IS CHINA AN ECONOMIC THREAT TO SOUTHEAST ASIA?

John Ravenhill

Abstract
Analysis of data on flows and stocks refutes the argument that China and Southeast Asia are engaged in a zero-sum competition for foreign investment. Although Southeast Asia appears to have lost out to Chinese-manufactured exports in global markets, this has been balanced by substantial increases in exports of components to China itself.

Keywords: China, ASEAN, investment, trade, regionalization

China’s rapid economic growth has caused as much alarm to its Southeast Asian neighbors as has the growth of its military prowess. Politicians and academics alike in Southeast Asia have expressed fears that the sustained expansion of the Chinese economy will harm the economic prospects of the members of the Association of Southeast Asian Nations (ASEAN). The potential for “diversion” of foreign direct investment (FDI) to China has figured prominently in these discussions. Typical of such sentiments are the views of then-Singaporean Deputy Prime Minister Lee Hsien Loong, who commented in November 2002 that

Southeast Asian countries are under intense competitive pressure, as their former activities, especially labor-intensive manufacturing, migrate to China. One indicator of this massive shift is the fact that Southeast Asia used to attract twice as much foreign direct investment as Northeast Asia, but the ratio is [now] reversed.1

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Concerns extend beyond competition for FDI, however. Inexpensive Chinese manufactures are perceived as posing a particular threat to the exports of ASEAN economies to industrialized markets.

The views of mainstream economists would not normally be expected to support such populist expressions of potentially zero-sum competition between China and ASEAN for markets and foreign investment, views reminiscent of Ross Perot’s statements on the impact of the North American Free Trade Agreement (NAFTA) on the U.S. economy. A series of studies by the World Bank concluded, however, that the lower-income ASEAN economies were the ones most likely to be adversely affected by China’s accession to the World Trade Organization (WTO), particularly after the country quotas associated with the Multi-Fiber Arrangement were removed at the beginning of 2005. Several other studies, using a variety of methodologies, reached similar conclusions.²

What impact has China’s rapid economic growth and WTO membership had on ASEAN economies? Data on investment and trade have now been published for the first three years since China’s accession, enabling an initial investigation of these questions. We first examine data on investment and then on trade.


Foreign Direct Investment

A dramatic increase in China’s receipts of FDI, particularly since 1997, has seen the country emerge as the largest single recipient of FDI in the global economy. The rapid growth in China’s receipts in the last years of the 20th century occurred at a time when many Southeast Asian countries were experiencing a downturn in inflows of FDI. The contrasting performance led some observers to assert that the growth of foreign investment into China had come at the expense of Southeast Asian states. Wong and Chan, for example, see this correlation between a downturn in flows to Southeast Asia and an upswing in those to China as providing evidence that “much of regional FDI [has been] diverted from ASEAN in favor of China.”

China now receives a substantial majority of the foreign investment that is recorded as flowing into East Asia as a whole, a fact that some commentators perceive as evidence that China is capturing a disproportionate share of such flows. While the fears that underlie such statements are entirely understandable and appear to be substantiated by a casual look at the FDI data, they reflect a number of logical fallacies. These include mistaking correlation for causation, a misrepresentation of FDI as constituting a fixed sum, a consequent fallacy that competition for FDI is inevitably a zero-sum game, and unwarranted implicit assumptions about what an “appropriate” level of FDI for China might be.

Data on FDI inflows at first sight do appear to support an alarmist view of the impact of China on ASEAN economies. Although China on average was already receiving substantially larger inflows of FDI than ASEAN economies in the years 1992–97, the trends diverged spectacularly after 1999. Whereas China’s FDI inflows increased to over $50 billion per year, FDI inflows into ASEAN fell substantially (by 2002 they were half the level of 1999, although they did recover from 2002 to 2004, rising from $13.1 billion to $24.8 billion, not far below the pre-financial crisis peak). When viewed in terms of shares in all inflows to China, Hong Kong, and ASEAN combined, the trend is graphic: whereas ASEAN gained an average of 40% of all inflows to the “region” in the years 1992–97, its share of FDI inflows from 2000 onward was nearly halved to slightly over 20% (Figure 1).

Even if one accepts that these data suggest a strong negative correlation between FDI flows to ASEAN and those to China (and as we will see, this is a questionable conclusion to draw given the various complications involved), cor-

relation does not necessarily equate with causation. Southeast Asia’s relatively poor aggregate performance as a recipient of FDI in the last years of the 1990s has much to do with the aftermath of the financial crises in the region. Of particular note here is the failure of the Indonesian economy to make a rapid recovery from the shocks of 1997 and the response of Western investors to Malaysia’s imposition of capital controls in 1998. Indonesia experienced net outflows of FDI in each year between 1998 and 2003: only in 2004 did flows turn positive again. For Malaysia, FDI inflows in 2004 were still one-third lower than in the peak year of 1996.

A fundamental problem with the argument that increased FDI flows to China have come at the expense of ASEAN is the assumption that the total amount of FDI in the global economy at any given time is fixed. Analysis that compares ASEAN and Chinese shares in FDI going to the ASEAN-China region as a whole (as presented in Figure 1) encourages a zero-sum perspective. Yet, even a cursory glance at the variability in annual flows of FDI (to the East Asian region, let alone globally) would point to the fallacy that underlies such perspectives.

Global FDI increased substantially in the last years of the 20th century, reflecting a massive increase during the dot-com boom in merger and acquisition activities (primarily among industrialized economies but with some substantial less-developed country [LDC] participation as well). FDI flows to developing economies rose from an annual average of $118.6 billion over the years 1992–97 to a peak of $252.5 billion in 2000. The bursting of the bubble in combination with the events of September 11, 2001, led to a steep decline in global FDI flows. Inflows to developing economies declined to $157.6 billion in 2002 but rebounded to $233 billion in 2004, a 40% increase over the previous year. There is nothing here to suggest that the overall amount of global FDI is in any way constant. An excellent example from the countries under consideration in this paper is the bulge in FDI into Hong Kong in 2000, when its share of total inflows to the ASEAN-China-Hong Kong “region” nearly doubled. A large part of this jump in inflows was due to a single acquisition—the $12 billion purchase of Hong Kong Telecom by Pacific Century Cyberworks.

As Xiao argues persuasively, there is good reason to believe that a substantial portion of FDI is endogenously (i.e., domestically) determined. He suggests that one way to interpret the recent surge in FDI into China is that it reflects the capacity of the Chinese economy to create new profits and new capital. A portion of the new FDI inflow is simply Chinese flight capital returning home or foreign investors bringing back to China some of the profits that they have made there. Looked at from this perspective, the key challenge for less-developed economies (especially China’s competitors in Southeast Asia) is to undertake the domestic reforms necessary to enhance their economies’ capacity to generate new capital. This—not the “fixed” pool of global FDI flows—is the principal arena in which competition occurs.

To suggest that increased FDI flows to China have caused a loss of jobs in Southeast Asia is to make some heroic inferences from the data. Only careful, on-the-ground investigation can establish where a direct transfer of production from Southeast Asia to China has occurred (to be sure, some evidence of such transfers has been discovered in the closure of electronic plants in Penang). But correlations of (highly variable) aggregate FDI flows in themselves are not sufficient to establish such trends.

Some of the commentary on China’s recent FDI inflows also appears to assume that there is a “natural” level of FDI appropriate for an economy—hence, China is somehow “supernatural” in the volume of flows that it has attracted.

6. For instance, see Dieter Ernst, “Global Production Networks in East Asia’s Electronics Industry and Upgrading Perspectives in Malaysia,” East-West Center (Honolulu), Working Papers, Economics Series 44 (May 2002).
In reality, despite currently receiving the largest volume of FDI inflows in the world, China is a small recipient of FDI relative to the size of its population and its gross domestic product (GDP). UNCTAD has constructed an “Inward FDI Performance Index,” which calculates the ratio of a country’s share in global FDI flows to its share in global GDP. China’s ranking in a list of 140 developing economies on this index in 2002–04 (45th) was essentially unchanged from 1988–90 (46th), suggesting that, despite the surge of foreign investment since the mid-1990s, China has not attracted FDI inflows disproportionate to its size and that the increase in foreign investment has merely kept pace with the growth of the economy.\(^7\) We turn now to two other factors crucial to any analysis of FDI in East Asia: whether FDI is best measured by stocks rather than flows and how to estimate China’s flows given the large volume of “round-tripping” capital.

**Flows v. Stocks of FDI**

While the picture for most ASEAN countries in terms of FDI inflows is far from reassuring, analysis of FDI data from other perspectives is somewhat less gloomy and arguably provides the basis for a more accurate assessment of the relationship between the rise of China and the FDI performance of ASEAN economies. First, consider data on FDI stocks rather than flows. For many analysts of foreign investment, stocks data present a more accurate picture of trends in foreign ownership in an economy than do data on flows. The principal reason is that stocks data include investments the subsidiaries make that are financed with locally raised funds and from reinvested earnings. When a subsidiary has been established for some time, the majority of its additional investments may be funded by local borrowings or reinvested earnings, rather than from money raised from the parent corporation. Data on FDI inflows (collected by host governments for balance of payments statistics) may consequently considerably understate the influence of foreign ownership in economies where the foreign presence is long established.\(^8\) The data for the Philippines provide an excellent example of how these different measures can lead to alternative

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\(^7\) See UNCTAD, annual *World Investment Report*.

\(^8\) The International Monetary Fund (IMF) provides guidelines to member governments for the compilation of balance of payments and international investment position statistics. FDI, according to the IMF, consists of three components: equity capital, borrowings from the parent company, and reinvested earnings. These data therefore exclude investment funds that a subsidiary raises from sources other than the parent company, e.g., borrowings from minority investors in the subsidiary or loans from local or international banks. Moreover, while reinvested earnings are part of the IMF’s definition of FDI flows, a number of countries, including Thailand, do not include them as part of their reporting of investment data to the IMF. According to the ASEAN Secretariat, reinvested earnings constituted 37% of FDI flows to the ASEAN region between 1995 and 2002. See “Seventh ASEAN Investment Area (AIA) Council Meeting, Joint Media Statement,” Jakarta, September 2, 2004, <http://www.aseansec.org/16347.htm>.
judgments on FDI performance. According to the U.S. Bureau of International Economic Analysis, in 2002 the Philippines incurred a net outflow of American FDI of $669 million. But for the same year, the bureau reported that stocks of American FDI in the Philippines rose by $560 million.9

Looking at FDI stocks, the picture for ASEAN is less grim than that portrayed by data on flows. Although China’s FDI inflows surpassed those to ASEAN economies after 1995, the trend in FDI stocks in ASEAN continued upward even in the immediate aftermath of the financial crisis (see Figure 2). The stock data give no suggestion of a zero-sum relationship between China and ASEAN. Between 1995 and 2004, the value of FDI stocks in ASEAN more than doubled. Even in 2004, FDI stocks in ASEAN remained substantially (25%) above the level of those in China. A note of caution has to be sounded about the aggregation of the data, however. Singapore accounted for a large share (85%) of the growth in FDI stocks in the ASEAN region. Nonetheless, stocks of FDI also grew strongly in Thailand and Vietnam, presenting a very different picture from the data on flows or UNCTAD’s flows-based performance index.

Overstatement of China’s FDI Inflows
Another reason why ASEAN’s FDI performance vis-à-vis that of China may not be as bad as the data on flows seem to suggest is because China’s total inflows...
of foreign capital are almost certainly considerably overstated. There are two principal factors underlying such overstatement: the manner in which China’s inflows are calculated and the significant proportion of inflows that may be “round-tripping” investment.

Most countries have adopted the standards of the Organization for Economic Cooperation and Development (OECD) for the measurement of FDI inflows. In essence, under these guidelines, foreign investment is counted as part of FDI inflows only where the investment gives foreign interests control of at least 10% of the shares of a company. China does not apply this minimum limit: any foreign investment is included in China’s FDI inflow data—inevitably overstating China’s receipts of FDI compared with other countries’ data. Moreover, because local government departments in charge of FDI promotion in China are responsible for collecting and reporting data on investment inflows, a powerful incentive exists for them to inflate these figures.10

A far more significant source of overstatement, however, is that a large percentage of “foreign” direct investment originates within China itself, a phenomenon known as “round-tripping.” The principal reason why Chinese investors seek to send their capital out of the country for ultimate reinvestment in the mainland is to take advantage of tax and other benefits available only to “foreign-invested” enterprises. The People’s Republic of China (PRC) provides a variety of incentives to attract foreign capital, including preferential tax treatment, preferential property rights particularly relating to land, and preferential access to financial services.

Because of ongoing ambiguity over the status of property rights and their enforcement, private enterprises in the PRC often operate in an atmosphere of uncertainty. Property rights for “foreign invested” enterprises are somewhat better enforced; domestic investors certainly covet this preferential treatment. And they also seek the tax advantages afforded foreign investors. The reported short life span of many foreign-invested enterprises in China itself reflects the desire of investors to exploit the tax benefits gained from an initial grant of this status. At the end of 2002, 48% of the cumulative total of 424,196 foreign invested enterprises that had been registered in China had closed. Many were wound up by their owners so that they could start “new” foreign invested enterprises, to take advantage once again of the preferential tax treatment they would gain during the first five years of their operation.11

An initial indication that round-tripping is a significant issue in China’s investment inflows is seen in the country’s sources of inward FDI. The big three sources or “Triad” of global FDI—the United States, the EU, and Japan—together account for only one-quarter of China’s FDI inflows. In contrast,

11. Ibid. p. 9.
Hong Kong accounts for nearly one-half. Offshore financial centers (the British Virgin Islands, Cayman Islands, Pacific Islands, Western Samoa, Mauritius, Bermuda, and Panama) together are the source for a further 9%: combined, these tax havens account for a larger share of the FDI inflows to China than do—individually—the EU, Japan, or the United States.

Estimating the extent of round-tripping is inevitably complex, not least because the activity under investigation is illegal. Early work by the World Bank suggested that round-tripping might account for as much as one-quarter of all China’s FDI inflows. In its *Global Development Finance* report for 2002, the World Bank commented that the share of total flows that originated within the mainland had actually increased in the last years of the twentieth century. Xiao provides the most comprehensive investigation of this issue to date, based on a careful comparison of China’s own data on FDI inflows and that of its major FDI partners on outflows to China. Xiao estimates that “unverifiable” FDI, most likely round-tripping capital, constitutes as much as 46.5% of China’s recorded inflows, with a range—allowing for possible statistical error equivalent to one standard deviation—of between 34.9% and 58.1% of all recorded inflows. Reducing the volume of inflows of FDI to China reflected in Figure 1 by 46% would present a dramatically different basis for comparison of China’s recent performance with that of ASEAN—including, for instance, China’s relative standing on UNCTAD’s FDI Performance Index.

Further evidence pointing to the likelihood that round-tripping capital constitutes a significant portion of China’s recorded FDI inflows comes from estimations of capital flight from China. In a careful study of the various elements of capital flight from the PRC, the most significant of which is trade misinvoicing, Gunter estimates that capital flight amounted to over $100 billion a year between 1997 and 2000, and that a total of about $900 billion had fled the PRC since 1984. These sums are substantially in excess of China’s annual FDI inflows: a reasonable assumption is that a sizeable amount of this flight capital returns to China in the form of round-tripping investment.

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12. Of course, some of this money may have originated in the “Triad” and reflect investments by Hong Kong-based subsidiaries of Triad multinational companies (MNCs).
Finally, suspicions that data on China’s FDI relative to that of ASEAN are substantially overstated are supported by national data for source countries. The record is very different from that presented by UNCTAD data on FDI inflows (which are usually supplied by the host country’s central bank). Although U.S. investment into ASEAN slumped in the aftermath of the financial crisis, 1998 was the only year in which U.S. data record FDI flows to China as exceeding those to the ASEAN region. By 2002, ASEAN countries were again receiving two-thirds of all U.S. FDI into the “region” (ASEAN, China, and Hong Kong combined): China’s share languished at less than 20%. Even allowing for the possibility that a portion of the U.S. investment in Hong Kong ends up in the mainland, China’s share in U.S. FDI flows remains remarkably small.

The data from the EU for FDI flows to ASEAN, China, and Hong Kong show enormous volatility (in 2000, for instance, the EU recorded a net outflow of investment from Hong Kong of $3.4 billion, whereas in the following year there was a net inflow of more than $49 billion). Despite the volatility in flows, there were only two years (1998 and 2000) in which China’s share of FDI flows from the EU exceeded that of ASEAN. Again, the data from one of the world’s major foreign investing regions do not match that for the inflows recorded by the Chinese authorities.

Data on shares in U.S. FDI stocks in ASEAN, China, and Hong Kong do not suggest a precipitous drop in ASEAN shares of American investment in the region. These shares have remained remarkably constant over the 10-year period from 1994 to 2003. ASEAN’s share in overall stocks did fall, but only from two-thirds to 60% of the U.S. total. And the economy gaining most was not that of China (whose share of U.S. FDI stocks in the “region” remains below 10%) but that of Hong Kong. Equivalent data for the EU again show more volatility than those for the U.S., but European investment stocks in ASEAN remain substantially above those in China. China’s share of EU FDI stocks in the region did experience a steady upward trend, rising from 6% in 1994 to 12% in 2003 while the ASEAN share was heading in the opposite direction (down from 69% to 44%). In 2001, largely as a result of a single merger and acquisition in the telecommunications industry in Hong Kong, the Hong Kong share in EU FDI stocks soared from 25% to 47%, which had the effect of substantially reducing the ASEAN share in EU investment in the region (but not the absolute value of EU investment stocks in ASEAN, which rose by nearly 40% from 1999 to 2003, totalling $71.6 billion in the latter year). The distortion caused by this single acquisition in Hong Kong again points to the dangers of reading too much into short-term trends in FDI.

FDI: A Zero-Sum or Positive Sum Game?

The performance of most ASEAN countries since the mid-1990s in attracting new inflows of FDI has been poor (Singapore, the ASEAN economy facing the least competition from China, remains the notable exception). The decline in the attractiveness of Malaysia and Thailand to foreign investors is particularly notable. But whether this poor performance can be largely attributed to the new competition from the PRC for investment funds is questionable. Its source is more likely to lie in domestic policies and performance: in Malaysia there were concerns over capital controls and subsequently over political uncertainties surrounding the successor to Prime Minister Mahathir Mohamad; in Thailand, continuing problems in the financial system, shortages of skilled workers, as well as political instability deterred foreign investors.

In the years post-2000 when global FDI flows to developing economies fell substantially, if a sizeable portion of inflows to China was in fact round-tripping capital (and thus to a considerable extent “captive”), China might reasonably have been expected to increase its share of all flows to LDCs. There is no reason to believe that ASEAN countries were competing in any way for such round-tripping funds. Even if one accepts that the recent record of ASEAN countries in attracting FDI is poor relative to that of China, this does not necessarily suggest the existence of zero-sum competition over capital flows. The variability of FDI flows over the last decade suggests that no fixed sum of investment capital exists over which countries inevitably must compete.

Several econometric studies have suggested that inflows of FDI into China have actually had a positive effect on ASEAN’s FDI receipts. Using a panel regression approach, Chantasasawat, Fung, Iizaka, and Siu in a series of papers estimate that a 10% increase in FDI inflows to China raises the level of FDI inflows to East and Southeast Asian countries by approximately 5% to 6%, depending on how the model is specified. They note, however, that the “China effect” is not the most important determinant of FDI flows to these other economies: of far greater significance are market size, policy, and institutional variables including levels of corporate taxation, degrees of economic openness, and the extent of corruption. ZHOU AND LALL, USING A SIMILAR METHODOLOGY, REPORT THAT FDI INTO CHINA HAD A POSITIVE IMPACT ON INVESTMENT FLOWS INTO WHAT THEY PECULIARLY DEFINE AS “SOUTHEAST ASIA” AFTER 1992. AND EICHENGREIN


21. They find no significant association before 1992 between FDI into China and that into Southeast Asia. These authors use a most unorthodox definition of “Southeast Asia,” however,
and Tong, using a gravity model (a form of regression analysis), similarly find that FDI inflows into China are complementary with FDI flows to other Asian countries.\(^\text{22}\)

While the variability in the data examined earlier in this paper and the problems involved in measuring FDI suggest that conclusions from such studies should be treated cautiously, this work does cast further doubt on arguments that the increase in FDI into China has come at the expense of ASEAN. As Chantasasawat et al. argue, the emergence of China as the “workshop of the world” can have both investment-diversion and investment-creation effects.\(^\text{23}\) Public discussion and much academic commentary has focused almost exclusively on potential investment diversion—the possibility that MNCs will choose to locate in China rather than in other East Asian countries to take advantage not only of its relatively inexpensive unskilled and skilled labor but also its good infrastructure and huge domestic market.

On the other hand, China’s stunning economic growth may also generate an investment creation effect. As China’s industrialization proceeds apace, it develops a huge appetite for minerals and raw materials—spurring inflows of FDI into countries with the resource endowment to feed this appetite, which, of course, includes several in ASEAN. Of greater interest to governments concerned that China will displace their manufactured exports in the global marketplace is another possible source of investment creation: the establishment of an increasingly sophisticated regional division of labor based on trans-border production networks that facilitate trade in components and their ultimate assembly. China’s accession to the WTO, with the consequent removal of trade-related investment measures such as local-content requirements, may facilitate MNCs’ construction of such regional networks. In such circumstances, an increase in FDI in China for component assembly, for instance, may stimulate complementary investments in manufacturing elsewhere in the region. It is to the new division of labor in the region that we now turn.

**Trade**

Much of the conjecture about the negative impact on ASEAN of China’s integration into the global economy rests on models that analyze data for the period before China joined the WTO. Data are now available (from the UN’s

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\(^{23}\) Chantasasawat et al., “Foreign Direct Investment in East Asia and Latin America.”
COMTRADE [Commodity Trade Statistics] database\textsuperscript{24} that cover the first three years following China’s WTO entry, which for the first time permits observation of the impact of China’s entry on ASEAN trade.

In this section, I look at the evolution of ASEAN and China’s position in the markets of Japan and the United States for five major categories of exports, aggregated at the two-digit level of the Standard International Trade Classification (SITC) Revision 3: office machinery, electrical machinery, telecommunications and sound equipment, clothing, and footwear. The last two of these sectors feature relatively unsophisticated, labor-intensive manufactures. In both categories, China’s share of the U.S. and Japanese markets already exceeded that of ASEAN by 1995. The other three product sectors comprise relatively sophisticated manufactures. In all three in 1995, exports from ASEAN had a substantially larger share of the U.S. and Japanese markets than did those from China. These five commodity groups combined accounted in 2003 for 71% of all ASEAN manufactured exports to the world (81% of all manufactured exports from ASEAN to the U.S. and 62% of the total of manufactured exports to Japan).

\textit{Office Machinery (SITC 75)}

China’s exports of office machinery (a category that includes computers) to the U.S. market were less than one-fifth of the value of those from ASEAN in 1995. China’s exports expanded rapidly after accession to the WTO in 2001, surpassing the value of those from ASEAN in 2003. China appears to account for much of the expansion in total U.S. imports of these products in the past four years, testimony to its increasing competitiveness in higher value added goods. In contrast, not only have ASEAN countries lost market share but the absolute value of their exports of office machinery (a product category that accounts for nearly one-third of all ASEAN manufactured exports to the U.S.) also has not matched the peaks reached at the end of the 1990s.

A similar pattern holds in the Japanese market although the decline in the ASEAN share and increase in the Chinese share is even more pronounced. ASEAN accounted for one-third of all of Japan’s office machinery imports in 1995, its exports amounting to nearly six times the value of those of China. In 2002, the value of Japanese imports of office machinery from China exceeded that of imports from ASEAN: in 2004, China accounted for 44% of Japan’s imports of these products, the value of imports from China being more than double those from ASEAN. Again, this is an instance where ASEAN countries not only lost market share but also the absolute value of their exports fell substantially from its peak in 2000.

\textsuperscript{24} All data are derived from the U.N.’s COMTRADE database, at <http://unstats.un.org/unsd/comtrade/>. To save space, only summary results are presented here. A complete set of data is available from the author.
Electrical Machinery (SITC 77)

This is the only sector (which includes semiconductors, electrical switching machinery, cathode ray tubes, and household electrical equipment) where the absolute value of imports from ASEAN has continued to surpass those from China (but only in the Japanese market—and only just). In the Japanese market, the value of imports from ASEAN in this sector rose substantially over the 1995–2003 period, probably testimony to the growing significance of “reverse exports” from Japanese subsidiaries in Southeast Asia. By 2003, the value of imports from ASEAN was more than two and a half times that of 1995. Electrical machinery contributed one-third of the value of all ASEAN manufactured exports to Japan. Whereas ASEAN held a 14.6% share of the Japanese import market in 1995, by 2000 this share had risen to 24.3%. At the end of the period, ASEAN maintained a 23.5% share of Japanese imports. Imports from China grew even more rapidly, however, more than quadrupling in value over the period. China’s share of the Japanese market rose from 7.1% in 1995 to 23% in 2004. This is one of the few instances for the commodities investigated in this study where both ASEAN and China increased their market shares.

In the U.S. market, in contrast, imports of electrical machinery from ASEAN peaked in 2000. By 2003 imports from China exceeded those from ASEAN. Imports from ASEAN had fallen to less than the value in 1995, and by 2004 its share of U.S. imports fell to under 13%, a particularly poor performance in a product group that contributed close to a quarter of the value of all ASEAN exports to the U.S. The value of U.S. imports from China, in contrast, increased fivefold in the period 1995–2004.

Telecommunications, Sound Recording Equipment (SITC 76)

The value of U.S. imports of telecommunications and sound recording equipment (TVs, radios, VCRs, DVD players) from ASEAN grew by two-thirds over the years 1999–2004. This growth, however, was insufficient to maintain ASEAN’s share of U.S. imports of this category (which accounts for 14% of all ASEAN manufactured exports to the U.S.). ASEAN’s share of the U.S. market fell from 22% in 1995 to under 14% by 2004. Imports from ASEAN were 75% above the value of those from China in 1995: in 1998, the value of imports from China exceeded those from ASEAN for the first time. By the end of the period, the value of imports from China was double those from ASEAN; China’s share of U.S. imports had reached 28% by the latter date.

A similar situation prevailed in Japan, where the value of imports in this sector from China surpassed those from ASEAN in 2002. By 2004 the value of imports from ASEAN had recovered to be 5% higher than its previous peak in 2001. Meanwhile, the value of imports from China increased nearly fourfold:
China’s share in Japan’s total imports in this sector rose from 14.4% to more than 44%, whereas ASEAN’s share decreased from 35% to 28%.

In contrast to the three sectors considered above, clothing/apparel and footwear are two relatively labor-intensive sectors where China was already a major source of imports for Japan and the United States even before its accession to the WTO.

Clothing and Apparel (SITC 84)

This is the sector where new exports from China were expected to have the most negative impact on ASEAN. The full impact of China’s competitiveness in this sector would not be felt, however, until after the abolition of the Multi-Fiber Arrangement (MFA) quota system from January 1, 2005, and the phasing out of the transitional arrangements that accompanied China’s accession to the WTO. For the period for which data are available, country quotas continued to constrain access to the U.S. market. Here, we see the effects of quotas in operation, with similar market shares and similar increases in the value of imports from ASEAN and those from China occurring until 2001. From 2001, however, imports from China began to expand at a more rapid pace than those from ASEAN.

The situation in the Japanese market was entirely different. The Japanese market has not been subject to country quotas for clothing and textiles; it therefore provides a possible signpost to how world markets will look once industrialized countries completely remove the MFA restrictions. Whereas apparel and clothing constituted 13% of the total value of ASEAN’s manufactured exports to the U.S. in 2003, they contributed only 2% of such exports to Japan. By 1995, China was already by far the dominant player in Japan’s market for apparel and clothing, contributing 56% of the total value of Japan’s imports in this sector. Between 1995 and 2004, the value of imports of clothing from China into the Japanese market increased by more than 70%, and China’s share of overall Japanese imports of clothing grew to 80%. In contrast, the value of imports of clothing from ASEAN fell by nearly one-half during the period. The share of ASEAN in Japan’s imports of clothing fell from 6.5% to 3.0%.

Footwear (SITC 85)

Footwear was the other labor-intensive sector where ASEAN countries were expected to experience significant difficulties because of the growth of exports from China. Data for the U.S. show that China in 1995 was already a much more significant source of imports than was ASEAN, accounting for more than four times the value of imports from Southeast Asia. The gap between the two has widened considerably since then. Whereas imports from China have more than kept pace with the growth of global imports of this sector into the U.S.,
with China’s share of the U.S. market rising from under one-half to more than two-thirds from 1995–2004, ASEAN’s market share has fallen from 12% to under 5% in the same period. The absolute value of imports from ASEAN has also fallen by 50% from its peak in 1997.

China was also a more significant source than ASEAN of imported footwear for Japan by 1995. Again, the data show Japan’s imports of footwear from China mirroring those from the world, with China’s share of total Japanese imports in this sector rising from under one-half to over two-thirds. In contrast to the situation in the U.S. market, ASEAN’s share of the Japanese market, after declining abruptly in the worst years of the financial crises, by 2002 had come back to the level enjoyed in 1998. The absolute value of imports of footwear from ASEAN remains below its 1997 peak but by 2003 had climbed to more than 25% above its 1999 trough.

Table 1 provides a summary of the changes in the value and shares of imports from ASEAN into the Japanese and U.S. markets. It makes for grim reading from the ASEAN perspective. In only one sector/country combination (electrical machinery in Japan) did both the value of imports and the share of ASEAN countries in total imports increase over the 10-year period 1995–2004. In only one sector (telecommunications) did the value of imports from ASEAN increase in both the Japanese and U.S. markets, even though ASEAN lost market share in both countries while that of China increased. For clothing, still governed in the U.S. by the country quotas of the MFA, the value of ASEAN imports increased but its market share decreased. For all the other sector and country combinations, including the higher value-added sectors of office machinery in both the Japanese and U.S. markets and electrical machinery in the U.S. market,
ASEAN economies suffered not only an erosion of their share of the import market but an absolute decline in the value of their exports.25

Integration into Regional Production Networks? ASEAN Trade with China

While developments in two principal export markets—Japan and the United States—in recent years appear to confirm fears about the damaging impact that China’s growth would have on ASEAN exports, to look only at competition in third country markets is to ignore other potentially significant stimuli to ASEAN trade. Particularly notable is growth in China itself and in China’s exports to the world of products assembled from imported components.

The emergence of China as “factory to the world” (or at least its assembly plant) has caused dramatic changes in the patterns and composition of trade within East Asia. Trade triangles had developed in the late 1980s following the G7 Plaza Accord currency realignments in which components were shipped from Northeast Asia for assembly in Southeast Asia for export to world markets. These triangles have been largely superseded by new trade triangles in which components from other East Asian economies are being shipped to China primarily for assembly and export to industrialized countries’ markets. One consequence has been a substantial growth in the overall significance of intraregional trade in East Asia. Although this still lags behind that of Europe, it now constitutes close to half of the total trade of countries in the region.26

Estimates suggest that processed (imported) components contribute between 60% and 80% of the value of all Chinese exports. These components constitute

25. Care must be exercised in drawing any inferences from the descriptive data presented above. They are highly aggregated (at the SITC two-digit level) and across all the major ASEAN economies, obscuring variance in performance across individual products and across countries. And, at best, they present a correlation between ASEAN loss of market share and simultaneous gains in that of China. The underlying factors behind such a correlation might not necessarily be the competitiveness of Chinese exports, however: supply-side disruptions in the crisis-hit ASEAN economies in the period from 1997 onward, for instance, may have contributed to ASEAN economies’ loss of market share. The data, however, do support the conclusions of econometric work that has analyzed changing market shares in earlier periods, e.g., David Roland Holst and John Weiss, “ASEAN and China: Export Rivals or Partners in Regional Growth?” World Economy 27:8 (August 2004), pp. 1255–74. More sophisticated methods used to examine the impact of China’s WTO accession on its neighbors have their own problems. Computable general equilibrium models make a variety of assumptions regarding elasticities of supply and demand, technological shifts, factor movements, etc. that may have little foundation in the real world. For discussion of some of the weaknesses of these models, see, for instance, Lall and Albaladejo, “China’s Competitive Performance.”

more than 50% of the total value of Chinese imports.\textsuperscript{27} Most of the components for processing in China come from Northeast Asian economies. Hong Kong, Japan, Korea, and Taiwan supply close to two-thirds of the inputs for China’s processing activities. To what extent have Southeast Asian economies also been integrated into these new trade triangles?

The new trade triangles reflect dramatic changes in the composition of intra-regional trade in East Asia and the Asia-Pacific region more generally. Economic complementarity in the Asia-Pacific has frequently been discussed in terms of patterns that characterized global trade before 1945—the exchange of raw materials for manufactures. Complementarity was seen, for instance, in the exchange of Australian and Indonesian raw materials for Japanese manufactures.\textsuperscript{28} Such a static view of economic complementarity informs Wong and Chan’s assessment of the potential for an ASEAN-China Free Trade Agreement:

\[\ldots\text{the lack of complementarity between the Chinese and ASEAN economies limits the capacity that each can absorb of the other’s products. This obstructs to a certain degree the economic integration and interdependence of China and the ASEAN countries.} \ldots\]

Mutually competitive, rather than complementary, structures of China and ASEAN prevented significant growth in trade, with the possible exception of China and Singapore. \ldots\ In the area of traditional labor-intensive industries like textiles, clothing, and footwear, China’s gains have come at the expense of ASEAN’s. \ldots\ China’s emergence as a global manufacturing base has apparently also resulted in most ASEAN economies experiencing a severe hollowing out of their industries.\textsuperscript{29}

Postwar commerce, however, was increasingly dominated by intra-industry trade among the industrialized economies, a phenomenon that—with FDI-driven globalization of production—has spread rapidly to trade between industrialized and middle-income developing economies, and increasingly to that among developing economies themselves. The growth of international production networks facilitated this intra-industry trade, a phenomenon that accelerated in the Asia-Pacific region following the currency realignments of the Plaza Accord.\textsuperscript{30}


\textsuperscript{29} Wong and Chan, “China-ASEAN Free Trade Agreement,” pp. 508, fn. 4; 517; 519; 525.

Rather than static complementarities, the globalized economy is driven by a
dynamic and rapidly evolving division of labor. China’s recent rapid economic
growth in large part reflects its incorporation into this new division of labor
through a further extension of production networks.

ASEAN and China have become more important economic partners for one
another in the past decade. Over the course of the 1990s, the value of ASEAN
exports to China increased fourfold; their share in China’s total imports in-
creased by one-half from 6% to 9%. The share of manufactures in China’s
imports from ASEAN more than doubled—from 3.1% to 6.7%. Some ASEAN economies have benefited signifi-
cantly from China’s need for raw materials imports to fuel its industri-
alization. But ultimately, given their emphasis on economic upgrading, most
governments are going to be interested in the opportunities that China will
offer for sale of their manufactures.

Table 2 examines the changing composition of ASEAN exports to China. It
shows that (with the notable exception of Indonesia, whose exports continue
to be dominated by energy products) a dramatic transformation in ASEAN ex-
ports occurred in the second half of the 1990s. The share of manufactures

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</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>54.4</td>
<td>29.2</td>
<td>22.5</td>
<td>23.5</td>
<td>34.1</td>
<td>29.0</td>
<td>25.3</td>
<td>27.0</td>
<td>25.0</td>
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<td>22.3</td>
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<td>Malaysia</td>
<td>11.9</td>
<td>41.0</td>
<td>48.3</td>
<td>40.9</td>
<td>41.9</td>
<td>49.4</td>
<td>54.5</td>
<td>62.1</td>
<td>54.5</td>
<td>50.8</td>
<td>50.2</td>
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<tr>
<td>Philippines</td>
<td>1.8</td>
<td>6.5</td>
<td>18.6</td>
<td>24.1</td>
<td>45.6</td>
<td>58.4</td>
<td>59.9</td>
<td>69.2</td>
<td>79.3</td>
<td>81.0</td>
<td>92.5</td>
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<td>Singapore</td>
<td>28.6</td>
<td>48.5</td>
<td>48.2</td>
<td>50.9</td>
<td>60.5</td>
<td>68.1</td>
<td>66.5</td>
<td>67.1</td>
<td>66.0</td>
<td>66.6</td>
<td>68.4</td>
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<tr>
<td>Thailand</td>
<td>10.4</td>
<td>14.5</td>
<td>21.5</td>
<td>31.7</td>
<td>47.7</td>
<td>45.2</td>
<td>44.5</td>
<td>45.9</td>
<td>53.3</td>
<td>46.7</td>
<td>59.7</td>
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ASEAN 5
(weighted)
average | 31.1 | 34.9 | 36.5 | 39.1 | 49.2 | 52.2 | 51.7 | 56.0 | 56.1 | 54.1 | 55.5 |

SOURCE: Calculated from U.N. COMTRADE data.
NOTE: Manufactures are defined as SITC 6, 7, and 8 less categories 67 and 68.
grew rapidly so that by 1999 they constituted more than half of the value of total exports. Since 2001, however, the share of manufactures in China’s imports from ASEAN has changed little.

Taking a “glass half full” perspective, the fact that the share of manufactures in this trade has slightly edged upward at a time when China’s demand for raw materials has boomed might be regarded as a positive performance. Moreover, a more detailed breakdown of exchanges between ASEAN and China finds significant growth in intra-industry trade. The share of parts and components in Malaysia’s exports of manufactures to China, for instance, rose from 6.4% in 1992 to 16.1% in 1996 to 50.6% in 2000; for Singapore, the respective figures were 23.1%, 41.9%, and 50.3%; and for Thailand, the figures were 8%, 29.2%, and 54%.

ASEAN’s share of China’s burgeoning imports of components increased from 0.9% in 1992 to 19.3% in 2004. China’s rapid industrialization is fostering a new division of labor in East Asia, including the ASEAN economies, and a significant expansion of intra-industry trade.

Although the composition of ASEAN exports has been transformed over the past decade because of the rapid growth of exports of manufactures, the imports of manufactures from China have grown even more rapidly, generating a deteriorating trade balance in manufactures from the perspective of the ASEAN economies. This has been true for Indonesia, Malaysia, Singapore, Thailand, and Vietnam. The one exception has been the Philippines, which has tripled the value of its manufactured exports (primarily electrical circuits) to China since 2001 and has enjoyed a positive balance of trade in manufactures with China throughout the period. Only Indonesia, because of its exports of raw materials, has consistently run balance of trade surpluses with China over the years 1995–2003. For most other ASEAN economies, however, the balance of trade in raw materials and agricultural products has at least partially offset imbalances in manufactures trade. And these data do not include trade in services, which would be expected in at least the case of Singapore to generate a healthy surplus in the bilateral relationship. From the viewpoint of economic theory, bilateral trade balances are largely meaningless. But as has been all-too-evident from the concerns of the U.S. Congress over the years, economic and political logics do not always coincide. No doubt ASEAN governments will be looking at their bilateral trade balances with China as a litmus test of the commitment of China to a good-neighbor policy.

To what extent has the growth of the Chinese market offset the losses that ASEAN economies have suffered in the Japanese and U.S. markets? A first point to make is that the aggregated position for ASEAN exports in the Japanese market is largely unchanged: losses in market shares in office machinery and telecommunications and sound equipment were offset by gains in the market share for electrical machinery. The question here then is reduced to asking to what extent have gains in China offset losses for ASEAN in the U.S. market? If ASEAN had maintained its shares of U.S. imports of the three categories of advanced manufactures included in this study—office machinery, telecommunications/sound equipment, and electrical machinery—its total exports of these products would have been worth approximately an additional $19 billion in 2004. In the Chinese market, however, ASEAN countries have increased their sales of these products by more than $24 billion since 2000 (Table 3).

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<td>Office machinery</td>
<td>1,356</td>
<td>2,113</td>
<td>1,921</td>
<td>2,866</td>
<td>3,092</td>
<td>3,990</td>
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<td>8,283</td>
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<td>Telecommunications,</td>
<td>305</td>
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<td>411</td>
<td>692</td>
<td>735</td>
<td>815</td>
<td>1,184</td>
<td>2,127</td>
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<tr>
<td>sound equipment</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
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<tr>
<td>Electrical machinery</td>
<td>934</td>
<td>1,309</td>
<td>2,384</td>
<td>4,498</td>
<td>5,509</td>
<td>9,086</td>
<td>15,365</td>
<td>21,765</td>
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SOURCE: Calculated from U.N. COMTRADE data.

To what extent has the growth of the Chinese market offset the losses that ASEAN economies have suffered in the Japanese and U.S. markets? A first point to make is that the aggregated position for ASEAN exports in the Japanese market is largely unchanged: losses in market shares in office machinery and telecommunications and sound equipment were offset by gains in the market share for electrical machinery. The question here then is reduced to asking to what extent have gains in China offset losses for ASEAN in the U.S. market? If ASEAN had maintained its shares of U.S. imports of the three categories of advanced manufactures included in this study—office machinery, telecommunications/sound equipment, and electrical machinery—its total exports of these products would have been worth approximately an additional $19 billion in 2004. In the Chinese market, however, ASEAN countries have increased their sales of these products by more than $24 billion since 2000 (Table 3).

The principal gains have come in electrical machinery, where ASEAN exports increased fourfold from 2001 to 2004—primarily from Malaysia and the Philippines. Substantial increases also occurred in office machinery—where the value of exports up more than 250%—the single most important supplier for this product being Thailand. Again, one must bear in mind various caveats in considering these data—the level of aggregation means that gains in one product sector and/or market will not necessarily offset losses in another for individual countries, let alone individual companies. Significant adjustment costs may have been incurred. But the data do point to an emerging regional division of labor that is incorporating ASEAN states to a greater extent than many anticipated, to growing dynamic complementarities, and to the stimulus that China’s growth has provided to some manufacturing sectors in ASEAN.

35. And trade data in themselves tell us nothing about the value added in the production chain by manufacturing facilities in any individual country. For instance, integrated circuits account for close to one-third of the total value of Philippine imports, and one-half of these are sourced from the United States. These imports presumably contribute a significant portion of the overall value of Philippine exports of electrical components. But that is a different issue to the question addressed in this article, the impact of China on ASEAN trade patterns.
Conclusion

China’s rapid economic growth presents an enormous challenge to other economies, not least those neighbors in East Asia whose export structures are similar to that of the mainland. How economies will fare in the face of the new competition will depend in large part on how successfully governments manage the process of domestic adjustment. This will involve, for instance, investments in upgrading local skills and infrastructure and improvements in governance structures and in institutional performance.

The evidence presented in this article suggests that at least some of the pessimism regarding economic competition between ASEAN and China is misplaced. Although ASEAN countries’ record in attracting new flows of FDI in the years since the financial crisis has been generally disappointing, it is not nearly as bad as the stark comparison with China’s aggregate inflows suggests. This is because the data frequently cited for China’s inflows consistently overstate the real volume of foreign investment in the mainland. And ASEAN’s performance on FDI is better when one examines stocks rather than flows of foreign investment (the comparatively low level of stocks of FDI in China again casts doubt on the accuracy of the data on its inward FDI flows).

At first sight, the evidence from the comparison of ASEAN and Chinese export competition in the Japanese and U.S. markets paints a particularly grim picture for ASEAN. Again, however, other data provide grounds for a more positive assessment. ASEAN economies are beginning to participate in a significant way in the new trade triangles that have emerged with China’s rapid industrialization. Although ASEAN exports of finished goods to extra-regional markets in some instances have declined, ASEAN is benefiting from China’s new role as an assembly plant for global markets and its consequent demand for components. Rather than a decline in ASEAN exports of manufactured goods to China occurring, as the zero-sum scenarios would suggest, exports, primarily of components, to China have increased substantially since its accession to the WTO. A new division of labor is being forged in which ASEAN exports to China are much more diverse than they were a decade ago.