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MILKEN INSTITUTE

EVOLVING PATTERNS OF TRADE IN ASIA

A nighttime photograph of a city skyline, likely Kuala Lumpur, Malaysia. The Petronas Twin Towers are the most prominent feature, illuminated with warm lights. To their left, the Kuala Lumpur Tower is also lit up. The sky is a mix of deep blue and orange, suggesting a sunset or sunrise. Other skyscrapers are visible in the background, some with lights on. The overall scene is a vibrant urban landscape at night.

Perry Wong, Tong Li, and Song-yi Kim



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1. Economists Tong Li and Song-yi Kim are former Milken Institute researchers.

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TABLE OF CONTENTS

EXECUTIVE SUMMARY..... 1

INTRODUCTION..... 2

THE BENEFICIARIES OF CHINA’S RISE IN GLOBAL TRADE 6

WILL CHINA CONTINUE TO BE THE WORLD’S FACTORY? 10

WHICH COUNTRIES WILL BENEFIT
FROM THE CHANGE OF PARADIGM?..... 12

CONCLUDING REMARKS..... 15

REFERENCES 18

EXECUTIVE SUMMARY

The past few decades have been golden for international trade, spurring industrialization and urbanization in developing countries and resulting in the creation of manufacturing clusters around the globe. Nowhere have the impacts been greater than in Asia, which has enjoyed tremendous growth in international trade since the 1960s. Originating in postwar Japan, then taking root among the Four Tigers (South Korea, Hong Kong, Singapore, and Taiwan), the Asian miracle has followed a trajectory that shows little sign of slowing. Although China is still an emerging country, its manufacturing dominance in the 1990s and ascension to the World Trade Organization in 2001 helped synchronize, mature, and entrench the region's value chains, which are now well integrated with one another through regional trading blocs and treaties, and with global markets. Asia has become the world's major supplier of goods ranging from apparel and toys to electronics and transportation equipment.

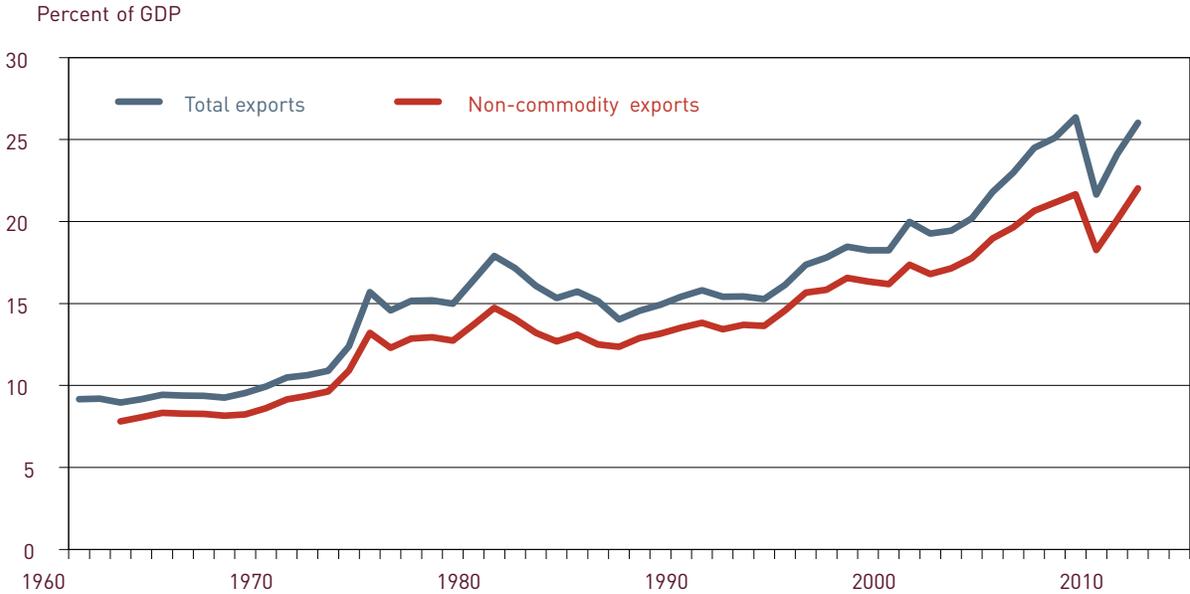
The 21st century presents both challenges and opportunities for the region, and may well be the "Asian century." Demographics will play a key role in the region's growth trends for decades to come. Japan, South Korea, Singapore, and especially China, all economies that account for much of the region's output, have aging populations, and the decline in labor force will present challenges. Other countries like Thailand, the Philippines, Malaysia, and Indonesia have less developed economies, but they can claim more advantageous demographics and less costly labor, both vital to growth.

As history has shown with Japan in the 1980s, or South Korea and Taiwan in the 1990s, when one nation's trade position evolves, this leads to changes in its partners, which adapt in response. Thus, one country moves up the global value chain, and another takes its place, leaving the regional value chain relatively stable. With different nations at different stages of development and productivity, Asian manufacturers can still take advantage of the value chain they have created within the region—the less developed economies will still produce raw materials and low labor costs at one end, and the more developed economies will evolve to contribute innovation and R&D at the other. But the case of China, with its immense but aging workforce, poses especially intriguing questions: As the country redirects its growth strategy, moving from an export-dependent economy to a service-oriented economy, what will be the effect on the region? Will its neighbors be able to adapt to fill China's huge export gaps? And how will they have to change to do so? The answer is that they likely will, but the trading patterns in Asia must be radically altered.

INTRODUCTION

The importance of international trade has never been as evident as in the past half century, when the world witnessed tremendous growth in trade openness. As a centerpiece of globalization, international trade is viewed as a key driver of post-World War II economic growth, especially for emerging economies. Between 1960 and 2011, merchandise export volume expanded at an average annual rate of 10.3 percent. In 1960, exports² accounted for 9 percent of world GDP, while by 2011 their share of world production had nearly tripled. Most of this growth is driven by non-commodity exports, as shown in figure 1.

FIGURE
1 *World exports relative to production, 1960-2011*



Sources: The World Bank, Direction of Trade Statistics (DOTS), and World Economics Outlook (WEO).

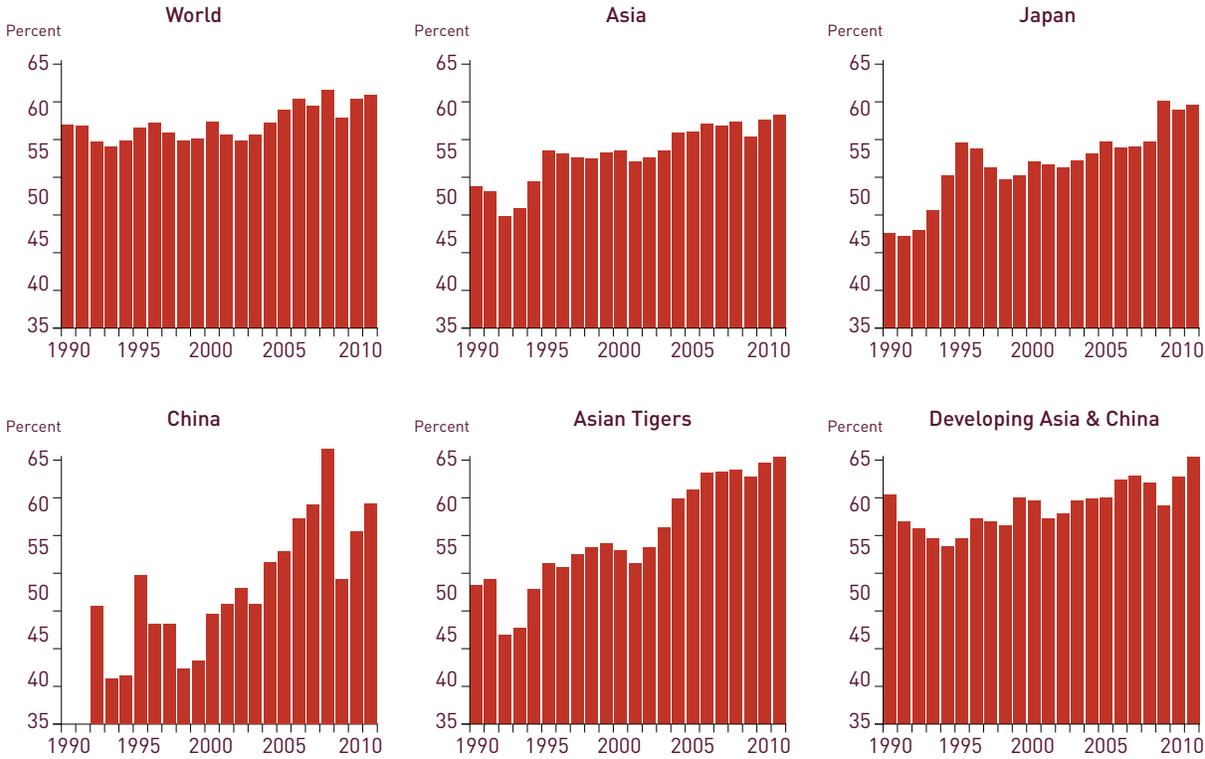
Major contributors to the boom in global trade after World War II include trade liberalization, enhanced infrastructure, and lower transportation costs. More recently, since the 1990s, the evolving landscape of global trade has been characterized by rapid technological innovation. Technology has made it possible to reduce production and transportation costs dramatically across various regions and has led to standardized manufacturing processes. As such, products and production processes can be “transferred” across borders and even regions as market conditions and cost efficiencies dictate.

2. For the rest of the paper, *trade* refers to merchandise trade unless specified otherwise.

An equally important factor has been greater *vertical specialization*, a term often used to describe a global production mode whereby “a sequential mode of production arises in which a country imports a good from another country, uses that good as an input in the production of its own good, and then exports its good to the next country; the sequence ends when the final good reaches its final destination.”³ Technological innovation and improved transportation infrastructure help foster vertical specialization in production. However, international production doesn’t automatically lead to increased levels of trade. Only when countries specialize in different stages of a good’s production can international trade prosper. Vertical specialization plays an increasingly important role in developing countries, allowing them to participate in the production of parts for goods. As figures 2 and 3 show, intermediate (imported) goods account for a growing share of imports and exports, suggesting that global integration is now at record levels. As the figures show, this trend is especially prominent for developing Asia and the Asian Tigers.

Both factors have contributed to a pattern of regional economic development. In this pattern, as countries advanced and moved up the value chain toward large-scale manufacturing and specialization in R&D and other knowledge industries, other emerging countries with abundant and less expensive labor—in Asia, Latin America, and Eastern Europe—became the new manufacturing centers for goods with high-technology content.

FIGURE
2 *Intermediate goods account for ever larger shares of exports*



Source: OECD STAN Bilateral Trade database. Developing Asia includes Cambodia, China, India, Indonesia, Malaysia, the Philippines, Thailand, and Vietnam.

3. Hummels, et al. (2001).

FIGURE

3

Intermediate goods account for ever larger shares of imports

Source: OECD STAN Bilateral Trade database. Developing Asia includes Cambodia, China, India, Indonesia, Malaysia, the Philippines, Thailand, and Vietnam.

With low labor and trade costs, Asian countries are well positioned to develop their manufacturing industries and exploit vertical specialization. Regional trade agreements, such as ASEAN and bilateral treaties, support the trend. Thus, key parts of a Japanese automobile, for example, are manufactured in ASEAN countries, such as Thailand, the Philippines, Malaysia, and Indonesia, all located within the ASEAN Free Trade Area. And because various Asian countries are at different stages of development, as shown in figure 4, manufacturers are able to take advantage of the region's complete value chain. Japan and the Asian Tigers are at the higher end of the value chain, adding important value in R&D and innovation. At the other end of the value chain are countries with favorable demographics and low labor costs.

FIGURE
4 *Asian countries by stage of development, 2011*



Source: World Economic Forum, Milken Institute.

The global financial crisis that began in 2007 brought changes to global trade. The United States suffered the worst recession since the Great Depression, and a double-dip recession has been confirmed in the euro zone. Consequently, demand from developed countries has declined sharply, resulting in a dramatic decrease in the export share of production in emerging countries, especially in China, in 2008 and 2009. After 2011, international trade rebounded to pre-crisis levels, but weak demand from developed countries will continue to weigh on the prospects for global trade. Moreover, worrisome fiscal conditions in both Europe and the United States have spread pessimism about the probability of a speedy recovery in these countries. As a result, emerging countries that used to rely heavily on exports as their source of growth now need to explore domestic demand as an alternative driver of growth and job creation.

These challenges are particularly pronounced in China, which faces the double jeopardy of rapidly rising costs at home and weakened demand abroad. That subdued demand from the West led to a wave of bankruptcies in China’s coastal regions in the midst of a structural shift from textile and other low-tech manufactured goods to medium- and high-technology production. Global economic uncertainties also prompted the Chinese leadership to refocus on investments and domestic consumption in order to support growth. On the supply side, labor costs have been rising rapidly, the result of an aging population and reforms in labor laws. As of 2012, China’s working-age population has shown a noticeable decline for the first time in decades, possibly indicative of rising costs and future constraints on the labor supply.

China, the world’s growth engine over the past two decades, is now at a crossroads. Its leadership is committed to structural and financial reforms that will move the country “upstream” in the global value chain through industrial upgrades and reorientation. Whether China can make a successful shift from its traditional, labor-intensive growth model and tap domestic demand as a source of growth will have significant implications for the future of the global economy in the next decade. As China follows through with its plan to reorient its economy by promoting higher value-added, more energy-efficient, and environmentally friendly production, some manufacturing processing industries and foreign firms will begin migrating out of China.

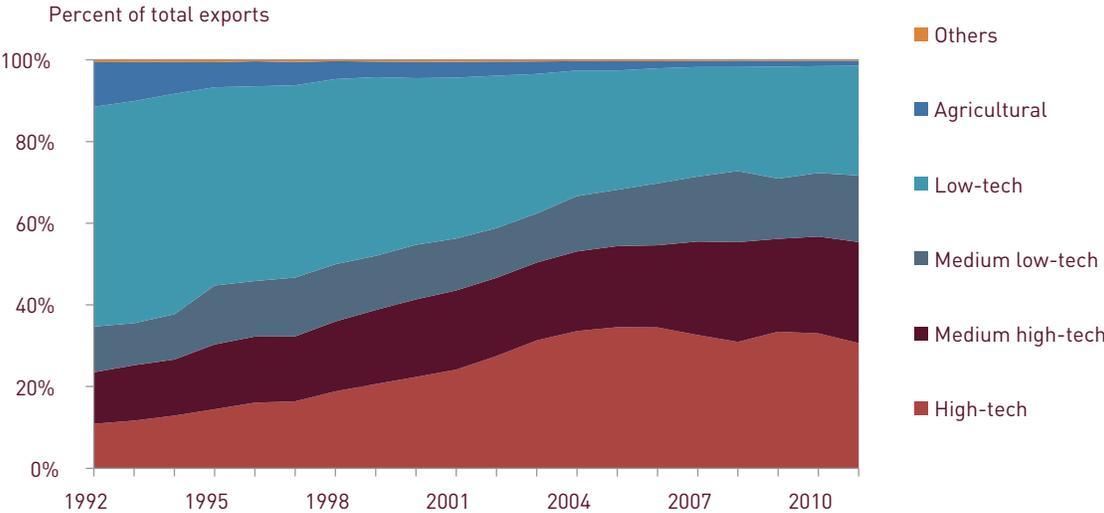
The rest of this paper will discuss the “new normal” of trade patterns in Asia after the financial crisis, with special focus on China’s structural changes, as well as the challenges and opportunities that these changes represent.

THE BENEFICIARIES OF CHINA'S RISE IN GLOBAL TRADE

In the decade after its admission to the WTO, China emerged as the “world’s factory” and a systemically important trading hub like the United States and Japan, both in terms of trade levels and interconnectedness with its trading partners. In 2011, China accounted for more than 10 percent of global exports. Favorable trade policies, a solid primary and secondary education system, a growing middle class, and a strong industrial base are often cited as the reasons behind China’s success, although concerns have grown recently on labor costs and tax burdens. China’s presence in international trade has increased rapidly since the early 2000s. As a part of the globalization effort, Chinese enterprises also intensified their investment abroad and began to export higher levels of capital in the form of direct investment, through the nation’s “going out” strategy.

Change has been underway in China’s export structure since 2004. As shown in figure 5, high-tech and medium high-tech products account for roughly half of Chinese exports. The export share of agricultural and mining products and goods, in contrast, has shrunk. Currently, China accounts for nearly one-fifth of the world’s high-tech exports. Its market share in high-tech exports was 1.5 percent in 1992 but reached a record high of 18.1 percent in 2011, as shown in figure 6. This reflects the fact that China is an increasingly important player in the global production and trade network of high-tech industries.

FIGURE 5 *High-tech and medium high-tech manufacturing have grown as a share of Chinese exports, 1992-2011*

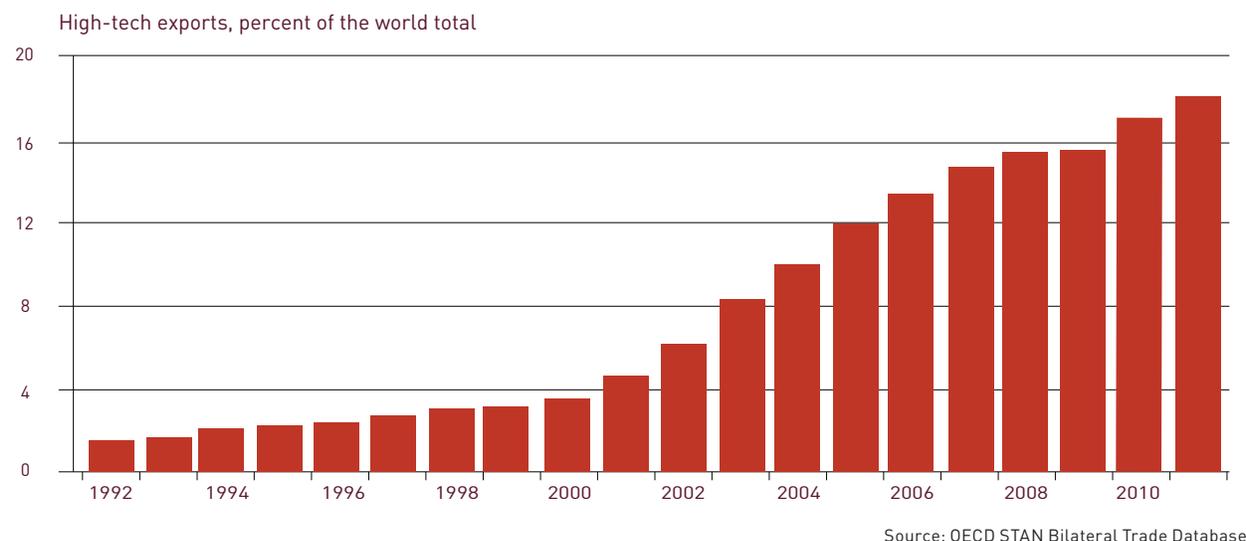


Source: OECD STAN Bilateral Trade Database.

FIGURE

6

High-tech exports from China account for an increasing share of world total, 1992-2011



There is no doubt that China's economy has benefited tremendously from trade, foreign direct investment, and the political reform process. International trade helped create jobs that allowed China to absorb millions of rural migrant workers during the nation's rapid urbanization process. Trade and direct investments have introduced advanced technologies and enriched manufacturing pipelines. A by-product of openness is significant improvement in the quality of the labor force. Reporters and politicians often cite China's huge trade surplus as evidence of how it benefits from trading with its partners in the West. However, focusing solely on trade balances leads to important distortions in policy analysis since they do not reflect the value-added imported goods used in China's exports.

Koopman, et al. (2010) note that "as inputs cross borders multiple times, traditional statistics on trade values—measured in gross terms—[are] increasingly less reliable as a gauge of value contributed by any particular country." This is certainly the case for China. The processing and assembling trades, in which imported intermediate goods or parts are locally processed and then exported in finished products, account for roughly half of China's exports. To include the gross value of these imported goods in the export statistics would significantly overstate the extent to which these goods are originated from China and simplify the complexity of trade links. Even for ordinary trades,⁴ China often makes use of intermediate goods and passes on the "trade dividend" to countries downstream in the supply chain. Hence, focusing on total exports can be misleading in terms of assessing evolution of trades and the ultimate beneficiaries of international trade.

In recent years, new methods have been developed to provide a more accurate analysis of global trade. In particular, economists now rely on global interregional Input-Output, or I-O, tables to gauge the double counting of intermediate goods.⁵ It is a more common practice to calculate the imported content of a country's exports using international I-O tables. While the first method provides a more comprehensive framework, data on a more granular level is not readily available for many countries. Using data published by OECD, however, we are able to examine the changes in the domestic content of a country's total exports between 1995 and 2005. A higher share of foreign content suggests a higher level of vertical specialization.

4. Ordinary trade refers to all non-processing trade within merchandise category.

5. For example, see Koopman et al. (2010).

We follow the OECD method (2006) to compute the share of vertical specialization in China's exports. This calculation is based upon the OECD STAN I-O tables for 1995, 2000, and 2005.⁶ The result is summarized in table 1. From 1995 to 2005, the share of foreign content in China's exports almost doubled, increasing from 15.4 percent to 27.5 percent. It is clear that China has become more integrated in the global production network.⁷

TABLE
1
Foreign content of Chinese exports

| Year | FVA* (US \$ millions) | % of exports |
|------|-----------------------|--------------|
| 1995 | 23,992 | 15.4 |
| 2000 | 53,652 | 19.2 |
| 2005 | 233,255 | 27.5 |

*Foreign value added

Source: Milken Institute, based on OECD STAN I-O tables 1995-2005, and OECD STAN Bilateral Trade Database.

We combined these I-O tables with the OECD STAN Bilateral Trade Database to break down the foreign content of Chinese exports by country. As shown in table 2, Asian countries consistently account for about 60 percent of foreign value added to China's exports. However, the content share from Japan has been steadily declining. The share from developing Asian countries, by contrast, is now at an all-time high. Also higher is the share from developing countries elsewhere, mainly in Eastern Europe and Latin America. Roughly 90 percent of the exports from developing Asian countries to China are intermediate goods, suggesting that these countries' enhanced trade ties with China are almost exclusively due to vertical specialization. Those intermediate goods shipped to China are also an increasing share of those countries' total trade over the past two decades, as indicated in figure 7. Altogether, intermediate goods accounted for 73 percent of developing Asia's exports. Intermediate goods exported to China almost exclusively accounted for the increase in this share since 1992. Thus, while China is often viewed as the "world's factory," many of the goods exported by China are produced with parts made elsewhere in Asia. More accurate product labels would read "Made in Asia," not "Made in China."

6. For a detailed discussion of methodology, see OECD (2006).

7. In this paper, we follow OECD (2006) and IMF (2011) approaches. It should be noted that this method (which is consistent with Hummels, Rapoport, and Yi, 2001) is not perfect. For example, Koopman, Wang, and Wei (2008) point out that this method tends to underestimate foreign content of exports by not distinguishing between process trades and ordinary, or normal, trade. Koopman et al. (2010) provide a more detailed discussion of the inaccuracies of this method. However, this method provides more information at the country level and should paint a consistent picture with regard to evolving trends over time.

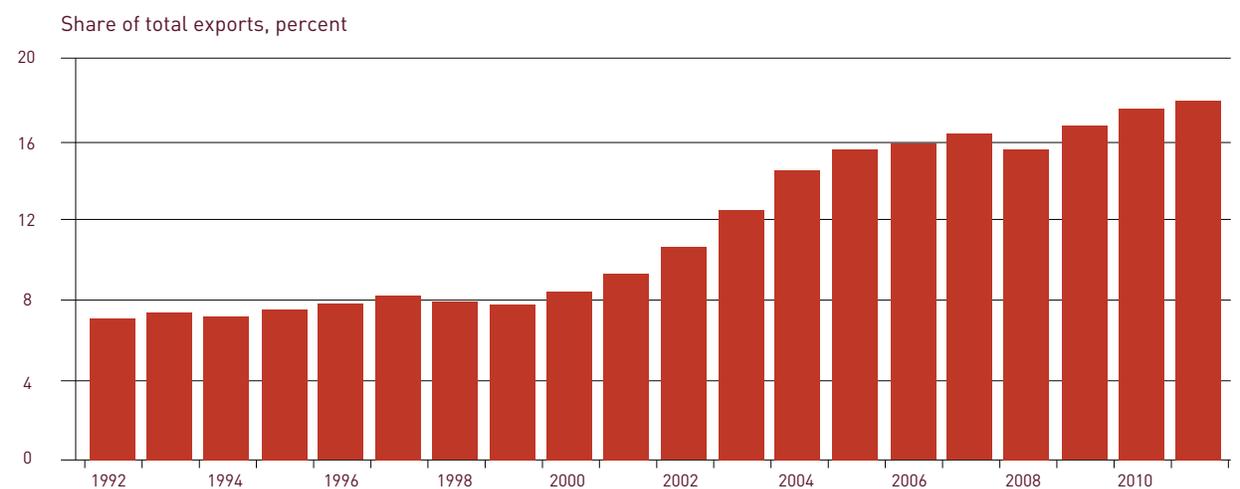
TABLE
2*Country/regional share of FVA* content in China's exports*

| | 1995 | 2000 | 2005 | 2011** |
|---------------|-------|-------|-------|--------|
| United States | 10.2% | 8.5% | 6.8% | 6.0% |
| Japan | 21.5% | 18.6% | 16.2% | 11.4% |
| Tigers | 33.6% | 31.6% | 33.1% | 23.8% |
| Rest of Asia | 5.3% | 8.5% | 12.3% | 12.6% |
| Euro area | 8.8% | 9.5% | 8.4% | 8.4% |
| Brazil | 0.8% | 0.7% | 1.5% | 2.9% |
| Russia | 3.4% | 2.5% | 2.4% | 2.5% |
| Australia | 2.7% | 2.6% | 2.7% | 5.5% |
| Canada | 1.8% | 1.5% | 1.1% | 1.2% |
| Rest of world | 11.9% | 17.5% | 16.6% | 26.8% |

*Foreign value-added

**2011 data is estimated using I-O tables from 2005 and trade data from 2011.

Sources: Milken Institute, based on OECD STAN I-O tables 1995-2005, and OECD STAN Bilateral Trade Database.

FIGURE
7*Intermediate goods exports to China as a share of emerging Asia's exports*

Source: Milken Institute, based on OECD STAN Bilateral Trade database.

It should be noted that compared with other developing Asian countries, the foreign value-added portion of China's exports is relatively small. This is in part due to the fact that provinces and regions in China are also in different stages of development. China is uniquely suited to form a long value chain within its borders so that a large portion of the benefits from international trade is retained. This is in sharp contrast with Japan, where seeking regional specialization is the only sustainable way for the country to continue reaping benefits from global trade. Nearly 60 percent of Japan's exports are intermediate goods, compared with roughly 40 percent for China.

WILL CHINA CONTINUE TO BE THE WORLD'S FACTORY?

The increasing portion of exports from China that includes value added by foreign countries is evidence that China is now very well integrated into the global production and trade network, and has become more central in terms of interconnectedness.⁸ Nevertheless, several recent developments may complicate the picture.

As shown in table 3, China's unit labor costs⁹ have steadily increased relative to all other countries for which data are available between 1991 and 2012. The growth in China's unit labor costs is especially dramatic between 2005 and 2012. As of mid-2012, Thailand, the Philippines, India, and Indonesia all have a significant comparative advantage over China in terms of unit labor costs.

TABLE
3

Country labor costs as a multiple of China's, select years

| | 1991 | 2000 | 2005 | 2012 |
|---------------|------|------|------|------|
| South Korea | 23.4 | 16.3 | 15.1 | 5.7 |
| Singapore | 21.5 | 19.5 | 13.3 | 7.3 |
| Taiwan | 21.4 | 12.2 | 7.9 | 2.9 |
| Hong Kong | 17.4 | 8.7 | 5.1 | 1.9 |
| Malaysia | 8.1 | 3.5 | 3.6 | 1.7 |
| Thailand | 5.4 | 1.8 | 1.1 | 0.7 |
| Philippines | 2.9 | 1.2 | 0.7 | 0.4 |
| India | 2.3 | 0.8 | 0.6 | 0.3 |
| Indonesia | 2.0 | 0.5 | 0.5 | 0.3 |
| United States | 77.1 | 41.6 | 30.1 | 11.3 |
| Euro area | 86.6 | 31.7 | 29.6 | 11.1 |
| Brazil | N/A | 7.3 | 5.0 | 3.5 |
| Russia | 0.6 | 0.7 | 1.7 | 1.4 |

Source: Economist Intelligence Unit.

This increase in unit labor costs is partly due to the fact that China is now quickly approaching the turning point in its urbanization process. Most surplus rural labor has moved to the manufacturing sector over the past two decades, and the era of unlimited labor supply has come to an end. In addition, the Labor Contract Law

8. See International Monetary Fund (2011) for a detailed technical analysis.

9. Unit labor costs (ULC) measure the average cost of labor per unit of output and are calculated as the ratio of total labor costs to real output.

enacted in 2008 signaled a shift toward modern labor protection practices similar to those in the West. The Chinese government is committed to raising the minimum wage and setting higher requirements for severance payments. These reforms, while necessary to protect workers, pushed up labor costs and reduced flexibility for business owners. At current rates, China's private-sector manufacturing wages are on track to triple from their 2011 levels by 2017, which will hurt China's competitiveness in international trade.¹⁰ In addition, the continuous appreciation of China's currency is also affecting China's competitiveness and may constrain its exports.

Recent surveys paint a mixed picture of China's manufacturing future. While some foreign CEOs have expressed concerns about the rising costs and are considering moving factories to Indonesia, Thailand, and Vietnam, others believe that China will retain a competitive edge because of the long value chain within its borders, its trained managers, and its disciplined workforce. In a recent survey by Deloitte (2012), CEOs cite physical infrastructure, local market attractiveness, increasing R&D spending, and government investments in manufacturing and innovation as reasons China stays competitive in trade and foreign direct investments.

While the government is concerned about how to sustain job creation to accommodate millions of rural migrant workers, upgrading China's industrial production capacity has been on its agenda for a long time. The current growth model, heavily dependent on labor and natural resources, has created social and environmental problems that are increasingly difficult to ignore. A refocusing of the growth model is now possible because China has one of the better-educated workforces among emerging countries. Millions of Chinese students have been trained in the West for advanced degrees. China's export composition has been steadily evolving, as shown in figure 5. This reflects the priority to accelerate an industrial upgrade to reap more benefit from international trade.

Another important policy priority, reiterated in the Twelfth Five-Year Plan in 2010, is a focus on domestic consumption. This is in part a result of the 2008 global financial crisis that led to dramatic declines in consumption demand from the West and insolvency for many Chinese businesses. This goal of increasing domestic demand will lead to profound changes in China's role in the global production network, and create both challenges and opportunities for its trade partners and competitors.

10. See Orlik and Davis (2012).

WHICH COUNTRIES WILL BENEFIT FROM THE CHANGE OF PARADIGM?

China's trading partners will likely be affected by this paradigm change and China's evolving role in the global trade value chain. While many will continue to gain by raising their exports to China, others may see minimal increases with China directly. Most will likely be able to reroute trading to downstream producers elsewhere.

Two groups of trading partners can directly reap the benefits of the paradigm shift. First, broadly defined, are the trading partners that export high-technology goods who can project increases in their high-tech equipment exports as China continues to shift its output to higher-value-added products. China is likely to import more intermediate goods with high-tech content to support its exports. As table 4 indicates, electrical machinery and electrical equipment products continued to take a larger share of China's FVA in exports, increasing from 7.3 percent to 10.9 percent. Similarly, optical equipment increased from 16.1 percent to 27.8 percent from 2000 to 2005. Nations that have technology production advantages, such as the United States, Germany, Japan, and South Korea, and regions such as Taiwan (see table 5), can benefit directly through trade.

Second, China's trading partners in developing Asia can leverage this opportunity to engage in trade more broadly and promote economic development, as China did in the past 30 years. China's advantage in producing low-cost commodity products is eroding as its unit labor cost increases. Some of the trade pattern changes have already begun, and they can be intensified when China pushes through changes in its growth model, as described in the previous section. As table 4 illustrates, imports of intermediate goods as a share of FVA to total exports in textiles, apparel, and footwear have been flat. This indicates that some production has migrated out of China into countries with lower production costs. Nations that have, in particular, extensive supplies of cheap labor can fill the gap.

Furthermore, as the Chinese government implements its development policy aimed at reducing environmental impacts and excessive energy usage, then the treatment of waste pulp and waste paper, as well as wood and wood-product production, which consume a great deal of energy and water in China, will face tougher government regulatory requirements. Hence these industries may face challenges from other developing Asian nations.

TABLE
4 *Foreign value-added by industry in China's exports*

| Code | Description | 1995 | 2000 | 2005 |
|--------|---|-------|-------|-------|
| C01 | Agriculture, hunting, forestry, and fishing | 2.7% | 1.2% | 2.8% |
| C02T03 | Mining and quarrying | 3.9% | 3.4% | 5.9% |
| C04 | Food products, beverages, and tobacco | 3.5% | 2.8% | 3.8% |
| C05 | Textiles, textile products, leather, and footwear | 7.8% | 7.2% | 7.7% |
| C06 | Wood and products of wood and cork | 6.6% | 6.8% | 5.5% |
| C07 | Pulp, paper, paper products, printing, and publishing | 6.9% | 15.1% | 8.4% |
| C08T11 | Chemical, rubber, plastics, and fuel products | 8.6% | 10.8% | 10.5% |
| C12 | Other nonmetallic mineral products | 4.2% | 3.8% | 5.7% |
| C13T15 | Basic metals and fabricated metal products | 5.8% | 7.3% | 13.9% |
| C16 | Machinery and equipment, n.e.c. | 8.9% | 7.3% | 10.9% |
| C17T20 | Electrical and optical equipment | 10.5% | 16.1% | 27.8% |
| C21 | Motor vehicles, trailers, and semi-trailers | 5.4% | 6.9% | 9.5% |
| C22T24 | Other transport equipment | 6.0% | 5.2% | 9.3% |
| C25 | Manufacturing, n.e.c. | 6.6% | 9.6% | 10.0% |
| C26T29 | Electricity, gas, and water supply | 3.5% | 3.1% | 6.1% |

Source: Milken Institute, based on OECD STAN I-O tables, 1995-2005. Above, n.e.c. refers to not else classified.

TABLE
5 *China's largest sources of imports, selected industries, 2011*

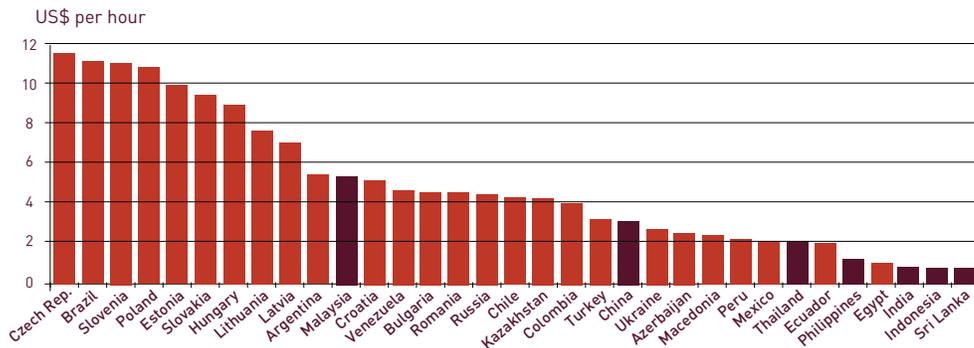
| C08T11 | (\$mn) | C13T15 | (\$mn) | C16 | (\$mn) | C17T20 | (\$mn) | C25 | (\$mn) |
|-----------------------------|--------------|------------------|--------------|------------------|--------------|------------------|--------------|------------------|-------------|
| 1. South Korea | 18.1 | 1. Japan | 19.9 | 1. Japan | 29.6 | 1. South Korea | 21.2 | 1. South Africa | 17.0 |
| 2. Japan | 13.7 | 2. Chile | 12.6 | 2. Germany | 20.5 | 2. Taiwan | 19.8 | 2. Switzerland | 15.8 |
| 3. Taiwan | 10.9 | 3. South Korea | 10.6 | 3. United States | 9.4 | 3. Japan | 17.2 | 3. United States | 13.7 |
| 4. United States | 9.4 | 4. Taiwan | 6.9 | 4. South Korea | 9.0 | 4. Malaysia | 10.0 | 4. Hong Kong | 8.4 |
| 5. Singapore | 5.0 | 5. Germany | 5.1 | 5. Taiwan | 5.4 | 5. United States | 5.7 | 5. Japan | 6.2 |
| 6. Germany | 4.3 | 6. Australia | 4.3 | 6. Italy | 5.1 | 6. Thailand | 4.6 | 6. Australia | 4.5 |
| 7. Saudi Arabia | 4.1 | 7. South Africa | 3.7 | 7. Switzerland | 3.0 | 7. Germany | 4.5 | 7. Germany | 3.0 |
| 8. Thailand | 3.7 | 8. United States | 3.6 | 8. France | 1.9 | 8. Philippines | 3.4 | 8. Spain | 2.9 |
| 9. Russia | 3.5 | 9. Russia | 3.6 | 9. Singapore | 1.9 | 9. Singapore | 2.5 | 9. South Korea | 2.2 |
| 10. Malaysia | 3.5 | 10. India | 2.9 | 10. Netherlands | 1.6 | 10. Switzerland | 1.1 | 10. Malaysia | 2.1 |
| Total, all countries | 241.0 | | 100.1 | | 133.9 | | 392.6 | | 99.7 |

Note: C08T11: Chemical, rubber, plastics, and fuel products; C13T15: Basic metals and fabricated metal products; C16: Machinery and equipment, n.e.c.; C17T20: Electrical and optical equipment; C25: Manufacturing, n.e.c.

Source: Milken Institute, based on OECD STAN Bilateral Trade Database.

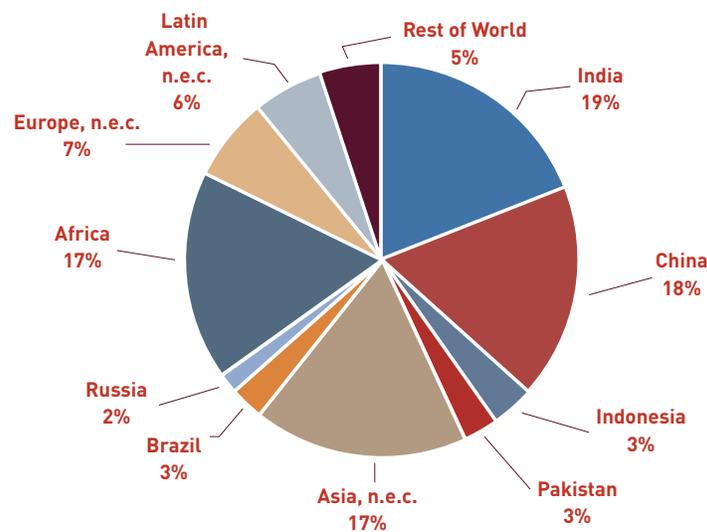
The countries that move along the value chain and fill China’s manufacturing role will need cheap and abundant labor in the coming decades, friendly environments for business, and proactive policy interventions from their central governments. Also important is an existing capacity to produce goods that are similar to those of other countries in the value chain. Indonesia, India, Thailand, and Vietnam fit into this category. As shown in figure 8, the cost of labor in Asian countries remains competitive with those of emerging countries in other regions. Figure 9 indicates that Asian economies will account for roughly 60 percent of the world’s working-age population in 2030, although China’s share will steadily decline. Perhaps most important, Asian countries also have the advantage of belonging to the world’s fastest-growing consumer market, which is attractive to foreign firms that wish to set up factories abroad. It is estimated that the Asian middle classes will account for 60 percent of consumer expenditure by 2030 (Brookings, 2010). To this extent, developing Asian countries are uniquely positioned to benefit from China’s ongoing economic transition and to enjoy brisk growth led by exports over the next decade.

FIGURE 8 *Developing Asian countries continue to be competitive in labor costs, 2012*



Source: Economist Intelligence Unit

FIGURE 9 *Asia is projected to account for 60 percent of the world’s working population in 2030*



Source: U.N. Population Database

CONCLUDING REMARKS

Global trade patterns have been evolving rapidly since the end of World War II, and the Asian countries are usually considered exemplars of economic achievement and prosperity through trade and investment openness. As shown in table 6, the Asian miracle has lasted for nearly six decades.

In the next 10 to 15 years, we can expect Asia’s developing countries large and small, like Indonesia, the Philippines, Vietnam, and India, to become more important players in global trade. Such countries have large, cheap, and young labor forces, but more important, they should be able to take advantage of their geographic proximity to other Asian countries that have already moved up the trade value chain.

Of course, the population dividend isn’t enough to explain the Asian miracle. Policy, whether it involves land use, education, or industry support mechanisms, has played an instrumental role. Both Hong Kong and Singapore introduced extensive labor force training programs that provide assistance to workers at various career stages and address structural changes amid industrialization. In Taiwan, land-use and education policies have evolved together around the centerpiece of industrial policy, which consists of directives to build technology clusters. These governments generally provide firm and sustaining support for key industries, such as electronics and electrical equipment. If other developing countries are to follow their success, they will need to be strategic in promoting exports within the context of building their industrial clusters.

TABLE 6
Six decades of the Asian miracle

| Country | Periods of high growth | Average growth rate (%) |
|-------------|------------------------|-------------------------|
| Japan | 1955-1969 | 8.7 |
| Hong Kong | 1969-1981 | 9.7 |
| Singapore | 1965-1973 | 10.5 |
| South Korea | 1963-1979 | 8.7 |
| Taiwan | 1963-1973 | 11.0 |
| Thailand | 1987-1996 | 9.5 |
| Malaysia | 1988-1997 | 9.5 |
| China | 1992-2011 | 10.4 |

Sources: World Development Indicators; DataStream; International Financial Statistics; Central Bank of the Republic of China; Chow (2002); Eichengreen (2011); Milken Institute.

In addition, bilateral currency and trade treaties have helped bolster the region. As an emerging micro trend in Asia, these treaties help build closer economic ties, and fend off competition from Latin America and Eastern Europe. Such pacts represent one way to help build a stable geopolitical environment and regional financial market. Although efforts have been made within ASEAN to enhance trade and economic ties, countries will have to undertake greater efforts to leverage their cultural and political ties for the most positive impacts on the trade environment for the entire region.

Finally, countries must continue to build up their infrastructure. Ports and roadways are critical for facilitating the movement of goods. One need only look at the world-class ports of Hong Kong, Singapore, and Shanghai to see how essential a strong infrastructure is. Education, labor force training, flexible labor policies, the ability to mobilize labor to anticipate demand and market changes, and the ability to anticipate the needs of enterprises—these are the pillars of prosperity in trade and industry. Looking back at China’s rapid ascent in global trade and its storied economic growth, these have been the crucial enabling factors.

TABLE
7
Shifts in trade policy in Asian countries

| China | Indonesia | South Korea | Malaysia | Taiwan | Thailand | Singapore |
|---|---|--|---|--|--|---|
| 1978-1994 Central planned import substitution | 1948-1966 Economic nationalism; nationalization of Dutch enterprises | 1961-1973 Initial export takeoff | 1950-1970 Natural resource-based exports | 1953-1970 Import substitution | 1955-1970 Natural resource-based exports | 1959-1964 Labor-intensive import substitution |
| 1979-1991 Gradual trade liberalization and export promotion | 1967-1973 Some trade liberalization | 1973-1979 Heavy industry and chemicals: selective promotion | 1971-1985 Import substitution and export promotion through EPZs* | 1958-1972 Export promotion | 1971-1980 Import substitution | 1967-1984 Labor-intensive import substitution |
| 1992-2001 Accelerated export promotion | 1974-1981 Oil and commodity boom | 1980-1990 Gradual trade liberalization and move to less selectivity | 1986 onward Gradual trade liberalization and export promotion | 1973-1976 Industrial consolidation | 1980 onward Trade liberalization and export promotion | 1973-1984 Upgrading export structure |
| 2002 onward Managed trade liberalization; upgrading export structure | 1986 onward Gradual trade liberalization and export promotion | 1990 onward Trade liberalization and high-tech exports | | 1981 onward High-tech industrialization | | 1985 onward Export promotion of high-tech and services |

*Export processing zone

Sources: World Bank (1993), Weiss (2005), Ma and Li (2007), Milken Institute.

The next decade may not be another “Made in China” decade. The trade landscape will change significantly as China experiences an economic transition. Many other Asian nations are likely to be the settings for final product assembly. Instead of labels that read “Made in China,” consumers globally will likely become familiar with “Made in Vietnam,” “Made in Indonesia,” or “Made in Malaysia.” Appropriate national and regional policies, however, will lead to greater vertical specialization and a stronger export value chain within the region. Developing countries have quite a distance to cover to meet the competitiveness requirements of today’s global trade. But as the proverb says, hoist your sail when the wind is fair.

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