

Make Your Publications Visible.

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre

Park, Donghyun; Shin, Kwanho

Working Paper

Can Trade with the People's Republic of China be an Engine of Growth for Developing Asia?

ADB Economics Working Paper Series, No. 172

Provided in Cooperation with:

Asian Development Bank (ADB), Manila

Suggested Citation: Park, Donghyun; Shin, Kwanho (2009): Can Trade with the People's Republic of China be an Engine of Growth for Developing Asia?, ADB Economics Working Paper Series, No. 172, Asian Development Bank (ADB), Manila, https://hdl.handle.net/11540/4186

This Version is available at: https://hdl.handle.net/10419/128510

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.



https://creativecommons.org/licenses/by/3.0/igo/

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.





ADB Economics Working Paper Series



Can Trade with the People's Republic of China be an Engine of Growth for Developing Asia?

Donghyun Park and Kwanho Shin No. 172 | October 2009

Asian Development Bank



ADB Economics Working Paper Series No. 172

Can Trade with the People's Republic of China be an Engine of Growth for Developing Asia?

Donghyun Park and Kwanho Shin October 2009

Donghyun Park is Senior Economist, Macroeconomics and Finance Research Division, Economics and Research Department, Asian Development Bank, and Kwanho Shin is Professor, Department of Economics, Korea University. The authors thank Jaehan Cho, Gemma Estrada, and Ji-Soo Kim for their excellent research assistance.

Asian Development Bank

Asian Development Bank 6 ADB Avenue, Mandaluyong City 1550 Metro Manila, Philippines www.adb.org/economics

©2009 by Asian Development Bank October 2009 ISSN 1655-5252 Publication Stock No. WPS091042

The views expressed in this paper are those of the author(s) and do not necessarily reflect the views or policies of the Asian Development Bank.

The ADB Economics Working Paper Series is a forum for stimulating discussion and eliciting feedback on ongoing and recently completed research and policy studies undertaken by the Asian Development Bank (ADB) staff, consultants, or resource persons. The series deals with key economic and development problems, particularly those facing the Asia and Pacific region; as well as conceptual, analytical, or methodological issues relating to project/program economic analysis, and statistical data and measurement. The series aims to enhance the knowledge on Asia's development and policy challenges; strengthen analytical rigor and quality of ADB's country partnership strategies, and its subregional and country operations; and improve the quality and availability of statistical data and development indicators for monitoring development effectiveness.

The ADB Economics Working Paper Series is a quick-disseminating, informal publication whose titles could subsequently be revised for publication as articles in professional journals or chapters in books. The series is maintained by the Economics and Research Department.

Contents

Abstı	ract	V
I.	Introduction—The Role of Intra-Regional Trade in Developing Asia	1
II.	Growth of Intra-Asian Trade, Rise of the PRC, and the PRC as an Engine of Growth A. Growth of Intra-Regional Trade in East and Southeast Asia B. The Stunning Rise of the PRC and its Implications for Developing Asia	2 3
	C. Trade with the PRC as an Engine of Regional Growth	11
III.	 Evidence from the PRC's Trade Data: Relative Importance of Parts and/or Components Versus Final Goods in the PRC's Imports from Developing Asia A. Description of Disaggregated Trade Data B. Share of Parts and Components Versus Finished Goods in Imports: Key Findings C. Evidence from Trade Balance between the PRC and the Rest of Developing Asia D. The PRC as an Engine of Recovery from the Global Crisis 	13 14 16 23 26
IV.	Concluding Observations—Toward a Broader Trade Openness	28
Refe	rences	30

Abstract

The recession in the United States in the wake of the global financial crisis has had a pronounced negative impact on developing Asia's exports and growth. As a result, developing Asian countries are increasingly looking to the People's Republic of China (PRC) as a new source of demand and growth. The central objective of this paper is to empirically assess whether trade with the PRC can become an engine of growth for developing Asia. To do so, we examine the structure of PRC's trade with developing Asia, in particular the relative shares of parts and components versus final goods in its imports from the region. Our most significant result is that the share of final goods in the PRC's imports from East and Southeast Asia has been rising while the share of parts and components has been falling, suggesting that the PRC is becoming more of a consumer and less of an assembler. This provides ground for optimism about the prospects of trade with the PRC as a source of resilience against extra-regional demand shocks in the short run and an additional source of growth in the long run.

I. Introduction— The Role of Intra-Regional Trade in Developing Asia

The global financial and economic crisis has had a pronounced negative impact on developing Asia's exports and growth. Although the crisis was financial in its origins, trade has been the dominant channel through which the global crisis has been transmitted from the United States (US) to developing Asia. Given that the root cause of developing Asia's slowdown is the contraction of aggregate demand due to the contraction of external demand, the logical solution to short-run recovery and long-term growth is to find alternative sources of demand. In the short run, the only realistic policy option is for governments to cut taxes and increase spending—i.e., to serve as consumer of last resort—as they in fact did throughout the region. In the long run, as discussed in the *Asian Development Outlook 2009*, one strategy is to strengthen domestic demand so that countries in the region consume more of what they produce. However, building up a more vibrant domestic economy is a long-term structural process that involves removing deep-seated structural impediments such as inadequate social protection and weak financial systems.

The paper explores another long-run potential source of demand and growth for developing Asia, namely intra-regional trade, which is intimately related to domestic demand. More robust domestic demand within the countries of the region will enable them to buy more of each other's goods as is the case among European Union (EU) countries. Stylized facts suggest that while trade among developing Asian countries has grown impressively in recent years, much of the trade reflects trade in parts and components as opposed to trade in final goods. In particular, the People's Republic of China's (PRC) well-known role as the world's factory means that countries around the region ship parts and components to the PRC, which assembles them into final goods and exports them to the US and other industrialized countries. This means that the growth of intra-Asian trade remains heavily influenced by growth of demand in the rest of the world. This is especially true for trade among East and Southeast Asian economies, which trade extensively with each other. Upon closer thought, lack of more substantive intra-regional trade based on final goods, along the lines of the EU, is a direct consequence of weak domestic demand in the regional economies. By the same token, the strengthening of domestic economies will stimulate more substantive intraregional trade.

The central objective of this paper is to empirically investigate whether intra-regional trade can serve as an engine of recovery and growth for developing Asia. More specifically, we examine the issue of whether the PRC can serve as an engine of recovery and growth. The next section will make it clear why the PRC has a unique potential to drive regional growth through trade. In light of our central objective, our empirical analysis concentrates on manufactured goods rather than commodities. In any case, manufactured goods account for a dominant majority of intra-regional trade. More significantly, our analysis is largely limited to the economies of East and Southeast Asia, which have reached a fairly high degree of trade integration with each other. Critically, our definition of East and Southeast Asia excludes Japan. Henceforth, intra-Asian trade refers to trade among Asian countries other than Japan, and Asia refers to Asia ex-Japan. East and Southeast Asia includes Hong Kong, China; Singapore; Republic of Korea (Korea); Taipei, China; Brunei Darussalam; Cambodia; Indonesia; Lao People's Democratic Republic; Macau; Malaysia; Mongolia; Myanmar; Philippines; Thailand; and Viet Nam. Of these, the first four countries are "high-income" while the rest are "others".

While our analysis looks primarily at East and Southeast Asia, our results have implications for other parts of developing Asia as well. For example, although intra-South Asian trade is still relatively low, Bangladesh, Pakistan, Sri Lanka and other subregional economies are likely to reap greater benefits as trade integration among South Asian countries progresses further in the future. In particular, just as East and Southeast Asia stand to benefit from the PRC's rapid growth, South Asia stands to benefit from India's rapid growth. More generally, any evidence that trade integration in East and Southeast Asia is contributing to the two subregions' recovery and growth will provide some grounds for optimism about the prospects of intra-regional trade to do the same for other parts of developing Asia.

II. Growth of Intra-Asian Trade, Rise of the PRC, and the PRC as an Engine of Growth

This paper is motivated by the hopes and optimism surrounding a new potential source of demand and growth, which may compensate for the weakening of an existing source of demand and growth. Those hopes and optimism are predicated on two stylized facts: the rapid growth of intra-Asian trade and the rise of the PRC as an economic force of global significance. In purely quantitative terms, trade among Asian countries, especially among East and Southeast Asian countries, has increased noticeably in recent years. Although much of this trade is currently trade in parts and components rather than trade in final goods, the very fact that Asian countries are trading more with each other provides some grounds for optimism about the future emergence of more substantive intra-regional trade in which final goods play a bigger role. In other words, the quantitative growth of intraregional trade holds out the promise that it may someday become a source of demand and growth in the region, as it is in the EU.

The stunning rise of the PRC as a global economic heavyweight potentially means the rise of a large and growing market for Asian exports. Although the PRC tends to be stereotyped as the factory of the world that sells manufactured goods to all corners of the world, the country's sheer size and growth means that it is also an importer of global influence. For example, the PRC's voracious appetite for raw materials has had a perceptible effect on global commodity markets. More generally, the PRC is not only growing at exceptionally rapid rates on a sustained basis, but it is also a huge country, which is home to more than a quarter of humanity. As such, in contrast to, say Malaysia or Singapore, or even Korea, the PRC is seen as a continental economy with a vibrant domestic demand and economy. To some extent, this perception has been borne out by the fact that the PRC's growth rate slowed down to "only" 9.0% in 2008 and a projected 8.2% in 2009 while the rest of East and Southeast Asia is barely managing to grow at all. In fact, Korea; Taipei, China; Hong Kong, China; Malaysia; and Thailand are all projected to contract in 2009.

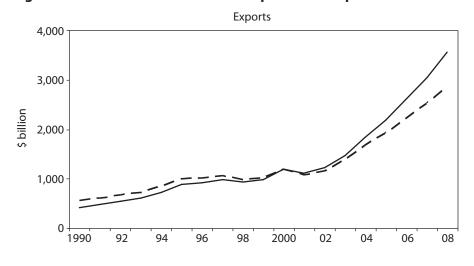
The combination of the two stylized facts has breathed life into the PRC-as-anengine-of-recovery-and-growth hypothesis. This is a special variant of the intra-Asian trade-as-an-engine-of-recovery-and-growth hypothesis, which recognizes the special role of the PRC as the dynamic center of the growing trade-based integration of the region's real economies. The remarkable resilience of the PRC in the face of the global crisis has given further impetus to the notion that the PRC can supplement the US as a new growth center for the entire region. To be sure, the rise of the PRC does not only present opportunities but also challenges for the region. Above all, the PRC's rise as a global manufacturing center poses a serious competitive threat to the third-country exports of regional countries. However, there is a growing tendency to view the PRC as a large and growing market rather than a competitor in other markets. The rethinking among PRC's neighbors is born of urgent necessity—to find a new source of growth—and rooted in cold hard reality—the stunning transformation of the PRC into an economic superpower.

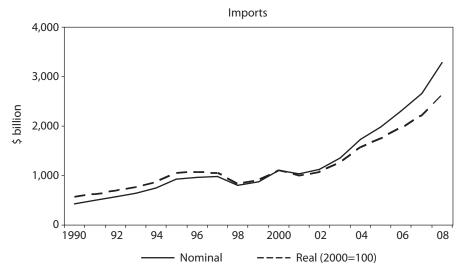
A. Growth of Intra-Regional Trade in East and Southeast Asia

Despite the multidimensional origins developing Asia's economic success, the one common ingredient that stands out is its trade dependence. East and Southeast Asian countries in particular have successfully integrated themselves into the global real economy by trading extensively with the outside world. From 1990 to 2008, their exports grew from US\$424.6 billion to US\$3.6 trillion in nominal terms and from US\$559.6 billion to US\$2.8 trillion in real terms, and imports grew from US\$429.0 billion to US\$3.3 trillion in nominal terms and from US\$565.4 billion to US\$2.6 trillion in real terms (Figure 1). Furthermore, the share of those countries' exports in global exports rose from 12.3% in 1990 to 21.9% in 2008, and the share of their imports in global imports similarly rose from 12.0% to 19.4% during the same period (Figure 2). Mirroring the rise in East and Southeast Asia's share of global trade, the region's share of global gross domestic product (GDP) rose from 5.5% in 1990 to 12.3% in 2008 (Figure 3). In short, developing

Asia is a highly trade-dependent region, which has basically exported and traded its way out of typical Third World poverty to become one of the centers of gravity of the world economy.

Figure 1: East and Southeast Asia's Exports and Imports





East and Southeast Asia comprises Brunei Darussalam; Cambodia; People's Republic of China; Hong Kong, China; Indonesia; Note: Lao People's Democratic Republic; Republic of Korea; Malaysia; Mongolia; Myanmar; Philippines; Singapore; Taipei, China; Thailand; and Viet Nam.

Source: Staff estimates based on data from CEIC Data Ltd. Company, downloaded 6 July 2009, and International Monetary Fund, Direction of Trade Statistics, May 2009.

25 Percent of world 20 15 1990 92 94 96 2000 02 04 06 08 98 **Exports** ---- Imports

Figure 2: East and Southeast Asia's Share in World Exports and Imports

Source: Staff estimates based on data from CEIC Data Ltd. Company, downloaded 6 July 2009, and International Monetary Fund, Direction of Trade Statistics, May 2009.

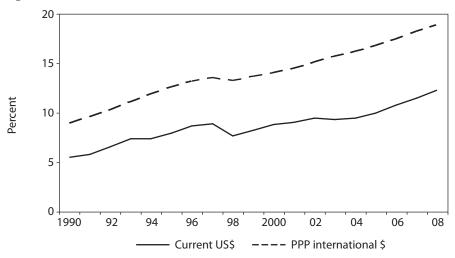


Figure 3: East and Southeast Asia's Share in World GDP

GDP = gross domestic product, PPP = purchasing power parity. Source: International Monetary Fund, World Economic Outlook Database (April 2009).

In recent years, the region's countries are increasingly trading with each other rather than with countries outside the region. Superficially, this suggests that intra-regional trade has already become a major source of demand and growth. Superficial or not, aggregate bilateral trade data unambiguously point to a rise in the relative share of intra-Asian trade. Again, this trend is particularly evident for East and Southeast Asian countries. For this group of countries as a whole, the share of intra-regional trade has risen from 31.7% in 1990 to 42.0% in 2008 (Figure 4). For each member of this group, the unmistakably clear overall pattern is one of an increase in the relative importance of intra-regional trade at the expense of extra-regional trade (Figure 5). The pattern is evident for all subgroups of countries within the region—PRC, the newly industrialized economies, as well as the major ASEAN economies. The implication is that in purely quantitative terms, East and Southeast Asian countries are trading more with each other and less with the rest of the world. Therefore, not only is trade important for the region, but the geographical profile of the region's trade is shifting toward trade with neighbors.

15 Percent 10 5 1990 2000 Current US\$ ---- PPP international \$

Figure 4: Share of Intra-Regional Trade, East and Southeast Asia

PPP = purchasing power parity.

Source: Staff estimates based on data from CEIC Data Ltd. Company, downloaded 6 July 2009, and International Monetary Fund, Direction of Trade Statistics, May 2009.

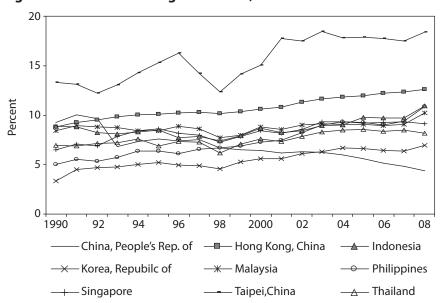


Figure 5: Share of Intraregional Trade, Selected East and Southeast Asian Economies

Source: Staff estimates based on data from CEIC Data Ltd. Company, downloaded 6 July 2009, and International Monetary Fund, Direction of Trade Statistics, May 2009.

To a large extent, the quantitative shift from extra-regional trade to intra-regional trade had been put forth as the primary supportive evidence of the decoupling hypothesis, according to which the dependence of Asian growth on the US business cycle had fallen markedly. The underlying idea was that increasingly rich Asian countries were now selling more of their goods to each other so that a US recession would have a smaller impact on their economic performance than before. The story was plausible but it suffered from a critical flaw—it failed to look at the structure of the growing intra-Asian trade. A large and growing number of studies used disaggregated trade data to examine the structure of intra-Asian trade (see, for example, Athukorala and Kohpaiboon [2009] and Athukorala and Yamashita [2006]). According to the overall balance of evidence, a large part of intra-Asian trade reflects intra-Asian production fragmentation, in which different stages of the production process were carried out in different Asian countries. More specifically, the PRC has emerged as the preferred location for assembling parts and components produced in other East and Southeast Asian countries. International production fragmentation is, in effect, international vertical specialization in which each country specializes in a different stage of the production process. As such, East and Southeast Asian countries are likely to enjoy the gains from the intra-regional specialization and division of labor. Nevertheless, the production fragmentation-oriented nature of intra-Asian trade casts serious doubts on the validity of the regional trade-as-an-engine-of-recoveryand-growth-hypothesis.

B. The Stunning Rise of the PRC and its Implications for Developing Asia

One of the most significant developments in the global economic landscape over the last 30 years is the integration of the PRC into the world economy and its stunningly rapid growth. What makes the PRC's rise so special is the sheer size of the country and hence its global and regional impact. The transformation of the PRC, which began 30 years ago, is gaining even more speed in recent years. From 1990 to 2008, the share of the PRC's GDP in world GDP rose sharply from 1.7% to 7.3% (Figure 6). Given the central role of trade and openness in the relentless expansion of the PRC's economy, its trade has also experienced a similarly rapid growth. The share of the PRC's exports in total world exports rose from 1.8% in 1990 to 9.1% in 2008, and its share of world imports rose from 1.5% to 7.0% during the same period (Figure 7). The PRC's emergence as a global economic power thus closely parallels its emergence as a global trading power.

9 Percent of world GDP 6 3 1990 92 96 98 2000 02 04 06 80 --- PPP international \$ Current US\$

Figure 6: Share of People's Republic of China in World GDP

GDP = gross domestic product, PPP = purchasing power parity. Source: International Monetary Fund, World Economic Outlook database (April 2009).

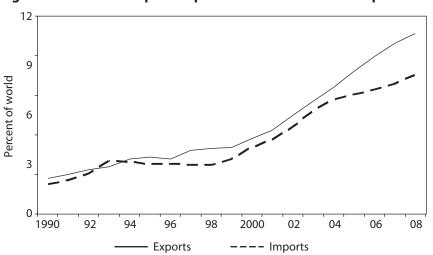


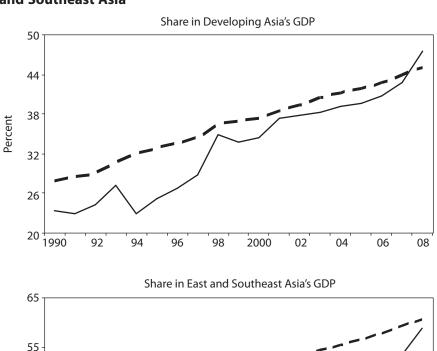
Figure 7: Share of People's Republic of China in World Exports and Imports

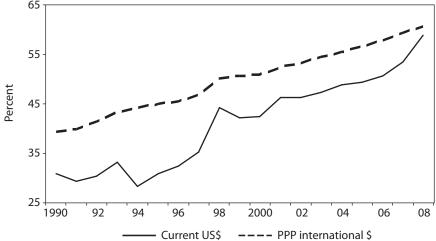
Sources: CEIC Data Ltd. Company, downloaded 6 July 2009, and International Monetary Fund, Direction of Trade Statistics, May 2009.

In the context of East and Southeast Asia, the rise of the PRC signals the arrival of a neighborhood heavyweight with far-reaching ramifications throughout the region. The PRC's share of developing Asia's GDP rose from 23.4% in 1990 to 47.6% in 2008. During the same period, its share of East and Southeast Asian GDP rose from 31.0% to 58.9% (Figure 8). Similarly, the PRC's exports account for a large share of the region's total exports, and the same holds true for its imports (Figure 9). In principle, the PRC's

growing weight in developing Asia's economy and trade is a welcome development that offers the promise of a large, fast-growing, and geographically close market. At the same time, elements of both competition and complementarity exist between the PRC and its neighbors. In particular, competition from products from the PRC may displace its neighbors' exports in third-country markets (see, for example, Eichengreen, Rhee and Tong [2007] and Greenway, Mahabir, and Milner [2008]). Potential competition is most pronounced in, but not limited to, the trade sphere. The Association of Southeast Asian Nation countries, for example, have expressed concerns about the PRC's competitive threat to foreign direct investment inflows.

Figure 8: Share of People's Republic of China in GDP of Developing Asia and East and Southeast Asia





GDP = gross domestic product, PPP = purchasing power parity. Source: International Monetary Fund, World Economic Outlook Database (April 2009).

50 40 30 Percent 20 10 0 1990 92 94 96 98 2000 02 04 06 80 ---- Imports **Exports**

Figure 9: Share of People's Republic of China in East and Southeast Asia's Exports and Imports

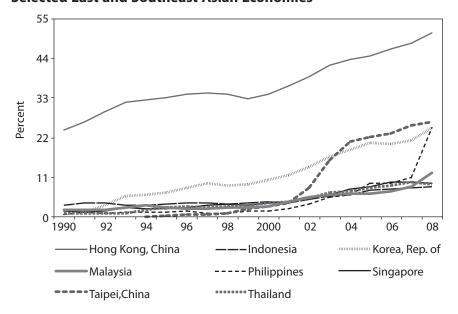
Source: Staff estimates based on data from CEIC Data Ltd. Company, downloaded 6 July 2009, and International Monetary Fund, Direction of Trade Statistics, May 2009.

However, it is important to reiterate that regional economic growth is not a zero-sum game in which the PRC's growth has to come at the expense of the rest of the region. There is every reason to believe that a richer PRC can pull up its neighbors by providing a huge future market for goods, a source of millions of tourists, profitable investment opportunities, demand for financial and other services in which the PRC lags behind, and countless other mutually beneficial activities. That is, the PRC's spectacular growth can be a positive-sum game that can imbue the entire region with a new sense of economic dynamism. The prospects for such optimism depend on the extent to which the PRC's own growth is fueled by domestic demand rather than exports. In this connection, a promising stylized fact is that in sharp contrast to much of Asia, the PRC has maintained a surprisingly robust growth rate in the face of an unprecedented global shock. Such resilience is what has breathed life into the popular view that the PRC can become a new engine of recovery and growth for the region and, less plausibly, the entire world. In fact, since the outbreak of the global crisis, there has been a growing tendency within the region to highlight potential complementarities rather than potential competition with the PRC. This is partly wishful thinking borne out of a desperate search for demand and growth, but it is also firmly rooted in the reality of a new huge fast-rising heavyweight in the region.

C. Trade with the PRC as an Engine of Regional Growth

The confluence of the two above mentioned stylized facts—i.e., the rapid growth of intra-Asian trade and the stunning rise of the PRC as a globally significant economic power—points to a natural candidate for reviving the region's short-run growth and longrun dynamism, namely exports to and trade with the PRC. In fact, the PRC has already emerged as the center of intra-Asian trade and much of the rapid growth of intra-Asian trade reflects the growth of trade between the PRC and other countries in the region. Exports to the PRC as a share of total exports have grown rapidly in each of the major economies in East and Southeast Asia from 1990 to 2008 (Figure 10). The pattern has been similar for imports (Figure 11). On the other hand, the share of the PRC's exports to East and Southeast Asia has fallen, as has the share of its imports from the region (Figure 12). The fact that Asian countries export more to and trade more with the PRC does not, in and of itself, indicate that the PRC has become an engine of growth. As noted earlier, the growth of trade of the PRC with its neighbors largely reflects the growth of intra-Asian production fragmentation or vertical specialization. While the PRC has increasingly become the central hub of intra-Asian trade, it has become the center of a regional production network rather than an independent source of demand for the region.

Figure 10: Exports to the People's Republic of China as Share of Total Exports, Selected East and Southeast Asian Economies



Source: Staff estimates based on data from CEIC Data Ltd. Company, downloaded 6 July 2009, and International Monetary Fund, Direction of Trade Statistics, May 2009.

33 Percent 22 11 94 80 1990 98 2000 04 06 Hong Kong, China -Indonesia Korea, Rep. of Malaysia - Philippines Singapore ----Taipei,China ******Thailand

Figure 11: Imports from the People's Republic of China as Share of Total Imports, **Selected East and Southeast Asian Economies**

Source: Staff estimates based on data from CEIC Data Ltd. Company, downloaded 6 July 2009, and International Monetary Fund, Direction of Trade Statistics, May 2009.

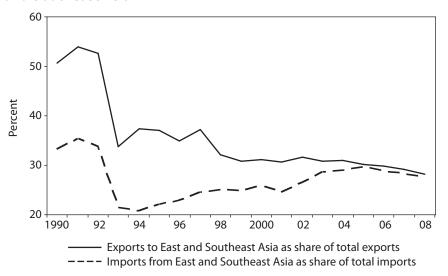


Figure 12: People's Republic of China's Exports to and Imports from East and Southeast Asia

Source: Staff estimates based on data from CEIC Data Ltd. Company, downloaded 6 July 2009, and International Monetary Fund, Direction of Trade Statistics, May 2009.

The sheer size and dynamism of the PRC's economy means that aside from its central role in intra-Asian production fragmentation, the PRC has a special, unique role to play. Even though, say, Hong Kong, China or Singapore trade extensively with other Asian countries and are highly integrated into the regional economy, they are small open economies with no perceptible impact on regional trade and growth. The same can be said for even larger regional economies such as Korea. The exact share of domestic demand in total GDP or growth accounting exercises, which purport to show the percentage of GDP growth that is attributable to domestic demand, matters much less than resilience in the face of a severe external shock in illustrating the presence or absence of a robust domestic economy. In a sense, the unprecedented global crisis is a stress test of the highest order for the domestic economy. The PRC's growth performance in 2008 to 2009, despite decelerating from 2003 to 2007, means that it has passed the stress test with flying colors. The perception of the PRC as a continental economy with a sustainable, resilient domestic economy has thus found a great deal of support. The big tantalizing question is this: what is the likelihood that the promise of the PRC-asan-engine-of-recovery-and-growth will be converted into reality? To answer that central question, we turn to the evolving structure of the PRC's trade in the next section.

III. Evidence from the PRC's Trade Data: **Relative Importance of Parts and/or Components Versus Final Goods in the PRC's Imports** from Developing Asia

Whether the PRC's imports from other developing Asian countries can have an independent positive impact on those Asian countries' growth depends critically on whether (i) those imports are derived from demand for final goods in the US and other industrialized countries, or (ii) those imports reflect the PRC's own demand for final goods. To the extent that the PRC's imports are imports of parts and components from the rest of the region for assembly into final goods and export outside the region, the PRC cannot serve as an independent source of demand and growth. On the other hand, if the PRC's imports are imports of final goods for its own consumption, then its demand can have a direct positive impact on growth in other countries of the region. Both the derived demand hypothesis and the PRC-as-engine hypotheses are ultimately hypotheses about the structure of the PRC's trade with other countries in the region. This is why we need to look at the structure of the PRC's trade with its neighbors, as well as its evolution over time, as we do in this section.

At a broader conceptual level, the key issue is whether the share of parts and components in the PRC's imports from the rest of the region is rising, falling, or stable. A rising share of parts and components in the PRC's intra-Asian imports would support the notion that the PRC's role in intra-Asian trade is primarily that of an assembler of

parts and components imported from the rest of the region, and thus lend support to the derived demand hypothesis. On the other hand, a falling share of parts and components in the PRC's intra-Asian imports would indicate that the PRC's role as an assembler for the region is weakening, which can be interpreted as indirect evidence of the emergence of a more substantive trade between the PRC and the rest of Asia based on demand for final goods from the PRC.

A vast literature based on standard trade data analysis unambiguously points to a secular increase in intra-regional trade among East Asian countries since the early 1980s. Examples of this literature include Kwan (2001), Drysdale and Garnaut (1997), and Frankel and Wei (1997). The standard trade data analysis used in this literature implicitly assumes trade based on horizontal specialization—i.e., exchange of goods that are produced from start to finish in one country. International production fragmentation—i.e., carrying out different production activities in different countries—has become an increasingly significant structural characteristic of economic globalization in recent decades (see, for example, Brown and Linden [2005], Brown et al. [2004], and Sturgeon [2003]). In particular, trade based on fragmentation or vertical specialization is playing a key role in trade among East and Southeast Asian countries (see, for example, Kimura and Ando [2005], Ng and Yeats [2003], McKendrick et al. [2000], Borrus [1997], and Dobson and Chia [1997]).

A number of studies have examined the structure of the PRC's trade with its Asian neighbors to gauge the extent to which such trade is driven by demand from the US and other economies outside the region. Decomposing trade into basic products, parts and components, and finished goods, Haltmaier et al. (2007) find a large role for parts and components trade in intra-Asian trade, in particular in trade between the PRC and the rest of Asia. They conclude that this evidence supports the conventional wisdom that the PRC is the endpoint of a giant Asian assembly line for exports to the US and elsewhere i.e., the PRC serves as a conduit rather than an engine of growth for the region. Similarly, Athukorala and Yamashita (2009) find that the PRC is the final assembly center in global production networks based in East and Southeast Asia. Athukorala and Yamshita (2008), Ng and Yeats (2001), Athukorala (2005), and Pula and Peltonen (2008) all reconfirm the central role of vertical specialization in intra-Asian trade and conclude that extra-regional trade is likely to remain the region's engine of growth in the foreseeable future.

Α. Description of Disaggregated Trade Data

The data for the study is of monthly frequency and derived from official customs agencies' merchandise trade export and import statistics in the PRC. These are the official international trade statistics released by the Government of the PRC. The data from January 1996 to December 2005 is held by TradeData International and was purchased in earlier years to support earlier research programs by TradeData. The post-2005 data were purchased specifically for this study from government-licensed suppliers of this information. Our trade data covers data for trade in goods or merchandise, and

excludes trade in services. Merchandise trade statistics only record goods that add to or subtract from the stock of material resources of a country by entering (imports) or leaving (exports) its territory.¹

Following Haltmaier et al. (2007), we provide a comprehensive decomposition of trade into four categories: (i) basic goods, (ii) construction materials, (iii) parts and components, and (iv) finished goods. The critical distinction for our purposes is between parts and components on one hand and finished goods on the other. Parts and components are manufactured intermediate goods that are combined with other inputs to produce finished goods. With few exceptions, parts and components cannot be used as finished goods. In contrast, finished goods are goods that can be directly consumed with little or no processing. The two other categories of goods are basic goods—i.e., food and beverages, natural resources and raw materials—and construction materials (e.g., cement). As Haltmaier et al. (2007) point out, classifying the goods into parts and components versus finished goods necessarily involves some subjective discretion and judgment. It is also impossible to know exactly how a good was used as a part and component or finished good once it has been imported.

Haltmaier et al. (2007), as well as most of the other studies that examined the structure of intra-Asian trade, classified goods according to Standard International Trade Classification Revision 3 (SITC Rev. 3). However, the data for this study is collected based on International Harmonised Customs Classifications (HS). The study attempts to reclassify the above mentioned SITC codes into their corresponding HS codes. In addition, in this study "basic goods" was also divided into basic goods and construction materials. To estimate the concordance between SITC codes and HS codes, the study used detailed Australian export and import data sets sourced from the Australian Bureau of Statistics. Within these datasets, Australian trade transactions are classified under both the HS and SITC classifications. A concordance table was created between the two classification sets and used in this study.² However, there are several sources of difference between this study and the Haltmaier, as follows: (i) There is often no clean link between the two classifications. Under one system, an item might be defined under one criteria and under the alternate classification system, the item maybe be defined under a totally different and unrelated criteria. As a consequence, no clean concordance exists between the two. (ii) There will be items that the PRC either exports or imports that are classified under the SITC system that Australia does not trade in, and thus no link between the two will be found in the Australian data. (iii) Both SITC and HS codes change over time. Due to these issues, judgments were made when reconciling the SITC and HS codes. This was particularly the case with regard to the composition of parts and components where 297 different HS classifications are identified as corresponding to the SITC classifications. As a general rule, a conservative pragmatic approach was taken in preparing the concordance—if an item was identified as a part and component under the SITC definition, it was classified as a part and component in this study.

Full technical details about the data used in the empirical analysis are available from the authors upon request.

² The resulting HS definitions are available from the authors upon request.

B. **Share of Parts and Components Versus Finished Goods** in Imports: Key Findings

The PRC-as-an-engine-of-recovery-and-growth hypothesis is predicated on the assumption of a dynamic domestic economy rooted in robust domestic demand. The underlying idea is that of a large and fast-growing PRC absorbing more imports from its neighbors, and thus speeding up their recovery in the short run and enabling more rapid growth in the long run. The validity of this hypothesis depends crucially on whether the PRC directly consumes the imports or processes the imports for export to other countries. Other things being equal, finished goods are more likely to end up being consumed domestically while parts and components are more likely to end up being consumed abroad. Of course, it is entirely possible that parts and components are used as inputs in producing finished goods that are consumed domestically, while finished goods—e.g., capital goods—are used to produce goods that are exported to other countries. Therefore, the relative share of parts and components versus finished goods is an imperfect measure of the relative importance of derived demand versus direct demand in a country's demand for imports.

Nevertheless, given the fact that trade data are incapable of telling us the final use of imports—i.e., whether imports are eventually used for domestic or foreign consumption the decomposition of imports into parts and components versus finished goods is probably the best measure available for making inferences about final use. A smaller share of parts and components in the PRC's imports would indicate a lower relative importance of derived demand, which would weaken the derived demand hypothesis and thus indirectly support the PRC-as-an-engine hypothesis. Furthermore, a falling share of parts and components over time would suggest that the PRC's role as an assembler would be diminishing, with a corresponding increase in its role as a consumer. This is true with respect to the world as a whole but especially with respect to East and Southeast Asia, given the extensive intra-regional production fragmentation discussed earlier.

Before we delve into the share of parts and components, we first review the importance of the PRC in world trade as well as East and Southeast Asia's importance in the PRC's trade. The PRC's share in global exports and imports has been continuously increasing. The PRC's share of global exports has shot up from a little less than 1.9% to 9.3% and its share of global imports has risen from 1.5% to 7.1%. Although the PRC tends to be stereotyped as an export machine, the growth of its imports has been almost as impressive. However, a noticeable gap between the export and import share opens up about 2003, in line with the large current account surplus experienced by the PRC in recent years. East and Southeast Asia's relative importance as a trading partner of the PRC seems to have decreased somewhat during 1996 to 2008 (Figures 13 and 14). However, the decline is much more pronounced for East Asia's share of exports from the PRC—from 35.5% to 27.2%—than it is for imports from the PRC—from 34.2% to 32.9%. To a large extent, the falling share of East Asia in the PRC's trade reflects the

PRC's successful integration into the world economy, in particular its growing success in exporting to more distant markets.

100 80 60 Percent 40 20

Figure 13: Share of the People's Republic China's Exports by Major Region

Source: CEIC Data Company Ltd., downloaded 4 August 2009.

2000

98

East and Southeast Asia

1996

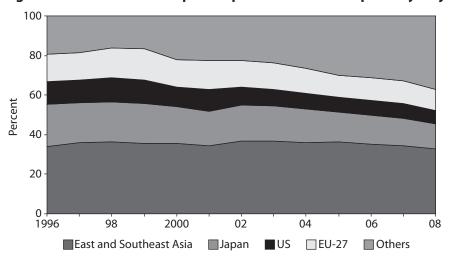


Figure 14: Share of the People's Republic of China's Imports by Major Region

02

Japan

04

■ EU-27

US

06

Others

08

Source: CEIC Data Company Ltd., downloaded 4 August 2009.

From 1996 to 2008, the share of parts and/or components in the PRC's total imports is much higher—averaging 32.8%—than the share of parts and/or components in the PRC's total exports, averaging 17.9% (Figures 15 and 16). The share of final goods in imports from the PRC—averaging 45.2%—is correspondingly much lower than the share of final goods in exports from the PRC—averaging 70.0%. This can be viewed as evidence of the PRC's global role as a net importer of intermediate goods for assembly and reexport to the rest of the world. However, the share of parts and components in imports has been falling while the share of parts and components in exports has been rising. The share of final goods in exports has been falling throughout the sample period. The pattern for the share of final goods in imports is more mixed. Although the share has been rising until about 2003, it has fallen sharply since then.

80 60 Percent 40 20 1996 98 2000 06 Construction ☐ Basic products Final goods Parts and materials components

Figure 15: People's Republic of China's Total Exports by Commodity Classification

Source: TradeData International Pty. Ltd.

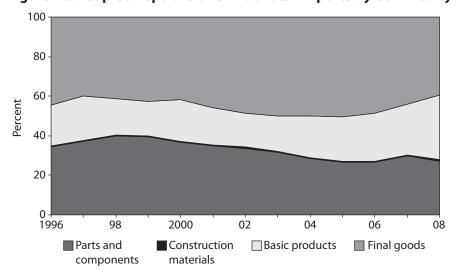


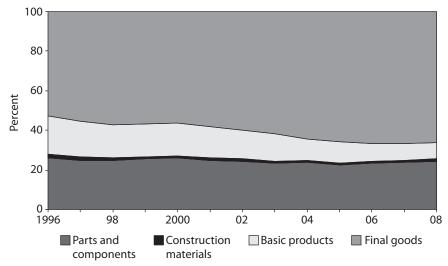
Figure 16: People's Republic of China's Total Imports by Commodity Classification

Source: TradeData International Pty. Ltd.

For our purposes, the most interesting and significant part of our analysis of the PRC's trade structure pertains to the structure of its trade with East and Southeast Asia. As was the case for the world as a whole, the share of parts and components in the PRC's imports from East and Southeast Asia—averaging 38.8%—is substantially higher than the share of parts and components in the PRC's exports to East and Southeast

Asia—averaging 21.2% (Figures 17 and 18). Similarly, for the most part, the share of final goods in exports from the PRC to East and Southeast Asia—averaging 62.0%—exceeded the share of final goods in the PRC's imports from East and Southeast Asia—averaging 51.0%. This suggests that part of the final goods assembled in the PRC is exported to the rest of developing Asia, which is consistent with the plethora of made-in-the PRC manufactured goods found in markets throughout developing Asia. More importantly for our purposes, the share of parts and components and finished goods in the PRC's imports from East and Southeast Asia averages about 38.8% and 51% for the whole sample period, respectively.

Figure 17: People's Republic of China's Exports to East and Southeast Asia by Commodity Classification



Source TradeData International Pty. Ltd.

Figure 18: People's Republic China's Imports from East and Southeast Asia by Commodity Classification



Source: TradeData International Pty. Ltd.

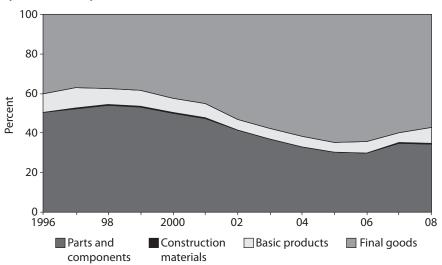
Therefore, while trade in parts and components is indeed a key element of intra-Asian trade, so is trade in finished goods. In a fundamental sense, both derived demand and direct demand may be important drivers of the PRC's demand for Asian imports. There is no reason why a flourishing trade based on production fragmentation cannot coexist alongside a flourishing trade based on the PRC's domestic demand. Crucially, the share of parts and components in the PRC's imports from East and Southeast Asia has decreased substantially from 43.6% to 33.8% from 1996 to 2008, and the share of final goods has increased appreciably from 43.6% to 54.7% during the same period. This can be viewed as weakening of the PRC's regional role as an assembler and a corresponding strengthening of its roles as a consumer. Equivalently, the declining import share of parts and components suggests that direct demand may be playing a greater role in the PRC's demand for imports from its neighbors. Therefore, the prospects for the PRC to act as an engine of recovery and growth seem to have improved in recent years. Overall, the recent pattern of trade between the PRC and East and Southeast Asia indicate that the PRC may be becoming more of a consumer and less of an assembler in the region.

An important caveat to such an interpretation is that the declining share of parts and components in the PRC's imports is the possibility that the PRC is moving up the technological and skill ladder to domestically produce more previously imported sophisticated parts and components. To the extent that this is happening, the falling share of parts and components reflects not so much the diminishing role of the PRC as the end point of the intra-regional Asian production network as the intensification of the PRC's competitive pressures for the rest of Asia. Furthermore, as pointed out earlier, the share of finished goods in the PRC's imports is at best an imperfect measure of the share of imported goods that are consumed in the PRC rather than reexported to other countries. By the same token, the share of parts and components in the PRC's imports is also at best an imperfect measure of the share of imported goods that are reexported to other countries. Therefore, while the declining share of parts and components in imports is significant and interesting, we must exercise a great deal of caution in interpreting this trend as evidence of a decline in the importance of derived demand relative to direct demand.

Within East and Southeast Asia, the decline in the share of parts and components in the PRC's imports is most pronounced for the more developed high-income East and Southeast Asian countries such as Korea; Taipei, China; Hong Kong, China; and Singapore (Figure 19). The share fell sharply from 50.2% in 1996 to 34.5% in 2008 for those four economies as a group. This is significant because intra-Asian trade based on derived demand—i.e., assembly of parts and components into final goods—is most relevant for those countries. These countries as a group are technologically more

advanced than the PRC and hence capable of producing high-tech parts and components that the PRC is not yet capable of producing. At the same time, their high labor costs render relocating the assembly stage of the production process most profitable. This explains why the share of parts and components is visibly higher in the PRC's imports from high-income East and Southeast Asia than it is for imports from other East and Southeast Asia. Therefore, the fact that the decline in the share of parts and components is most visible for East Asian economies that are most likely to engage in vertical specialization with the PRC can be viewed as further evidence of a weakening of its regional role as an assembler. Again, we must exercise caution in making such an interpretation to the extent that the decline in parts and components may be driven by the PRC's closing the technological gap with their more developed neighbors and producing more sophisticated parts and components. The share of parts and components in the PRC's imports from other East and Southeast Asia has also declined—from 23.1% to 19.5% during 1996 to 2008—although not as sharply as for imports from high-income East and Southeast Asia (Figure 20). Finally, despite East and Southeast Asia's dominant role in developing Asia's production fragmentation, the share of parts and components in the PRC's imports from regional economies outside those two subregions is also quite high, averaging 33.2%. However, the share of final goods is far lower—averaging 10.6%—and the share of basic products is far higher—averaging 54.3% (Figure 21).

Figure 19: People's Republic of China's Imports from High-Income East and Southeast Asia by Commodity Classification



Note: Developed East Asia and Southeast Asia covers Hong Kong, China; Republic of Korea; Singapore; and Taipei, China. Source: TradeData International Ptv. Ltd.

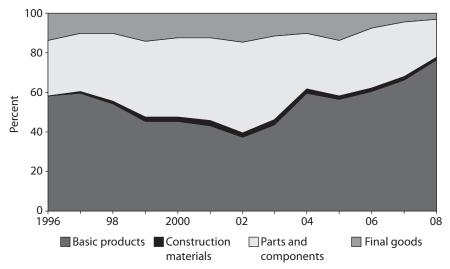
Figure 20: People's Republic of China's Imports from Developing East and Southeast Asia by Commodity Classification



Developing East and Southeast Asia covers Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Mongolia, Myanmar, Philippines, Thailand, and Viet Nam.

Source: TradeData International Pty. Ltd.

Figure 21: People's Republic of China's Imports from Non-East and Southeast Developing **Asia by Commodity Classification**



Note: Non-East and Southeast developing Asia includes Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, Sri Lanka, Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan, Uzbekistan, Cook Islands, Fiji Islands, Kiribati, Republic of Marshall Islands, Federated States of Micronesia, Nauru, Palau, Papua New Guinea, Samoa, Solomon Islands, Timor-Leste, Tonga, Tuvalu, and Vanuatu.

Source: TradeData International Pty. Ltd.

C. Evidence from Trade Balance between the PRC and the Rest of **Developing Asia**

Another key trade indicator that can inform us about the impact of trade with the PRC on the growth of other Asian countries is the trade balance. In an accounting sense, it is net exports rather than exports that capture the positive impact of trade on a country's aggregate demand. Although trade is in and of itself beneficial, unbalanced trade in which one side exports disproportionately more to and imports disproportionately less from the other side raises questions about the distribution of benefits. There are widespread concerns that the PRC's massive trade surplus represents a large stimulus to the PRC's own aggregate demand and hence growth but an equally large leakage of demand from the rest of the world. In fact, such concerns underlie the calls for protectionism against the PRC in the US and elsewhere. In short, trade balance with the PRC matters a lot to the rest of Asia in terms of the magnitude of the stimulus to demand and growth provided by trade with the PRC.

While the PRC runs a trade surplus with East Asia, the surplus is mainly due to the surplus from the trade with Hong Kong, China reflecting the special administrative region's role as a major transshipment center for the Pearl River delta area, which is the hub of the PRC's export-oriented manufacturing (Table 1). If we exclude Hong Kong, the PRC runs a trade deficit with East and Southeast Asia. This deficit is primarily due to trade deficit with more developed East Asian countries such as Korea and Taipei, China. The PRC's trade deficit with more developed East Asian countries, in particular Korea and Taipei, China, has been steadily increasing. However there has been an interesting change in the composition of the trade deficit. In 1996, most of the PRC's trade deficits with Korea and Taipei, China occurred in the parts and components trade. However, by 2007, the final goods trade accounted for more of the PRC's trade deficit with Korea and Taipei, China than the parts and components trade.

Table 1: Trade Balance with Developing Asian Economies, People's Republic of China (\$ billion), 1996 and 2007

	Total		Basic products		Construction materials		Parts and components		Final goods	
	1996	2007	1996	2007	1996	2007	1996	2007	1996	2007
East and Southeast										
Asia	7.41	31.25	2.30	-5.93	0.86	2.67	-7.57	-14.11	11.82	48.60
High-income East										
and Southeast Asia	8.09	58.20	5.76	9.35	0.52	1.92	-7.99	-16.08	9.80	63.02
Hong Kong, China	25.92	171.46	5.14	8.59	0.26	0.50	4.62	32.23	15.90	130.14
Singapore	0.25	12.16	-0.91	0.46	0.08	0.22	0.08	-0.19	1.00	11.67
Rep. of Korea	-4.79	-47.92	1.44	0.39	0.18	1.05	-4.69	-18.06	-1.72	-31.29
Taipei, China	-13.29	-77.51	0.09	-0.09	0.00	0.15	-8.00	-30.06	-5.38	-47.50
Other East and										
Southeast Asia	-0.68	-26.94	3.46	-15.28	0.34	0.75	0.42	1.97	2.02	-14.42
Brunei Darussalam	0.04	-0.13	0.00	-0.23	0.02	0.01	0.00	0.03	0.02	0.07
Cambodia	0.06	0.83	0.00	0.11	0.01	0.03	0.01	0.53	0.05	0.15
Indonesia	-0.84	0.23	-1.41	-5.45	0.05	0.12	0.04	2.12	0.48	3.44
Lao PDR	0.02	0.09	0.00	-0.06	0.00	0.00	0.00	0.01	0.02	0.14
Malaysia	-0.81	-11.04	-0.99	-4.40	0.07	0.15	-0.15	-2.48	0.25	-4.31
Mongolia	-0.06	-0.64	-0.07	-1.20	0.00	0.03	0.00	0.11	0.01	0.42
Myanmar	0.35	1.32	-0.03	-0.08	0.02	0.03	0.07	0.53	0.28	0.80
Philippines	0.64	-15.62	-0.01	-0.24	0.07	0.10	0.15	-1.34	0.44	-14.14
Thailand	-0.64	-10.67	-0.82	-3.60	0.02	0.15	0.04	-1.44	0.12	-5.78
Viet Nam	0.56	8.69	-0.13	-0.13	0.08	0.13	0.26	3.90	0.35	4.79
Non-East and										
Southeast Asia	0.82	25.81	-0.60	-11.74	0.15	0.59	0.41	7.06	0.60	29.21

Source: Staff estimates based on data from TradeData International Pty. Ltd.

This change closely mirrors and is consistent with the declining share of parts and components in the PRC's imports from high-income East and Southeast Asia. The PRC continues to run trade deficits with high-income East and Southeast Asia in 2008 and 2009, but the projected deficits for 2009 are lower than for 2008 (Table 2). The PRC also runs a trade deficit with other East and Southeast Asia but this is primarily due to trade in basic goods, especially in 2008 and 2009. The PRC runs a trade surplus in parts and components with other East and Southeast Asia and non-East and Southeast Asia, which supports our earlier argument that the PRC's role as a regional assembler pertains primarily to high-income East and Southeast Asia. The PRC experiences a trade surplus in final goods vis-à-vis high-income East and Southeast Asia. Once again, however, this is mainly due to its trade surplus with Hong Kong. If we exclude Hong Kong, the PRC runs a large trade deficit in final goods trade with high-income East and Southeast East Asia. The PRC's final goods trade with other East and Southeast Asia is more or less balanced, and the PRC runs a surplus in its final good trade with non-East and Southeast Asia.

Table 2: Trade Balance with Developing Asian Economies, People's Republic of China (\$ billion), 2008 and H1 2009

	Total		Basic products		Construction materials		Parts and components		Final goods	
	2008	H1 2009	2008	H1 2009	2008	H1 2009	2008	H1 2009	2008	H1 2009
East and Southeast										
Asia	58.63	16.00	-14.84	-0.71	3.42	0.93	-5.64	-6.46	75.65	22.24
High-income East										
and Southeast Asia	74.34	18.32	4.57	2.88	2.15	0.61	-12.02	-6.83	79.65	21.68
Hong Kong, China	177.83	42.16	10.76	2.77	0.43	0.14	33.30	7.62	133.33	31.64
Singapore	12.20	3.24	-2.18	-0.10	0.25	0.08	0.67	-0.20	13.47	3.45
Rep. of Korea	-38.25	-11.45	-2.43	0.15	1.35	0.31	-17.43	-6.89	-19.73	-5.01
Taipei,China	-77.44	-15.63	-1.58	0.06	0.12	0.08	-28.56	-7.36	-47.42	-8.40
Other East and										
Southeast Asia	-15.71	-2.32	-19.41	-3.59	1.27	0.32	6.38	0.37	-4.0	0.56
Brunei Darussalam	0.05	0.03	-0.07	-0.01	0.01	0.00	0.05	0.01	0.06	0.03
Cambodia	1.06	0.27	0.16	0.04	0.04	0.01	0.63	0.16	0.22	0.05
Indonesia	2.83	0.40	-7.63	-1.54	0.26	0.05	4.12	0.69	6.08	1.20
Lao PDR	0.12	0.01	-0.11	-0.08	0.00	0.00	0.02	-0.01	0.19	0.10
Malaysia	-10.75	-2.49	-5.64	-1.03	0.35	0.07	-2.45	-0.79	-3.01	-0.74
Mongolia	-0.63	-0.09	-1.39	-0.22	0.06	0.01	0.09	0.01	0.61	0.11
Myanmar	1.33	0.44	-0.37	-0.08	0.02	0.02	0.59	0.16	1.06	0.32
Philippines	-10.41	-0.76	0.29	0.29	0.14	0.05	-0.74	-0.35	-10.10	-0.74
Thailand	-10.11	-2.77	-4.41	-0.87	0.21	0.05	-0.66	-0.62	-5.24	-1.33
Viet Nam	10.80	2.64	-0.24	-0.09	0.18	0.06	4.73	1.11	6.13	1.56
Non-East and										
Southeast Asia	38.29	10.83	-18.01	-3.31	0.63	0.15	13.66	3.62	41.44	10.15

Source: Staff estimates based on data from TradeData International Pty. Ltd.

The clear overall pattern that emerges from the trade balance data is that in striking contrast to its trade with the rest of the world, in particular the US, the PRC does not run a large and persistent trade surplus vis-à-vis developing Asia. In fact, once we exclude the PRC's large trade surplus with Hong Kong, China, which reflects the territory's role as a transshipment hub between southeastern PRC and the world, developing Asia runs a trade surplus with the PRC. This lends further support to the notion that trade with the PRC provides a positive stimulus to demand and growth for the rest of the region. The fact that final goods account for a growing share of the PRC's trade deficit with developing Asia gives additional hope that it is becoming less of an assembler and more of a consumer. At a minimum, the absence of a large imbalance in favor of the PRC should help to put rest to concerns that the benefits of intra-regional trade accrue disproportionately to the PRC.

D. The PRC as an Engine of Recovery from the Global Crisis

We now sift through trade data up to June 2009 to see if there are any tangible signs that the PRC's relatively healthy economy is helping the region to recover from the global crisis. Although the impact of the global crisis on the PRC's own growth has been far from insignificant, the PRC continues to grow rapidly, with GDP growth for 2009 projected to be a robust 8.2%. This is in sharp contrast to the rest of the region and indeed the world. The primary channel through which the PRC can help the region recover is the trade channel. Unlike the small open economies of developing Asia, the PRC has a sufficiently large domestic economy that can cushion the collapse of external demand and, it is hoped, provide a much-needed source of demand for its smaller neighbors as well. The evolution of monthly global imports by major economies from January 2006 to June 2009 clearly shows the negative impact of the global financial and economic crisis (Figure 22). What is striking from the figure is that although the PRC's imports have collapsed along with those of the other major economies until December 2008, they have rebounded sharply since January 2009. While the EU is also showing some faint signs of a recovery in imports, the signs are much clearer for the PRC. In fact, the PRC's imports surged by 85% from US\$51.3 billion to US\$94.8 billion from January to July 2009. Developing Asia and the rest of the world stand to benefit from the PRC's reinvigorated appetite for imports.

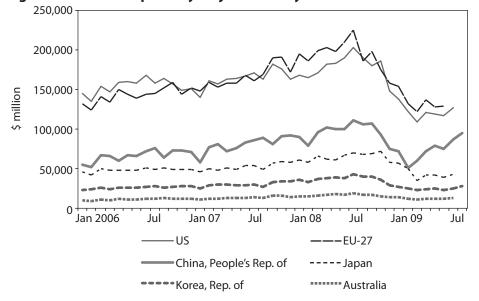


Figure 22: Global Imports by Major Economy

Source: CEIC Data Company Ltd., downloaded 14 August 2009.

More direct evidence about the PRC's role as a regional engine of recovery from the global crisis can be found in data on trade between the PRC and East and Southeast Asia. The PRC's imports from East and Southeast Asia fell from US\$49.9 billion in July 2008 to US\$19.9 billion in January 2009 in line with the intensification of the global crisis before rebounding to US\$37.4 billion by June 2009 (Table 3). Exports from the PRC to East and Southeast Asia have also followed a similar pattern of decline and recovery but, significantly, the magnitude of the recovery in the first half of 2009 has been much more limited, rising from US\$29.1 billion to US\$35.0 billion (Table 4). As such, the PRC has been a significant source of additional net demand for the region in 2009. The pattern of import revival is similar in every subregion of Asia—high-income East and Southeast Asia, other East and Southeast Asia, and non-East and Southeast Asia. The biggest beneficiaries of the PRC's renewed appetite for imports from January to June 2009 has been high-income East and Southeast Asia, which saw its exports rise by US\$8 billion, from US\$9.9 billion to US\$17.9 billion. Other East and Southeast Asia and non-East and Southeast Asia experienced more modest gains in their exports to the PRC—US\$3.5 billion and US\$0.4 billion, respectively—during the same period. Overall, Asian countries seem to have benefited substantially from the revival of imports from the PRC in the first half of 2009, which can be viewed as evidence that the PRC is leading the region out of the global crisis.

Table 3: People's Republic of China's Imports (\$ billion), January 2008–June 2009

	Imports (from)												
Period	US	EU-27	East and Southeast Asia	Japan	High-Income East and Southeast Asia	Other East and Southeast Asia	Non-East and Southeast Asia	Others					
2008	7.1	13.0	41.0	11.1	21.5	8.4	2.9	19.2					
2008	6.1	10.6	35.5	10.6	17.6	7.3	2.7	18.3					
2008	7.1	13.4	42.9	12.7	21.1	9.0	2.9	21.9					
2008	7.8	14.8	46.1	14.0	23.1	9.0	3.7	21.9					
2008	6.9	14.3	43.9	12.5	22.5	8.9	3.4	24.0					
2008	6.6	14.4	44.3	13.6	22.3	8.5	2.8	24.3					
2008	7.2	16.7	49.9	15.0	25.5	9.4	2.6	26.7					
2008	6.5	15.5	45.4	13.5	22.8	9.0	2.5	27.5					
2008	7.1	15.3	46.1	13.8	23.1	9.2	2.2	26.5					
2008	6.2	13.3	41.0	12.9	20.3	7.8	1.9	22.1					
2008	6.2	12.1	31.3	10.4	14.7	6.1	1.3	16.8					
2008	6.7	12.4	30.5	10.5	14.0	5.9	1.6	13.9					
2009	4.8	9.1	19.9	6.0	9.9	4.0	1.3	9.9					
2009	5.2	9.8	25.6	8.1	12.4	5.1	1.7	10.9					
2009	6.2	11.7	31.5	9.5	15.5	6.5	1.9	13.7					
2009	6.6	12.9	34.1	10.6	16.7	6.7	1.9	16.4					
2009	5.7	12.2	31.7	8.9	16.2	6.6	1.7	17.1					
2009	6.1	15.0	37.4	11.9	17.9	7.5	1.7	19.3					

EU = European Union, US = United States.

Source: Staff estimates based on data from TradeData International Pty. Ltd.

Table 4: People's Republic of China's Exports (\$ billion), January 2008–June 2009

					Exports (to)			
Period	US	EU-27	East and Southeast Asia	Japan	Developed East and Southeast Asia	Developing East and Southeast Asia	Non-East and Southeast Asia	Others
2008	19.2	25.7	40.2	9.1	24.5	6.5	4.9	19.9
2008	15.5	19.7	33.1	7.7	19.9	5.4	3.6	15.5
2008	18.8	23.1	43.6	9.3	27.1	6.9	4.9	18.8
2008	20.9	25.6	45.6	10.3	27.7	7.4	5.7	21.2
2008	21.2	26.0	44.3	9.4	27.5	7.2	6.1	23.0
2008	21.3	26.3	44.6	9.5	27.7	7.2	6.2	22.9
2008	23.6	29.8	49.4	10.3	30.7	8.1	6.6	27.5
2008	24.1	30.0	47.7	9.7	30.4	7.4	6.0	27.3
2008	24.7	29.5	48.8	10.7	30.6	7.2	6.6	27.2
2008	23.6	28.3	45.5	10.3	28.3	6.7	6.2	24.8
2008	20.4	25.7	41.0	10.0	24.6	6.2	6.3	21.7
2008	19.2	23.7	40.5	10.0	23.8	6.5	5.8	22.3
2009	17.0	20.5	29.1	8.0	16.3	4.7	4.6	16.9
2009	11.6	13.4	25.0	5.5	15.7	3.7	3.2	10.5
2009	16.4	18.7	34.4	8.0	20.6	5.7	5.0	15.8
2009	17.2	18.7	34.1	7.8	20.2	5.9	4.9	17.1
2009	16.7	18.6	32.5	6.9	19.7	5.9	4.7	16.2
2009	17.7	20.3	35.0	7.3	21.5	6.1	4.8	17.7

EU = European Union, US = United States.

Source: Staff estimates based on data from TradeData International Pty. Ltd.

IV. Concluding Observations— **Toward a Broader Trade Openness**

Overall, our empirical evidence suggests that the PRC may not yet be an independent source of demand and growth for East and Southeast Asia, but that it is beginning to become one. Although the PRC's trade with its neighbors has grown rapidly in recent years, our evidence confirms the conventional wisdom that much of this trade reflects trade in parts and components—i.e., the PRC importing parts and components from the region for assembly and export to the US and other industrialized countries. While intraregional trade in parts and components benefits the region by allowing for specialization and division of labor, it casts doubts about the PRC's capacity to serve as an independent regional engine of recovery in the short run and growth in the long run. However, the share of final goods exceeds the share of parts and components in the PRC's imports from East and Southeast Asia, which suggests that its role as a consumer is at least as important as its role as an assembler. Critically, there has been a secular shift from parts and components toward final goods in the composition of the PRC's imports from the two subregions, suggesting that the PRC is becoming more of a consumer and less of an assembler. This gives some hope that demand from the PRC can help to offset the impact of negative extra-regional shocks such as the current global crisis and provide its neighbors with an additional independent source of demand. The broader implication

for the rest of developing Asia is that intra-regional trade offers the promise of a new independent source of growth in the future. This is especially true for South Asia, where a large and fast-growing Indian economy has the potential to lift up the entire subregion to a higher plateau through more intra-regional trade.

The pronounced impact of the global crisis on developing Asia's growth is partly a result of the unbalanced structure of its trade—i.e., overdependence on a few extraregional markets, especially the US-and partly the result of unbalanced structure of aggregate demand—i.e., excessive dependence on external rather than domestic demand. The second, broader imbalance was analyzed extensively in the Asian Development Outlook 2009. The resolutions of the two imbalances are intimately related with each other. The emergence of a stronger and dynamic self-sustaining domestic economy in the countries of the region will facilitate the growth of a more substantive intra-regional trade based on final goods. In the meantime, instead of simply waiting for the long term, the countries of the region can speed up intra-regional trade in final goods by removing behind-the-border obstacles to trade such as burdensome customs procedures, and taking other measures to stimulate intra-regional trade, such as improving the intra-regional transportation infrastructure. An even better strategy would be to liberalize trade with both intra-regional and extra-regional partners. As the experience of the EU and North American Free Trade Agreement show, vibrant intra-regional and extra-regional trade is by no means mutually exclusive.

In the final analysis, whether the region continues to rely wholesale on an unreformed export-led growth strategy of the past, which is predicated on ever rising extra-regional demand for the region's exports, or instead makes adjustments toward a broader openness that relies more on domestic demand and intra-regional trade, matters enormously for the welfare of the region. The former course of action implies doing nothing and waiting for the US economy to fully regain its vitality, and being exposed to continuous vulnerability to the US business cycle in the future. It also implies a secular decline in the region's long-term growth if there were to be a secular decline in the US appetite for imports. The latter course of action implies the self-enlightened pursuit of a more balanced growth strategy that enables domestic demand and intra-regional trade to become more significant sources of demand and growth. This requires the removal of a wide range of deep-seated structural distortions against domestic demand and intraregional trade. As domestic economies evolve toward a higher level of internal dynamism, strengthening regional cooperation can speed up the emergence of a more robust intraregional trade. Greater Mekong Subregion (GMS) and Central Area Regional Economic Cooperation (CAREC) are two examples of regional cooperation programs that are creating a conducive environment for intra-regional trade. Whether the region succeeds in its quest for a broader and more resilient trade openness will have a big influence on the success of its more fundamental quest for rapid yet stable growth.

³ Please refer to www.adb.org/gms and www.adb.org/carec for more information about GMS and CAREC.

References

- Asian Development Bank. 2009. Asian Development Outlook 2009: Rebalancing Asia's Growth, Asian Development Bank, Manila.
- Athukorala, P., and A. Kohpaiboon. 2009. "Intra-Regional Trade in East Asia: The Decoupling Fallacy, Crisis, and Policy Challenges." Paper presented at the Conference on Global Financial and Economic Crisis: Impacts, Lessons and Growth Rebalancing, Asian Development Bank Institute, Tokyo, 22-23 April.
- Athukorala, P., and N. Yamashita. 2006. "Production Fragmentation and Trade Integration: East Asia in a Global Context." North American Journal of Economics and Finance 17(3):233-56.
- . 2008. "Patterns and Determinants of Production Fragmentation in World Manufacturing Trade." In F. di Mauro, S. Dees, and W. McKibbin, eds., Globalization, Regionalism and Economic Interdependence. Cambridge: Cambridge University Press.
- . 2009. "Global Production Sharing and Sino-US Trade Relations." China & World Economy 17(3):39-56.
- Athukorala, P. 2005. "Product Fragmentation and Trade Patterns in East Asia." Asian Economic Papers 4(3):1-27.
- . 2007. "The Rise of China and East Asian Export Performance: Is the Crowding-out Fear Warranted?" World Economy 32(2):234-66.
- Borrus, M. 1997. "Left for Dead: Asian Production Networks and the Revival of US Electronics." In B. Naughton, ed., The China Circle: Economics and Technology in the PRC, Taiwan and Hong Kong. Washington, DC: Brookings Institution Press.
- Brown, D. K., A. V. Deardorff, and R. M. Stern. 2004. "The Effect of Multinational Production on Wages and Working Conditions in Developing Countries." In R. E. Baldwin and L. A. Winters, eds., Challenges of Globalization: Analyzing the Economics. Chicago: University of Chicago Press.
- Brown, C., and G. Linden. 2005. "Offshoring in the Semiconductor Industry: A Historical Perspective." In S. M. Collins and L. Brainard, eds. Brookings Trade Forum 2005: Offshoring White-collar Work. Washington, DC: Brooking Institution Press.
- Dobson, W., and S. Y. Chia. 1997. Multinationals and East Asian Integration. Institute of Southeast Asian Studies, Singapore.
- Drysdale, P., and R. Garnaut. 1997. "The Pacific: An Application of a General Theory of Economic Integration." In C. F. Bergsten and M. Noland, eds., Pacific Dynamism and the International Economic System. Institute for International Economics, Washington, DC.
- Eichengreen, B., Y. Rhee, and H. Tong. 2007. "China and the Exports of other Asian Countries." Review of World Economics 143(2):201-26.
- Frankel, J. A., and S. Wei. 1997. "The New Regionalism and Asia: Impact and Policy Options." In A. Panagariya, M. G. Quibria, and N. Rao, eds., The Global Trading System and Developing Asia. Oxford: Oxford University Press.
- Greenaway, D., A. Mahabir, and C. Milner. 2008. "Has China Displaced other Asian Countries" Exports?" China Economic Review 19(2):152-69.
- Haltmaier, J., S. Ahmed, B. Coulibaly, R. Knippenberg, S. Leduc, M. Marazzi, and B. Wilson. 2007. The Role of China in Asia: Engine, Conduit, or Steamroller? International Finance Discussion Paper No. 904, Board of Governors of the Federal Reserve System, Washington, DC.
- Kimura, F., and M. Ando. 2005. "Two-dimensional Fragmentation in East Asia: Conceptual Framework and Empirics." International Review of Economics and Finance 14(3):317-48.
- Kwan, C. H. 2001. Yen Bloc: Toward Economic Integration in Asia. Washington, DC: Brookings Institution Press.

- McKendrick, D. G., R. F. Doner, and S. Haggard. 2000. From Silicon Valley to Singapore: Location and Competitive Advantage in the Hard Disk Drive Industry. Stanford, CA: Stanford University Press.
- Ng, F., and A. Yeats. 2001. "Production Sharing in East Asia: Who Does What for Whom, and Why?" In L. K. Cheng and H. Kierzkowski, eds., Global Production and Trade in East Asia. Boston: Kluwer Academic.
- _. 2003. Major Trade Trends in East Asia: What are Their Implications for Regional Cooperation and Growth? Policy Research Working Paper No. 3084, World Bank, Washington, DC.
- Pula, G., and T. Peltonen. 2008. Has Emerging Asia Decoupled? An Analysis of Production and Trade Linkages Using the Asian International Input-Output Table. ECB Working Paper No. 993, European Central Bank, Frankfurt.
- Sturgeon, T. J. 2003. "What Really Goes on in Silicon Valley? Spatial Clustering and Dispersal in Modular Production Networks." Journal of Economic Geography 3(2):199-225.

About the Paper

Donghyun Park and Kwanho Shin examine the evolving structure of intraregional trade to assess whether growing trade with the PRC can serve as an engine of growth for East and Southeast Asia. They find that the composition of the PRC's imports from the region has been shifting from parts and components toward final goods. This provides some cause for optimism about the PRC-as-engine-of-growth hypothesis.

About the Asian Development Bank

ADB's vision is an Asia and Pacific region free of poverty. Its mission is to help its developing member countries substantially reduce poverty and improve the quality of life of their people. Despite the region's many successes, it remains home to two-thirds of the world's poor: 1.8 billion people who live on less than \$2 a day, with 903 million struggling on less than \$1.25 a day. ADB is committed to reducing poverty through inclusive economic growth, environmentally sustainable growth, and regional integration.

Based in Manila, ADB is owned by 67 members, including 48 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.

Asian Development Bank 6 ADB Avenue, Mandaluyong City 1550 Metro Manila, Philippines www.adb.org/economics ISSN: 1655-5252

Publication Stock No. WPS 091042



Printed in the Philippines