

The End of the Manufacturing Export-Led Growth Model and Its Implications for Development Strategies

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Export-led growth model behind 20th century growth miracles

- Unprecedented growth in East Asia—closing the gap in income per capita/standards of living with advanced countries
- Major shift from import substitution model that prevailed earlier
- Deconstructing success
 - Open economy allowed one to avoid complexity of material balance equations—all one had to have was enough foreign exchange
 - Export led growth generated necessary foreign exchange
 - Didn't need to generate demand to absorb new supply
 - No need to worry about demand constraints
 - Flexible exchange rate (or correctly managed exchange rate), open economy, and “attentive” producers suffice to absorb supply

Deconstructing success

- Exports provided basis for **learning**
 - What separated developed and less developed countries was a gap in knowledge
 - Transfer of technology could be accomplished in numerous ways (buying technology, FDI)
 - Important spillovers to other industries
 - Institutional spillovers (e.g. education) even to other sectors
 - Demand for educated individuals—of benefit elsewhere in the economy
- Exports provided basis for **tax revenues**
 - Finance needed government expenditures—infrastructure, education, technology
 - Hard to tax informal sector

Deconstructing success of export-led growth

- Generated **employment** in urban sector—key in supporting structural transformation
 - Generated jobs for new entrants into the labor force
- **Mechanisms for promoting exports**
 - Access to credit at near commercial rates—provided incentives for entrepreneurs
 - Limited direct support
- **Natural system of accountability**
 - Successful firms proved profitable

The (relative) demise of manufacturing

- Victim of own success: productivity exceeds rate of increase in demand
 - Some vertical disintegration of service components of manufacturing gave appearance of more rapid disappearance of jobs
 - Vertical disintegration can have real consequences (e.g. for wages and flows of knowledge)
- Even with emerging markets taking larger share of manufacturing jobs, and with shift of jobs from China to Africa, new manufacturing jobs will only absorb a fraction of new entrants into labor force
 - Can still have impacts disproportionate to size
 - Countries may have a natural comparative advantage in some niche (or in some cases, even be able to create a comparative advantage)
 - But unlikely to have impacts that manufacturing export led growth had in China and East Asia

A new framework for learning-led growth

- Based on “deconstructing” export-led growth
- Multifaceted growth strategy, with different facets reflecting different aspects of manufacturing export-led growth
 - Export-led manufacturing naturally combined structural transformation and urbanization, movement to a learning economy, openness that meant one could simply focus on foreign exchange constraint (did one have the foreign exchange one needed?), and job creation for new entrants into the labor force to maintain reasonably high employment

- May need to combine multiple strategies
 - Manufacturing—more directed, more limited, where possible, taking advantage of natural advantage (mineral resources)
 - Agriculture—basis of employment, but can be restructured in ways that are more dynamic, with more learning, learning to learn, a kind of transformation *in situ*
 - Mining and oil—important for foreign exchange (maximize revenues, taking advantage as much as possible of spillovers)
 - Services—will be the growth sector of the future
 - Understand implications
 - Understand how to maximize growth potential
- Government may need to take a more active role if there is to be successful structural transformation
 - Shadow prices for learning, learning spillovers, jobs, and foreign exchange may also entail deviations from market-only solutions

Manufacturing

- Niche manufacturing/limited import substitution
 - Emerging markets can undertake research and become leaders in particular sectors—Brazil and China illustrate
 - “Shadow prices” may lead to some protection for jobs in the SR, some encouragement because of learning, and fix benefits in the medium to long run
- Pushing manufacturing further towards more complex products
- Further steps to maximize **learning** from industrialization by
 - South-South cooperation—expanding markets
 - Taking advantage of natural advantages—natural resources
 - Managed protectionism—helping “infant economies grow”
 - Import substitution unfairly got bad name
 - Balancing carefully costs against benefits, constant reassessment
 - Declining future potential role changed calculus
 - Trump has changed calculus
 - Internet has changed calculus
 - Balanced education—not just emphasis on primary education
 - Advance complexity—not context with current comparative advantage

Natural resources

- Standard lessons of resource curse have not yet been learned by most countries
 - Need to maximize revenues from natural resources from well designed auctions and contracts
 - It may be necessary to auction off different parts of the production process, rather than to have a bid for a “manager”
 - Contracts need to be complemented by excess profit taxes
 - Countries need to be careful not to sign investment agreements that circumscribe ability to change taxes and regulations
 - Those that have signed such agreements should exit or renegotiate (e.g. South Africa)
 - Even with these agreements, it may be preferable to change contracts (e.g. Israel)
 - Sovereign wealth fund—both to manage cyclical variability and to prevent exchange rate appreciation
- New lesson: industrial policies can exploit a variety of forward, backward, and horizontal links
 - Possible losses in SR in return for long run learning
 - But careful appraisal of trade-offs required
 - Absence of current spillovers is not necessarily evidence that there aren’t potentially long run profitable linkages.

Agriculture

- Need robust agricultural sector to provide full employment
 - Seek to add learning dimension to agriculture and other sectors
 - Modern agriculture can be very “advanced”
 - Focus on non-labor saving innovations—better crop mix, better fertilizers
 - Focus on “learning”—developing skills useful in modern economy
 - Transforming farming from *traditional practices* to modern farming
 - To reduce need for foreign exchange—using it for areas where it cannot be replaced

Service sector

Move to service sector may have many implications

- Smaller production units
 - Part of explanation of seemingly **lower productivity growth** (Baumol's disease)
 - Some may be measurement problem
 - But not inevitable
 - Less R & D: more need for cooperative R & D, government R & D
 - Larger productivity differences across firms
 - Increased need for government to push “creating a learning society” to reduce productivity differences
- Many services can be more easily inserted into the global economy through internet
 - Especially if there can be quality certification, either through peer monitoring or certification services
 - Increasing need for skills training, including languages

Service sector—more market power, more inequality

- High levels of product differentiation, links to oligopoly manufacturing may lead to more market power
 - Profits from servicing Deere Tractors, not manufacturing them
 - Location matters more—natural product differentiation (monopolistic competition)
- Compensation more linked to individual productivity, greater differences in productivity within and between firms, leading to **greater inequality**

Rethinking taxation and money

- Should lead to greater need for progressive taxation (to provide for increased need for collective goods, including common research), but dispersed production may lead to decreased ability to collect taxation
- **Need for government** in structural transformation, especially in developing countries
 - Important resource constraints—costly to move from “old economy” (jobs, sectors, technologies) to new; imperfections of capital markets become particularly evident in process of transformation (assets of those in “old economy” diminished, so they don’t have resources to make necessary investments or provide collateral)
 - Important learning externalities
 - Evident even in earlier Western transformation from agriculture to services
 - Even more in service sector economy—closing knowledge gap between small production units

Taxes and money

- Modern technology allows creation of an economy based totally on e-money—currency is no longer needed
 - With e-money, income can be better traced and a progressive tax imposed
- In absence of e-money (current system), may need to impose progressive indirect system
 - Heavy tax on goods purchased by wealthy, like expensive cars, expensive foods, especially when imported, large homes
 - Can be made WTO compliant in most countries, since much of the *specific* goods purchased by wealthy are imported (tax on luxury biscuits vs. biscuits eaten by ordinary individuals) and *can be integrated into industrial policy (import substitution)*
- Decline in manufacturing will necessitate putting further burden on environmental taxes (taxing bad things rather than good things) and on taxing land and natural resources (taxing goods that are observable and in inelastic supply)

Rethinking industrial policy

- Some service sectors are more amenable to learning
- Some learning in specific services has more spillovers to others
- General principles of industrial policies still apply
- Need to identify “learning” and “learning spillover” service sectors
- These can have much of the benefits of the learning provided by manufacturing

Reformulating development thinking

- Success in development over past 60 years was greater than anyone anticipated—contrast Myrdal's predictions for Asia with what happened
- There is an enormous gap in knowledge, as well as in resources, that has to be closed
- Most of the advanced countries are engaged in service sector—80% or more
 - So if there are disparities in standards of living, it relates to productivity in these service sectors
 - There are huge disparities in productivities within countries, even greater between countries

Reformulating development thinking

- The basis of the success of growth over past half century was export-led growth
 - We have deconstructed what enabled manufacturing to provide this growth spurt, this structural transformation
 - It won't be able to do so in the future
 - There has to be another strategy—that performs some of the essential roles that manufacturing export-led development did

Reformulating development thinking

- Successful development policy will need to be explicitly more multi-pronged, addressing separate “challenges” that manufacturing sector addressed simultaneously
- We have shown how a coordinated {Agriculture, Manufacturing, Mining, Service Sector} strategy has the prospect of attaining the same success of the old manufacturing export-led strategy
- Government will need to play an important role in the new structural transformation towards a modern economy—which will not in general be a manufacturing economy but a modern *services* economy

Some references

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