Prelude to the Pacific century: Overview of the region, leading issues, and methodology

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1 Introduction

The Pacific Basin is the most robust economic region of the world. Over half the world's population resides in countries bordering on it, and this region's average economic growth rate has been double that of the rest of the world since 1970. The volume of trade on the Pacific is three times that on the Atlantic and has been growing twice as fast. In less than a generation, this region has become the global pacesetter for market-based economic development and a model of efficient international specialization. This volume examines a number of leading issues facing the Pacific Basin, collecting the research and opinions of experts from around the region on its economic prospects into the next generation. In particular, some of these authors examine the received history of trade rivalry and the new initiatives for regional cooperation in trade. Another series of papers examines Pacific multilateralism from the capital account perspective, detailing a complex web of foreign direct investment linkages that now pervades the region. Finally, two papers examine an important emergent issue in the region and the world — links between trade, sustainable resource use, and the environment. Taken together, these studies cover issues of the highest priority for policy dialogue and research, in this region and in the context of multilateralism generally, now and for the foreseeable future.

As we enter the Pacific Century, an unprecedented set of promises and challenges lies ahead. Can a new global paradigm of market-based, open multilateralism provide the economic momentum to lift the majority of humankind out of poverty at last? Can such a

complex mosaic of trading economies also provide a basis for sustained cooperation, peace, and political stability? There are no definitive answers to these questions, but recent history and current trends appear to justify an optimistic perspective. At the same time, however, the promise of sustained economic prosperity must be tempered with real concern about how the diverse and partially conflicting aims of so vast an area can be reconciled.

Table 1.1 provides GNP per capita and other economic indicators for 15 major Asia Pacific Economic Cooperation (APEC) countries.[1] An extremely large variance in GNP per capita among these countries indicates that the APEC members are at very different stages of development. In 1995, China's per capita income of $620 was only about 1.6 percent of Japan's per capita income of $39,640. If GNP is measured at purchasing power parity (PPP) dollars — i.e., using a common set of prices for goods and services — instead of using nominal exchange rates, then the ratio of the lowest to highest per capita income countries in the region would increase to about 10.8 percent.

The economic dynamism we see in the region today has arisen from two trends that are inextricably linked, rapid domestic growth and expanding trade.[2] Japan led the postwar expansion, growing at an average rate of 8.2 percent from 1955 to 1980, and was followed by "Four Tigers", Korea, Taiwan, Hong Kong, and Singapore that together grew by 8.8 percent from 1965 to 1990. More recently, China and the Association of Southeast Asian Nations (ASEAN) members have experienced unprecedented growth rates. China's real GDP grew by an annual average of 9.5 percent over the period 1980-1995. Other high-performing Asian economies (HPAEs) — Malaysia, Thailand, and Indonesia — grew by 7.2 percent per annum from 1970 to 1995.[3] Indeed, it is remarkable to see how, across this immense region, a few decades of market forces has delivered higher living standards than did several generations of traditional development policy.

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[1] Three APEC members — Brunei, Papua New Guinea, and Chile — are not included in the table because of their small economic size relative to the other 15 members.

[2] Growth rates across the region are summarized in Table 1.1.

[3] While the Philippines was an exception in that it experienced an extremely turbulent period with the debt crisis, the subsequent application of a stringent IMF adjustment program, and severe recessions over the period 1982-92, its economy has achieved a steady growth in recent years.

In all these cases, trade with much larger external markets leveraged the expansion of domestic GDP. The exports to GDP ratios increased sharply in most East Asian countries between 1970 and 1995 (Table 1.1), indicating sharply rising participation in the global economy. The increases were particularly dramatic in China (2.9 percent in 1970 to 21.5 percent in 1995), Korea (9.5 to 27.5 percent), Hong Kong (66.5 to 120.9 percent), Malaysia (42.5 to 83.1 percent), and Thailand (10.0 to 31.6 percent).

The success of these trading economies had no precedent since the times of Western colonialism. Unlike their predecessors, however, the early Asian exporters (Japan and Four Tigers) did not rely on political power to project their economic interests abroad. Instead, they used a combination of disciplined domestic industrial policies and aggressive international competition to penetrate established Western markets. Although there were significant reciprocal trade flows from these trading partners, the approach was essentially neo-mercantilist. National industry groups sought ever-increasing exports to stimulate domestic capacity, meeting foreign competitors on their own terrain and opening market share against domestic import substitutes. At the same time, domestic growth in these countries was financed by a combination of retained profits from domestic and foreign operations. Sustained trade surpluses made an essential contribution, accelerating the growth of domestic savings and investment in these export-dependent countries. Among the results of this approach were rapid capital accumulation, meteorically rising incomes, and often problematic bilateral trade relationships. Because of its bias towards national industry, internal finance, and asymmetric trade, the traditional model of export orientation has led to chronic dissonance of trade policies and impeded the progress of multilateralism. Voluntary export restraints (VERs) on Japanese autos, the Multifibre agreement (MFA), and a long litany of actual and threatened retaliatory trade measures are all evidence of this.

In addition to export-led industrialization, there are other noteworthy similarities between earlier and more recent Asian Pacific growth. As was the case for the more mature economies, income growth in the new Asian exporters is relatively egalitarian. We identify this with an enterprise and investor emphasis on human resource development that foster steadily rising labor productivity, real wages, and labor market flexibility. These attributes, in turn, lead ultimately to greater economic diversification and more balanced

and sustainable growth. Such an approach can be contrasted with some Latin American economies, for example, whose colonial experience with resource boom export activities has fostered an apparent bias against investment in human capital.

Despite their similarities, however, early and modern Asian Pacific exporters differ in very important ways. Firstly, the latter countries are exporting not only to Europe and North America, but to the world's most rapidly growing regional market, the Asian Pacific itself. Since 1980, intraregional trade has expanded twice as fast as trade with the rest of the world.[4] At the same time, developing Asian countries are rapidly diversifying beyond the traditional primary products that were the mainstay of regional exports to the North. More than just an alternative to Northern markets, Asian Pacific regional trade is qualitatively different. Export opportunities have been created largely through new domestic growth in importing countries rather than by market penetration. This increases the net gains from trade for both parties, supercedes important obstacles to market openness, and facilitates cooperation.

A second important difference in the outward orientation of today's Asian Pacific growth economies is microeconomic in nature — a pervasive trend toward joint ventures that might be termed "private multilateralism." Long before the Uruguay Round was successfully negotiated or the terms APEC, AFTA, and even NAFTA were coined, private business interests have been forging alliances for trade and domestic market development that transcend national boundaries.[5] Nowhere has this trend been more rapid and diversified than in the Asian Pacific, where nearly every permutation of nationalities has joined together to work across markets and jurisdictions, pooling expertise, market access, and capital to take fuller advantage of economies-of-scale and informational and other externalities. The result contrasts sharply with the narrower national economic interests of the older export economies, and represents a spontaneous and more intrinsic form of the liberal trading spirit so laboriously enunciated in regional and global trade agreements.

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[4] During 1980-95, intra-APEC trade grew 10.7 percent per annum while APEC countries' trade with the rest of the world grew 5.5 percent per annum.

[5] For reference, the acronyms refer to the ASEAN Free Trade Area (AFTA) and the North American Free Trade Area (NAFTA).

Evidence of the advantages of private multilateralism can also be found in the capital accounts. Instead of relying on investment resources to accrue from perennial trade surpluses, newly emergent economies in the region are benefiting from vast infusions of foreign direct investment. Sometimes referred to as Tiger's Milk, much of this growth of capital originates within the region itself and from joint ventures that represent complex marketing alliances. This more elaborate process of capitalization is an essential attribute of the new model of export-led, investment driven growth, including significant new advantages like technology transfer and a more collaborative basis of market linkages. The historic, one-country approach to rapid Asian growth, typified by Japan and the Four Tigers, has given way to extensive private networks of investment syndication arising with joint commercial and financial ventures. Taken together, the collective forces of this "Invisible Handshake" give rise to a myriad of commercial linkages for market participants and pervasive growth externalities for their domestic economies.

Thus it is reasonable to argue that there exists in the Asian Pacific a new paradigm for the outward-oriented economy. Such an economy draws a significant growth impetus from the global economy, but not by developing a national commercial export platform from which to penetrate foreign markets, maximize net exports, and relentlessly accumulate savings from at home and abroad. The modern outward-oriented economy opens itself to fuller participation in a complex web of self-interested but mutually advantageous trade and investment linkages. Many of these take the form of explicit joint ventures, but most arise as spontaneous market interactions. The private sector across the Pacific Basin has already developed this multilateralism to a relatively high degree (by comparison to other regions), and a number of regional initiatives (e.g. APEC) are being crafted to formalize the institutional context for this. If the promise of these agreements is fulfilled, we may see a new and more collaborative basis for prosperity that could significantly improve long-term prospects for stability and security in the region and throughout world.

2 Overview of Regional Trade Patterns

Trade is the animating force behind domestic economic growth and multilateral relations across the Pacific region, and the papers in this volume examine many specific aspects of this phenomenon. To introduce this work, however, we begin with a broad overview of historical trade patterns. These trends clearly reveal a transition from more focused, bilateral trade ties, from traditional, neo-mercantilist and even neo-colonial trade to a new, more diversified regime. Today's Pacific Basin is a complex universe of multilateralism, arising not from negotiating tables, but from the myriad initiatives of market forces. Indeed, it is striking how rapidly regional trade has advanced ahead of regional conventions such as APEC. Although stubborn details about trade barriers and distortions still need to be resolved, the spontaneous potential of this market is remarkable.[6]

The four panels of Table 1.2 lay out detailed patterns of bilateral and multilateral trade for the region over the last fifteen years. These will provide a useful reference for reading other parts of the book, but it is also worth digressing here to examine the evolution of trade relations from the Pacific perspective. Panel A of Table 1.2 details trade shares for leading East Asian economies for the years 1980, 1990, and 1995.[7] The trade destinations included in this table are the same East Asian economies and, in the first trading partner column, an aggregate of these. The most notable feature of these results is the steady growth of the "internal" East Asian market. Many of these countries now trade more than half their goods within the region and this share has increased substantially in the last fifteen years for all but one.[8] Apart from this, only China saw its East Asian trade

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[6] Indeed, the relative caution of Asian parties to APEC may be a partial concession to market forces as the leading agent of regional growth and change. Markets are, after all, designed to take risks, and politicians are notoriously reluctant to do so.

[7] In all the entries of these tables, trade is defined as the sum of exports and imports with respect to the two trading partners under consideration.

[8] Only Indonesia's regional share has fallen, but this country's trade statistics are misleading for two reasons, both related to its primary export good. Oil prices have dropped significantly during the period considered, and their revenues are denominated in a currency (the US dollar) that has depreciated significantly against the dominant East Asian currency (the Japanese yen).

share decline from 1990 to 1995, because of booming trade with the US, but still targeted over half its trade with neighboring Pacific countries.

Most countries actually reduced or held steady their share of trade with Japan, still the dominant regional importer. The most rapid growth in trade opportunities came instead from the Four Tigers and other emerging regional partners. Such diversification within the region represents both vertical and horizontal market expansions. In the first case, the emerging traders are fitting into the lower tiers of more complex trade hierarchies, including economies at the early, intermediate, and advanced stages of industrialization. This tendency has been particularly evident in association with the avalanche of FDI into China and Southeast Asia. Over the past ten years, Japan, Korea, and Taiwan have sharply increased their commitments in these markets, building links to subsidiaries or partners in the host countries who then export intermediate goods to the investor's home country or its subsidiaries elsewhere. In the latter case, horizontal expansion, they are participating in widening regional distribution systems. This growth is usually mediated by complex commercial alliances, in which the new partners enjoy more equal status and many growth externalities.

This trend can be contrasted with older, bilateral spoke links to hubs in Japan and the industrialized west. Most of these situations entailed projection of domestic marketing and production operations abroad, and the growth externalities for destination countries were more limited.

Apart from general trends, there are several specific aspects of internal East Asian trade worth highlighting. Despite its decline as a regional trade partner, Japan has steadily expanded its own sales in the region, increasing trade share in all East Asian economies except in Indonesia.[9] For most of the countries considered, Japan's trade share rose more than one third in five years from 1990 to 1995.

As one might expect, the implications of historical trade patterns between China, Hong Kong, and Taiwan are complex. Chinese trade dependence on Hong Kong dropped precipitously from 1990 to 1995, largely as a result of developing its direct trade capacity

[9] While the decline in the oil price reduced Japan's imports from Indonesia during 1980-95, its exports to Indonesia also declined as a result of the sharp appreciation of the yen during the period.

in the southeast and elsewhere. China still has the largest trade share to Hong Kong (15.9 percent) but is closely followed by Taiwan, with whom it has negligible bilateral shares.[10] One might expect the events of 1997 to exert some adjustment pressure on these trade flows. For its part, Hong Kong has the biggest relative commitment to intra-East Asian trade, but 34.8 percent of its 63 percent regional trade share is directed to China. Thus the accord of 1997 will internalize over half of Hong Kong's East Asian trade.

<INSERT TABLE 1.2 HERE>

Panel B of Table 1.2 summarizes the composition of total trade flows from the same East Asian countries. In addition to East Asia itself, trade with other destinations in the Pacific Basin and elsewhere are given. Among the most arresting features of this table is the predominance of APEC trade. For all the East Asian economies represented here, APEC accounts for two-thirds to three-quarters of their total trade by 1995. Of particular interest is how Japan has diversified toward APEC since 1980, moving from 51.6 to 70.4 percent of total trade. These figures make plain the stakes for APEC members.

Among individual countries, the U.S. is the largest non-East Asian destination. While this is hardly surprising given the size of its economy, it still exceeds large regional groupings such as Europe, Latin America, and the rest of the world aggregate. In most cases, the U.S. represents one-quarter to one-half of APEC trade for each East Asian country (1995). Although one might reasonably expect these shares to diminish over time (as indeed they have done in many cases), they help explain the special status accorded to this country in trade negotiations.

East Asian trade links to the rest of NAFTA are still negligible and have fallen somewhat since that agreement was signed, but this may have more to do with the decline of the Mexican economy than with trade diversion. Despite the initiative of some countries (Japan, China, Korea, and Taiwan), Latin America remains a marginal trade partner for

[10] There is an inconsistency in reporting trade data by China and Taiwan. A large fraction of Taiwan's trade with China is still reported as trade with Hong Kong, which jumped from 8.2 percent of Taiwan's trade in 1990 to 13.0 percent in 1995 (Table 1.2, panel A).

East Asia. Most interesting perhaps is Europe, whose relative importance to East Asian trade has declined monotonically and nearly uniformly (except Indonesia) over the last fifteen years. The same diversion of market share is occurring with respect to the residual, rest of the world region, including South Asia, Africa, and the former Soviet Union. Together, these areas have steadily declined in relative importance as markets for East Asian goods.

Panels C and D of Tables 1.2 tell a story analogous to that of Panels A and B, but this time from the perspective of all the 15 APEC economies considered here. The East Asian 10 are aggregated in the first row for comparison, while the remaining rows detail trade shares for the NAFTA countries, Australia, New Zealand (referred to sub-regionally as ANZ), and a representative APEC-15 aggregate.

Note first that the NAFTA and ANZ countries generally had significant and steadily increasing trade shares to East Asia. Although Mexico apparently has not committed itself beyond 6 percent of total trade, the rest of these countries now maintain over 10 percent, and in some cases almost half, of their trade with East Asian. Japan appears to be the primary partner. The real growth in trade has been to other East Asian countries, particularly China, with respect to which most trade shares have at least doubled.

Such imbalances also reveal an important difference between the East Asian (EA) and the NAFTA members of APEC. Trade by the latter group is more diversified outside the Pacific, and this has advantages and disadvantages for all members. The NAFTA countries are less regionally dependent on EA markets, thus can expect to see slower trade growth than their EA partners as long as this region is the most rapidly growing in the world. EA countries have the good fortune to be concentrated in trade growth markets, but relatively less bargaining power in a global trading context.

Panel D of Table 1.2 summarizes the trade links among the EA-10, NAFTA countries, and ANZ, as well as for the APEC-15 as a whole. The first group has already been discussed in the context of Panel B, but comparison with the others indicates the real trade diversification the non-EA members bring to APEC. This diversification mainly takes the form of increased European, Latin American, and intra-NAFTA market access. Given the scale of these three, if not their growth rates, this is a very attractive component

of the APEC regional accord from the East Asian (and ANZ) perspective. Canada and Mexico's trade dependence on the US limits the diversity they contribute to APEC, but it is worth noting that the US trade share to EA is larger than its combined NAFTA share. This fact, combined with the relative growth rates of the two regions, helps explain the impetus coming from Washington for this agreement. Indeed, the APEC-15 accounted for 64.7 percent of US trade in 1995, and almost 90 percent for its other NAFTA partners.

The receding markets during this period are Europe and ROW, which have lost significant trade share from EA-10, AFTA, and APEC-15 since 1990. In 1995, Europe only absorbed 16.2 percent of APEC-15 trade, and the residual ROW only 8.1 percent. Although the relative merits of regionalism and globalization are still being intensively discussed, the APEC regional initiative certainly covers the vast majority of the member countries' current trade. For this reason, APEC's success is essential to realizing the trade potential of the regional economies, and it will be a forceful precedent for global liberalization.

3 Trade Policy Issues

The dynamism of the Pacific regional economy is apparent not only in the volume of trade, but in the rapid evolution of trade relations. Beginning from a post-colonial setting, the early Asian growth economies built prosperity on neo-mercantilist strategies of intensive export promotion, protected internal markets, and accelerating capital accumulation. This approach was feasible as long as these countries were relatively few in number and their market shares in other countries remained small, but it is incompatible with the broadly based multilateral trade and growth we see in the region today. Pacific trade has expanded in recent years largely because of qualitative changes in policy that take account of commonality of interests. Increased recognition of the importance of reciprocity, joint venture activity, and even explicit regional agreements have all contributed to an expanding universe of economic opportunity for the regional economies. The papers in Section II of this book evaluate some of the leading issues in this area, with particular emphasis on the challenges facing policy makers.

In Chapter 2, Hiro Lee and David Roland-Holst examine the state of the trade relationship between the two largest economies in the region, the U.S. and Japan. In the half-century since its modern inception, trade between these two industrial powers has matured, but now it faces one of its greatest challenges, shifting comparative advantage. Indeed, recent friction in this relationship is perhaps an inevitable result of its failure to adapt to changing circumstances. Improved U.S. export competitiveness in agriculture and service has coincided with Japanese intensification of industrial exports, yet trade policies in the two countries have not fully accommodated this reality. Lee and Roland-Holst use a two-country calibrated general equilibrium (CGE) model to estimate the opportunity cost of this policy dissonance in terms of foregone economic opportunity, efficiency, and incomes. In addition to detailing the complex adjustments that would ensue, the authors conclude that both countries would gain substantially if they removed the significant residual protection against each other's imports. Furthermore, they show that free movements of direct investment flows provide greater welfare for the two countries than fully liberalized bilateral trade without such investment flows.

A broader lesson may be drawn from this work, one that resonates with the later contributions. Traditional neo-mercantilist policies are an artifact of a fading era, when trading partners were at vastly different levels of development. They are incompatible with an economic future that promised increasing parity between industrialized, diversified economies. The adjustment costs of outgrowing these bad habits may be non-negligible, but the economic potential thereby liberated is far greater.

In Chapter 3, Marcus Noland takes a closer look at the special characteristics of Asian exporting economies. In doing so, he reveals much about the transition alluded to above. In a thorough review of export-based growth experience in East Asia, Noland compares output and trade composition in the high performing Asian economies with countries in Europe, Latin America, and elsewhere. His empirical results suggest that while the Asian countries as a whole may exhibit greater export orientation, this is matched on the import side and should instead be interpreted as greater *trade* orientation. In addition, given the diversity of the Asian economies, it is difficult to characterize an "Asian export model" as such. Concerning the sectoral composition of exports, Asian economies have specialized

more rapidly in some manufacturing industries than would be predicted by factor endowment changes. Interestingly, Noland does detect high degrees of specialization, apparently more associated with targeted industrial policies than with relative factor endowments, yet there is little evidence that these specializations are innately Asian or even likely to be persistent sources of comparative advantage.

The three chapters in Section III deal with the dominant trade policy issue in the Pacific, regionalism. Just as Europe did as its economies modernized and diversified after World War II, today's East Asian economies are looking to increased economic interdependence as a source of new growth and mutual advantage. Unlike Europe in the 1950s and 1960s, however, Asian regional consciousness is embedded in an era of globalization, where both official and market institutions are promoting open multilateralism on a worldwide scale. Thus the choice for Asia is less obvious, and regionalism, even as a piecemeal approach to globalization, is a more uncertain prospect.

Arvind Panagariya presents a detailed analysis of this complex issue in Chapter 4, weighing the apparent merits of incremental cooperation against the more subtle pitfalls of global market segmentation. After thoroughly scrutinizing the options open to East Asian economies, Panagariya expresses deep skepticism on about the wisdom of systems of trade preferences within or across the region. He argues that there is little rational for such an approach on theoretical grounds, and it seems quite unrealistic on practical grounds. Instead, the argues, these economies would be better off upholding more universal principles of economic openness, using the APEC forum, if necessary, to leverage a faster transition to WTO-sponsored global liberalization.

In Chapter 5, Hiro Lee and Brian Woodall use empirical methods to evaluate regional trade policy in the context of domestic political agendas. Since trade policy is often formulated from the bottom up, it is reasonable to expect that a more modern view of national interest, such as that based on trade reciprocity, might encounter conflicts with established domestic interests. Lee and Woodall compare the prospects of Pacific regionalism from two perspectives, a heuristic indicator analysis designed to measure to domestic political feasibility and a multicountry CGE model. Their findings indicate that one can expect significant contention between vested domestic economic interests and

those who rightly anticipate significant economic gains from more liberal trade. This conclusion may help explain the unusual degree of policy independence that APEC members have negotiated into their agreements.

A special challenge facing East Asia is reconciling new regional and global trade initiatives with older multilateral agreements. ASEAN is one such arrangement, forged in a different time and with somewhat different objectives including security, but it has evolved in response to new economic forces. In Chapter 6, Tan Kong Yam clearly enunciates an East Asian perspective on both APEC and globalization. Among other things, he emphasizes the pivotal but somewhat ambiguous role of the US in most of the worlds major regional initiatives, arguing that East Asia generally and Southeast Asia in particular should hedge itself to avoid being played off against the EU or NAFTA. Tan also observes that complexities in US-Japan and US-China bilateral relations should not obscure Southeast Asia's fundamental interest in more open trade with both sides. In concluding, Tan sustains Panagariya's case that APEC should only be implemented as a complement, rather than substitute, for more open global trade. He further amplifies by arguing that ASEAN should leverage its position in APEC to push the latter organization closer to WTO standards. This argument is based on the belied that the WTO holds the promise "to sustain economic dynamism in the Pacific Basin."

4 Foreign Direct Investment and Private Multilateralism

In concert with, and sometimes well ahead of, official efforts at multilateralism, market forces and private enterprise have moved rapidly to expand the collaborative basis for trade across the Pacific region. This market-directed interaction has few direct counterparts in national trade policy, yet strongly influences and is influenced by the latter. While not a sufficient condition for policy coherence between trading partners, it is certainly necessary for such policies to succeed. The process arises from the myriad of small and large business initiatives referred to above as "The Invisible Handshake". While it may be difficult to observe the countless communications, meetings, and contracts that make up this web of market interdependence, we can observe it indirectly in the flows of

foreign direct investment (FDI) that facilitate it. The papers in Section IV all examine FDI in the Pacific region, and from these comes a better understanding of one of the most dynamic determinants of regional trade and economic growth, private multilateralism.

In Chapter 7, Peter Petri and Michael Plummer give an extensive survey of FDI. After a brief theoretical overview of the determinants of FDI, the key empirical characteristics of FDI flows, and related research, the authors provide their own empirical results in the Pacific context. Among other things, their findings emphasize the importance of FDI as a mediator of intraindustry and intrafirm trade. By extensifying and intensifying commercial linkages, FDI has accelerated the growth of regional trade and strengthened the basis for multilateralism.

Given its senior status among modern Asian export economies, Japan has undergone more extensive adaptation to the changing regional economy. For example, it was the first traditional Asian exporter to diversify itself from commodities to capital services, shifting production capacity abroad and becoming a private-sector partner in regional development. Initiating these financial links to neighboring economies has had complex implications for the private sectors in both Japan and its partner countries, and this experience has amplified the debate over whether trade and investment are substitutes or complements. In Chapter 8, Masahiro Kawai and Shujiro Urata appraise this question in the context of Japanese manufacturing. These authors find strong and positive two-way interactions, complementarity, between trade and FDI. Their results for a variety of Japanese industries demonstrate that FDI not only expands external capacity, but facilitates domestic capacity use. In short, FDI is an essential factor in deepening regional interdependence.

In the same context, Korea's experience with outward FDI has many similarities and some important differences. In Chapter 9, Jai-Won Ryou examines patterns of Korean overseas investment form the perspective of labor utilization. Of particular interest in this article is the emphasis on outward FDI as a potential threat to domestic employment, a concern more often raised in Europe and North America. In the Korean context, Ryou finds the domestic effects of outward FDI differ across sectors, but that the overall effect on trade and the economy reaffirms strong complementarity. While some labor-intensive

sectors, like textiles, have experienced "de-industrialization" symptoms in concert with FDI outflows, these are natural attributes of shifting comparative advantage in the global economy and it would be risky to jeopardize emergent trade opportunities by trying to obstruct this market-driven adjustment process with protectionist measures. The lessons drawn from this paper certainly have significance for other mature industrial countries.

The next two chapters reverse perspective on foreign capital flows, looking this time an inbound investment to two of the world's largest and dynamic developing countries. In Chapter 10, Shang-Jin Wei examines the provocative question of whether or not China is an underachiever as a foreign investment destination. Despite the meteoric rise of foreign capital inflows into China and an equally rapid proliferation of joint ventures, the Wei infers that China is still behind its absorptive capacity and could probably utilize significantly more FDI in mutually profitable ventures. Using the same model, one that combines standard economic variables and indicators of the receptiveness of the investment environment, Wei shows that Hong Kong is a dramatic overachiever as an FDI destination. In summary, post-1997 China will be more average in all these respects, but given China's size, it is still reasonable to expect dramatic future growth in its inbound FDI.

In Chapter 11, Iwan Azis examines FDI into Indonesia in a broader historical and institutional context. Azis begins with an authoritative review of the country's experience with foreign investment, a lengthy transition from colonialism to inward orientation to outward orientation. One important insight from this long view of economic development is how well established many "modern" economic phenomena were across three centuries of colonialism: including FDI, intraindustry trade, export orientation, import substitution, and regionalism. The author then goes on to appraise the domestic effects of FDI on the modern economy, with particular emphasis on income distribution. He points out that historical FDI has not fostered very uniform income growth, particularly in the regional sense. This may contribute to political uncertainty unless future investment trends help diversify the economy and broaden its basis of income generation.

5 Trade, Resources, and the Environment

Most of the contributions to this book focus on the positive aspects of Pacific multilateralism — public and private initiatives to improve individual and collective living standards through expanded regional trade and economic growth. While reference has been made to institutional or structural impediments to this trend, most of the previous material focuses on the positive side of the policy agenda. There have been and will certainly be many serious challenges to expanding multilateralism, however, and this book would be incomplete without some substantive discussion of them.

Challenges to multilateralism that arise from past norms and traditional institutions are treated in the earlier chapters. The future holds many new challenges, most of which cannot be anticipated. An important one that is clearly discernible, however, is the environment, and we examine it in this book as a case study in the risks of policy discord. The status of the environment raises very intrinsic questions of national interest (e.g., local public health and resource degradation), yet these are increasingly linked to multilateral relations and global events. While the maturity of domestic environmental policies varies widely, a multilateral perspective on environment is relatively new. Indeed, this issue has in many ways grown up with the new regionalism and globalization debates, and trade and environment linkages have been intensively discussed and researched in recent years.[11]

The final two chapters of this book examine trade and environment issues from two perspectives, that of a regional trade agreement and that of a single, large country whose environmental policies have implications for trans-boundary pollution and other multilateral externalities. In the first case, John Beghin, David Roland-Holst, and Dominique van der Mensbrugghe use a CGE model of Mexico to assess the environmental effects of its accession to the NAFTA regional trade pact. Although this issue has been intensively debated before, during, and after the negotiation of the NAFTA, very little evidence has been presented about the economywide impact on the Mexican environment until now. The authors conclude that, contrary to some thinking that NAFTA would induce the country to specialize in pollution-intensive products, Mexico actually shifts the

[11] See, e.g., Beghin, Roland-Holst, and van der Mensbrugghe (1994) for a survey.

composition of its economic activities toward lower average pollution-intensity. Despite this, however, aggregate growth impelled by trade liberalization leads to higher total pollution levels for the country. The authors then go on to examine a number of mitigation policies, however, and conclude that targeted emission taxes can achieve significant abatement for Mexico, while it still realizes most of the growth benefits accruing from the NAFTA agreement.

When the issue of pollution growth is raised in the Pacific region, attention is usually drawn to China. Because of this country's combination of rapid economic growth, low current pollution per capita, and vast population, it is reasonable to expect dramatic changes in this country's contribution to regional emission levels. In Chapter 13, two distinguished Chinese policy economists appraise this issue, beginning with an overview of environmental conditions and concluding with a discussion of trade linkages and multilateral externality issues. The authors concede that many challenges lie ahead for China in regulating its effect on the domestic and regional environment, but argue that multilateral cooperation in general and trade in particular can facilitate their efforts at pollution mitigation, greater energy efficiency, and more sustainable development policies. The threats that might be posed by acid rain, global warming, soil and other renewable resource depletion are very serious indeed. If more liberal trade contributed to faster technology transfer, stricter environmental standards induced by rising incomes, and more efficient and sustainable resource utilization, this would indeed be a triumph for multilateralism.

6 Methodological Notes

The contributions in this book come from a group of experts with quite diverse backgrounds and professional emphasis. In order to achieve the greatest coherence and policy relevance in this collection, we have asked them to focus their analysis and methodology on a specific region and set of issues. While representing many different perspectives and insights, the empirical work represented here emphasizes two main approaches: general equilibrium simulation models and the so-called gravity equation

approach to econometric modeling. In this section, we provide a synopsis of each of these methods, with references to guide the interested reader to more complete introductions.

6.1 Calibrated General Equilibrium Models

A confluence of neoclassical economic theory, dramatically improved computing and data resources, and renewed interest in reform-growth linkages has led to the advent of a new generation of policy simulation models. These calibrated general equilibrium (CGE) models are economywide in scope and simulate price-directed resource allocation in product and factor markets.[12] While their veracity rests as much on assumptions and data quality as any empirical economics, these models have especially desirable properties:

1) closed-form accounting for economic activity that helps ensure consistency;
2) emphasis on linkages, which captures myriad indirect effects beyond the ken of partial equilibrium analysis or conventional intuition;
3) a simulation structure permitting extensive counterfactual analysis in support of economic policymaking.

Because of these structural features, CGE models are particularly useful for detailed incidence analysis, where movements in relative prices of goods and factors can have pervasive effects on incomes. This approach has been widely applied for evaluating the economywide effects of trade and fiscal reforms, as well as other policies that entail removal or imposition of distortions to commodity or factor prices. By combining market simulation with detailed information on income and expenditure linkages, complex patterns of structural adjustment can be elucidated.

In recent years, the number of studies that employ CGE models has proliferated. Such models have now been constructed for over fifty countries, and they are in active use supporting government policy in countries as diverse as China, Morocco, and the U.S. A CGE model is particularly useful in assessing sectoral adjustments and income distribution

[12] For more thorough background on this methodology, the reader is referred to Dervis, de Melo, and Robinson (1982), Shoven and Whalley (1984), Borges (1986), Francois and Shiells (1994), and Devarajan, Lewis, and Robinson (1997).

and is ideally suited to evaluating of new trading arrangements because it can detail the impacts on both member and nonmember countries. Studies evaluating the effects of alternative trade liberalization scenarios among Pacific Basin countries include Brown, Deardorff, and Stern (1996), Lee and Roland-Holst (1995), Lee, Roland-Holst, and van der Mensbrugghe (1997), Lewis, Robinson, and Wang (1995), and Young and Chye (1997). These studies generally find that, in percentage terms, both discriminatory and nondiscriminatory liberalization by East Asian or APEC countries would lead to welfare gains to developing countries (such as China and ASEAN) that are significantly greater than those to developed countries. Recent studies assessing the impact of the Uruguay Round (e.g., Francois, McDonald, and Nordström, 1996; Goldin, Knudsen, and van der Mensbrugghe, 1993; Harrison, Rutherford, and Tarr, 1996; Hertel et al., 1996; Yang, Martin, and Yanagishima, 1997) also show substantial variations in the distribution of world welfare gains across regions.

6.2 Gravity Models

The gravity model has been one of the most successful empirical tools in explaining cross-sectional trade patterns.[13] In a simple form, it relates volume of trade between two countries positively to their incomes and negatively to geographical distance, analogous to gravitational attraction between two masses in physics. The standard gravity equation may be specified as:

$$T_{ij} = \beta_0 Y_i^{\beta_1} Y_j^{\beta_2} d_{ij}^{\beta_3} A_{ij}^{\beta_4} e^{\beta_5 D_{ij}} u_{ij}, \tag{1.1}$$

where T_{ij} is the bilateral trade flow from country i to country j, Y_i and Y_j are the exporting and importing countries' gross domestic products, and d_{ij} is the geographical or economic distance between the two countries. D_{ij} is an array of dummy variables such as those for preferential trading arrangements, A_{ij} is an array of other factors that could either facilitate

[13] See, e.g., Baldwin (1994) and Oguledo and MacPhee (1994) for surveys. Bayoumi and Eichengreen (1995) stated that, "The gravity model has long been the work-horse for empirical studies of the pattern of trade."

or impede trade between i and j, and u_{ij} is a log-normally distributed error term with E (log u_{ij}) = 0.[14]

Earlier empirical papers employing the gravity model to estimate trade flows (e.g., Tinbergen, 1962; Linnenmann, 1966; Leamer and Stern, 1970; Aitken, 1973; Leamer, 1974) consistently provided a good fit, yet they were often criticized because of the absence of strong theoretical foundations. Anderson (1979) was the first to provide a rigorous economic justification, deriving a reduced-form gravity equation from a general equilibrium model incorporating the properties of expenditure systems.[15] Subsequently, Helpman and Krugman (1985, ch.8) derived a version of the gravity equation from a model that consisted of sectors producing homogeneous products with constant returns to scale and those producing differentiated products with increasing returns to scale.

A series of papers by Bergstrand further developed microeconomic foundations of the gravity equation under alternative assumptions. In Bergstrand (1985) he assumed that goods are differentiated by country of origin and derived a generalized gravity equation consisting of price variables. He suggested that the assumption of perfect product substitutability would result in the omission of price variables and could lead to misspecification of the equation.[16] In Bergstrand (1989) he assumed non-homothetic tastes for a representative consumer and relative factor-endowment differences between two monopolistically competitive sectors in a two-factor, two-sector, N-country model. His reduced-form equation consisted of the exporter's national output and capital-labor ratio and the importer's income and per capita income, as well as distance and price-related variables. Using this theoretical framework, Bergstrand (1990) evaluated the determinants of cross-country bilateral intraindustry trade and presented some testable propositions.

Derivations of alternative versions of the gravity equation by Anderson (1979), Helpman and Krugman (1985), and Bergstrand (1985, 1989) did not directly base on the Heckscher-Ohlin (H-O) model, but instead on product differentiation models. A recent

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[14] The per capita income variable is generally included in A_{ij} as rich countries are expected to trade more than poor ones

[15] Linnenmann (1966), Leamer and Stern (1970), and Leamer (1974) attempted to provide theoretical foundations for the gravity model, but they lacked a compelling economic justification.

[16] Anderson (1979) and Helpman and Krugman (1985) also shared this view.

paper by Deardorff (1997) showed that the gravity equation can also be derived from two extreme cases of the H-O model — one with identical, homothetic preferences and frictionless trade, and the other with impeded trade where every country produces and exports different goods. Given that the gravity equation may be derived from a large class of models, Deardorff points out that its empirical success does not imply a support of any particular trade model.[17]

The main purpose of most of the empirical papers employing the gravity model has not been testing of an imperfect competition trade model, the H-O model, or any other trade models, however. Instead, a number of recent papers (e.g., Frankel, 1993; Frankel and Wei, 1993a,b; Frankel, Stein, and Wei, 1995; Baldwin, 1994; Oguledo and MacPhee, 1994; Bayoumi and Eichengreen, 1995) have attempted to capture a special regional effect on bilateral trade flows. This is accomplished by including a dummy variable for a common membership in a regional trade grouping. A major objective of these papers is to determine whether or not the high level of trade within a given region has been beyond what could be explained by economic characteristics common to bilateral trade throughout the world and thus could be attributable to the regional effect.

Although the gravity model might be able to describe factor movements as well as commodity movements between countries, that for foreign direct investment has not been formally derived. To date, Eaton and Tamura (1996) have made a good attempt to link between a theoretical model of trade and investment and gravity equations for trade and FDI. Specifically, they develop a model that can predict the extent to which innovators will alter exports and FDI to changes in the destination country's characteristics. Inevitably, more theoretical work is needed to provide satisfactory explanations of the activities of multinational corporations and how they affect trade and direct investment decisions.

The gravity equation has increasingly been used to explain FDI flows (e.g., Eaton and Tamura, 1994, 1996; Kawai, 1994; Wei, 1996) with a relatively good fit. The determinants of bilateral FDI flows could differ from those of bilateral trade flows. For

[17] For example, Deardorff cites Helpman's (1987) study which interpreted the good fit of the gravity equation with bilateral trade of the OECD countries as evidence for the monopolistic competition model.

example, in addition to the standard variables such as GDP, per capita GDP, and distance between two countries, Wei's FDI equation in this volume includes the host country's wage rate (labor cost), a measure of corruption and red tape, and a dummy variable for source and host countries that speak a common language.

Kawai and Urata's and Ryou's chapters explore interactions between bilateral FDI outflows and trade for Japanese and Korean industries. Specifically, they examine whether outward FDI would lead to an increase in the source country's trade and vise versa using gravity equations. They are aware of the FDI-trade simultaneity problem and use lagged values of trade and FDI in their FDI and trade equations, respectively. As long as the error terms in each equation are not serially correlated, lagged endogenous variables would be predetermined. This is likely to be the case when one only uses cross-country data, but is less likely to be the case when one uses a pooled cross-country, time-series data.

Despite these limitations, the chapters that employ gravity equations provide us with new insights on FDI in the Asia-Pacific region. Discussion by Kawai and Urata on Japanese FDI and patterns of trade by foreign affiliates of Japanese firms is important because Japan is the world's largest FDI source country. Korea has emerged as a major supplier of capital to China and the ASEAN countries, and Ryou's chapter provides an excellent case study for Korea. Furthermore, these authors estimate trade and FDI flows for selected manufacturing industries, enabling the readers to examine the differences in behavior across sectors.

7 Concluding Remarks

The contributions to this volume were assembled to shed light on the most dynamic economic region of the world. We hope that the lessons learned thereby will help to sustain and propagate the successes of the Pacific Basin economies, making a lasting contribution to improved living standards around the world. For decades after World War II, many international trade and development economists were haunted by one question: Why, two hundred years after the Industrial Revolution, do more than three-quarters of humankind still live in poverty? Despite the best intentions of donors and social reformers, a

generation of development assistance and political experimentation produced no general prototype for rapid and sustainable growth in developing countries. Only in recent years, with the fuller articulation of economies in the Asian Pacific, and the advent of rapid growth in China and ASEAN countries, has a new paradigm for economic modernization begun to manifest itself.

The early positive examples of this period, such as Japan, Taiwan, and Korea, gave some indications about how to industrialize in a modern, postwar era. These economies revealed the importance of leveraging domestic capacity growth with exports, dedicated public and private investment in infrastructure and, especially in human capital, and rigorous attention to market forces. Despite such important features, however, the example of early Asian export economies is of limited relevance to poor countries today. This is largely because the former based their industrialization and export strategies on neo-mercantilist principles, domestic protection and single-minded projection of national business interests into foreign export markets. Such an approach cannot be readily generalized across the developing world and in any case is inconsistent with the norms of multilateral trade prevailing today.

What we see emerging now in the Pacific Basin is a new paradigm of market-directed economic coordination and the kind of synergistic multilateral growth envisioned by classical trade theorists, significantly improved upon by modern private enterprise. While elements of comparative advantage exert a strong influence on resource allocation in individual countries, specialization is much less extreme than that which resulted from historic trade patterns. Multinational business exerts a pervasive influence on growth patterns in these economies, replicating abroad to exploit not only natural resources but also internal markets in each country. By infusing each FDI destination with new capital, technology, and expertise, thousands of foreign private interests contribute simultaneously to greater economic diversity within each economy, greater uniformity across economies. For the poorer countries, the result is a broader basis for employment and opportunity in their own economy, leading to greater diversification, stability, and generally higher rates of growth in productivity and wages.

Two of the most compelling aspects of this new, private multilateralism are its spontaneity and collaborative nature. Historically, economic policy in general and trade policy in particular was closely circumscribed by official institutions representing abstraction notions of national interest. Like many forms of regulation, the relatively simplistic agendas of national trade policy do not mesh well with complex and often conflicting incentives/signals that permeate today's international commerce. But the risks of commerce always carry the prospect of reward and, for every reticent trade negotiator, there may be hundreds of firms eager to establish a lucrative foreign partnership or open a new market. The resulting "Invisible Handshakes" ultimately serve national interest by transcending it, reaching beyond the short-term perspective of (e.g.) domestic protection to broaden the basis for economic activity globally and take a (national) material interest in the resulting economic growth.

The spontaneous and collaborative aspects of this process are intuitively appealing, but they also have one very profound historical implication. By transcending national policy control and relying instead on voluntary private cooperation, a multilateral basis for security may be emerging that is unprecedented in history. Private multilateralism is not simply a new source of global prosperity, it may be the new foundation for sustained global peace. If open multilateralism and market forces can supercede destructive national rivalry, it will be neither the End of History nor the Clash of Civilizations that prevail in the Pacific Century, but individual aspiration and enterprise, freeing most of us at last from the millennial scourges of war and deprivation.

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Table 1.1
Economic Indicators for Major APEC Countries

	GNP per capita (in US$)	GNP per capita (in PPP$)	Population (millions)	Real GDP Growth Rates			Exports/GDP (%)		Imports/GDP (%)	
	1995	1995	mid-1995	1970-80	1980-90	1990-95	1970	1995	1970	1995
Japan	39,640	22,110	125.2	5.0	4.1	1.2	9.5	12.3	9.3	11.1
China	620	2,920	1200.2	5.7	8.6	11.2	2.9	21.5	3.0	19.1
Korea	9,700	11,450	44.9	9.5	9.7	7.8	9.5	27.5	22.6	29.7
Taiwan	12,490	. . .	21.2	10.2	8.0	6.3	26.2	42.2	26.9	39.1
Hong Kong	22,990	22,950	6.2	9.3	7.1	5.3	66.5	120.9	76.5	134.2
Singapore	26,730	22,770	3.0	8.5	6.4	8.5	82.0	141.2	129.8	148.6
Malaysia	3,890	9,020	20.1	7.8	5.2	8.9	42.5	83.1	35.3	84.0
Thailand	2,740	7,540	58.2	7.2	7.6	8.9	10.0	31.6	18.4	38.0
Indonesia	980	3,800	193.3	7.6	5.5	7.1	12.0	22.9	10.9	18.3
Philippines	1,050	2,850	68.6	6.3	0.9	2.3	14.6	23.4	17.2	35.7
U.S.	26,980	26,980	263.1	3.0	3.4	2.5	5.7	8.1	5.5	10.3
Canada	19,380	21,130	29.6	3.9	3.4	1.6	23.3	32.5	20.6	28.9
Mexico	3,320	6,400	91.8	5.2	1.0	0.8	7.7	23.9	9.7	21.6
Australia	18,720	18,940	18.1	3.0	3.4	2.6	12.5	14.8	11.8	16.4
New Zealand	14,340	16,360	3.6	2.3	1.9	3.2	19.7	25.1	20.2	25.5

Sources:
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Table 1.2. Gross Trade Shares of Major APEC Countries
(Percentages)

Panel A. East Asian countries' bilateral trade

		Trading Partner										
Country	Year	East Asia	JPN	CHN	KOR	TWN	HKG	SGP	MYS	THA	IDN	PHL
Japan	1980	24.0	. . .	3.4	3.0	3.6	1.9	1.9	2.0	1.1	5.9	1.3
(JPN)	1990	28.2	. . .	3.5	5.6	4.6	2.9	2.7	2.1	2.5	3.4	0.9
	1995	38.8	. . .	7.4	6.2	5.6	3.9	3.8	3.5	3.8	3.1	1.4
China	1980	42.5	24.4	. . .	0.1	0.0	13.1	1.6	1.1	1.2	0.1	0.9
(CHN)	1990	58.5	14.4	. . .	0.6	2.2	35.7	2.3	1.0	0.9	1.1	0.3
	1995	54.5	20.5	. . .	6.0	6.4	15.9	2.0	1.2	0.8	1.2	0.5
Korea	1980	33.0	22.6	0.1	. . .	1.6	2.3	1.1	1.6	0.6	2.1	1.1
(KOR)	1990	36.2	23.1	0.5	. . .	2.0	3.3	2.0	1.7	1.1	2.0	0.6
	1995	42.3	19.1	6.4	. . .	2.5	4.4	3.4	2.1	1.3	2.4	0.8
Taiwan	1980	32.3	19.0	0.0	1.2	. . .	4.6	1.9	1.5	0.7	2.6	0.8
(TWN)	1990	39.3	19.9	0.3	2.1	. . .	8.2	3.0	1.7	1.5	1.8	0.9
	1995	49.2	20.2	1.6	3.2	. . .	13.0	3.4	2.7	2.1	1.9	1.1
Hong Kong	1980	44.1	13.6	12.7	2.3	5.4	. . .	5.3	0.9	1.2	1.7	1.2
(HKG)	1990	59.1	10.9	30.8	3.4	6.6	. . .	3.6	1.0	1.3	0.8	0.7
	1995	63.0	10.7	34.8	3.4	5.8	. . .	4.1	1.4	1.2	0.7	0.8
Singapore	1980	48.9	13.2	2.1	1.3	2.3	4.5	. . .	14.0	3.0	7.7	0.8
(SGP)	1990	48.7	14.4	2.5	2.5	3.8	4.5	. . .	12.9	4.4	2.7	0.8
	1995	55.9	14.3	2.7	3.5	4.0	5.7	. . .	16.9	5.3	2.1	1.2
Malaysia	1980	49.7	22.1	1.9	1.9	3.2	1.6	15.2	. . .	2.1	0.5	1.3
(MYS)	1990	55.6	19.7	2.0	3.6	3.9	2.5	18.9	. . .	3.0	1.1	0.9
	1995	55.6	20.2	2.4	3.5	4.1	3.7	16.2	. . .	3.3	1.4	0.7
Thailand	1980	40.0	18.3	3.4	1.5	2.2	2.6	6.9	2.9	. . .	1.8	0.6
(THA)	1990	47.7	25.0	2.4	2.5	3.7	2.6	7.4	3.0	. . .	0.6	0.5
	1995	50.5	23.8	2.9	2.5	3.7	2.8	9.2	3.7	. . .	1.1	0.8
Indonesia	1980	60.7	41.7	0.6	1.5	4.0	0.9	10.0	0.3	0.9	. . .	0.8
(IDN)	1990	58.0	34.3	3.1	4.9	4.6	1.9	6.7	1.1	0.8	. . .	0.5
	1995	56.3	27.3	3.9	7.2	4.6	3.0	5.4	2.5	1.7	. . .	0.7
Philippines	1980	37.9	22.0	1.8	2.4	2.9	2.7	1.7	1.8	0.6	2.1	. . .
(PHL)	1990	40.9	19.0	1.2	3.4	4.9	4.3	3.5	2.0	1.4	1.2	. . .
	1995	46.8	20.0	2.1	4.1	4.7	5.0	4.4	2.2	2.6	1.6	. . .

Sources:
International Monetary Fund, *Direction of Trade Statistics*.
Monthly Statistics of Exports and Imports, Taiwan Area, Republic of China.

Table 1.2 (continued)

Panel B. East Asia's trade with NAFTA, Australasia, and non-APEC countries

		Trading Partner										
Country	Year	East Asia	USA	CAN	MEX	AUS	NZL	APEC	Latin Amer	Europe[a]	ROW	World
Japan	1980	24.0	20.0	2.6	0.8	3.7	0.5	51.6	4.4	11.3	32.7	100.0
	1990	28.2	27.5	2.9	0.8	3.7	0.6	63.8	2.8	20.1	13.3	100.0
	1995	38.8	25.4	2.1	0.6	2.9	0.5	70.4	3.2	16.4	9.9	100.0
China	1980	42.5	12.8	2.5	0.3	3.4	0.5	62.0	3.0	16.1	19.0	100.0
	1990	58.5	10.2	1.6	0.2	1.6	0.2	72.2	1.5	13.9	12.4	100.0
	1995	54.5	14.6	1.3	0.1	1.5	0.2	72.2	1.9	15.0	10.9	100.0
Korea	1980	33.0	23.5	1.8	0.3	2.2	0.3	61.1	1.9	11.5	25.5	100.0
	1990	36.2	27.0	2.4	0.6	2.6	0.4	69.2	2.2	15.0	13.6	100.0
	1995	42.3	20.9	1.7	0.5	2.5	0.4	68.3	3.0	13.8	14.9	100.0
Taiwan	1980	32.3	28.9	1.8	0.3	2.7	0.2	66.1	2.4	12.6	18.9	100.0
	1990	39.3	28.1	2.0	0.4	2.4	0.3	72.5	1.8	17.3	8.4	100.0
	1995	49.2	21.9	1.4	0.3	2.0	0.3	75.1	2.1	14.6	8.2	100.0
Hong Kong	1980	44.1	17.5	1.2	0.1	1.8	0.3	65.2	1.5	19.7	13.7	100.0
	1990	59.1	16.1	1.1	0.2	1.2	0.2	77.9	1.1	16.0	5.0	100.0
	1995	63.0	14.4	1.1	0.2	1.1	0.2	79.9	1.5	13.8	4.8	100.0
Singapore	1980	48.9	13.1	0.6	0.1	3.0	1.0	66.6	1.5	13.4	18.5	100.0
	1990	48.7	18.0	0.7	0.1	2.1	0.3	70.0	1.1	15.1	13.8	100.0
	1995	55.9	16.3	0.4	0.1	1.8	0.2	74.8	1.0	14.0	10.2	100.0
Malaysia	1980	49.7	15.3	0.7	0.0	3.2	0.7	69.6	0.5	17.5	12.3	100.0
	1990	55.6	16.9	0.9	0.1	2.6	0.5	76.6	1.1	16.5	5.8	100.0
	1995	55.6	18.5	0.7	0.2	2.1	0.3	77.5	1.1	15.8	5.6	100.0
Thailand	1980	40.0	13.4	1.0	0.1	1.5	0.3	56.3	0.7	21.1	22.0	100.0
	1990	47.7	15.7	1.2	0.3	1.7	0.3	66.7	1.4	20.7	11.1	100.0
	1995	50.5	14.2	0.8	0.2	1.6	0.2	67.5	1.1	16.5	14.9	100.0
Indonesia	1980	60.7	16.7	0.4	0.1	2.1	0.5	80.5	3.0	9.1	7.5	100.0
	1990	58.0	12.3	1.1	0.2	3.4	0.4	75.5	1.1	16.6	6.9	100.0
	1995	56.3	12.5	1.0	0.2	3.3	0.4	73.9	1.4	18.6	6.1	100.0
Philippines	1980	37.9	24.5	1.0	0.2	2.4	0.6	66.6	1.5	14.3	17.6	100.0
	1990	40.9	26.6	1.5	0.1	2.4	0.5	72.0	1.9	14.9	11.3	100.0
	1995	46.8	25.0	1.1	0.2	2.1	0.4	75.5	1.2	13.8	9.5	100.0

[a] Europe includes Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, United Kingdom.

Table 1.2 (continued)

Panel C. APEC countries' trade with East Asian countries

Country	Year	Trading Partner: East Asia	JPN	CHN	KOR	TWN	HKG	SGP	MYS	THA	IDN	PHL
10 East Asian Countries	1980	33.9	11.0	3.0	2.1	2.9	2.9	3.1	2.5	1.2	4.1	1.1
	1990	41.3	11.3	5.7	3.5	3.8	6.0	3.6	2.6	2.0	2.2	0.7
	1995	49.2	12.5	8.7	4.3	4.5	5.6	4.3	3.8	2.5	2.0	1.0
U.S. (USA)	1980	22.9	10.9	1.0	1.8	3.1	1.6	1.0	0.8	0.4	1.4	0.8
	1990	32.3	15.6	2.3	3.7	3.7	1.8	2.0	1.0	0.9	0.6	0.7
	1995	35.2	14.1	4.5	3.7	3.4	1.8	2.5	2.0	1.3	0.8	0.9
Canada (CAN)	1980	7.9	4.7	0.7	0.5	0.7	0.5	0.2	0.1	0.1	0.1	0.1
	1990	11.6	6.2	1.0	1.4	1.1	0.7	0.3	0.2	0.3	0.2	0.1
	1995	11.0	4.9	1.6	1.3	1.0	0.6	0.4	0.5	0.3	0.3	0.2
Mexico (MEX)	1980	5.7	4.7	0.5	0.1	0.0	0.1	0.1	0.0	0.0	0.1	0.0
	1990	6.8	4.9	0.5	0.5	0.2	0.5	0.1	0.0	0.1	0.0	0.0
	1995	5.9	3.0	0.4	0.7	0.5	0.4	0.3	0.3	0.1	0.1	0.0
Australia (AUS)	1980	37.9	22.0	2.5	1.6	2.5	1.8	2.7	1.7	0.5	1.9	0.7
	1990	43.8	22.5	2.6	4.1	3.7	2.1	3.6	1.6	1.1	1.9	0.6
	1995	48.4	19.1	4.7	5.7	4.1	2.6	4.2	2.6	1.9	2.6	0.8
New Zealand (NZL)	1980	25.1	13.5	1.9	0.8	NA	1.3	3.9	1.1	0.4	1.6	0.7
	1990	27.9	15.6	1.1	2.9	2.1	1.3	1.3	1.3	0.7	0.9	0.5
	1995	32.9	15.0	3.0	3.4	2.8	2.1	1.7	1.9	1.0	1.3	0.6
15 APEC Countries	1980	26.4	10.6	1.9	1.8	NA	2.0	1.9	1.5	0.7	2.5	0.8
	1990	34.8	12.5	3.9	3.3	3.4	3.8	2.6	1.8	1.4	1.4	0.6
	1995	40.5	12.2	6.5	3.8	3.8	3.8	3.3	2.8	1.9	1.4	0.9

Table 1.2 (continued)

Panel D. APEC countries' trade with NAFTA, Australasia, and non-APEC countries

		Trading Partner										
Country	Year	East Asia	USA	CAN	MEX	AUS	NZL	APEC	Latin Amer	Europe[a]	ROW	World
10 East Asian	1980	33.9	19.2	1.9	0.5	3.1	0.5	59.1	3.1	13.0	24.8	100.0
Countries	1990	41.3	22.3	2.0	0.5	2.7	0.4	69.3	2.0	17.6	11.2	100.0
	1995	49.2	19.6	1.4	0.4	2.2	0.4	73.1	2.2	15.2	9.6	100.0
U.S.	1980	22.9	. . .	15.7	5.7	1.4	0.3	46.0	13.7	23.3	17.1	100.0
	1990	32.3	. . .	19.4	6.5	1.5	0.3	60.0	6.8	24.3	8.9	100.0
	1995	35.2	. . .	20.3	8.0	1.1	0.2	64.7	7.0	20.7	7.6	100.0
Canada	1980	7.9	63.4	. . .	0.6	0.8	0.2	72.9	2.8	11.9	12.5	100.0
	1990	11.6	69.3	. . .	0.9	0.6	0.1	82.5	1.7	11.6	4.2	100.0
	1995	11.0	74.1	. . .	1.4	0.5	0.1	87.1	1.7	8.8	2.5	100.0
Mexico	1980	5.7	63.0	1.3	. . .	0.1	0.1	70.3	5.4	16.4	7.9	100.0
	1990	6.8	67.6	1.1	. . .	0.1	0.3	76.0	5.6	16.6	1.8	100.0
	1995	5.9	79.2	2.2	. . .	0.1	0.1	87.4	4.4	7.3	0.9	100.0
Australia	1980	37.9	16.5	2.4	0.1	. . .	4.1	61.1	1.1	20.4	18.7	100.0
	1990	43.8	17.6	1.9	0.2	. . .	4.7	68.2	1.0	21.4	9.4	100.0
	1995	48.4	14.4	1.8	0.2	. . .	5.9	70.7	1.0	19.6	8.7	100.0
New Zealand	1980	25.1	13.7	2.3	0.3	15.8	. . .	57.3	1.2	23.3	18.1	100.0
	1990	27.9	15.5	1.8	0.7	19.3	. . .	65.2	1.4	20.7	12.7	100.0
	1995	32.9	14.3	1.7	0.3	21.0	. . .	70.2	1.7	18.6	9.5	100.0
15 APEC	1980	26.4	17.3	7.0	2.4	2.1	0.5	55.8	7.1	17.2	19.8	100.0
Countries	1990	34.8	19.8	7.7	2.5	2.1	0.5	67.4	3.7	19.4	9.5	100.0
	1995	40.5	19.8	6.9	2.7	1.7	0.4	72.1	3.6	16.2	8.1	100.0