objective of the country (maximization of value added).

•The upgrading process of moving up the value added chain by embarking on more integrated values and creating more products is harder: it is no longer a national policy at the government discretion, but involves "lead firms" often located in developed countries. There is a potential conflict between national policies and "lead firms" policies arising from the "principal-agent" problem. So unless there are government policies to address this issue, the market will not lead to an optimal solution (or only leads to a low equilibrium).

The value of assembly type

Example

Figure 1.3. The production value chain of an iPhone



Source: Rassweiler 2009.

Middle-Income Countries (cont.)

•Moreover, footloose industries can close shop in one country and move to the next if wages are rising faster than productivity. Higher productivity may also mean fewer jobs so that there are every incentives at the level of the (foreign owned) firm as well as at the government level to stay at the low equilibrium.

•South Korea and Taiwan did not appear to have that problem in the 1970s and 1980s. South Korea pioneered a set of measures to integrate domestic firms into the value chain involving foreign firms thus facilitating the process of technology and know-how transfer.

•Also, the nature and extent of public policy support in areas such as institutional support, skills upgrading, coordination between lead firms and firms in other regional and developing countries, vary by the value chains so that it is becoming harder for governments to forge an effective, across-the-board approach for industrial policy.

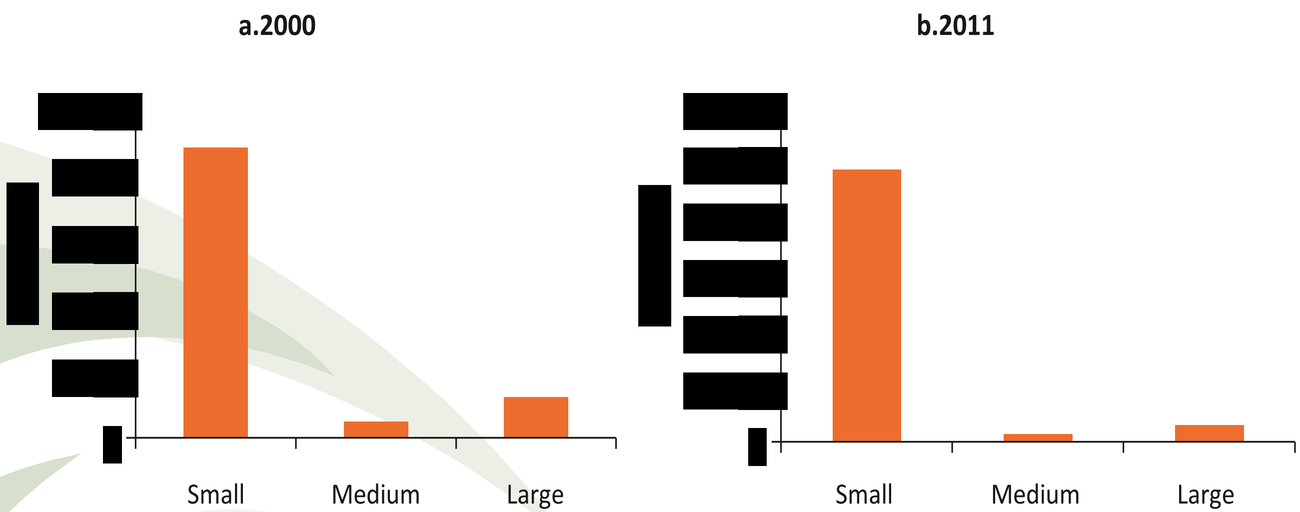
V. Case Study of Vietnam

Current Structure of Manufacturing in Vietnam

•Economy's growth has relied on capital accumulation and not on productivity growth
•Dichotomy between the large FDI/SOE firms and a vast number of **micro and small, low-productivity informal firms producing for the domestic market**
•Dependent on FDI enterprises reliant on small profit margin, cheap and low-skilled labor, imported raw materials and inputs
•Few or no linkages among domestic enterprises or among the FDI enterprises and between the two types
•Policies support birth but not growth of SMEs
•Prevalence of SOEs which discourage SME expansion
•Little value chain integration

Size Distribution of Firms

Figure 2.5 Size Distribution of Manufacturing Firms, Vietnam, 2000 and 2011



Source: GSO 2013.

Growth mainly due to the rise in the sheer number of micro and small enterprises rather than expansion of medium and large firms, as seen here, creating the 'missing middle' phenomenon

The Reform Agenda

- ➢Macro-stability: Conducive macroeconomic framework.
- ➢Role of the government: Government is no longer the provider of growth, but must act as facilitator, partner and catalyst
- ➢Structural issues:
  - ✓ Reduce the role of SOEs
  - ✓ Encourage organic clusters
  - ✓ Encourage the establishment and expansion of trading companies
  - ✓ Invest in plug-and-play and/or technological industrial zones
  - ✓ Encourage and foster linkages among enterprises through subcontracting
  - ✓ Encourage FDI in upstream activities
  - ✓ Mobilize foreign and social networking
  - ✓ Consider strategic investing to gain knowledge and technology in certain areas
  - ✓ Kaizen programs

The Reform Agenda (cont.)

Development of Labor Skills: Whether Vietnam can become an industrialized country depends on the strategy to develop its human resources

- Strengthen coordination between various ministries dealing with educational and vocational training
- Ease control at universities and technical and vocational education and training institutions to allow more autonomy, especially in adjusting curricula to be in tune with labor market demands
- Strengthen university-industry links
- Orient vocational training needs to the needs of business and industries
- Provide incentives to enterprises to accept student interns

VI. Government Role

•Provide constant support to the private sector: this support need not be in the form of subsidies or active interventions of the government, which could create more distortions to the economy, but rather by paying attention to the environment facing the private enterprises and act to help remove the most serious constraints. Foremost among government actions is the strong commitment to promote industrial development.

•Local governments can take several measures to foster cluster development

- Nurturing clusters from an existing industrial base
- Building industrial parks
- Creating special platforms for specific industries
- Providing financing to expand production

•Understand the constraints of key sectors and act promptly to relieve them.

•Facilitate the exchange of foreign know how, technology, and ideas.

•Backing the winners concept.

References

Agénor, P.R. and Dinh, H., 2013. From Imitation to Innovation: Public policy for industrial transformation. *Economic Premise*, *11*.

Agénor, P.R. and Dinh, H.T., 2015. Social capital, product imitation and growth with learning externalities. *Journal of Development Economics*, *114*, pp.41-54.

Agénor, P.R., 2016. CAUGHT IN THE MIDDLE? THE ECONOMICS OF MIDDLE-INCOME TRAPS. *Journal of Economic Surveys*.

Dinh, H.T., 2014. *Light manufacturing in Vietnam: creating jobs and prosperity in a middle-income economy*. World Bank Publications.

Dinh, H.T., Rawski, T.G. and Zafar, A., 2013. *Tales from the development frontier: How China and other countries harness light manufacturing to create jobs and prosperity*. World Bank Publications.

Felipe, J., Abdon, A. and Kumar, U., 2012. *Tracking the Middle-income Trap: What Is It, Who Is in It, and Why? Levy Economics Institute of Bard College* (No. 715). Working Paper.

Maddison, A., 2007. *The world economy volume 1: A millennial perspective volume 2: Historical statistics*. Academic Foundation.

McMillan, M. S., & Rodrik, D. (2011). *Globalization, structural change and productivity growth* (No. w17143). National Bureau of Economic Research.

Tran, V.T., 2013. The middle-income trap: Issues for members of the Association of Southeast Asian Nations. ADBI Working Paper 421.

Vries, G.D., Timmer, M. and Vries, K.D., 2014. *Patterns of structural change in developing countries* (No. GD-149). Groningen Growth and Development Centre, University of Groningen.