

Singapore Management University Institutional Knowledge at Singapore Management University

Asian Management Insights

Centre for Management Practice

11-2017

From rags to riches

Shantanu BHATTACHARYA

Singapore Management University, shantanub@smu.edu.sg

Follow this and additional works at: <https://ink.library.smu.edu.sg/ami>

Part of the [Asian Studies Commons](#), and the [Operations and Supply Chain Management Commons](#)

Citation

BHATTACHARYA, Shantanu. From rags to riches. (2017). *Asian Management Insights*. 4, (2), 26-31. Asian Management Insights.

Available at: <https://ink.library.smu.edu.sg/ami/91>

This Magazine Article is brought to you for free and open access by the Centre for Management Practice at Institutional Knowledge at Singapore Management University. It has been accepted for inclusion in Asian Management Insights by an authorized administrator of Institutional Knowledge at Singapore Management University. For more information, please email libIR@smu.edu.sg.

From Rags to Riches

By Shantanu Bhattacharya

What governments and firms should know before following the East Asian blueprint.

There is a well-trodden path towards economic development in Asia—first blazed by the Japanese, then followed by the Four Asian Tigers and, more recently, repaved with Chinese characteristics. Hailed as the quintessential roadmap for progressing from third world to first, this approach towards development has yet to catapult would-be tigers in other emerging markets to the same levels of prosperity. Has the East Asian blueprint failed to deliver results elsewhere?

Not necessarily. The export-oriented success of East Asia depended on a confluence of interactions amongst a country's factor endowments, that is, the land, labour, capital and technology needed to exploit latent manufacturing capabilities. The East Asian blueprint requires the right mixture and sequence of interaction of these factors of production in a way that secures a competitive position in the global value chain. A simple mix of some elements of good governance and the dogged/indiscriminate replication of policy without the associated labour readiness and infrastructural investment is simply not enough.

Globalisation

Whether it is elsewhere in Asia, such as India and Vietnam—or further afield in Africa and Latin America—the lessons remain the same. An export-driven economy relies on the ability of local firms to integrate into a global value chain. In almost all cases, a country's development and its wealth are derived through the manufacturing prowess of its firms. It is a process-driven undertaking. This is an important point; all too often economic development literature focuses on a set of macroeconomic principles and policies. In practice, there is a confluence of macroeconomic and firm level issues that influences development at the firm level and moves from the bottom up to the level of the economy.

COST

Manufacturing firms in most countries begin by making low-value components—ball bearings, crankshafts, nuts and bolts—and then, as they develop expertise in a particular area, they

scale up in volume and quality. Historically, it has been found that a good indicator for tracking such development is the intensity of steel production over time. When examining how certain East Asian countries developed their manufacturing industry, it is useful to contrast how Japan, Korea, Taiwan and China improved their own manufacturing capabilities. Again, this tracks well with steel production, which can be used to benchmark how well these countries have industrialised in relation to one another. Vietnam's steel production, contrarily, has continued to languish. But as it continues to industrialise, this indicator should begin to rise.

Countries that perform well with regard to ongoing development demonstrate a key commonality: a careful focus on quality and cost at the firm level. In developing countries, low-cost production is achieved through minimal variable costs, that is, labour and material inputs. Conversely, fixed investment costs, such as those in technology, may be much higher than their developed counterparts, though other fixed costs such as plant and equipment tend to be low. Moreover, if government-borne infrastructure investment is lacking, logistical costs may be much higher too.

Firms in developing countries stand to benefit by taking advantage of the fractured and decentralised nature of globalisation. In other words, there are gaps in the globalised industrial ecosystem, which hark back to David Ricardo, where a comparative advantage can often be achieved through proximity to certain resources and markets in a supply chain.

Hailed as the quintessential roadmap for progressing from third world to first, the East Asian approach towards development has yet to catapult would-be tigers in other emerging markets to the same levels of prosperity.

For instance, firms in advanced economies outsource their manufacturing to Asia because their costs can be reduced by a factor of three. This is due to labour and the multiplier effects of information technology and reduced shipping costs, driven by containerisation, which have made complex logistics much more affordable. For decades, emerging market players have been able to plunge into a global supply chain and serve clients from half a world away.

QUALITY

Quality control is equally important. In the 1950s, Japan re-emerged as a manufacturing economy with a focus on statistical process quality control—a technique that is relevant to both manufacturing and services. Briefly, statistical process quality control is the application of statistics to reduce the variance of risk to within an acceptable level in the production process. The idea is to design the production process so that risk can be assigned to specific causes. If properly measured and controlled, only random defects will occur in the production process, making quality assurance possible. Six Sigma, for example, earns its name by introducing a mechanism to reduce process variation such that the chance of a defective product is less than six standard deviations from the mean batch size, or 2 defects per billion products in a single production step.

This opens the door to partnering with or supplying to multinational corporations (MNCs) operating at global volumes. Still, MNCs will not work with a supplier unless they can be confident in their quality control. Certifications like ISO 9000, which guarantee standardised processes and controls, are essential for firms in industrial hopefuls like India

and Vietnam. If quality can be maintained, rapid scaling through high volume supply contracts enables a firm to gain even greater efficiencies as its marginal cost curve falls below its average production costs.

Once a critical mass of firms, or a sufficiently large firm, emerges as a global supplier capable of serving global clients; their country of origin begins to transition from a developing manufacturing economy to a developed one. A successful transition demands more infrastructure support, which then requires government involvement.

GOVERNANCE

Rule of law, standardised legal contracts, and the enforcement of the legal system, are essential for international commerce. But even the best performing firms will find it difficult to acquire clients without proper governance of buyer-supplier contracts. This has become a significant hurdle for Indian firms, not because the rule of law in India is weak, but because the time needed to resolve a dispute can be lengthy, expensive and burdensome.

Favourable industrial and banking regulation, and free trade agreements, when properly applied, can also open the door for foreign direct investment. This has historically been a huge boon for nearly every rapidly developing country in East Asia.

Specialisation and country development

Contrary to Western dogma, authoritarian governments can also be beneficial. Needless democratic wrangling can be bypassed in favour of economic development by unilaterally targeting strategic growth industries for the export market. Mandatory (or forced) domestic savings, for example, can be used to funnel

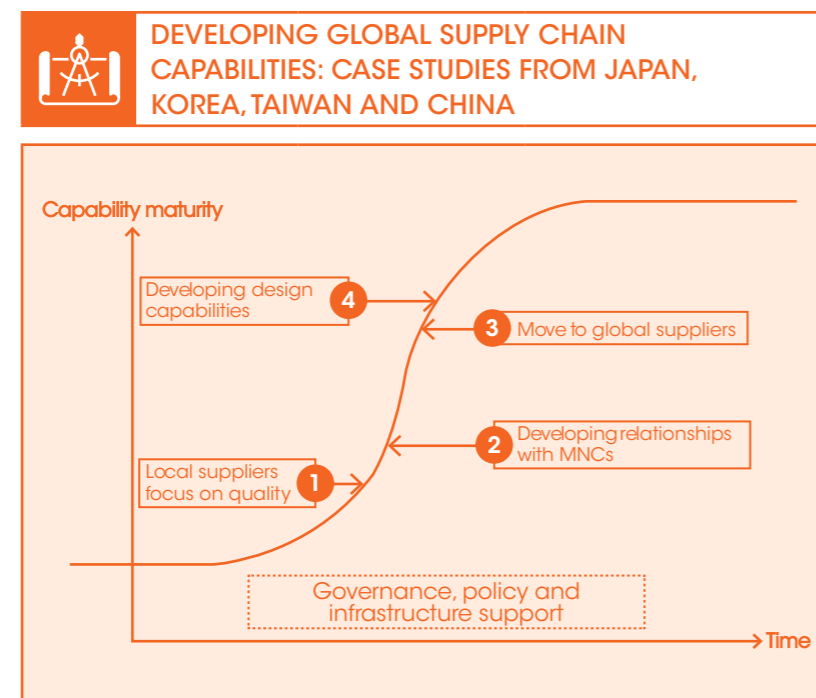


FIGURE 1

Source: Author's framework

investment into infrastructure aimed at specific sectors. For example, Malaysia relies significantly on project financing based on local currency bonds that are typically used for energy and transportation projects. However, without the right monetary transmission mechanisms in place, even countries with high rates of domestic savings may not experience efficient capital allocation.

Indeed, Japan, China and Taiwan have all maintained targeted government policies to support infant industry development. However, such targeted policies must be geared towards the export market. India, for instance, gave certain companies monopoly rights through required licensing schemes. This killed domestic competition, but the monopolies never went global because they already had a large consumer market in India.

One point to remember is that, with the East Asian blueprint, manufacturing for the export market comes first. Domestic markets, or at least developed domestic markets, typically only arise after a sufficient amount of wealth has flowed in via trade balances. It is the influx of foreign money that drives up wages to the point that local populations have enough income and wealth to support local consumer markets.

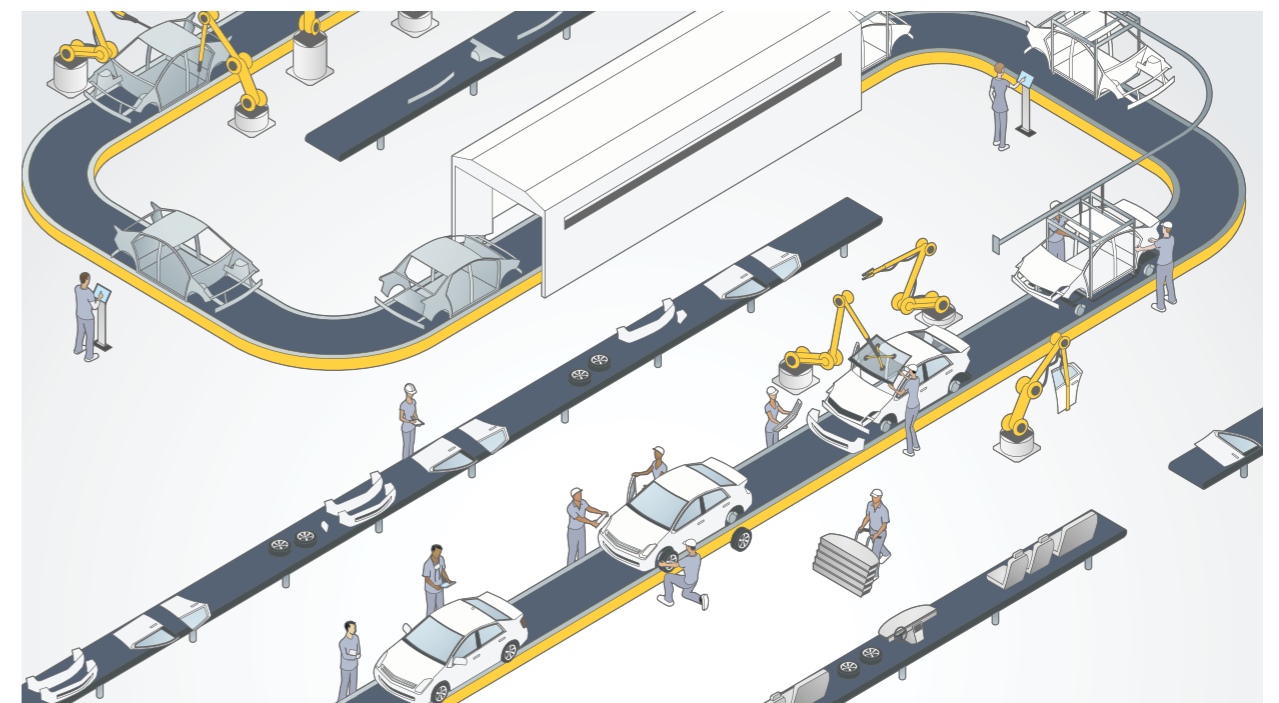
Education policy is another lever that can be used to align workforce skills with industry needs. This can potentially accelerate higher-end manufacturing capabilities and make foreign direct investment attractive.

Moreover, it should be noted that a local consumer market might not develop if income and wealth are not adequately distributed. Unlike resource rich countries like Saudi Arabia, others like Japan, Korea and Taiwan had a reasonable level of income equality to spur a healthy consumer economy.

Plugging into the global value chain

Specialisation at the firm level should occur organically. Japan's automotive industry and Korea's consumer electronics industry are both homegrown. As firms like Toyota and Samsung specialised, gained competence and began to scale through a global value chain, other enterprising firms began to rise up as suppliers and market complements. This becomes the foundation of an ecosystem that can support a cluster of both cooperating and competing firms.

Industrial ecosystems built around these clusters are typically home to two to three large anchor firms. The Chennai automotive cluster in southern India sprung up around companies like Hindustan Motors. Once Hindustan Motors and its counterparts established an industrial cluster, more and more suppliers began moving in and foreign firms like Hyundai and Ford also began to set up shop. A chain reaction takes place once an ecosystem such as this is established, where local manufacturers become global suppliers with a means to move up the value chain. Again, a mastery of low-cost and consistent quality production is essential to reach this stage.



Markets

GLOBAL MARKET ORIENTATION AND VALUE CHAIN POSITIONING

There are various paths to moving up the global value chain. Some local manufacturing suppliers begin by focusing on a low value chain position. These firms double down on low-end manufacturing with ever-increasing volumes until they reach a massive scale. As they scale up, they are more able to meet the volume needs of their global clients and evolve to critical suppliers. At this point, a firm can move up the value chain by doing one of two things: they can either continue to make low-end components but in greater variety; alternatively, they can vertically integrate and focus on higher-end components until they begin competing with the same MNCs they used to supply to.

It is at this point where a firm may transition from being a supplier to offering the complete package, i.e. becoming a brand.

BECOMING A BRAND

Indian automaker and heavy machinery manufacturer, Mahindra, began as a local supplier in the automotive sector and then developed an integrated supply chain, moving up the value chain to become a local brand. Technology companies often move in this direction. For example, Samsung got its start as a supplier, before becoming a locally-branded consumer durables and electronics company. As it matured, it began investing more in design and R&D, eventually becoming a global brand that competes head-to-head with Apple in the smartphone market.

At the other end of the spectrum, Japan moved from a low-rung global market orientation but with complete manufacturing capabilities. When Sony built its first smartphone, it had focused mostly on meeting local needs. The company's global market orientation was low despite having a 'complete package'. No longer a low-cost producer, Sony re-evaluated its position and pivoted towards a design focus by outsourcing the production of subcomponents.

Currently, some of China's firms are on the verge of potentially becoming what Samsung and Sony already are: fully realised high technology brands. Mobile phone manufacturers, Huawei and Xiaomi, are currently at the early stages of this development. Eventually, they may move from being low-cost, economical phone makers to spearheading cutting-edge R&D with releases of new

generation phones hitting the market every year. Nonetheless, a reputation as a low-quality producer may be hard to shake, at least with consumers in wealthier countries. There is every reason to believe that China can successfully market its brand to poorer and middle-income countries; first enhancing its reputation in developing markets and hoping it will be attractive in higher-value markets.

This is by no means certain. Taiwan had begun stagnating before ever fully reaching the heights of Korea and Japan. Although it has always been globally oriented, Taiwan never quite took off on its own. For instance, it is still one of the largest chipmakers in the world, but only as a supplier for Qualcomm, the U.S. semiconductor and telecommunications equipment company. Although suppliers in Taiwan produce the chips, Qualcomm designs them.

The East Asian blueprint

At the macro-policy level, the East Asian blueprint rests on four primary factors working in concert¹:

1. High gross savings as a percentage of GDP that are funnelled into strategic investments targeting export-oriented manufacturing capabilities;
2. Enforced export-oriented policies, such as free trade agreements and favourable industrial regulation;
3. A balanced budget as a percentage of GDP in order to take on debt to support key growth industries; and
4. A low GDP per capita, i.e. low labour costs. Once GDP begins to grow, new wealth must be funnelled back into strategic investments—not just in infrastructure, but also in education and healthcare.

So why have Vietnam and some other ASEAN countries not been able to replicate the success of Japan, Korea, Taiwan and other East Asian countries? The answers to this question lie in their infrastructure, governance, education and financing paradigms. Data from the 2016 World Economic Forum reveals that some of the most problematic aspects of doing business currently in Vietnam are access to financing, policy instability, corruption and complexity of tax regulations (related to governance), an inadequately trained workforce and poor workforce ethic (related to labour readiness and a lack of capability for applying rigorous quality methodologies), as well as a lack of high quality logistical infrastructure (related to the cost issues mentioned above)². As improvement takes place in governance, labour readiness and infrastructural

dimensions, Vietnam will make rapid strides towards economic development.

Much has been said about the impact of the breakdown of the Trans-Pacific Partnership (TPP) on the economic development of Vietnam and other rapidly industrialising Asian countries. While the TPP does have a significant impact on the ability of Vietnam to woo MNCs to partner with and gain access to international markets, the fact is that the breakdown of the TPP is being replaced by a higher degree of cooperation in Asia. Asian countries have verbally committed their resolve to continuing with a higher pace of cooperation intra-regionally.

As trade ties with Asia get stronger, there will be a requirement for partners, from firms in countries where the manufacturing sector has moved up the value chain and are no longer cost competitive. For instance, Chinese firms that are facing a higher cost base in China because of increased labour costs may look to their Vietnamese partners for supplying lower level components that are hitherto being provided by firms in China. This provides a platform to Vietnamese firms and firms in other countries to set off on the journey of industrialisation. So, while the TPP may have been beneficial for firms in these rapidly industrialising countries, they can still look for opportunities for economic development by partnering with firms in countries with large markets like Japan, Korea and China, which have the need to develop an extended supplier base for cost competence.

Ultimately, emerging market firms with high aspirations must begin with a strong focus on consistent quality and low prices with the infrastructural means to get one's product to market. This must be followed by firms placing an emphasis on process control and international certification. Then, these young firms must partner with other local firms to build an industrial ecosystem around a specialised product. Finally, the government has to support this ecosystem through the right set of policies and investment in infrastructure as the ecosystem of these firms grows.

With quality consistency and scale, MNCs can then be courted and, with the right policies in place, they may seek local partnerships. For local firms, it is very important to develop design capabilities and partner with other firms to become part of a global supply chain or develop vertically to become a global brand. With enough luck, you could be the next Samsung.

Shantanu Bhattacharya

is Professor and Associate Dean at Singapore Management University

References

- ¹ Andrea Boltho & Maria Weber, "Did China follow the East Asian development model?", *The European Journal of Comparative Economics*, 6.2 (2009): 267.
- ² World Economic Forum, "The Global Competitiveness Report 2015-2016".

