

# People's Republic of China and its Neighbours: evidence on regional trade and investment effects

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The very rapid economic growth of the People's Republic of China (PRC), its dramatic success in world export markets and its heavy receipts of foreign direct investment (FDI) have generated much thought and debate in policy and business circles in different parts of the world. This paper surveys evidence from research by ADB Institute staff and Visiting Fellows conducted over the last two years that sheds light on these issues. The paper examines differences in trade structure between the PRC and its trading partners, finding that the PRC's current structure is closest to that of Korea and Taipei, China in 1990. It also considers changes in market share and finds that the PRC exports are eroding the market share of its regional neighbours in the USA and Japan, particularly in products in which trading partners are most specialised. There is no evidence of FDI diversion from elsewhere in the region to PRC. The trade diversion effects in the US and Japan are offset however by strong trade creation as the rapid growth in PRC leads to a substantial rise in its imports.

The paper surveys the projections of models that demonstrate the gains in greater trade and income for the region from closer trade links with the PRC. The broad conclusion that emerges is that whilst there may be risks to individual sectors in all countries concerned, the pattern of regional trade and investment that is emerging is mutually beneficial, provided enterprises and governments representing the PRC's regional partners respond effectively to the adjustments required.

The dramatic and sustained economic emergence (or re-emergence) of the People's Republic of China (PRC) has altered the landscape of international trade. Its rapid growth, its remarkable success in world export markets and its magnetism for foreign direct

investment (FDI) have all aroused apprehension among potential competitors. From Malaysia to Mexico and Indonesia to India, the 'threat or opportunity' question has been posed again and again in relation to the 'rise of the PRC'. Given the influence of geography on

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trade and investment patterns, such concerns have been most intense amongst the PRC's immediate neighbours. This paper reviews the evidence from recent empirical studies conducted at the Asian Development Bank Institute (ADBI) or by authors associated with the Institute that address different aspects of this issue, with particular reference to the PRC's economic relations with East and Southeast Asia.<sup>1</sup> As it matures, Chinese growth is relying on increasing absorption of primary products, components and capital goods, opening new export horizons for China's trading partners. From numerous and diverse empirical perspectives a broad consensus emerges that whilst there may be risks for individual sectors in all these countries, the evolving patterns of regional trade and investment can be mutually beneficial, provided that enterprises and governments representing the PRC's regional partners respond appropriately.

The 'stylised fact' view of the PRC presents the country as having a large, very rapidly growing economy with an unusually high level of domestic savings, attracting large absolute inflows of FDI (but not, it should be noted, in per capita terms), and achieving dramatic export growth (averaging nearly 17 per cent from 1990 to 2002). With its large rural population, the PRC's 'modern sector' growth is seen as based on a near perfectly elastic labour supply at a low real wage level.<sup>2</sup> Given its size, the PRC is thus the dominant marginal supplier of labour-intensive goods on the world market, and its real wage level and productivity largely determine world prices in these products. In addition, FDI inflows and domestic investment in skills and technology upgrading have affected a shift into more technologically sophisticated products, particularly where labour-intensive segments of international supply chains can be relocated to the PRC through FDI.<sup>3</sup>

Falling trade costs (including import tariffs and other protection, transport and freight

charges, time in transit, the cost of information and of managing international supply chains, and administrative costs) have facilitated rapid regional integration in trade and capital flows across the East-Southeast Asian region. Added to this, the PRC's rapid expansion provides an opportunity for regional partners to both export to and invest in its large domestic market. However, the PRC is also an export rival in third country markets (and a neighbouring country's own domestic market) in a range of goods, from simple labour-intensive products to those of greater technological complexity (in the latter type of good principally because of the country's large FDI sector). If FDI to the region is a fixed sum, then inflows to the PRC can increase only at the expense of other economies; thus FDI diversion may arise as an additional negative effect, with multiple consequences for trade flows.

The competitive threat from the PRC in particular product categories can be seen in changes in domestic market share (displacement by imports) and in shares in third country markets. However, whether or not rising international competition leads to aggregate income and welfare losses will depend upon the flexibility of the economies in question. In a world of full flexibility, economies adapt their domestic structure to changing relative costs and, if market share is lost in one product, resources shift into another where market prospects and returns are better. The familiar argument that 'only firms, not nations, compete' strictly rests on the set of simplifying assumptions related to perfect markets and hence zero adjustment costs. In other words, in a world of non-zero adjustment costs, trade competition need not always be beneficial to all parties.

The impact of the rise of the PRC, and falling trade costs more generally, can usefully be thought of in terms of two components: trade diversion and trade creation. Trade diversion

1 The empirical literature is extensive and this is a deliberately selective survey.

2 This represents the low rural opportunity cost that characterises the 'Lewis model' of a labour surplus economy.

3 It should be emphasised, however, that the PRC remains well behind Korea and Taipei, China, for example, in terms of technology indicators such as enterprise R&D expenditure per capita.

arises where lower cost or higher quality goods (for example, from the PRC) displace exports of an economy, creating a potential loss of income if new markets are not found and the resources involved are not shifted efficiently to other activities. Trade creation occurs when growth elsewhere (for example, in the PRC) creates new demand for an economy's exports.<sup>4</sup> It will make a difference what types of products experience the trade diversion and creation processes. In general, it is desirable for economies to climb the so-called 'ladder of comparative advantage', seen in its original version as running from simple labour-intensive goods through capital-intensive, to human capital (skill)-intensive, technologically sophisticated products (Balassa 1977). How this process is affected by closer trade links with a large fast growing regional neighbour will clearly be important, and the dynamic implications of any new regional division of labour will matter. If an economy adapts by specialising in products with a static global market or lacking technological dynamism, this new specialisation pattern may offer lower growth prospects. *A priori*, one might reasonably expect that the more adaptable the firms in an economy are, the greater is the scope for mutually beneficial outcomes from closer trade links. Also, the greater the scope for complementarity between partner economies in terms of resource and human capital endowments, the greater should be the potential for trade creation and thus the greater the economic gains.

Adaptability in this context implies an ability for firms to identify new market niches; re-equip and re-train; identify, purchase and adapt new technology; and establish alliances within international supply chains. These firm-level responses can be aided by a supportive and flexible policy environment that encourages firms to take risks; provides adequate public education, training, and research expenditure; ensures firms have adequate financial sector support; encourages R&D activity with collaboration, where appropriate;

and gives an overall strategic direction to a coherent and outward oriented national competitiveness policy.

### Trade structure: the PRC and the region

In general terms, the PRC's trade and production structure is intermediate; less sophisticated on average than that of Japan and the first-tier, newly-industrialised economies (NIEs) (Singapore, Korea and Taipei, China) but in some sectors considerably more sophisticated than the second-tier NIEs (Indonesia, Malaysia, Thailand and the Philippines). This hierarchy can be illustrated in various ways, and sheds light on the determinants of regional comparative advantage.

The simplest approach is to compare the structure of exports by commodity category. Table 1 reports bilateral export share correlations

**Table 1**  
Correlation coefficients: the PRC and regional export structures (3-digit SITC)

		PRC 1990	PRC 2000
Korea	1990	0.38	0.64
	2000	n.a.	0.43
Taipei, China	1990	0.34	0.83
	2000	n.a.	0.53
Singapore	1990	0.10	0.42
	2000	n.a.	0.41
Malaysia	1990	0.28	0.24
	2000	n.a.	0.44
Thailand	1990	0.30	0.52
	2000	n.a.	0.51
Indonesia	1990	0.38	0.07
	2000	n.a.	0.33
Philippines	1990	0.23	0.38
	2000	n.a.	0.33

Source: Lall, S. and Albaldejo, M., 2004. 'China's competitive performance: a threat to East Asian manufactured exports', *World Development*, 32(9): Table 4.

<sup>4</sup> These do not correspond exactly to the classic 'Viner definition' from the theory of customs unions, since the latter assumes a common external tariff that can divert trade from low-cost suppliers outside to high-cost suppliers within the union. Trade diversion in customs union theory thus becomes a negative factor for an economy and is a cost to be offset against the gains from trade creation.

**Table 2**  
**Technological structure of manufactured exports, 2000 (percentage of total manufactured exports)**

	PRC	Korea	Taipei, China	Singapore	Malaysia	Thailand	Indonesia	Philippines
Resource-based	10	12	4	15	13	18	34	7
Low technology	45	17	24	7	10	22	31	12
Medium technology	21	34	26	17	18	24	18	12
High technology	24	37	46	61	59	36	17	70

**Source:** Lall, S. and Albaladejo, M., 2004. 'China's competitive performance: a threat to East Asian manufactured exports', *World Development*, 32(9): Table 3.

between the PRC and other regional economies. These are reported for 3-digit Standard International Trade Classification (SITC) categories in 1990 (when the PRC was still a relatively closed economy) and 2000. While the PRC's trade was not representative of the region in 1990, by 2000 the PRC's export structure had become closer to the 1990 export patterns for Taipei, China and (to a lesser extent) Korea. In 2000, the PRC's structure was closest to that of Taipei, China and Thailand (correlation coefficients of over 0.5) and most dissimilar from that of Indonesia and the Philippines (correlation coefficients of around 0.3).

Another perspective on the same data uses a well-established trade classification, grouping SITC categories by technological sophistication based on R&D and natural resource intensity of the products covered (see Lall 2000 for details). The significance of this approach is that more technologically sophisticated products generally have higher export value-added and show the highest market growth in world trade. In other words, the high technology category is the most dynamic segment of world trade.

Table 2 presents PRC and regional trade in 2000 according to this technology classification. Over the period 1990–2000, the PRC's total export growth was considerably faster in the high technology category (averaging 32 per cent annually, against 17 per cent for all manufactures). Whilst the PRC's growth in the high technology category (principally electronics) has been impressive, in terms of its share in total manufactures China remains well below that of most regional partners (except Indonesia).

The importance of low technology goods in 2000 reflects the role of clothing, textile products, and other goods reliant on low wage comparative advantage. This low wage orientation is likely to persist and even intensify with the ending of the export quota regime under the multi-fiber agreement (MFA) in 2005, from which the PRC is expected to be the main beneficiary.

There may be no simple formula for determining the degree of potential complementarity between economies, but these differences in trade structure and the differences in domestic production that underlie them imply considerable scope for re-orientation of regional trade in response to the opportunities created by closer trade integration and liberalisation. As we shall see, there is evidence that this is occurring at an accelerating pace, particularly through the segmentation of production chains in high technology categories (particularly electronics).

### Changes in competitiveness in third markets

The PRC's dramatic export expansion is widely recognised. Its share of world trade has risen by 4.5 percentage points over the period 1990–2002 (from 1.9 per cent to 6.4 per cent) and its share of East Asian trade has increased even more dramatically. Like the NIEs before it, export growth has been a primary driver of industrial development in the PRC since the opening of the economy to foreign trade in

**Table 3**  
**Demand decomposition for manufactures: PRC and NIEs (per cent)**

Region	Years	Category	Domestic demand	Export expansion	Import substitution
PRC					
	1990–94	Resource-based	93	18	10
		Low technology	-24	164	-40
		Medium–high technology	73	48	-21
	1995–99	Resource-based	94	17	-11
		Low technology	-30	185	-55
		Medium–high technology	4	203	-107
First-tier NIEs					
	1985–89	Resource-based	91	15	-6
		Low technology	48	75	-23
		Medium–high technology	57	44	-2
	1990–94	Resource-based	103	10	13
		Low technology	60	40	-
		Medium–high technology	68	34	-2
	1995–99	Resource-based	538	-9	-429
		Low technology	85	21	-6
		Medium–high technology	58	53	-11
Second-tier NIEs					
	1990–94	Resource-based	99	-45	46
		Low technology	66	28	7
		Medium–high technology	39	81	-20
	1990–94	Resource-based	77	31	-8
		Low technology	59	44	-3
		Medium–high technology	48	50	2
	1990–94	Resource-based	61	85	-46
		Low technology	12	96	-8
		Medium–high technology	22	82	-4

**Note:** First and second-tier NIEs are defined in the text.

**Source:** Weiss, J. and Jalilian, H., 2004. 'Industrialization in an age of globalization: some comparisons between East and South East Asia and Latin America', *Oxford Development Studies*, 32(2): Table 5.

the early 1990s. However, the role of export demand in the PRC in the 1990s appears greater than even in the first and second tier NIEs at comparable stages of their development. This is illustrated by a simple demand decomposition analysis that breaks down the increase in output over a given period into growth of domestic demand (holding constant the import

share in total domestic supply), growth of exports, and the import substitution effect.<sup>5</sup> Table 3 reports the results of this decomposition when production data are grouped according to the previous technology classifications. The most arresting feature of these results is the PRC's export growth orientation, which exceeds that of the NIEs for all but resource-based

5 This is based on the identity  $\Delta P = d_1 \Delta S + \Delta X + (d_2 - d_1) S_2$ , where  $\Delta P$  is the change in output between period 1 and 2,  $\Delta S$  is the change in total supply (imports plus domestic production),  $\Delta X$  is the change in exports,  $d_1$  and  $d_2$  are the shares of domestic production in total supply in periods 1 and 2 respectively, and  $S_2$  is total supply in period 2. If the three terms are divided by  $\Delta P$ , the ratio  $(d_1 \Delta S) / \Delta P$  gives the share of domestic demand in total growth,  $(\Delta X / \Delta P)$  gives the share of export expansion, and  $((d_2 - d_1) S_2) / \Delta P$  gives the effect of import substitution. A negative sign on the last term indicates that imports are rising as a share of domestic supply, that is, there is negative import substitution. A negative sign on the first term indicates falling domestic consumption.

manufactured products from the second-tier group, which are typically net exporters of these products. A figure of 203 per cent for medium-high technology exports in the 1995–99 period meant that the increase in exports over this period was a little more than double output expansion—because of the strong negative import substitution effect—as imports took a rising share of the domestic market for these goods.

This strong export growth has seen the PRC's share of world trade rise by nearly five percentage points (1990–2002), and underlies the nearly universal impression of China as a pervasive and effective global competitor. While apprehension about China's export success may be overstated, this remarkable export expansion has inevitably eroded the position of some regional exporters in third-country markets, such as the United States and Japan. To more clearly delineate patterns of competition, more detailed evidence on market share incidence is needed. The most direct way of judging this competitive impact is to examine changes in market share for the PRC and regional exporting economies. Lall and Albaladejo (2004) use a simple classification to organise this data. For any given market (or the world economy as a whole) five groupings are possible. Using the terminology of the authors these are:

- **Partial threat:** the PRC and the economy concerned gain market share, but the PRC gains more.
- **No threat:** both the PRC and the other economy gain market share, but with the PRC growing more slowly.

- **Direct threat:** the PRC gains market share and the other economy loses it.
- **China under threat (or Reverse threat):** the PRC loses market share while the other economy gains.
- **Mutual withdrawal:** the PRC and the other economy lose market share.

Data on global competition between the PRC and the main NIEs is presented by this taxonomy in Table 4. For each economy, total exports for 2000 are decomposed into the five categories.

These results imply that all economies considered have a majority of their exports (or nearly a majority in the case of the Philippines) under some form of 'threat' status as defined above. Countries in most direct competition by this indicator are Malaysia, Thailand and Indonesia. These countries also tend to have the least sophisticated export structures. The reverse threat, where countries are gaining relative to the PRC, is modest in all cases. The countries with more sophisticated trade structures, as evidenced by a higher share of high technology exports, are those where the direct threat (of losing market share whilst the PRC is gaining it) is greatest, although no causal inference can be drawn from this relative change in market shares. In fact, data in the appendix to Lall and Albaladejo (2004) indicate that only in Malaysia do a majority (77 per cent) of goods under direct threat belong to the high technology category; elsewhere the majority of directly threatened goods come from low and medium technology and resource-intensive categories.

**Table 4**  
**The PRC threat to NIEs in the world market, 2000 (percentage of total exports)**

Category	Korea	Taipei, China	Singapore	Malaysia	Thailand	Indonesia	Philippines
Partial threat	28	34	40	57	62	48	44
No threat	42	39	32	5	16	11	44
Direct threat	26	23	24	29	15	20	6
Reverse threat	3	3	3	6	6	9	4
Mutual withdrawal	1	-	1	4	1	12	2

**Source:** Lall, S. and Albaladejo, M., 2004. 'China's competitive performance: a threat to East Asian manufactured exports', *World Development*, 32(9): Table 6.

**Table 5**  
**ASEAN-5 growth decomposition of exports to the US, 1995-2000**

	SITC				
	Office and data processing machines	Telecommunications	Electrical machinery	Furniture	Miscellaneous
Constant market share effect	112	593	82	169	574
Overall competitiveness effect	-12	-493	18	-69	-474
Competitiveness viz PRC	-220	-572	-126	-197	-674
Export change (per cent of 1995 exports)	42	18	55	78	10
Total export increase to US	100	100	100	100	100

**Source:** Weiss, J. and Gao, Shanwen, 2003. *China's export threat to ASEAN*, ADB Institute Discussion Paper No. 2, Asian Development Bank, Tokyo: Table 1.

A more disaggregate analysis of competition in third-country markets is provided by Weiss and Gao (2003). To establish the degree of market share lost by a given competitor to the PRC, export growth for any commodity destined to a particular market (such as the USA or Japan) can be decomposed into a share effect (assuming the country keeps a constant market share) and a competitiveness effect (allowing for the changing market share). If a comparator economy (in this case the PRC) is introduced, competitiveness can in turn be decomposed into the change in the country's market share relative to the PRC and the change in the PRC's market share relative to the rest of the world.<sup>6</sup>

This approach is applied to exports of five ASEAN countries (Singapore, Malaysia, Thailand, Indonesia and the Philippines, henceforth ASEAN-5) to the USA and Japan over the period 1995-2000. To illustrate the magnitude of the market share loss in US-bound exports relative to the PRC, Table 5 decomposes the change in 1995-2000 exports for the five two-digit SITC categories with the greatest absolute export loss relative to the PRC. A

change in exports in each category is set at 100, so the competitiveness effect *vis-à-vis* the PRC is a proportion of this. Columns two and three always sum to 100 as they reflect the two components of the total change in exports. Competitiveness relative to the PRC is one element of total competitiveness and when the third column has a negative sign, the country is losing market share to the PRC.

In all of these categories there has been a strong market share loss effect relative to the PRC and in all but SITC 77, ASEAN-5 face a 'direct threat' in the sense of the terminology used above (for SITC 77 the threat is 'partial'). What is measured here is the loss in exports, as a country's market share has not kept pace with that of the PRC, considered as a proportion of the observed export increase. In some categories, the absolute value of the change in relative market share is several times that of the actual export increase. For example, for office machines (SITC 75) the loss of exports from falling market share relative to the PRC is roughly double the actual export increase achieved, whilst for telecommunications (SITC 76) it is nearly six times the actual increase.

6  $\Delta X_{ij} = \Delta Q_i \cdot s_{ij} + s_{ij} \cdot Q_i \cdot (\Delta s_{ij} / s_{ij} - \Delta s_{ik} / s_{ik}) + \Delta s_{ik} / s_{ik} \cdot s_{ij} \cdot Q_i$  where X is exports and  $\Delta$  is the absolute change in exports,  $Q_i$  is total imports of commodity i in the market concerned (at the end of the period),  $s_{ij}$  is the initial market share of country j in imports of i and with competitor country k,  $s_{ik}$  is k's market share for product i. In this expression, the first term gives the share effect with market share constant, the second term gives a measure of competitiveness for country i relative to the comparator and the third term gives the competitiveness of the comparator.

Nonetheless, in all these categories a strong loss of market share was still accompanied by rising absolute export volumes from ASEAN.

The analysis of changing competitiveness relative to the PRC can be extended by focusing on trends at the four-digit SITC level and explaining these in a regression framework that links product characteristics with changing market share relative to the PRC. In this case, the dependent variable is the value of exports lost due to change in market share relative to China, expressed as a share of total exports in 1995 in the same category.<sup>7</sup> Weiss and Gao (2003) test whether loss of competitiveness, so defined, is systematically related to the characteristics of trade categories, whether in terms of technological characteristics or patterns of specialisation. A simple model that makes competitiveness a function of product characteristics—reflected in a measure of specialisation, general shifts in competitiveness, and changes in tastes as a demand factor—is applied. The authors use a measure of specialisation—the relative revealed comparative advantage measure (RCA) at the start of a period—to explain changing competitiveness over the period in question, on the grounds that the initial RCA can be taken as a proxy for the relative output level and factor intensity of different products.<sup>8</sup>

Analysis across 690 four-digit SITC categories was first conducted for the ASEAN–5 collectively and then for each economy individually with respect to the US and Japanese markets. The results strongly support the view of PRC competitive export pressure. Not only have the main ASEAN economies been exposed to increasing competition in both US and Japanese markets and seen their competitiveness reduced relative to the PRC, but this appears

to be related systematically to particular product categories, with losses greater in categories where the ASEAN economies have been most highly specialised relative to the PRC.

Significantly, there is evidence of increased competition from the PRC at both the relatively labour-intensive and the relatively high technology ends of the product scale, although within a given trade category technological sophistication appears generally to offer some protection for ASEAN exporters. This latter effect is found in different product categories for different countries, but appears more uniform for engineering products directed to the United States. The only product category showing no evidence of systematic loss of competitiveness is automobile products, but this product category is both small in value and has the smallest number of observations. In no product category is there any evidence of systematic gains relative to the PRC, although for a few countries and categories there is a significant cross-over rate for the RCA variable; which implies that at lower levels of specialisation there is a gain of competitiveness relative to the PRC, whilst there are losses at higher levels.

For the large categories of electronics and electrical goods and engineering (which comprised two-thirds of ASEAN exports to the USA and 40 per cent to Japan) there is a consistent pattern of loss of competitiveness, which is stronger in more specialised products. For the other important categories of primary products, resource-based manufactures, and textiles and garments, all ASEAN countries show significant losses in either the USA or Japan. In a majority of cases for these categories, countries show a significant loss in both markets. Again, this is always significantly related to the degree

7 Using the notation in footnote 3 competitiveness (COMP) is measured as:  $COMP_{ij} = [s_{ij} \cdot Q_i^* (\Delta s_{ij} / s_{ij} - \Delta s_{ik} / s_{ik})] / X_{ij}$  where  $X_{ij}$  is initial exports of  $i$  from  $j$  to the market concerned. Where there is a gain in market share relative to the PRC, COMP will be positive and where there is a loss it will be negative.

8 Relative revealed comparative advantage is defined as  $RCA = (X_{ij} / X_{it}) / (X_{jk} / X_{ik})$  where  $X$  refers to export value,  $t$  stands for total exports and  $k$  is the comparator economy. In principle, the RCA may be related to changes in competitiveness, as defined here, either through shifts in relative factor prices or due to a simple 'catching up' effect. As total trade covers a wide variety of product types, to impose some pattern on the data, dummies are applied for nine product categories that are sub-divisions of the Lall technology classification noted above. The use of dummy variables reflecting these nine categories implies that there is broad homogeneity within each in terms of the response of different products to the explanatory variables.

of specialisation.<sup>9</sup> It should be stressed that loss of competitiveness as defined here refers to loss of market share relative to the PRC. It does not correspond to an absolute decline in exports but means declining demand trends would be more adverse for ASEAN than for the PRC exporters in these categories. Absolute export declines for ASEAN were found in primary products and engineering to the USA and in primary products, resource-based manufactures, and textiles, garments and footwear to Japan. Hence, much of the erosion of market share is in categories where ASEAN exports are continuing to expand—principally the very large category of electronics and electrical goods. Losses of market share are in the product lines where ASEAN is most specialised, eroding established market positions and intensifying downside macro risks.

The conclusion is that neighbours have been exposed to strong direct competition from PRC exports and this has resulted in some trade diversion in the sense of loss of market share.

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### **Competition for FDI: is there a diversion effect?**

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FDI inflows have been a major driving force in development in East and Southeast Asia in recent years and some of the second-tier NIEs, in particular, have relied heavily on FDI for enhancing technology, management and marketing skills. Because of dramatic increases in inbound investment over the past two decades, China has been seen by some as a 'black hole' for FDI, drawing it away from established destinations elsewhere in East Asia. To the extent that capital flows might be diverted in this way, regional growth might seem a form of fixed-sum strategic game. Insofar as Southeast Asian economies saw FDI inflows falter in the wake of the recent regional financial crisis (Indonesia actually experienced net outflows) whilst the PRC was the single largest developing country recipient, this concern had a superficial plausibility.

However, a closer examination of the data suggests this case is greatly overstated.

First, there is often confusion in popular discussion between the absolute and relative magnitudes involved. Whilst in absolute terms FDI flows into the PRC are very large, by comparison with either population or some measure of domestic economic activity the PRC is not an outlier in relation to other East or Southeast Asian countries. This is readily apparent in the United Nations Conference on Trade and Development (UNCTAD) FDI Performance Index, for example, which compares a country's global FDI share to its global GDP share. For 1999–2000, the figure for the PRC (1.2) is roughly the average for the region as a whole and below that of Singapore, Thailand and Malaysia (UNCTAD 2002: Table 2.1).

Second, comparisons based on officially recorded FDI flows will give an upward bias to the PRC's position, since it is widely accepted that 'round-tripping' (expatriated domestic savings that return to their country of origin as FDI) is more significant in the PRC than elsewhere. The motives for 'round-tripping' in the case of the PRC are threefold:

1. to reinvest flight capital that may have had its origins in the black economy
2. to capture domestic tax incentives and other advantages not open to locally registered firms
3. to take advantage of improved reputation, better corporate governance, and superior financial services available if domestic business interests are incorporated abroad (particularly in Hong Kong).

Xiao (2004) examines these issues in detail. Through a comparison of FDI statistics in the country of origin and the PRC, he breaks down the discrepancy into what he terms a normal 'statistical error' and 'round-tripping'. His estimate of the latter is as high as 40 per cent of FDI inflows in recent years (with bounds of 50 per cent and 30 per cent). If recorded figures are adjusted downwards by this proportion, the

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9 Weiss and Gao (2003) hypothesise that the link between greater specialisation in ASEAN relative to the PRC and loss of market share is due to shifts in the relative capital rental-wage ratios that are favourable to the PRC and hence unfavourable to ASEAN. Increased domestic savings or rising FDI inflows to the PRC, which increase the supply of capital and lower the capital rental-wage ratio, are simple candidates for a general explanation. Industry-specific effects may also be at work but the analysis does not capture these.

PRC's FDI Performance Index figures (as defined above) will appear well below regional averages.

These points significantly weaken the argument that the PRC is an FDI overachiever, yet the PRC's expansion has increased regional demand for FDI.<sup>10</sup> One can address the diversion argument more rigorously by identifying the explanatory factors behind regional FDI inflows and by adding a separate variable for a PRC effect. Chantasawat, Fung, Iizaki and Siu (2004) do this by setting up a regression model that explains FDI flows to eight East and Southeast Asian economies over the period 1985–2001 in terms of several conventional variables—including measures of market size, tax rates, wage levels, human capital stock, infrastructure quality and government stability—plus FDI inflows to the PRC.<sup>11</sup> If the investment diversion case were sustained by this data, one would expect a significant negative coefficient on the PRC FDI variable.

The most relevant finding in this work is that, when explaining the level of FDI investment in these eight neighbouring economies, the correlation between it and FDI flows to the PRC is positive not negative. In particular, a 10 per cent increase in FDI to the PRC 'contributes' 5–6 per cent to other regional FDI, depending on the regression specification. Far from revealing FDI diversion, this evidence indicates that FDI creation seems to be at work. The authors explain this by reference to production networking among international firms in the region. So that investment in the PRC may be linked with investment elsewhere in the region to supply parts and components to plants located in the PRC (or vice versa, with the PRC supplying parts and components to

plants in one of the eight neighbouring economies). This result holds whether or not FDI from Hong Kong (with an assumed high round-tripping rate) is included in the analysis. The 'PRC effect' is not the strongest factor explaining FDI inflows; measures of trade openness and taxation have higher elasticity estimates. Nonetheless, the significant positive sign on FDI flows to the PRC directly challenges the notion that competition for FDI in the region is a zero-sum game. A more plausible view is that FDI flows are endogenously influenced by regional trading activity, particularly extension of supply chains. In this context, FDI responds to the profit opportunities accompanying regional growth, and FDI inflows to various economies interact positively as international firms exploit regional production sharing in a segmentation of the supply chain.<sup>12</sup>

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### What is the evidence on trade creation?

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To sustain its rapid domestic growth and export expansion over more than two decades, the PRC has increasingly relied on imports across a broad spectrum of products. Import growth has outpaced exports over the past five years and may do so for some time given the rapid expansion of the economy. Accompanying this shift from export orientation to more balanced trade has been a rising awareness that while the PRC's expansion may represent a challenge to traditional regional exporters, it also offers unprecedented opportunities for new export expansion. Contrary to the 'threat' view that Chinese exports will stifle competitiveness and growth among

10 Wei (2002) supports precisely the opposite argument, that is, the PRC is an FDI underachiever, with detailed econometric evidence.

11 As there will be simultaneity in the relationship with feedback between FDI to the various countries and PRC, the model is estimated as a simultaneous equation system where

$$AFDI_{it} = \alpha + \beta PRC\_FDI_t + \lambda x_{it} + \mu_i + e_{it} \quad (1)$$

$$PRC\_FDI_t = \gamma + \delta AFDI_{it} + \rho z_t + v + w_t \quad (2)$$

Here subscripts *i* and *t* refer to country *i* at time *t*;  $x_{it}$  is the set of determinants of FDI to the Asian economies covered, so for country *i* its FDI inflow is  $AFDI_{it}$ ;  $z_t$  is the set of determinants for FDI to PRC ( $PRC\_FDI_t$ );  $u_i$  and  $v$  are country-specific terms; and  $e_i$  and  $w$  are error terms.

12 This 'synchronous FDI' behaviour moves in both directions, as the region learned in the late 1990s.

the PRC's neighbours, this argument asserts that the PRC's expansion, particularly when accelerated by WTO accession, will constitute a windfall opportunity for regional exporters.

Indeed, recent evidence indicates that the PRC has become the region's largest single importer, and this rapidly growing absorption has been widely identified as a key source of dynamism for the region. For example, from 1995 to 2003, exports of precision instruments and electrical machinery (much of this in the form of parts and components) from the PRC's nine major neighbouring trade partners, grew by over 600 per cent. Exports of machinery, chemical products and transportation equipment grew by around 300 per cent.<sup>13</sup> This import growth was during a period of major change in the PRC's trade policy, in preparation for WTO accession. Many of the changes needed for WTO entry were introduced during the 1990s, and as a result the weighted average tariff on manufactures fell from 47 per cent in 1992 to 13 per cent in 2001. The WTO agreement calls for this to be reduced further to 7 per cent (expected by 2005) and remaining non-tariff barriers are to be simplified and phased out (Martin, Bhattasali and Li 2004).

However, establishing the link between the surge in imports from the region and the trade reforms associated with WTO entry requires more than casual inspection of concurrent trade patterns. To identify the policy effects at work, a counterfactual non-reform scenario must be compared with a projected 'with reform' case. The conventional means of addressing this is to use a simulation approach, usually in the form of a computable general equilibrium (CGE) model, that compares a baseline (pre-reform) case with scenarios based on one or more trade reform packages. In a series of studies, Roland-Holst (2002, 2003a) applied a global CGE to assess the impact of a variety of trade policy scenarios across the East and Southeast Asian region.<sup>14</sup>

The model permits direct scenario comparison, with and without policy interventions (changes in unilateral or multilateral trade policy), and outcomes are evaluated around baseline macro growth paths, detailing structural changes in sectoral demand, supply, trade, employment, and incomes over two decades to 2020. As an economic forecast, results from this type of exercise are best seen as indicative, that is, a projection of what could happen under a broad range of *ceteris paribus* (as well as neoclassical market-clearing) conditions. As CGE models assume that all markets achieve equilibrium, in effect they imply smooth adjustment as resources shift from previously protected activities, minimising the role of adjustment frictions. When interpreting such results, one must bear in mind that arguably such models have an implicit bias in favour of the policy (trade reform and market liberalisation more generally) that they are examining. Nonetheless, inferences from the models can be illuminating, and in the present context it can be noted that the recent evolution of regional trade flows is broadly consistent with the predictions of Roland-Holst (2002, 2003a).

The main finding of Roland-Holst (2002, 2003a) is that in the years following the PRC's WTO accession an Asian 'trade triangle' will emerge. In particular, global trade will shift to a situation where the PRC sustains and increases its structural trade surplus with the Western members of the Organisation for Economic Co-operation and Development (OECD) (mainly the USA and EU), while developing a structural deficit of about equal magnitude with the rest of East and Southeast Asia. The PRC may displace other Asian exports to third-region markets (at least in relative terms), but its strong domestic absorption growth more than offsets this by creating new export opportunities for its regional neighbours. The logic behind this outcome is straightforward. The PRC is a resource-constrained economy

13 See ADB (2004), these figures include Hong Kong, China as a separate export source and are therefore slightly misleading.

14 The model is calibrated to the GTAP trade database and aggregated to cover 16 countries and 18 sectors. Production sectors are based on constant returns, CES value added and Leontief intermediates. Real GDP growth is calibrated to exogenous consensus estimates for the baseline scenario interval (1997–2020) and real government and foreign savings for each country are fixed. Details are available in Roland-Holst (2002).

**Table 6**  
**Trade growth with PRC WTO accession (percentage change from baseline scenario in 2020)**

Exports from	Exports to							Total
	PRC	Japan	NIE	ASEAN	USA	EU	ROW	
PRC	-	37	43	36	31	35	32	34
Japan	38	-	-4	-6	-7	-5	-5	3
NIE	32	-10	-7	-11	-13	-10	-10	3
ASEAN	28	-4	-1	-2	-5	-3	-4	1
USA	24	-1	1	-1	-	-1	-1	1
EU	22	-	1	-1	-2	-1	-2	-
ROW	13	-	2	-2	-2	-1	-1	-
Total	26	5	6	2	2	-	1	3

Notes: NIE is Korea and Taipei, China; ROW is rest of world.

Source: Roland-Holst, D., 2002. *An overview of PRC's emergence and East Asian trade patterns to 2020*, ADB Institute Research Paper No. 44, Asian Development Bank, Tokyo: Table 4.2.

and to sustain its expected growth rate, it must sharply increase absorption of external resources, intermediates, and capital goods. This is particularly the case for export sectors, where the need for capacity expansion to meet external demand remains substantial. Moreover, income growth in the PRC will change the resource-intensity of demand patterns, accelerating import demand for energy and agricultural products (such as meat and animal feed) in particular.<sup>15</sup>

Broadly speaking, the PRC will export finished goods to the OECD markets and import foodstuffs, raw materials, parts and components, and capital goods from East and South-east Asia.<sup>16</sup> Tables 6 and 7 illustrate the basic counterfactual scenario for the model, which compares the baseline case (that is projections under the assumption of no policy change) with the PRC WTO accession scenario.

Table 6 shows, for example, that the PRC's exports to ASEAN are 36 per cent higher in 2020 as a result of WTO accession, while ASEAN's exports to the PRC are 28 per cent higher. The respective percentage changes for Korea and Taipei, China (the NIE here) are 43 per cent and 32 per cent. Table 7 gives the same results but focusing on the change in the bilateral trade balance between different groupings and the PRC as a result of WTO accession. The NIE, for example, have a bilateral trade surplus with the PRC in 2020 of US\$34 billion attributable to the PRC's WTO accession, which explains roughly one-third of their total projected surplus. For ASEAN, the share explained by WTO accession is much smaller (presumably because trade barriers were lower prior to accession) at less than 10 per cent (US\$3 billion out of a surplus of US\$41 billion).

15 Ten years ago the PRC was a small net exporter of energy fuels. It has become the world's second largest net importer.

16 This general inference is sustained by other similar studies: see, for example, the work at the World Bank, such as Ianchovichina and Martin (2003). There are notable differences in projections at the sectoral level for the PRC between the results of Roland-Host and those of the World Bank. The World Bank work is distinguished by meticulous attention to estimating the PRC's prior protection levels, and this is important to results over a relatively short time horizon around WTO accession. The original work of Ianchovichina and Martin only goes up to 2005, so that initial conditions are critical determinants of outcomes. The work of Roland-Holst goes up to 2020, so that cumulative growth effects dominate. For example, in the case of the sensitive good rice, Ianchovichina and Martin predict an export surplus in 2005, while the longer-term simulations of Roland-Holst (2002) suggest strong import dependence for the PRC. Generally speaking, the longer time horizon foresees rising incomes and increasing resource intensity in the PRC demand patterns, with net trade effects that are easily predicted by earlier experience in higher income Asia.

**Table 7**  
**Absolute change in bilateral trade balance with the PRC in 2020 compared with baseline scenario**  
**(1997 US\$ billions)**

	Japan	NIE	ASEAN	USA	EU	ROW
Change in bilateral balance PRC–country due to WTO accession	–4	–34	–3	61	46	51
Projected actual bilateral trade balance PRC–country 2020	–5	–135	–41	166	66	71

**Note:** A negative sign indicates a deficit for the PRC.

**Sources:** Roland-Holst, D., 2002. *An overview of PRC's emergence and East Asian trade patterns to 2020*, ADB Institute Research Paper No. 44, Asian Development Bank, Tokyo: Table 4.3 and Roland-Holst, D., 2003a. East Asian trade relations in the wake of China's WTO accession, Asian Development Bank Institute, Tokyo (unpublished): Table 2.2.

These results can be extended by accepting WTO accession as a given and posing the question: what additional trade creation results from new regional arrangements such as the PRC joining the ASEAN free trade grouping, or an Asian Free Trade Area (ASEAN plus the PRC), or the PRC, plus Japan and Korea, joining ASEAN (ASEAN plus 3)? Tables 8 and 9 provide the answers in terms of percentage changes in trade flows in 2020, compared with the scenario of the PRC's WTO accession rather than the original baseline.

When the PRC in ASEAN is examined, strong growth of PRC exports to ASEAN is

predicted (47 per cent above the level with WTO accession alone). Import growth from ASEAN is only modest at 2 per cent because PRC barriers are already very low after WTO accession. ASEAN significantly reduces imports from third countries, so there is an important trade diversion effect (for example, US exports to ASEAN are 6 per cent lower and Japanese exports are 10 per cent lower). In the case of the wider group of ASEAN plus the PRC, Japan and Korea, most effects are magnified, with the PRC's exports to the latter two countries rising strongly. This is the result of inclusion of more diverse economies into a regional free

**Table 8**  
**Trade growth with the PRC joining ASEAN (percentage change from PRC WTO accession scenario in 2020)**

Exports from	Exports to							Total
	PRC	Japan	NIE	ASEAN	USA	EU	ROW	
PRC	-	-4	-4	47	-3	-4	-3	1
Japan	2	-	1	-10	1	1	1	-
NIE	2	-	-	-12	1	1	1	-
ASEAN	2	4	3	33	3	3	1	9
USA	1	-	-	-6	-	-	-	-
EU	1	-	-	-5	-	-	-	-
ROW	2	-	-	-7	-	-	-	-
Total	2	-	-	9	-	-	-	1

**Source:** Roland-Holst, D., 2003a. East Asian trade relations in the wake of China's WTO accession, Asian Development Bank Institute, Tokyo (unpublished): Table 3.2.

**Table 9**  
**Trade growth with the PRC joining ASEAN plus 3 (percentage change from PRC WTO accession scenario in 2020)**

Exports from	Exports to							Total
	PRC	Japan	NIE	ASEAN	USA	EU	ROW	
PRC	-	21	33	27	-8	-9	-8	3
Japan	2	-	39	40	-2	-2	-2	10
NIE	3	50	31	43	-	-1	-2	11
ASEAN	4	49	35	26	5	4	-	14
USA	5	-4	-11	-9	1	1	1	-1
EU	4	-2	-10	-11	1	-	-	-
ROW	5	-9	-10	-8	1	-	1	-1
Total	4	12	10	13	-1	-	-1	2

Source: Roland-Holst, D., 2003a. East Asian trade relations in the wake of China's WTO accession, Asian Development Bank Institute, Tokyo (unpublished): Table 3.3.

trade arrangement. Again, however, the exports to the PRC grow only modestly (Japan's are 2 per cent higher and ASEAN's 4 per cent higher), because the latter's trade liberalisation is already factored into the adjusted (WTO accession) baseline. There are now also greater diversion effects for exports of non-members than in the more limited ASEAN plus the PRC arrangement (US exports to ASEAN, for example, fall by 9 per cent).<sup>17</sup>

Detailed sectoral adjustments are also illustrated in this model. If one compares the relatively inclusive regional trade grouping ASEAN plus 3 with the PRC-WTO accession scenario, by 2020 exports from the PRC are higher in nine out of the 18 sectors in the model, with the vast majority of total export gains in just two sectors, Processed Food (US\$40 billion in 1997 prices) and textiles (US\$8.5 billion) (Roland-Holst 2003a: Table 3.9). A disaggregated look into import and export flows at the sector level is also possible by utilising a simple measure of intra-industry competitiveness (IIC), essentially net exports

relative to total trade in the sector.<sup>18</sup> Table 10 presents this measure for bilateral trade flows by sector in 2020 in the scenario where the PRC joins ASEAN plus 3.

The sectoral picture that emerges under this scenario casts the PRC as a net importer of primary products, foodstuffs, and energy, and a net exporter of manufactures. This pattern is replicated in its projected trade with ASEAN. In the important electronics category, the IIC figure 0.02 indicates a small trade surplus equal to 2 per cent of total PRC-ASEAN electronics trade (imports plus exports). For trade with Korea and Taipei, China, there is a projected net deficit in manufactures, with important exceptions in clothing, processed food and motor vehicles. Importantly here, there is a heavy deficit in electronics with the IIC of -0.42 indicating a trade deficit of roughly 42 per cent of total trade in electronics with these two countries. Trade with Japan is projected to be in surplus with the exception of the more capital and technology intensive sectors in manufacturing and construction.

17 It should be noted that agricultural protection in Japan and Korea is not removed in this scenario. By most accounts, this would significantly increase trade in all directions.

18 For sector  $i$ , intra-industry competitiveness (IIC) is  $IIC_i = (X_i - M_i)/X_i + M_i$ , where  $X$  and  $M$  are exports and imports respectively. This figure can be given for total trade or for bilateral trade between countries  $x$  and  $y$ , so that for sector  $i$  in trade between  $x$  and  $y$  we have  $IIC_{i,xy} = (X_i - M_i)_{xy}/(X_i + M_i)_{xy}$ . See Roland-Holst (2003b) for details and more extensive regional results.

**Table 10**  
**Intra-industry competitiveness for the PRC by**  
**sector and trading partner, 2020 (scenario of the**  
**PRC in ASEAN plus 3)**

	Japan	NIE	ASEAN	Total
Rice	1.00	1.00	-0.94	-0.47
Other grains	1.00	1.00	1.00	-0.48
Oil seeds	1.00	1.00	1.00	-0.78
Sugar	1.00	-1.00	-1.00	-0.86
Other crops	0.96	0.92	-0.54	-0.48
Livestock	0.72	0.44	-0.64	-0.51
Energy	0.96	-0.28	-0.74	-0.36
Processed food	0.94	0.63	-0.45	-0.15
Textiles	0.04	-0.69	0.41	-0.12
Clothing	0.89	0.73	0.99	0.92
Leather goods	0.94	-0.26	0.80	0.72
Basic manufacturing	-0.06	-0.38	0.09	-0.02
Motor vehicles	-0.81	0.52	0.76	-0.32
Other transport equipment	-0.06	-0.54	0.85	-
Electronic goods	-0.32	-0.42	0.02	0.06
Other manufactures	-0.11	-0.05	0.44	0.22
Construction	-0.32	0.31	1.00	-0.48
Services	0.26	0.32	0.34	0.24

**Note:** NIE is Korea and Taipei, China.

**Source:** Roland-Holst, D., 2003a. East Asian trade relations in the wake of China's WTO accession, Asian Development Bank Institute, Tokyo (unpublished): Table 3.13.

There has been concern that closer trade links with the PRC may push ASEAN economies down, rather than up, the value added (and skill-intensity) ladder of comparative advantage. Evidence from the same modelling work casts doubt on this apprehension. The IIC indicator can be adjusted to reflect differences in skill-intensity (that is, skilled and unskilled labour ratios) between sectors, and this skill-adjusted version of the IIC can be used to classify sectors as 'import dependent', 'trade neutral' or 'export oriented'.<sup>19</sup> If one considers changes over

the late 1990s (1996–2000) in PRC-ASEAN trade on a skill-adjusted labour content basis, there was a substantial shift of 16 percentage points towards greater export-orientation (much greater than if the unadjusted data are used). The implication is that over this period ASEAN was increasing net exports to the PRC in relatively more skill-intensive activities.

Examining trade flows alone does not fully reveal income or welfare changes (and may reinforce the 'mercantilist fallacy' that exports are good and imports are bad). The modelling exercise also incorporates a variety of equivalent variation estimates calculated as future discounted income streams with both consumption and savings components. A recent statement of these estimates is in Lee, Roland-Holst and van der Mensbrugghe (2004), which looks at the shorter period 2005–15 and uses a slightly different model specification.<sup>20</sup> Tables 11 and 12 summarise the real income effects by 2015 for three different scenarios—the PRC unilaterally removes all remaining trade barriers (PRC UNI), the PRC joins ASEAN, and the PRC joins ASEAN plus 3. For 2015, the income change by country and region for these scenarios is given relative to the baseline (essentially the PRC WTO accession scenario). These estimates are given in two versions, with (Table 11) and without (Table 12) agricultural liberalisation.

As is predictable in this type of model (since adjustment costs are assumed away), the wider the geographic scope of liberalisation, the larger the benefits. Hence, ASEAN plus 3 is the preferred arrangement in terms of income change for all countries, apart from the excluded trading partner, Taipei, China. Unilateral removal of remaining tariffs by the PRC is a superior alternative for PRC and for the rest of the world, than PRC's entry into the limited free trade area of ASEAN, although the latter is a superior option for ASEAN countries. If agricultural trade is excluded from the reform

19 The adjusted figure is  $ELTi_{xy} = (\lambda_i^x X_i - \lambda_i^y M_i)_{xy} / (\lambda_i^x X_i + \lambda_i^y M_i)_{xy}$ , where  $\lambda_i^x$  is the skilled to unskilled labour ratio in value-added for commodity  $i$  in country  $x$  and  $\lambda_i^y$  is the same for country  $y$ . Sectors are classed as import dependent if  $ELTi$  is between  $-1$  and  $-0.33$ , trade neutral if it is between  $-0.33$  and  $0.33$ , and export-oriented if it is between  $0.33$  and  $1$ ; see Roland-Holst and Weiss (2004).

20 One difference is the inclusion of 'trade costs' as wedges between cif and fob prices. Policy reform scenarios assume not just a removal of tariffs but also a lowering of trade costs, in this case by 2.5 per cent. Also in the more recent work the baseline scenario is the equivalent of PRC WTO accession in the earlier papers.

**Table 11**  
Income effects relative to baseline, 2015 (percentage change)

	PRC	Japan	Korea	Taipei, China	ASEAN	World
PRC WTO	2.9	0.3	0.6	1.0	0.5	0.4
ASEAN plus PRC	1.4	-	-0.1	-0.3	2.5	0.2
ASEAN plus 3	4.0	1.6	3.7	-1.0	4.0	0.7

**Note:** Equivalent variation real income is measured.

**Source:** Lee, H.; Roland-Holst, D. and van der Mensbrugge, D. 2004. The implications of prospective free trade agreements in East Asia, (unpublished): Table 1.

**Table 12**  
Income effects relative to baseline without removal of barriers on food and agricultural products (percentage change)

	PRC	Japan	Korea	Taipei, China	ASEAN	World
ASEAN plus PRC	0.9	0.1	-0.1	-0.3	1.7	0.1
ASEAN plus 3	1.9	0.7	1.5	-1.0	2.6	0.3

**Note:** Equivalent variation real income is measured.

**Source:** Lee, H.; Roland-Holst, D. and van der Mensbrugge, D., 2004. The implications of prospective free trade agreements in East Asia, (unpublished): Table 2.

process, benefits to all parties fall and Korea and Taipei, China are predicted to lose from the PRC's unilateral trade liberalisation.

As noted earlier, these modelling exercises can mask complex adjustment costs as resources shift within partner economies in response to the removal of trade barriers. In the PRC, this would entail potentially complex changes within agriculture (especially in relation to grains) and in parts of manufacturing (particularly heavy industry, parts of which are often said to be highly inefficient). These modelling exercises imply that there is ample scope for income growth to compensate potential losers. However, with rising inequality and a fiscally constrained state, optimal compensation schemes can be difficult to implement and the adjustment process will almost certainly imply winners and losers.<sup>21</sup> Similar points can be made concerning adjustments in partner economies.

Given that the trade policies being considered are already evolving rapidly, it would make sense to direct research attention to ways of minimising adjustment costs and facilitating compensation, as appropriate.

## Conclusions

The PRC's economic emergence (or more strictly re-emergence) has been a momentous process for itself and its neighbours. The evidence we review here indicates that regional trade relations have indeed been complicated by the PRC's success but that opportunities for the regional economies are now greater because of it. Indeed, absorption by the PRC may come to dominate East and Southeast Asian demand and become a primary driver for sustained regional growth. Provided neighbouring

<sup>21</sup> How rapidly private sector investors emerge to take up opportunities offered by these developments on the trade front will have important implications for the pace and pattern of adjustment; see Kanamori and Zhao (2004) for a discussion of the evolution of the private sector in PRC. Kanamori (2004) discusses fiscal constraints.

economies do not isolate themselves from this process, the net effect of growth in the PRC is predicted to be hugely positive.

Concern over FDI diversion, which appeared an obvious 'threat' a few years ago, can be set aside on the basis of substantial empirical evidence. An essential catalyst for regional growth (and globalisation generally) has been the growth of intra-industry trade, through the propagation of global supply chains and production networks. In this web of commercial linkages, final products made in the PRC may contain parts and components from elsewhere as there is an extensive network of trade links across the region. FDI has been a prime mover in this process in integrating PRC-based firms in these global networks and buttressing the 'trade triangle' between the PRC, the rest of East and Southeast Asia, and the large markets in the US and Europe.

In this emerging specialisation, China's regional neighbours provide the inputs for manufactures produced in the PRC, which are then exported out of the region. Currently, this

is proving strongly mutually beneficial and we find no convincing evidence that trading partners are losing comparative advantage in higher value added or more skill-intensive activities.

Preoccupation with the PRC's dynamism has also drawn attention to East and Southeast Asian trade blocs. The more established regional grouping (ASEAN) is being re-examined in the light of the PRC's WTO accession and there are discussions on how best to include the PRC within regional trading configurations. While the adoption of the WTO agenda by the PRC has given a major impetus to globalisation trends, the evidence we review indicates that there may still be short or medium term benefits from regional FTAs. These should be relatively inclusive, however, to realise their fullest potential. Indeed, we have found that East and Southeast Asia can reap gains from ASEAN plus 3 that approach those of global trade liberalisation. In this sense, East and Southeast Asia's best path to globalisation is probably through more comprehensive regionalism.

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