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TRADE LIBERALIZATION AND EMPLOYMENT LINKAGES IN THE PACIFIC BASIN

by

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Regionalization and Employment Growth in the Pacific Basin[†]

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ABSTRACT

At the 1994 APEC summit in Bogor, Indonesia, it was recommended that trade and investment barriers among the member countries be removed by 2020. Despite general consensus that trade liberalization would accelerate development in this most dynamic trading area, there is very little empirical evidence about the adjustment process which would ensue. In this chapter, a ten-country CGE model is used to estimate the impact of trade liberalization among economies of Pacific Asia and the United States, giving particular attention to the adjustment which would occur in domestic labor markets. Our results elucidate the employment linkages between trading partners and show that the potential for new import demand by developed countries would accelerate employment growth in developing countries. In particular, Pacific trade liberalization could facilitate the emergence of a new reciprocal basis for multilateral gains from trade. Under an expanding system of liberal trade, capital-intensive and labor-intensive countries can cooperate to consolidate the basis for regional growth and prosperity.

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1. Introduction

The Pacific Basin is emerging as the most robust economic region in the world. In the last 25 years, the average economic growth rate in this area has been double that in the rest of the world. Japan experienced an unprecedented period of economic growth in the post-World War II era, then became a technological leader and substantially increased its share of high-technology products in the global market. Asian NIEs (newly industrialized economies of South Korea, Taiwan, Hong Kong, and Singapore) followed Japan in growing out of labor-intensive manufacturing and moving into a large-scale industrial sector and an increasing number of skilled-labor-intensive products, such as consumer electronics. China and ASEAN-Four (Association of Southeast Asian Nations: Thailand, Malaysia, Indonesia, and the Philippines) have substantially increased their manufacturing capacity and exports of labor-intensive products. Overall, the Pacific Asian share of world production has increased from less than 9 percent in 1960 to 23 percent in 1992.

While this region increased its share of world output and trade, intra-regional trade increased even faster. During the 1965-1990 period, the share of Japan's gross trade (exports plus imports) which flowed to and from other Asian Pacific countries rose from 15 to 26 percent. At the same time, Asian NIEs increased their average intra-regional trade share from 38 to 44 percent, China from 36 to 56 percent, and ASEAN from 36 to 50 percent. In other words, nearly half the income and other gains from international specialization by these trade- and growth-intensive countries are now internal to the region. Combined with trade to and from North and South America on the eastern rim of the Pacific Basin, the majority of Pacific Asian income is now generated within the region.[1] With this growth of trade has come increasing dependence upon external demand as a source of growth. Trade has generally grown faster than domestic output for most of the region's economies, with average import and export shares in domestic demand and supply, respectively, roughly doubling over the last two decades. This in turn implies that employment linkages between countries are more extensive than ever before and, in particular, the poorer and more labor-intensive economies are increasingly reliant upon

[1] Drysdale and Garnaut (1993) show that intra-Pacific trade (including North America but excluding South America) expanded from 56 per cent of the Pacific total in 1970 to 65 per cent in 1990. Frankel (1993) finds that an increase in intra-regional trade can be largely explained by rapid economic growth in East Asian countries.

export linkages to wealthier, more capital-intensive economies to fuel domestic employment and broaden the basis of rising living standards.

Despite the dynamism which already exists, Pacific trade patterns are still distorted by complex systems of domestic tariffs and other protective measures.[2] Under the auspices of the Uruguay Round, many of these trade barriers will gradually be reduced. In addition, at the 1994 APEC summit in Bogor, Indonesia, it was recommended that trade and investment barriers among the 18 member countries be eliminated by 2020.[3] While these liberalization efforts have attracted intense interest, little in the way of detailed empirical estimation has been done to assess their possible effects. The general equilibrium approach used here also reveals more extensive economic linkages than can be captured by other methods.[4]

A ten-country calibrated general equilibrium (CGE) model of Pacific Basin economies has been constructed to simulate the effects of changes in regional trade policy. The model details not only individual countries, but ten production sectors in each country and completely endogenous trade flows between them. One area of special emphasis is labor market and employment adjustment. Shifts in employment which result from trade are invariably at or near the center of the negotiating table, since the political sustainability of most policies can often be traced to their employment effects. In the current CGE model, we explicitly model sectoral employment in domestic production, the inter-sectoral domestic mobility of labor, and the labor services or employment embodied in trade between countries. This will elucidate the employment linkages between countries which are induced by trade.[5]

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[2] See USTR (1990) for a qualitative assessment of trade barriers in non-U.S. countries.

[3] Elek (1992) and Yamazawa (1992) summarize recent economic integration efforts in the Pacific and discuss the agenda for APEC, while Saxonhouse (1993) indicates that new regionwide liberalization could lead to substantial trade creating effects in the region. The APEC was established in 1989 with 12 member countries: Australia, Brunei, Canada, Indonesia, Japan, Korea, Malaysia, New Zealand, the Philippines, Singapore, Thailand, and the United States. China, Hong Kong, and Taiwan joined APEC in 1991, Mexico and Papua New Guinea in 1993, and Chile in 1994.

[4] An important exception is an OECD-World Bank collaboration to evaluate the global consequences of GATT-type agricultural liberalization (Goldin, Knudsen and van der Mensbrugghe, 1993). For an example of more traditional, partial equilibrium trade share approaches to economic integration in Pacific Asia, see Kreinin and Plummer (1992).

[5] The role of international capital mobility, which is receiving an increased attention, will be evaluated using the Pacific CGE model in a separate study. Doner (1993) and Urata (1993)

2. Modelling Economic Linkages in the Asian Pacific

This section gives an overview of the Pacific CGE model and the data resources which were used to calibrate it. The ten-country model described here is in most respects typical of comparative static, multi-sectoral, economywide models in use today. Generally speaking, all these models simulate price-directed resource allocation in commodity and factor markets. They maintain detailed information on sectoral prices, output, trade, consumption, and factor use in a consistent framework which also accounts for aggregates such as household income, government budget, and employment. The model equations are presented in the Appendix. The present model differs from the mainstream of CGE specifications in that domestic supply, demand, and bilateral trade for the 10 countries (United States, Japan, China, Korea, Taiwan, Singapore, Malaysia, Thailand, Indonesia, and the Philippines) are fully endogenous at a 10-sector level of aggregation.[6] Trade between all 10 countries is thus endogenous, while their individual trade flows with the rest of the world (ROW) are governed by export supply and import demand functions whose elasticities depend upon the size of each country in the non-Pacific market. The resulting 110 sets of 10-sector trade flows are then governed by an equal number of endogenous price systems.[7]

The extent of price adjustments, as well as the volume and pattern of trade creation and trade diversion, are important factors in determining the ultimate welfare effects of regional trade policy. As has been employed in many other CGE models, a differentiated product specification is used for the demand and supply for tradeable commodities. Domestic demand is constituted of goods which are differentiated by origin (domestic goods, imports from each of nine bilateral trading partners, and imports from ROW) and domestic production is supplied to differentiated destinations (domestic market, exports to

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suggest that the acceleration of Japanese direct investment in Asia has intensified regional economic integration.

[6] Australia, New Zealand, and Hong Kong have been omitted with reluctance because of data constraints, but will be included in future versions of the model. The ten sectors of the model are listed in table 1.

[7] There are $\sum_{i=1}^{r-1} i = 55$ sets of sectoral import and export flows, where r denotes the number of countries including the ROW.

each partner, and exports to ROW). The present model uses a constant elasticity of substitution (CES) specification for demand and a constant elasticity of transformation (CET) for supply.

We assume that labor in each of the PAC-10 countries is mobile between sectors, but the total labor supply is specified as a function of the wage rate and household income. Labor supply is given by

$$LS = \overline{L^{\max}} \left(\frac{\eta_0}{w}\right)\left[\frac{YP - \sum_{j=1}^{n} P_{Dj}\gamma_j}{1-\eta_0}\right],$$

where $\overline{L^{\max}}$ is the maximum aggregate labor hours available, η_0 is the marginal budget share for leisure, w is the wage rate, Y is household income, P_{Dj} are consumer prices of composite goods (consisting of domestically produced and imported goods), and γ_j are the subsistence consumption levels.[8] The wage elasticity of labor supply may be expressed as

$$\varepsilon_{LW} = \left[\frac{(1-\eta_0)\overline{L^{\max}}}{LS}\right] - 1 .$$

It is assumed that $\varepsilon_{LW} > 0$, thereby allowing the model to capture the positive income effects of liberalization on aggregate employment.

We specify that each of the ten Pacific countries has a fixed aggregate stock of domestic productive capital which is mobile between sectors while the economywide average rental rate adjusts to equate aggregate capital demand to the fixed total supply. Every sector is characterized by constant returns to scale and perfect competition. Prices are normalized by a fixed numéraire chosen as the GDP price deflator. Finally, we assume that real exchange rates are flexible while the current account balances are fixed at the baseline values.

[8] The maximum labor hours may be defined as $\overline{L^{\max}} = C_0 + \gamma_0$, where C_0 is leisure hours and γ_0 is the subsistence level of leisure. See de Melo and Tarr (1992) for details on this specification.

The Pacific CGE model has been calibrated to a ten-country 1985 social accounting matrix (SAM) constructed by the authors for this purpose.[9] The principal data source used to estimate the SAM was a ten-country, 23-sector input-output table estimated by the Institute of Developing Economies (IDE, 1992). Structural parameters of the model were obtained by calibration, direct estimation, or imputation from other sources. Calibrated values were obtainable for most share parameters, input-output coefficients, and nominal *ad valorem* taxes from the SAM itself. Employment and capital stock data were obtained from official publications where possible and otherwise estimated from international sources.

The scope of the SAM and other data is too great to permit any detailed discussion here, but Table 1 summarizes some general structural information on domestic output, income, and trade for the 10 countries. What emerges from these data are sketched portraits of countries at very different stages of development, whose trade patterns are richly textured along the lines of comparative advantage and regional location and a complex network of linkages between external demand and domestic income, output, and employment. For example, the United States and Japan most closely resemble an archetype of modern industrial economies, with small agricultural sectors, over half of output and almost three-quarters of their income (value-added) in tertiary activities. The United States, a country geographically linked to the world's three largest trading regions (East Asia, Europe, and the Americas) is the least dependent upon intra-Pacific trade. By contrast, Indonesia, the Philippines, and Malaysia are still very reliant on primary industries for domestic employment and income, and they are embedded most deeply in the regional trade matrix, with the highest levels of combined Pacific import and export dependence.

Trade shares also reflect a combination of endowment differences and hierarchy in development. The most advanced economies generally rely upon exports of primary products the least, while their export goods are capital-intensive manufactures (e.g. machinery and transport equipment). Pacific countries at intermediate development stages are woven into the fabric between the primary exporters and the U.S. and Japan, with bilateral trade patterns varying widely, depending upon relative resource endowments and

[9] See Reinert and Roland-Holst (1995) for applications of the SAM methodology to trade policy analysis.

technological advancement.[10] For example, Korea and Taiwan's imports from Japan are dominated by manufactured goods while their main exports to Japan are primary products and labor-intensive manufactures. Singapore has the same relationship with Japan, but is a net importer of primary goods and net exporter of manufactured goods with Malaysia, Thailand, and Indonesia. Overall, Taiwan, Malaysia, and Indonesia have heavy intra-regional export dependence, which are embedded in the regional trade matrix. China had virtually no official trade with Korea and little trade with Taiwan in 1985, but its trade with them has increased dramatically in the past several years.[11] The U.S. trade with Japan and NIEs are dictated by relative differences in factor endowments, however. Because of its relative abundance in land, the U.S. plays more of the role of an agricultural exporter and manufacturing importer with these Asian trading partners.

Table 1 also lists the *ad valorem* average nominal tariff rates and *ad valorem* equivalents of nontariff barriers that were applied to the 10 sectors in each country in 1985.[12] A few caveats apply to interpretation of these protection estimates and the results which are obtained by simulations entailing their removal. Although variation of protection across countries and sectors has remained relatively stable, actual tariff rates today are probably lower in most of these countries. On the other hand, each of the PAC-10 maintains some (and sometimes a considerable) degree of nontariff protection against imports and many of these have been increasing over the same period. To some extent, including both will offset these opposing trends.

3. Aggregate Results of Trade Liberalization Experiments

This section reports on the aggregate results of three trade-policy simulations with the Pacific CGE model. In the first case, it is assumed that a Pacific free trade area is

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[10] Park (1989) suggests that Pacific Asia could be divided into four groups of countries along a ladder of comparative advantage (the "flying geese" model of regional development): (1) Japan, (2) Asian NIEs, (3) Malaysia and Thailand, and (4) Indonesia and the Philippines. The flying geese development pattern was first put forth by Akamatsu (1962).

[11] China's intra-regional trade is underestimated because of the exclusion of Hong Kong, which has been its major trading partner.

[12] See e.g., Laird and Yeats (1990), Nogues, et al. (1986), and UNCTAD (1987) for data on NTB coverages.

created by the removal of all nominal tariffs governing bilateral trade between the 10 Pacific countries (hereinafter referred to as PAC-10). In a second experiment, the PAC-10 abolish both tariff and nontariff import barriers on regional imports. A third and final experiment assumes that the PAC-10 remove tariff and nontariff protection on imports from all sources. This is more analogous to embedding the Pacific countries in a GATT-type regime of global liberalization, although ROW import barriers are not explicitly changed.

An important aspect of the present results is the interpretation of labor market adjustments. Employment linkages will be evaluated from a multi-faceted demand perspective. Domestic demand creates domestic employment in domestic production and foreign employment in the production of imports. Likewise, external demand creates domestic employment in production for export. This leads to two kinds of employment, direct domestic employment, and indirect domestic and foreign employment embodied in exports and imports, respectively. In the interpretation below, particular attention will be given to trade in embodied labor services or multilateral employment linkages.

A. PAC-10 bilateral tariff liberalization

Aggregate results for the three experiments are presented in Tables 2-4. The equivalent variation (EV) income measure in column 1 represents the aggregate change in real consumer purchasing power, measured in 1985 billions of U.S. dollars. This can be contrasted with the real GDP measure, which is price deflated aggregate value-added. From Table 2, it is apparent that most of the PAC-10 countries would benefit from liberalizing their bilateral tariffs. The region as a whole experiences a $9.8 billion rise in EV income, although this is very unevenly distributed in both absolute and percentage (of base GDP) terms. Only Korea appears to lose in terms of EV or real consumption, largely because tariff liberalization raises the relative prices of nontradeables (services) and agriculture.

While China, Malaysia, Thailand, and the Philippines experience real output gains of more than one percent, the economy of Singapore contracts very slightly. This is because Singapore has relatively low prior protection levels and regional liberalization induces appreciation of its real exchange rate. Singaporean consumers benefit from this, however, as EV income rises more in percentage terms than for any other country. Indeed,

one might argue that, in the more protected Pacific environment, Singapore's real exchange rate was too low because of its free trade orientation.

Under regional tariff liberalization, the percentage change in EV income is lower than that of real GDP for most of the countries. This happens because the terms-of-trade deterioration resulting from liberalization to varying extents offsets real purchasing power gains.[13] Liberalization increases trade sharply, and in percentage terms overall exports and imports (columns 4 and 5) grow much faster than domestic output. While there is significant trade creation, the growth rates of intra-regional imports and exports (columns 6 and 7) generally exceed the overall rates, indicating that substantial trade diversion would also take place.

The employment effects of Pacific tariff liberalization are even more salutary than real GDP growth, with 9.9 million workers in new employment and percentage gains which exceed real GDP growth in every country but Japan. In part this is a result of the constraint on total capital stock (i.e. not a dynamic model) and mobility, which limits growth to more labor-intensive expansion. China has the largest absolute employment gain (7.4 million), but in percentage terms the biggest job creators are Malaysia, Thailand and the Philippines.

Employment embodied in imports and exports are defined as

$$LM_h = \sum_f \sum_i \ell_i^f D_i^f$$

and

$$LE_{hi} = \sum_f \sum_i \ell^h S_i^f ,$$

where ℓ_i^h and ℓ_i^f are sectoral labor/output ratios for the home country (*h*) and trading partner (*f*), respectively, *f* is a set of foreign subregions (9 regional partners and ROW), D_i^f is domestic demand for imports from region *f*, and S_i^f is domestic production for export to region *f*. To see the effects of trade on employment linkages, columns 8 and 9 display the absolute and percentage changes in *LM* and *LE* for the PAC-10 countries. The pattern of absolute job creation will depend upon the relative size of labor force and the

[13] The terms-of-trade for the United States, Japan and Singapore actually improve in this experiment because their tariff rates are low relative to other Pacific trade partners.

labor/output ratio (labor intensity) of each country, while percentage changes depend upon a combination of labor intensities (of trading partners for imports, domestically for exports) and trade expansion. For the region as a whole, 1.4 million new jobs are embodied in regional import demand, while exports from the region generate 2.4 million new jobs. The difference is net job creation from trade with the rest of the world, which is absent from the total absolute figures on columns 8 and 9.

Most countries see increases in employment driven by both domestic and external demand, but imbalances between the two depend upon where the country is on the scale of relative labor intensity. The U.S. and Japan, for example, create many more jobs abroad than their trading partners create for them, but this is quite inevitable given their relatively capital-intensive domestic production. China is at the other extreme, with 1.8 million extra export jobs but, under a less protective regional trade regime, shifting its imports toward greater capital intensity, reducing their labor content by 1.5 percent while total imports rise by 1.2 percent.

It is noteworthy that trade is creating employment at a faster rate than is overall domestic production, i.e. employment linkages often accelerate faster than trade itself. Consider the United States, for example, for which imports grow by 0.8 percent while the foreign employment tied to its imports grows by 1.7 percent. On the supply side, U.S. employment for export production grows 1.1 percent, generating 32,000 jobs. These account for about 27 percent of the 117,000 figure for economywide job creation, which is significantly higher than the proportion of aggregate exports to gross output.

B. PAC-10 bilateral tariff and NTB removal

While tariff reform has been a leading issue in global trade negotiations, nontariff barriers (NTBs) have become a serious impediment to trade in recent years. As column 7 of Table 1 shows, the *ad valorem* effect of NTBs in some Pacific countries exceeds its nominal import protection. In the face of evidence that the U.S. and Japan have substituted to some extent the latter for the former type of import protection since the 1980s, the agenda for trade liberalization has broadened in recent years to cover voluntary and involuntary quantity restrictions, government procurement practices, and other institutional mechanisms which can distort the prices of tradeables. Experiment 2, which entails the removal of tariff and NTBs among the PAC-10 countries, is therefore viewed as a more plausible long-term scenario for negotiated Pacific trade liberalization.

The aggregate results of such an agreement (Table 3) are universally beneficial to the PAC-10 countries in EV income terms. The region as a whole gains $17.5 billion in EV income, a 0.3 percent increase relative to the base year. Aggregate regionwide output rises by $18.2 billion in real terms, but Singapore and Taiwan experience small reductions in real domestic output. This happens primarily because of increased import penetration, but overall employment rises in both countries as their trade orientation shifts to textiles and other labor-intensive exports.

Employment in the PAC-10 combined rises by 13.5 million and 38 percent of this gain results directly from an increase in export production (column 9). The United States would undergo job growth of 312,000, while the corresponding figure for China is 9.6 million. Under this broader regional liberalization, Japan's employment also increases slightly (by 15,000).[14] In percentage terms, Malaysia, Thailand, and the Philippines experience gains exceeding 4 percent of their labor forces.

Overall, imports and exports increase by an average of 4.3 and 5.0 percent, respectively. Trade between the PAC-10 rises by 12.2 percent on average, indicating a significant amount of trade creation from the regional trade agreement. Average employment embodied in the PAC-10's imports rises by 13.2 percent while that embodied in its exports increases by 13.8 percent. The latter figure reflects significant export employment stimulus experienced by the labor-intensive economies, i.e. China (18.1 percent), Malaysia (17.1 percent), Thailand (15.9 percent) and the Philippines (16.7 percent). Even the relatively capital-intensive Korea experiences a sharp rise (14.0 percent) in export employment because of textile market liberalization.

C. PAC-10 multilateral tariff and NTB removal

The third experiment represents a scenario which might approximate the progress of the next GATT round. Table 4 presents the results of an experiment where all the PAC-10 countries essentially become free traders, not only among themselves but with respect to the rest of the world. When the 10 abolish all nominal tariffs and NTBs, the aggregate regional gains are triple those of experiment 1, including over 30 billion 1985 dollars of

[14] Lee and Roland-Holst (1994a) find that bilateral tariff and NTB liberalization by the United States and Japan would increase United States employment by 257,000 and Japanese employment by 61,000.

EV income and real GDP growth, and over 20 million new jobs in the region.[15] While the results across countries are not uniform, every country gains in aggregate income and job creation, with the latter exceeding the former in percentage terms in developing countries. In Malaysia, Thailand and the Philippines, for example, aggregate employment gains exceed 5 percent of the labor force. In the case of the U.S., however, EV income gains exceed those of within-region liberalization, but its real GDP and employment gains ($5.1 billion and 187,000 jobs, respectively) fall short of those it would enjoy from the regional agreement ($5.4 billion and 312,000 jobs). This may be because the U.S. is similar to other non-Japanese OECD countries and benefits from preferential access to the Pacific market.

Trade results are qualitatively similar to the second experiment, but imports and exports generally expand more in this scenario, 9-10 percent overall and over 13 percent within the region. It is noteworthy that regional trade expands substantially more than overall trade even when the liberalization is non-discriminatory. In percentage terms, the most significant aggregate adjustments are in trade-embodied employment. Imports into the region generate 17.9 percent more jobs for the PAC-10 compared to the baseline, while exports employ 20.9 percent more than in the status quo situation. Clearly, the existing system of import protection within the Pacific region is a serious impediment to economic efficiency and growth.

4. Regional Trade and Employment Linkages

There are two paths in the decomposition of aggregate trade effects, between-country and within-country effects. From the inter-country perspective, the aggregate domestic impact of trade policy is decomposed into an elaborate mosaic of bilateral relations, each with their own political, cultural, and geographic implications. Within a country, aggregate effects are decomposed across sectors and other more specialized economic institutions, and here arises the complex political economy of industry, labor, and domestic welfare policies. Each of the two perspectives gives rise to very different

[15] Compare these figures to the dynamic estimates for GATT by Goldin, Knudsen and van der Mensbrugghe (1993). With the present model, we do not remove rest of the world tariffs, so it is likely that these results understate the potential gains from global liberalization even in a comparative static framework.

issues, but ultimately the two must be reconciled if trade policy is to be managed coherently.

The inter-country implications of Pacific trade liberalization can be more clearly seen in Table 5, which presents bilateral trade flows among each of the PAC-10 countries and the rest of the world. The figures given in the table are for experiment 2, changes in bilateral import and export flows resulting from tariff and NTB removal within the PAC-10 region. Rows of the table are exporting countries, columns importing countries. Row and column sums of the table thus correspond to the aggregate country export and import changes, while the matrix details their bilateral composition. All bilateral trade links among the PAC-10 are amplified, but a significant number of trade flows with the rest of the world are actually reduced, thereby causing trade diversion. For example, Chinese and Thai imports from ROW decrease by 4 percent, and Taiwanese and Malaysian exports to ROW fall by 5 percent. As the aggregate results indicate (Table 3), Japan experiences a sharp rise in both imports and exports, totaling $10.6 and $11.5 billion, respectively.

While the nominal results are of interest, changing bilateral trade patterns are easier to discern in the percentage table. Although there are strong trade linkages among the PAC-10 countries, the percentage changes in trade volume differ considerably across different bilateral partners. For example, Thailand increases import demand from neighboring China by 18.0 percent, but from its southern neighbor Malaysia by only 9.5 percent. U.S. demands for Korean and Chinese goods increase by 16.6 and 14.1 percent, respectively, but only 2.2 percent more Indonesian goods come into the country. Japan increases imports from China and the Philippines by 24.9 and 24.4 percent but from Singapore by only 9.8 percent.

From an export perspective, U.S. prospects improve substantially with respect to Japan (21.6 percent, mostly in agriculture), Indonesia (20.1 percent) and the Philippines (23.1 percent), yet its exports to Singapore rise only 4.0 percent. Likewise, Indonesia increases exports to the Philippines by 22.7 percent, but its exports to the U.S. and Singapore rise by only 2.2 and 3.8 percent, respectively. Thus, bilateral trade linkages in this region, and the economic and political incentives which correspond to them, are quite asymmetric.

Table 6 presents analogous results in terms of employment linkages. Rows represent thousands of jobs created abroad by export demand, columns the same units of domestic employment created by import demand. For completeness, we have also included

domestic employment generated by domestic demand on the diagonal of the matrices of absolute and percentage changes. In percentage terms, the results on employment creation are more variegated than those on the trade flow changes. As has been observed in the aggregate results, developing countries gain more employment than developed countries, but the patterns of employment creation are quite complex. The U.S. and Japan create far more jobs for foreigners than conversely, but the disparity for Japan is much greater. While creating over 3.5 million jobs abroad with its import demand, Japan generates only 15,000 new jobs to meet demand from all sources. Job creation from domestic demand is actually negative, the result of import penetration in relatively labor-intensive sectors (Taiwan and Singapore also experience this). Net of domestic-domestic job creation, China is a relatively extreme opposite, accruing 3.5 million jobs from exports and generating only 22,000 with its new import demand.

It is worth emphasizing at this point that all countries gain substantially from these trade reforms. Indeed, the only negative employment effects induced between trading partners are with respect to the excluded group, ROW. Even though the winnings differ in both absolute and relative terms, all the PAC-10 countries appear to be winners in the aggregate and bilaterally. The bilateral picture is indeed more complex, but it is still a positive scenario. An even more challenging policy situation arises as the results are decomposed within countries, revealing adjustments of output and employment for individual sectors.

5. Domestic Structural Adjustment to Regional Liberalization

As is often the case with trade theory and policy, aggregate results tell only part of the story and can in many cases give misleading signals about the institutional feasibility of reform measures. In particular, economywide efficiency gains are rarely distributed uniformly across sectors and other domestic institutions. This issue is central to the distinction between the trade theory and trade policy practice.

Table 7 presents sectoral adjustments in output, demand, factor use, and trade for the PAC-10 resulting from regional tariff and NTB removal (experiment 2 in section 3). Even the most casual inspection of these results makes clear how variegated the domestic adjustment experience is, both within and between countries. For example, even though the U.S. gains 312,000 jobs across its economy, 63,000 are lost in the textile sector and

10,000 in the vehicle sector (column 5). Japan's agricultural sector contracts by 6.4 percent in real terms and sheds 311,000 jobs, but this and the contraction in mining are more than offset by expansion in manufacturing. As one might expect, its vehicle sector expands robustly (7.6 percent), driven largely by exports (13.5 percent).

The liberalization of regional textile trade has dramatic effects on Korea, Taiwan, Singapore, and the Philippines, each of which sees sharp expansion in textile production and strong resource pulls to this export sector. This example raises a more general point. The concept of a declining industry is often applied to older production infrastructure in mature economies, but it is apparent from these results that the idea is a more relative one. In the contention for limited resources, sectors in growing economies must be competitive not only internationally but domestically. Changing trade regimes can put even newer activities on the defensive as other sectors contend for limited labor and capital to meet new export opportunities.

The sectoral results reported in Table 7 must be interpreted with caution. It should be reminded that this model is calibrated to 1985 data set when revealed comparative advantages for exports in textiles for Asian NIEs were considerably higher than what they are today.[16] Because large percentages of Asian NIEs' textile exports are to the U.S. (Table 1), which has a very high ad valorem equivalents of NTBs on textiles (41 percent), the complete removal of trade barriers would cause a sharp increase in the production of textiles in Asian NIEs. As labor is drawn from other sectors in these countries, the output levels of many of the other sectors fall. Since comparative advantage of these countries have shifted from textiles to consumer electronics, machinery, metal products and transportation equipment since 1985, quite different results are likely to emerge if data are calibrated to a more recent year.[17] Nevertheless, the present results do suggest that even the most dynamic of Asian economies will realize the fullest gains of a more liberal

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[16] The index of revealed comparative advantage for exports is defined as the ratio of a country's share in exports of a particular product to its share in total exports:

$$RCA_i = \frac{E_{ik} / \Sigma_k E_{ik}}{\Sigma_i E_{ik} / \Sigma_i \Sigma_k E_{ik}} ,$$

where E_{ik} are exports of commodity *i* to country *k*.

[17] 1985 was the most recent year for which input-output tables were available for all ten Asia-Pacific countries. IDE is in the process of constructing 1990 Asian input-output tables, which will become available in March 1998.

regional trade regime only by greater innovation and infusions of external capital. In the absence of these factors, the domestic-resource rivalry in these countries could be fierce.

The sectoral composition of liberalization effects holds more information about the real consequences and institutional feasibility of policies which would lead to these kinds of adjustment. As one would expect from a trade-driven adjustment process, sectoral imports and exports (Table 7, columns 7 and 8) are making greater adjustments than domestic output. Even more dramatic are the changes in bilateral sectoral trade flows, and these often constitute the focal points of trade negotiation and, failing that, retaliation. Such a detailed analysis is outside the scope of the present study, but the separate bilateral and sectoral results make one thing very apparent: only detailed empirical work of this kind can clearly identify the practical incentives and impediments to more efficient international markets and fuller realization of the benefits of greater multilateral trade linkages.

Table 8 summarizes the sectoral output results for six alternative liberalization scenarios. The six scenarios are (1) PAC-10 regional tariff removal (same as experiment 1 in section 3), (2) tariff liberalization and a 50% cut in *ad valorem* equivalents of NTBs within the PAC-10 region, (3) PAC-10 removal of all regional tariffs and NTBs (same as experiment 2), (4) PAC-10 removal of tariffs on imports from all sources, (5) removal of tariffs and a 50% reduction in *ad valorem* equivalents of NTBs on all imports, and (6) removal of tariffs and NTBs on all imports (same as experiment 3). The second and fifth scenarios are considered because the removal of NTBs is more difficult and thus could be expected to proceed more gradually than tariff liberalization.

Compared with the third scenario, where tariffs and NTBs are completely removed within the PAC-10 region, shifts in resource allocation and production across sectors are less dramatic in the first two scenarios. When the removal of NTBs is more gradual, one could reasonably predict that the output adjustment process would be moderated. For example, Korea no longer experiences an output contraction in the machinery and vehicle sectors. Taiwan's metal and transportation equipment sectors still contract, but the magnitudes are significantly smaller than those reported in Table 7. The present model is likely to bias downward the output effect of those sectors whose revealed comparative advantage has increased since 1985.

Pairwise comparisons between regional liberalization and global liberalization (scenario 1 versus 4, 2 versus 5, and 3 versus 6) confirm intuition that the magnitude of sectoral adjustments would be significantly larger in the latter than the former. Under

scenario 6 where tariffs and NTBs are removed on imports from all sources, some sharp output reductions are observed in a number of sectors, including U.S. textiles and Japanese agriculture. For Japan, the opportunity cost of protecting agriculture is apparently quite high, since its manufacturing sectors would expand at a considerably greater rate than under regional liberalization. For the U.S., however, a reduction in the textile production does not appear to induce output expansion in other sectors. Most sectors in China, Asian NIEs, and ASEAN countries (with the exception of Indonesia) generally experience greater net output expansion under non-discriminatory liberalization scenarios 4-6. Growth in the machinery sector (including electronics products), which has been a cornerstone of development in Asian NIEs, is as robust in these scenarios as in the first two.

6. Sensitivity Analysis

Since a main focus of this study is the effect of trade liberalization on employment in the Pacific region, a sensitivity test was conducted to evaluate the magnitude of employment changes resulting from PAC-10 regional tariff and NTB removal with respect to the wage elasticity of labor supply (ε_{LW}). The base values of ε_{LW} presented in Table 9 are based on literature estimates and reasonable assumptions. As a starting point, the value of 0.15 was chosen for ε_{LW} in the U.S.[18] A significantly lower value (0.05) was used for Japan, because employment there has been quite insensitive to fluctuations in the wage rate. For the remaining eight countries, the base values of ε_{LW} were set according to assumptions about the availability of surplus labor. A relatively low value (0.1) was assigned for Singapore because almost no surplus labor exists there. A higher value (0.2) was chosen for Korea and Taiwan because of the existence of surplus labor in agriculture, and an even higher value (0.5) was set for China and ASEAN-4 countries because of their large employment shares in agriculture.[19] In the sensitivity analysis, we set low values of ε_{LW} between 0.02 and 0.15, high values between 0.2 and 1.5, and very high values between 0.5 and 5.0 (Table 9).

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[18] This value is used, for example, by Fullerton, Shoven, and Whalley (1983) and Shoven and Whalley (1992).

[19] In 1985, 62 percent of employment was in agriculture in China, the highest among the PAC-10 countries.

The results of sensitivity runs (summarized in Table 10) indicate that, while the absolute employment impact depends upon the values of wage elasticity of labor supply, the qualitative effect is unaffected by these parameter values. Employment gains in Japan and the United States are relatively small regardless of the values of ε_{LW}. Those in Asian developing countries, particularly in Malaysia, Thailand, and Philippines, are still significant in the low elasticity case and amplified in the high and very high elasticity cases. Thus, the main conclusion of this chapter is robust against reasonable uncertainty about the true values of ε_{LW}.

7. Conclusions and Extensions

The Pacific Basin is the largest and fastest growing multilateral trading region of the world. It is also inhabited by an extraordinary variety of economies, representing a broad spectrum of resource endowments and levels of development. Despite rapid and sustained growth of commerce across this region, Pacific trade is still impeded and distorted by tariff and other import barriers. Using a CGE model of the United States and nine leading Asian economies in the region, this chapter has provided some initial estimates of the growth and adjustments which would ensue from greater trade liberalization in the region.

Our results indicate that, while regional liberalization certainly confers efficiency gains upon the region as a whole, the composition of these gains varies significantly between the member countries in aggregate, percentage and especially sectoral terms. In particular, employment gains result for every country if all PAC-10 countries remove tariff and nontariff import restrictions bilaterally or universally. Over 20 million jobs can be created in the region, but both the absolute and percentage changes differ considerably across countries. Even in this comparative static framework, real GDP gains for the region can exceed $30 billion, but its composition across countries also varies significantly.

An analysis of bilateral trade and employment linkages reveals that the composition of regional demand and supply would shift significantly under more liberal Pacific trading rules. Although there are strong asymmetries in these linkages, multilateral cooperation to achieve a less distorted regional trade regime would lead to employment gains for every Pacific country. Whether these results suggest the existence of more complex self-interested strategies, including patterns of optimal tariff discrimination, is an open

question. While they do suggest the existence of a large space of cooperative and non-cooperative bargaining solutions, considerable gains can be realized for most of the region's population by applying the simple rule of more liberal, undistorted trade.

In light of the factor endowment patterns of the countries in this region, one major conclusion can be drawn from our results: Pacific trade liberalization will facilitate the emergence of a new reciprocal basis for multilateral gains from trade. Under an expanding system of liberal trade, capital-intensive and labor-intensive countries can work together to consolidate the basis for regional growth and prosperity. Developing countries offer new regional resources and a broad spectrum of investment opportunities to their industrialized partners, while the latter can contribute their financial capital and technology to accelerate the expansion of real output and employment in developing countries. Thanks to the income growth which results in both areas, this process will not be as asymmetric as it might seem. Rising incomes in the developing countries will contribute to domestic savings and capital accumulation, while increasing employment in developed countries.

At the sectoral level, compositional effects are quite variegated, exhibiting large absolute and percentage variations. For smaller trading nations, output adjustments of more than 10 percent are not unusual and sectoral imports and exports can change by multiples of this figure. Even the U.S. experiences significant shifts in output and trade flows, particularly in textiles, but the negative employment effects in contracting sectors are outnumbered by gains elsewhere. The U.S. economy as a whole would gain about 312,000 new jobs. Clearly, the system of import protection in place in the Pacific since 1985 has fostered significant distortions in the composition of domestic production and trade among the economies of the region.

At the next level of detail, beyond individual sectors, lies the complex network of bilateral commodity trade flows. Here, the adjustments are even more dramatic than those for the sectoral trade aggregates. Discussion of these detailed results is beyond the scope of the present study, however. The increasing amplitude of effects as one examines more and more detailed trade linkages reveals the importance of this type of focused empirical work for understanding two essential issues in modern trade theory. The first is the adjustment process which ensues from removing existing systems of protection, always more complex and ambiguous than would be presumed from aggregate welfare analysis. The second is the political economy of protection which has given rise to the barriers in the first place. This can be fully understood not by the naïve application of aggregate rules-of-thumb, but with a more detailed analysis of the incidence of well crafted trade policy.

There are three significant directions in which to extend the present work: (1) the inclusion of other prominent regional economies (including Australia, Canada, Hong Kong, Mexico, and New Zealand), (2) the specification of a dynamic framework, and (3) updating of the Pacific CGE database to 1990. All these extensions can make an important contribution to improving the scope and accuracy of our results, but in the meantime it is hoped that this preliminary work will stimulate a more detailed and empirically rigorous appraisal of the prospects for realizing the enormous economic potential for this region.

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Appendix: Structural Equations for the Pacific CGE Model

I. Structural Equations

Consumer Behavior

$$C_i = LES_C(P_{Di}, Y) = \gamma_i + \frac{\eta_i}{P_{Di}}\left(Y - \sum\nolimits_j P_{Dj}\gamma_j\right) \tag{A.1}$$

Production Technology

$$S_i = \min\left\{CES_S(L_{Di}, K_{Di}, \phi_i), V_{1i} / a_{1i}, \ldots, V_{ni} / a_{ni}\right\} \tag{A.2}$$

$$V_{ij} = a_{ij} S_j \tag{A.3}$$

Factor Demands

$$LD_i / KD_i = \psi(w / r_{Di}; \phi_i) \tag{A.4}$$

$$KD_i = KD_i^d + \sum_f KD_i^f \tag{A.5}$$

Factor Supplies

$$LS = LES_L(w, Y) \tag{A.6}$$

$$KS_i = KS_i^d + \sum_f KS_i^f \tag{A.7}$$

Commodity Demands, Supplies, and Allocation of Traded Goods

$$D_i = \overline{A}_{D_i}\left[\sum_k \beta_i^k \left(D_i^k\right)^{(\sigma_i - 1)/\sigma_i}\right]^{\sigma_i/(\sigma_i - 1)} \tag{A.8}$$

$$D_i^f / D_i^d = g_D\left(P_{Di}^f / P_{Di}^d; \sigma_i\right) \tag{A.9}$$

$$S_i = \overline{A}_{S_i}\left[\sum_k \delta_i^k \left(S_i^k\right)^{(\tau_i + 1)/\tau_i}\right]^{\tau_i/(\tau_i + 1)} \tag{A.10}$$

$$S_i^f / S_i^d = g_S\left(P_{Si}^f / P_{Si}^d; \tau_i\right) \tag{A.11}$$

Composite Domestic Prices

$$P_{Di}\, D_i = \sum_k P_{Di}^k\, D_i^k \tag{A.12}$$

$$P_{Si}\, S_i = \sum_k P_{Si}^k\, S_i^k \tag{A.13}$$

Domestic Market Equilibrium

$$D_i = C_i + \sum_{j=1}^{n} V_{ij} \tag{A.14}$$

$$D_i^d = S_i^d \tag{A.15}$$

$$LS = \sum_{i=1}^{n} LD_i \tag{A.16}$$

$$\sum_{i=1}^{n} KD_i^d = \sum_{i=1}^{n} KS_i^d \tag{A.17}$$

Income and Government Revenue

$$\begin{aligned} Y = {} & (1-t_L)\sum_{i=1}^{n} w\, LD_i + (1-t_K)\sum_{i=1}^{n} r_{Di}\, KD_i + Y_G \\ & + e\sum_f \sum_i \theta_i^f\, \rho_i^f\, (1+t_{Di}^f)\, PW_{Di}^f D_i^f \end{aligned} \tag{A.18}$$

$$\begin{aligned} Y_G = {} & t_L \sum_i w\, LD_i + t_K \sum_i r_{Di}\, KD_i \\ & + \sum_k \sum_i \left(t_{Di}^k\, P_{Di}^k\, D_i^k + t_{Si}^k\, P_{Si}^k\, S_i^k \right) \end{aligned} \tag{A.19}$$

Balance of Payments

$$B^f = \sum_i \left[PW_{Si}^f\, S_i^f - \left\{ 1+\theta_i^f\, \rho_i^f\, (1+t_{Di}^f) \right\} PW_{Di}^f\, D_i^f \right] \tag{A.20}$$

Foreign Commodity Prices

$$P_{Di}^f = (1+t_{Di}^f)\, e\, PW_{Di}^f \tag{A.21}$$

$$P_{Si}^f = \left[1/(1+t_{Si}^f) \right] e\, PW_{Si}^f \tag{A.22}$$

Foreign Demand and Supply Functions

$$D_i^{h,ROW} = \overline{A}_{M_i} \left(PW_{Si}^{h,ROW} \right)^{\zeta_i} \tag{A.23}$$

$$S_i^{h,ROW} = \overline{A}_{E_i} \left(PW_{Di}^{h,ROW} \right)^{\xi_i} \tag{A.24}$$

Trade Flow and Price Equivalence

$$D_i^{h,f} = S_i^{f,h} \tag{A.25}$$

$$P_{Di}^{h,f} = P_{Si}^{f,h} \tag{A.26}$$

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$$\sum_i \omega_i P_{Di}^d = 1 \tag{A.27}$$

II. Variable and Parameter Definitions

Price Variables

e	Real exchange rates (domestic/foreign currency)
$P_{Di}^{h,f}$	Demand price by destination (h) and origin (f)
$P_{Si}^{h,f}$	Supply price by origin (h) and destination (f)
P_{Di}^d	Domestic purchaser price of domestic goods
P_{Di}^f	Domestic purchaser price of imports from region f (equivalent to $P_{Di}^{d,f}$)
P_{Si}^d	Domestic producer price in the domestic market
P_{Si}^f	Domestic producer price for exports to region f (equivalent to $P_{Si}^{d,f}$)
P_{Di}	Purchaser price of composite domestic demand
P_{Si}	Producer price of domestic output
$PW_{Di}^{h,f}$	World demand price by destination (h) and origin (f)
$PW_{Si}^{h,f}$	World supply price by origin (h) and destination (f)
PW_{Di}^f	World price of imports from region f
PW_{Si}^f	World price of exports to region f
r_{Di}	Rental rate on capital
w	Average wage rate

Quantity Variables

C_i	Personal consumption (C_0: leisure)
$D_i^{h,f}$	Demand by destination (h) and origin (f)
D_i^d	Domestic demand for domestic goods
D_i^f	Domestic demand for imports from region f (equivalent to $D_i^{d,f}$)
D_i	Composite goods for domestic consumption
KD_i^d	Domestic demand for domestic capital
KD_i^f	Domestic demand for imported capital (inward direct foreign investment stock) from region f (exogenous)

KS_i^d	Domestic supply of domestic capital
KS_i^f	Outward direct foreign investment stock in region f (exogenous)
LD_i	Demand for labor
LS	Aggregate labor supply
$S_i^{h,f}$	Supply by origin (h) and destination (f)
S_i^d	Domestic production for domestic use
S_i^f	Domestic production for export to region f (equivalent to $S_i^{d,f}$)
S_i	Gross domestic output
V_{ij}	Demand for intermediate good i in sector j

Nominal Variables

B^f	Net foreign borrowing from region f (exogenous)
Y	Nominal domestic income
Y_G	Government income

Structural and Policy Parameters

a_{ij}	Intermediate use coefficients (Leontief technology)
γ_i	Subsistence consumption of good i
η_i	Marginal budget share for consumption of good i
ϕ_i	Elasticity of substitution between labor and capital in domestic production
σ_i	Elasticity of substitution between domestic and imported products
τ_i	Elasticity of transformation between domestic and exported products
ζ_i	ROW import supply elasticity
ξ_i	ROW export demand elasticity
$\overline{A}_{D_i}$	Calibrated intercept parameter for composite product demand
$\overline{A}_{S_i}$	Calibrated intercept parameter for composite product supply
$\overline{A}_{M_i}$	Calibrated intercept parameter for ROW import supply
$\overline{A}_{E_i}$	Calibrated intercept parameter for ROW export demand
β_i^k	Base share parameter of demand by origin in the composite demand
δ_i^k	Base share parameter of supply by destination in the composite demand
θ_i^f	Share of quota rents accrued to foreigners
ρ_i^f	Ad valorem equivalent of nontariff barriers on imports from region f
t_{Di}^d	Indirect tax rate on domestic sector production
t_{Di}^f	Ad valorem tariff rate on imports from region f
t_K	Tax rate on capital income
t_L	Tax rate on labor income
t_{Si}^d	Producer tax or subsidy on domestic deliveries
t_{Si}^f	Tax or subsidy on exports to region f
ω_i	Domestic expenditure shares

Indices

i, j : sectors

k = {PAC-10 countries, ROW}

h = {PAC-10 countries}

d = domestic country

f = set of foreign subregions (nine regional partners and ROW)

Table 1: Economic and Trade Structures of the Ten Pacific Countries

		Sectoral Economic Structure (% shares)							Imports from Origin Country as % of Total Imports										Exports to Destination as a % of Total Exports									
	USA	S	VA	D	M	E	tm	NTB	usa	jpn	chn	kor	twn	sgp	mys	tha	idn	phl	row	usa	jpn	chn	kor	twn	sgp	mys	tha	idn	phl	row
1	AgForFish	2,6	1,7	2,5	2,8	6,2	2,2	8,3		2	1	0	1	0	1	1	3	0	91		24	3	6	5	0	0	0	1	0	60
2	PetMining	5,5	4,0	5,9	10,3	4,5	0,5	0,0		0	1	0	0	1	0	0	7	0	91		16	0	5	2	2	0	0	0	2	73
3	FoodProc	4,6	2,3	4,5	4,9	5,2	3,4	0,0		4	1	1	2	0	1	3	1	2	85		16	1	3	1	1	1	1	0	0	77
4	Textiles	1,6	0,9	1,8	10,9	1,5	14,6	41,0		4	6	13	14	1	1	1	1	1	58		4	2	2	1	0	1	0	0	2	88
5	OthNonDur	6,8	5,1	6,7	8,1	10,8	2,2	0,0		6	1	1	6	0	0	0	1	0	85		11	4	3	3	1	1	1	1	0	76
6	Metals	3,2	2,2	3,4	6,4	3,2	3,2	0,0		18	1	4	4	0	0	0	0	0	72		23	2	4	2	1	1	1	2	0	64
7	Machinery	5,8	5,1	5,9	20,0	21,6	4,9	0,0		35	0	4	7	4	2	0	0	1	47		7	2	2	2	2	2	0	1	0	82
8	TranspEqp	5,0	3,4	5,2	13,5	15,3	3,2	11,3		35	0	0	1	0	0	0	0	0	64		6	1	1	0	1	0	0	0	0	91
9	OthDurable	2,9	2,7	3,0	7,6	6,1	6,4	0,0		21	2	4	8	1	0	0	0	0	65		7	2	2	1	1	0	0	0	0	86
10	Services	62,1	72,7	61,1	15,4	25,7	0,0	0,0		8	1	1	1	0	0	0	1	1	88		6	1	1	2	0	0	0	0	0	89
	All Sectors	100	100	100	100	100	3,5	5,1		17	1	3	4	1	1	0	1	1	72		9	2	2	2	1	1	0	1	0	82

		Sectoral Economic Structure (% shares)							Imports from Origin Country as % of Total Imports										Exports to Destination as a % of Total Exports									
	Japan	S	VA	D	M	E	tm	NTB	usa	jpn	chn	kor	twn	sgp	mys	tha	idn	phl	row	usa	jpn	chn	kor	twn	sgp	mys	tha	idn	phl	row
1	AgForFish	2,5	3,0	3,1	10,2	0,2	4,8	76,8	29		10	2	3	0	5	1	2	2	45	70		1	9	5	1	1	1	0	7	5
2	PetMining	2,6	0,6	4,8	38,9	0,8	4,0	7,0	3		3	1	0	2	4	0	14	0	74	6		1	13	2	0	0	1	1	1	74
3	FoodProc	5,3	2,7	5,9	7,0	0,6	16,2	7,7	27		5	5	9	0	1	3	0	1	48	54		4	2	9	2	2	3	1	2	21
4	Textiles	2,1	1,4	2,2	3,8	2,5	6,8	11,8	3		20	20	8	0	0	1	0	0	48	20		4	8	3	3	1	1	1	1	58
5	OthNonDur	7,0	4,8	7,4	7,0	6,2	3,0	0,0	30		2	2	4	1	2	3	2	1	53	16		11	9	6	2	2	2	3	1	49
6	Metals	6,6	3,7	6,8	5,9	9,6	1,6	0,0	19		2	4	2	0	2	1	3	3	65	26		19	6	4	2	3	3	3	0	34
7	Machinery	9,4	7,1	8,0	4,6	32,1	2,9	0,0	54		0	6	5	2	1	1	0	0	30	39		8	5	3	2	1	1	1	0	39
8	TranspEqp	5,6	3,4	4,3	1,7	25,0	4,2	0,0	70		0	0	0	0	0	0	0	0	29	46		5	1	1	0	1	1	1	0	45
9	OthDurable	3,6	2,8	3,6	3,5	5,9	4,1	0,0	25		3	8	9	1	0	1	0	0	54	54		5	5	3	2	1	1	2	0	27
10	Services	50,4	70,7	54,0	17,3	16,9	0,0	16,1	14		6	1	1	0	1	0	1	1	75	16		3	2	1	1	1	1	1	0	75
	All Sectors	100	100	100	100	100	3,8	15,7	16		4	3	2	1	3	1	6	1	63	34		7	4	3	1	1	1	1	0	47

S = output, VA = value added, D = composite demand, M = imports, E = exports, tm = average nominal tariff rates, and NTB = ad valorem equivalents of nontariff barriers. U.S. NTB on TranspEqp is applied to Japanese imports only.

Sources: IDE (1992), UNCTAD (1987), and authors' calculations.

Table 1 (continued)

	China	Sectoral Economic Structure (% shares) S	VA	D	M	E	tm	NTB	Imports from Origin Country as % of Total Imports usa	jpn	chn	kor	twn	sgp	mys	tha	idn	phl	row	Exports to Destination as a % of Total Exports usa	jpn	chn	kor	twn	sgp	mys	tha	idn	phl	row
1	AgForFish	18,8	35,6	18,5	3,5	13,5	17,2	0,0	26	0		0	0	0	2	1	0	0	69	2	33		0	0	1	2	1	4	0	57
2	PetMining	4,5	4,3	4,0	0,9	13,5	13,6	0,0	2	2		0	0	1	0	0	0	1	95	11	37		0	0	30	0	1	0	1	20
3	FoodProc	7,1	3,1	6,6	9,5	8,7	27,9	0,0	11	4		0	0	2	2	10	2	2	67	5	15		0	0	2	4	1	1	1	71
4	Textiles	8,3	4,3	7,4	5,7	19,8	40,2	0,0	4	8		0	10	0	0	0	0	0	78	26	15		0	0	1	0	0	0	0	56
5	OthNonDur	8,7	5,4	9,1	16,2	6,3	23,9	0,3	15	19		0	5	1	1	1	2	0	55	12	13		0	0	2	1	1	2	2	67
6	Metals	5,6	3,3	6,7	13,5	2,5	12,4	0,0	2	40		0	0	0	0	0	0	0	57	24	21		0	0	2	2	1	1	2	48
7	Machinery	8,3	5,8	9,0	31,5	5,7	27,3	0,2	11	46		0	1	0	0	0	0	0	42	6	1		0	0	1	0	0	1	4	87
8	TranspEqp	2,3	1,5	2,7	6,7	0,8	30,6	9,3	10	54		0	0	0	0	0	0	0	35	2	0		0	0	1	1	0	2	3	91
9	OthDurable	6,4	4,8	6,1	5,2	7,7	41,1	0,0	13	29		0	3	0	0	1	0	0	54	21	6		0	0	1	1	0	0	0	71
10	Services	30,0	31,8	29,9	7,2	21,5	4,2	0,8	17	23		0	1	0	0	0	2	0	57	8	26		0	0	4	0	0	0	1	59
	All Sectors	100	100	100	100	100	22,6	0,8	10	32		0	2	0	0	1	1	0	53	13	21		0	0	6	1	1	1	1	57

	Korea	Sectoral Economic Structure (% shares) S	VA	D	M	E	tm	NTB	Imports from Origin Country as % of Total Imports usa	jpn	chn	kor	twn	sgp	mys	tha	idn	phl	row	Exports to Destination as a % of Total Exports usa	jpn	chn	kor	twn	sgp	mys	tha	idn	phl	row
1	AgForFish	8,0	14,5	8,7	8,8	2,1	15,7	11,6	41	1	0		1	0	12	3	1	0	39	5	50	0		1	0	1	0	0	1	42
2	PetMining	5,3	2,3	8,7	23,2	3,5	7,3	0,3	7	3	0		1	1	7	0	7	0	73	6	52	0		0	1	0	0	0	1	40
3	FoodProc	9,2	2,4	9,4	4,3	1,9	26,7	5,0	39	3	0		1	1	4	2	2	2	44	29	61	0		1	0	1	0	0	2	6
4	Textiles	7,8	4,2	4,7	4,8	24,4	21,6	0,1	9	40	0		6	0	0	0	0	0	44	48	12	0		0	1	0	0	0	0	37
5	OthNonDur	8,8	5,3	8,6	13,5	9,3	28,7	0,4	25	33	0		1	2	1	0	1	0	38	16	8	0		2	0	1	2	2	1	67
6	Metals	6,8	3,1	6,4	8,1	11,5	16,6	0,1	15	46	0		2	0	0	0	0	1	35	32	12	0		1	1	2	1	1	0	49
7	Machinery	6,9	4,3	7,1	18,7	15,5	17,3	2,0	23	49	0		1	1	0	0	0	0	26	59	9	0		1	1	2	0	1	1	26
8	TranspEqp	3,3	2,0	2,6	4,8	7,4	12,6	7,5	34	35	0		1	1	1	0	0	0	28	3	0	0		0	2	0	0	0	0	94
9	OthDurable	4,1	2,9	3,6	3,5	6,9	27,0	0,7	24	52	0		2	0	0	0	0	0	22	51	17	0		0	2	1	0	0	0	29
10	Services	39,8	59,1	40,1	10,3	17,4	0,2	2,7	26	16	0		1	0	1	0	1	0	55	12	7	0		0	0	0	0	0	0	81
	All Sectors	100	100	100	100	100	14,1	2,4	20	25	0		1	1	3	0	2	0	46	33	13	0		1	1	1	1	1	1	50

Table 1 (continued)

	Taiwan	Sectoral Economic Structure (% shares) S	VA	D	M	E	tm	NTB	Imports from Origin Country as % of Total Imports usa	jpn	chn	kor	twn	sgp	mys	tha	idn	phl	row	Exports to Destination as a % of Total Exports usa	jpn	chn	kor	twn	sgp	mys	tha	idn	phl	row
1	AgForFish	5,0	6,6	6,3	8,0	1,7	6,9	10,9	47	1	0	0		0	9	1	2	1	39	12	67	0	6		4	3	0	0	1	8
2	PetMining	4,1	3,8	7,5	17,4	2,2	9,7	0,3	5	1	0	0		2	2	0	5	0	85	11	9	0	9		9	0	0	2	5	55
3	FoodProc	7,9	2,7	7,8	8,3	4,4	30,2	3,5	20	12	0	0		1	0	5	1	0	59	21	49	0	1		1	1	0	0	0	26
4	Textiles	9,3	6,5	5,9	2,7	18,9	16,1	0,1	5	27	0	4		0	1	0	0	0	63	60	6	3	1		2	1	1	0	0	26
5	OthNonDur	11,4	7,8	12,2	14,5	10,3	14,6	0,3	24	22	0	2		2	2	1	2	0	45	58	11	10	1		1	1	1	3	0	14
6	Metals	7,5	4,2	8,0	8,7	5,5	19,2	0,2	10	42	0	1		0	0	0	0	1	45	63	11	1	3		2	2	4	1	0	11
7	Machinery	9,1	5,7	6,5	16,0	23,4	16,0	1,3	22	51	0	1		2	1	0	0	0	23	64	5	1	1		2	1	1	1	0	25
8	TranspEqp	3,0	1,9	2,6	3,1	3,8	53,6	4,7	14	54	0	0		0	0	0	0	0	32	33	1	0	0		0	1	0	1	0	62
9	OthDurable	8,2	6,1	4,7	3,9	19,2	20,9	0,4	17	41	0	0		0	0	1	0	0	41	37	6	1	0		1	1	0	0	0	53
10	Services	34,4	54,6	38,7	17,3	10,7	0,1	2,8	20	8	0	0		0	0	0	1	0	70	19	7	1	1		1	0	0	0	0	71
	All Sectors	100	100	100	100	100	12,5	2,1	18	22	0	1		1	2	1	2	0	54	47	9	2	1		2	1	1	1	0	35

	Singapore	Sectoral Economic Structure (% shares) S	VA	D	M	E	tm	NTB	Imports from Origin Country as % of Total Imports usa	jpn	chn	kor	twn	sgp	mys	tha	idn	phl	row	Exports to Destination as a % of Total Exports usa	jpn	chn	kor	twn	sgp	mys	tha	idn	phl	row
1	AgForFish	0,6	0,7	1,2	4,5	0,3	0,1	9,7	6	1	13	0	7		18	13	1	1	40	51	4	0	7	4		13	0	0	4	18
2	PetMining	20,1	5,4	19,3	29,0	37,5	2,8	0,5	3	0	17	0	1		11	0	9	0	58	4	13	0	1	1		17	5	4	0	54
3	FoodProc	2,5	1,6	3,2	6,0	2,4	0,1	5,4	9	3	8	0	2		32	3	2	0	41	13	6	4	3	1		9	2	1	1	61
4	Textiles	1,5	1,9	2,4	7,0	2,3	0,9	0,9	2	16	8	9	18		11	4	3	0	28	76	1	0	0	0		3	0	0	1	18
5	OthNonDur	5,5	4,9	5,8	7,6	5,9	0,1	3,6	14	16	3	1	3		11	2	7	0	45	14	11	6	4	5		13	5	12	1	28
6	Metals	2,6	2,2	4,2	5,3	2,1	0,0	0,0	9	39	1	3	4		3	1	4	0	36	12	10	4	2	2		26	7	13	0	24
7	Machinery	12,0	10,2	10,3	17,3	22,7	0,0	2,5	27	31	0	1	3		10	2	1	1	23	62	4	1	1	2		9	2	3	0	17
8	TranspEqp	2,3	3,9	3,9	4,0	1,6	3,1	4,8	36	23	0	5	1		1	0	0	0	35	41	2	1	3	0		28	0	22	0	3
9	OthDurable	2,7	2,5	4,0	6,5	2,4	0,5	0,0	13	26	2	3	7		5	1	2	0	41	42	8	2	1	1		17	2	5	0	23
10	Services	50,1	66,7	45,7	12,9	22,8	0,0	0,0	9	8	11	0	1		9	0	7	1	53	1	1	0	0	0		0	0	0	0	96
	All Sectors	100	100	100	100	100	1,2	1,9	12	13	9	1	3		11	1	5	0	45	21	7	1	1	1		11	3	4	0	51

Table 1 (continued)

		Sectoral Economic Structure (% shares)							Imports from Origin Country as % of Total Imports											Exports to Destination as a % of Total Exports										
	Malaysia	S	VA	D	M	E	tm	NTB	usa	jpn	chn	kor	twn	sgp	mys	tha	idn	phl	row	usa	jpn	chn	kor	twn	sgp	mys	tha	idn	phl	row
1	AgForFish	9,1	11,7	7,7	5,0	11,0	9,9	0,8	7	1	13	1	3	1	30	3	0	41		6	41	3	16	9	4	0	1	1	19	
2	PetMining	12,5	13,0	8,5	13,0	30,6	10,3	0,1	0	0	0	0	0	55	0	1	0	44		1	48	0	13	2	17	9	0	2	8	
3	FoodProc	13,2	5,9	11,8	8,1	8,0	12,8	1,4	11	3	9	0	2	4	15	2	0	54		15	8	2	3	0	21	1	0	1	49	
4	Textiles	1,5	1,7	1,3	3,5	3,0	31,5	0,0	6	18	6	7	14	4	4	2	0	37		44	4	0	1	1	18	1	0	4	26	
5	OthNonDur	9,5	7,3	7,5	9,5	16,3	14,2	0,1	14	16	2	1	3	11	4	3	0	46		3	9	3	1	2	6	1	0	2	73	
6	Metals	3,1	1,2	3,7	8,4	5,4	13,4	0,6	5	39	1	6	3	9	0	0	0	37		1	20	0	1	1	4	0	0	2	71	
7	Machinery	4,2	5,6	6,5	25,9	15,5	19,4	1,1	27	26	0	3	2	11	1	0	4	27		57	2	0	1	2	15	0	0	3	19	
8	TranspEqp	2,9	1,4	4,4	7,1	0,4	25,2	13,3	5	58	0	0	1	8	0	0	0	27		9	0	0	18	0	14	0	0	16	43	
9	OthDurable	2,0	1,7	2,4	4,3	1,2	26,8	2,4	9	26	2	2	8	15	1	0	0	36		25	4	0	0	0	30	0	0	2	39	
10	Services	42,0	50,6	46,1	15,2	8,7	4,6	2,5	8	7	0	0	1	1	1	1	2	80		12	14	1	3	2	18	1	0	1	48	
	All Sectors	100	100	100	100	100	14,6	1,9	12	19	2	2	2	15	3	1	1	43		14	24	1	7	3	13	3	0	2	33	

		Sectoral Economic Structure (% shares)							Imports from Origin Country as % of Total Imports											Exports to Destination as a % of Total Exports										
	Thailand	S	VA	D	M	E	tm	NTB	usa	jpn	chn	kor	twn	sgp	mys	tha	idn	phl	row	usa	jpn	chn	kor	twn	sgp	mys	tha	idn	phl	row
1	AgForFish	10,5	14,9	10,3	4,2	8,2	28,2	6,1	9	0	6	0	0	0	1	0	0	83		14	22	4	10	3	6	23	1	0	18	
2	PetMining	5,4	3,8	8,4	16,5	1,8	13,6	4,8	1	0	2	0	0	16	17	0	0	63		61	6	0	4	8	4	2	4	6	5	
3	FoodProc	13,9	8,1	11,1	5,0	29,1	24,8	2,9	19	8	5	0	1	3	3	2	1	59		16	9	4	1	2	1	6	1	0	60	
4	Textiles	8,5	6,3	7,5	4,8	12,5	32,4	0,2	3	23	4	10	15	0	1	1	0	44		25	3	1	0	0	3	1	0	0	67	
5	OthNonDur	4,8	3,9	5,0	16,9	8,8	21,5	2,2	11	22	2	3	3	4	2	1	1	52		6	36	6	1	3	4	7	0	0	36	
6	Metals	2,0	1,1	2,4	11,1	4,6	15,7	1,3	4	46	0	4	7	3	0	0	0	36		17	15	3	1	1	2	1	0	0	60	
7	Machinery	2,2	1,9	2,6	22,9	5,8	20,3	1,9	15	42	0	1	3	5	1	0	1	32		41	10	0	1	0	15	5	0	1	27	
8	TranspEqp	2,7	1,5	3,3	4,6	0,2	32,5	14,9	2	58	0	1	1	0	0	0	0	39		0	7	0	7	0	0	7	7	0	73	
9	OthDurable	3,2	2,9	2,9	3,6	5,3	30,4	1,3	10	23	2	1	3	3	0	0	0	59		17	12	3	0	1	2	1	0	0	64	
10	Services	46,7	55,6	46,5	10,6	23,6	4,1	1,5	24	17	2	1	2	2	1	1	1	51		2	1	0	0	0	0	1	0	0	96	
	All Sectors	100	100	100	100	100	18,6	3,0	9	23	2	2	3	6	5	0	0	51		15	10	2	1	1	3	5	0	0	61	

Table 1 (continued)

		Sectoral Economic Structure (% shares)						
	Indonesia	S	VA	D	M	E	tm	NTB
1	AgForFish	14,6	22,6	15,0	4,5	6,9	9,8	13,1
2	PetMining	16,5	20,0	8,9	8,7	68,9	5,1	2,5
3	FoodProc	12,3	4,2	13,0	2,1	1,6	20,2	17,5
4	Textiles	2,1	1,1	1,9	1,1	2,5	35,3	2,4
5	OthNonDur	4,8	3,7	5,3	16,3	6,8	17,2	9,3
6	Metals	1,7	1,2	2,2	10,9	2,7	16,5	8,3
7	Machinery	1,4	0,7	2,6	24,0	0,6	27,2	15,3
8	TranspEqp	3,2	2,3	4,1	10,8	0,2	25,9	18,7
9	OthDurable	1,5	0,9	1,7	3,2	0,3	30,4	13,1
10	Services	42,0	43,3	45,5	18,4	9,5	5,0	1,7
	All Sectors	100	100	100	100	100	16,2	10,0

	Imports from Origin Country as % of Total Imports										
	usa	jpn	chn	kor	twn	sgp	mys	tha	idn	phl	row
1	23	0	23	0	0	0	3	1	0		50
2	3	1	0	0	1	26	0	0	0		68
3	15	5	8	0	1	3	0	7	0		61
4	12	39	6	14	8	2	0	3	0		17
5	13	19	1	3	4	7	0	0	1		51
6	11	44	1	4	2	4	0	0	0		34
7	18	28	0	2	3	5	0	0	0		43
8	13	24	0	0	1	5	0	0	0		56
9	14	50	2	1	3	5	0	0	0		24
10	7	5	0	0	0	0	0	0	0		86
	12	20	2	1	2	6	0	0	0		56

	Exports to Destination as a % of Total Exports										
	usa	jpn	chn	kor	twn	sgp	mys	tha	idn	phl	row
1	29	17	1	2	2	0	1	0		0	48
2	23	59	0	5	2	4	0	0		0	7
3	28	12	8	6	3	4	6	2		2	29
4	47	2	0	1	0	5	1	0		2	42
5	14	13	12	2	5	6	3	1		1	43
6	6	62	4	2	0	9	0	0		1	16
7	20	0	4	0	0	36	3	0		24	13
8	0	0	0	0	0	0	0	0		9	91
9	5	13	0	0	0	38	0	0		2	42
10	18	20	3	1	2	9	1	0		1	43
	22	47	1	4	2	5	1	0		1	17

		Sectoral Economic Structure (% shares)						
	Philippines	S	VA	D	M	E	tm	NTB
1	AgForFish	17,3	26,0	18,8	4,4	6,2	38,2	3,9
2	PetMining	6,5	2,7	7,9	17,8	3,8	26,5	10,8
3	FoodProc	17,6	10,6	18,0	7,5	10,6	42,0	3,8
4	Textiles	2,4	1,6	0,7	11,6	7,3	40,1	0,3
5	OthNonDur	5,5	3,3	5,1	14,2	4,3	39,2	8,5
6	Metals	3,0	1,3	2,3	4,5	7,9	25,2	1,3
7	Machinery	2,4	1,2	0,5	22,8	12,9	34,4	9,0
8	TranspEqp	1,0	1,2	1,1	2,0	0,6	40,1	12,1
9	OthDurable	1,2	0,8	1,0	1,3	1,8	47,0	4,3
10	Services	43,0	51,3	44,6	13,9	44,6	7,3	1,9
	All Sectors	100	100	100	100	100	26,0	6,3

	Imports from Origin Country as % of Total Imports										
	usa	jpn	chn	kor	twn	sgp	mys	tha	idn	phl	row
1	19	15	8	5	2	1	7	1	2		40
2	22	2	3	1	3	0	8	1	4		57
3	20	13	7	6	2	2	8	0	3		37
4	21	13	6	6	3	2	8	1	4		36
5	20	14	8	6	3	2	7	1	3		38
6	21	14	7	6	3	1	8	1	3		37
7	20	14	8	6	3	2	8	1	3		36
8	22	14	6	5	2	0	9	0	4		38
9	22	16	8	5	0	0	6	0	2		42
10	6	2	4	0	0	0	1	0	1		85
	17	8	6	3	2	1	6	1	3		53

	Exports to Destination as a % of Total Exports										
	usa	jpn	chn	kor	twn	sgp	mys	tha	idn	phl	row
1	13	69	1	1	3	1	0	0	0		12
2	3	61	2	5	2	10	0	2	0		16
3	50	7	3	3	1	0	0	0	0		35
4	64	2	0	0	0	0	0	0	0		34
5	38	24	5	0	3	0	2	4	4		20
6	2	46	3	4	5	0	1	0	0		40
7	56	1	0	1	1	4	15	2	0		22
8	0	22	0	7	0	0	0	0	0		72
9	41	3	3	0	0	0	0	0	0		52
10	15	7	0	0	1	0	1	0	0		74
	28	15	1	1	1	1	3	1	0		49

Table 2.4: PAC-10 Regional Tariff Liberalization

Absolute Changes

	1 *EV Income*	*2* *Real GDP*	*3* *Total Emp*	*4* *Total Imports*	*5* *Total Exports*	*6* *Pacific Imports*	*7* *Pacific Exports*	*8* *Import Emp*	*9* *Export Emp*
USA	3,0	3,4	117	3,1	3,6	3,6	3,2	271	32
Japan	5,0	0,3	-11	5,7	0,9	3,2	3,9	778	8
China	1,4	3,5	7 449	0,5	2,7	2,2	1,3	-21	1 786
Korea	-0,4	0,7	140	1,1	2,2	1,4	1,4	47	84
Taiwan	0,2	0,5	71	1,2	1,5	1,1	1,4	37	56
Singapore	0,2	0,0	1	0,8	0,5	0,4	0,6	91	3
Malaysia	0,2	0,6	233	0,6	1,0	0,8	0,8	78	68
Thailand	0,1	0,4	697	0,3	0,6	0,5	0,3	29	149
Indonesia	0,1	0,3	704	0,4	0,7	0,6	0,7	59	74
Philippines	0,1	0,4	513	0,3	0,7	0,4	0,4	37	172
Total	9,8	10,0	9 915	14,1	14,4	14,1	14,1	1 405	2 433

Percentage Changes

	EV Income	*Real GDP*	*Total Emp*	*Total Imports*	*Total Exports*	*Pacific Imports*	*Pacific Exports*	*Import Emp*	*Export Emp*
USA	0,1	0,1	0,1	0,8	1,4	3,2	7,0	1,7	1,1
Japan	0,4	0,0	0,0	3,8	0,5	5,9	3,7	7,0	0,3
China	0,5	1,2	1,5	1,2	8,8	10,7	9,8	-1,5	9,3
Korea	-0,5	0,7	1,5	3,8	7,4	8,8	9,7	4,7	7,8
Taiwan	0,4	0,8	1,0	5,1	4,5	9,7	6,6	4,5	4,4
Singapore	1,3	-0,2	0,1	4,0	2,6	3,9	6,5	6,0	0,7
Malaysia	0,6	1,9	4,2	4,1	6,7	9,4	7,8	7,9	6,1
Thailand	0,2	1,0	3,3	2,7	6,0	10,1	8,8	7,3	6,9
Indonesia	0,1	0,4	1,1	3,2	3,6	10,8	4,3	7,6	1,9
Philippines	0,2	1,4	2,6	5,5	9,4	18,5	10,9	12,5	8,5
Wgt Ave	0,2	0,2	1,3	2,0	2,3	5,8	5,8	4,0	6,6

Absolute figures in 1985 billions of US dollars except total employment (column 3), employment embodied in imports (column 8), and employment embodied in exports (column 9), all of which are in thousands.

Table 3: PAC-10 Regional Tariff and NTB Liberalization

Absolute Changes

	1 *EV Income*	*2* *Real GDP*	*3* *Total Emp*	*4* *Total Imports*	*5* *Total Exports*	*6* *Pacific Imports*	*7* *Pacific Exports*	*8* *Import Emp*	*9* *Export Emp*
USA	6,5	5,4	312	9,0	7,9	9,3	8,2	494	80
Japan	5,5	6,4	15	10,6	11,5	10,0	10,4	3 513	114
China	3,1	4,0	9 636	2,2	3,3	3,1	2,5	22	3 477
Korea	0,0	0,7	170	2,1	2,8	2,1	2,4	104	151
Taiwan	0,8	-0,1	77	2,2	1,4	1,5	1,9	77	114
Singapore	0,2	0,0	8	0,9	0,7	0,5	0,9	98	12
Malaysia	0,7	0,4	299	1,1	0,8	1,0	1,1	89	190
Thailand	0,2	0,4	998	0,4	0,7	0,6	0,5	36	343
Indonesia	0,3	0,4	1 146	1,0	1,2	1,1	1,3	118	278
Philippines	0,1	0,4	852	0,5	0,8	0,5	0,6	46	339
Total	17,5	18,2	13 513	30,1	30,9	29,8	29,8	4 597	5 098

Percentage Changes

	EV Income	*Real GDP*	*Total Emp*	*Total Imports*	*Total Exports*	*Pacific Imports*	*Pacific Exports*	*Import Emp*	*Export Emp*
USA	0,2	0,1	0,3	2,3	3,1	8,4	17,8	3,2	2,8
Japan	0,4	0,5	0,0	7,1	5,9	18,3	9,9	31,6	4,0
China	1,0	1,4	1,9	5,2	10,8	15,4	19,0	1,6	18,1
Korea	0,0	0,7	1,8	7,1	9,2	13,0	16,1	10,5	14,0
Taiwan	1,5	-0,1	1,1	9,0	4,1	14,0	9,0	9,5	8,9
Singapore	1,4	-0,2	0,6	4,7	3,3	4,4	9,3	6,5	2,5
Malaysia	2,5	1,4	5,3	7,5	5,4	12,6	10,5	9,0	17,1
Thailand	0,6	1,1	4,8	4,5	7,1	13,3	13,7	8,9	15,9
Indonesia	0,4	0,5	1,8	7,8	5,7	20,1	7,5	15,1	7,3
Philippines	0,4	1,4	4,3	8,9	10,9	23,6	17,5	15,6	16,7
Wgt Ave	0,3	0,3	1,7	4,3	5,0	12,2	12,2	13,2	13,8

Absolute figures in 1985 billions of US dollars except total employment (column 3), employment embodied in imports (column 8), and employment embodied in exports (column 9), all of which are in thousands.

Table 4: PAC-10 Global Tariff and NTB Liberalization

Absolute Changes

	1 *EV Income*	*2* *Real GDP*	*3* *Total Emp*	*4* *Total Imports*	*5* *Total Exports*	*6* *Pacific Imports*	*7* *Pacific Exports*	*8* *Import Emp*	*9* *Export Emp*
USA	11,3	5,1	187	20,5	14,2	14,0	6,0	1 051	148
Japan	7,8	13,6	68	21,3	27,0	8,8	13,8	4 088	314
China	6,8	6,8	14 137	5,9	6,0	2,7	2,7	177	5 184
Korea	0,6	1,3	211	3,7	4,4	2,0	2,4	186	192
Taiwan	0,7	1,0	159	3,1	3,4	1,4	2,5	120	172
Singapore	0,3	0,1	12	1,3	1,1	0,9	0,6	163	11
Malaysia	0,9	0,7	483	1,7	1,5	1,0	1,1	126	219
Thailand	0,8	0,8	1 131	1,3	1,3	0,5	0,5	82	404
Indonesia	0,3	1,1	2 754	1,6	2,4	0,7	1,9	143	596
Philippines	0,5	0,9	1 246	1,1	1,5	0,5	0,8	73	492
Total	30,1	31,4	20 388	61,5	62,9	32,5	32,5	6 208	7 732

Percentage Changes

	EV Income	*Real GDP*	*Total Emp*	*Total Imports*	*Total Exports*	*Pacific Imports*	*Pacific Exports*	*Import Emp*	*Export Emp*
USA	0,3	0,1	0,2	5,2	5,5	12,6	13,1	6,7	5,3
Japan	0,6	1,0	0,1	14,3	13,8	16,1	13,2	36,8	10,9
China	2,2	2,3	2,8	13,7	20,0	13,4	21,3	13,1	26,9
Korea	0,7	1,5	2,2	12,3	14,6	12,7	16,3	18,7	17,7
Taiwan	1,4	1,7	2,2	13,0	10,3	13,1	11,6	14,8	13,5
Singapore	1,8	0,3	0,9	6,8	5,5	7,9	6,7	10,8	2,3
Malaysia	3,0	2,3	8,6	11,5	9,8	11,8	10,2	12,7	19,7
Thailand	2,2	2,2	5,4	13,4	14,2	11,4	14,3	20,3	18,8
Indonesia	0,4	1,2	4,4	12,3	11,7	13,3	11,3	18,3	15,6
Philippines	1,6	2,9	6,3	21,0	21,2	19,7	22,6	24,8	24,3
Wgt Ave	0,5	0,5	2,6	8,7	10,2	13,3	13,3	17,9	20,9

Absolute figures in 1985 billions of US dollars except total employment (column 3), employment embodied in imports (column 8), and employment embodied in exports (column 9), all of which are in thousands.

Table 5: Changes in Bilateral Trade Flows Resulting from PAC-10 Regional Tariff and NTB Removal

Millions of 1985 USD

	Destination											
Origin	*USA*	*JPN*	*CHN*	*KOR*	*TWN*	*SGP*	*MYS*	*THA*	*IDN*	*PHL*	*ROW*	*Total*
USA		5 209	664	859	605	91	184	99	321	199	-291	7 940
Japan	5 017		2 203	920	749	100	408	326	532	94	1 146	11 495
China	531	1 600		0	0	133	36	33	58	68	797	3 255
Korea	1 628	597	0		25	19	28	25	34	40	364	2 760
Taiwan	1 255	380	134	44		17	32	25	38	21	-588	1 357
Singapore	251	143	23	26	26		222	76	120	10	-244	653
Malaysia	121	622	17	111	49	57		46	7	69	-264	835
Thailand	131	182	40	30	26	15	58		8	7	164	659
Indonesia	101	957	27	48	34	39	11	5		32	-95	1 160
Philippines	276	271	10	13	14	9	40	7	2		138	779
ROW	-271	616	-903	63	633	454	81	-198	-92	-85		300
Total	9 040	10 578	2 215	2 114	2 160	933	1 101	443	1 028	455	1 125	31 193

Percentages

	Destination											
Origin	*USA*	*JPN*	*CHN*	*KOR*	*TWN*	*SGP*	*MYS*	*THA*	*IDN*	*PHL*	*ROW*	*Ave*
USA		21,6	14,7	14,3	13,8	4,0	10,9	11,2	20,1	23,1	-0,1	3,1
Japan	7,4		15,7	12,7	14,7	3,7	15,2	14,9	21,6	24,3	1,2	5,9
China	14,1	24,9		0,0	0,0	7,5	13,7	18,0	24,6	24,6	4,6	10,8
Korea	16,6	15,2	0,0		14,9	7,4	10,9	16,2	18,7	26,1	2,4	9,2
Taiwan	7,9	12,0	17,5	11,2		3,2	10,2	10,2	14,7	20,8	-5,0	4,1
Singapore	6,1	9,8	13,7	12,7	10,7		10,4	12,6	15,7	26,7	-2,5	3,3
Malaysia	5,5	16,7	11,1	10,6	12,4	2,7		9,5	20,2	22,4	-5,1	5,4
Thailand	9,3	18,8	17,2	24,4	20,4	6,4	12,5		23,0	25,8	2,9	7,1
Indonesia	2,2	10,1	9,3	6,5	8,9	3,8	8,5	10,5		22,7	-2,7	5,7
Philippines	13,9	24,4	12,4	14,7	16,0	10,8	21,4	16,0	16,6		3,9	10,9
ROW	-0,1	0,7	-4,0	0,5	4,8	5,2	1,3	-4,0	-1,2	-3,0		0,1
Average	2,3	7,1	5,2	7,1	9,0	4,7	7,5	4,5	7,8	8,9	0,2	

Table 6: Employment Creation Resulting from PAC-10 Regional Tariff and NTB Removal

Thousands

	Destination											
Origin	*USA*	*JPN*	*CHN*	*KOR*	*TWN*	*SGP*	*MYS*	*THA*	*IDN*	*PHL*	*ROW*	*Total*
USA	232	55	6	8	6	1	2	1	3	1	-5	312
Japan	49	-99	26	13	10	1	5	3	7	1	-1	15
China	149	2 541	6 159	0	0	63	28	33	102	33	528	9 636
Korea	71	55	0	19	1	1	1	1	1	2	19	170
Taiwan	49	71	5	3	-37	1	1	1	1	1	-19	77
Singapore	14	1	1	1	1	-4	4	1	3	0	-14	8
Malaysia	13	142	3	24	10	4	109	1	2	4	-12	299
Thailand	31	187	10	37	10	8	34	655	2	1	24	998
Indonesia	55	248	6	12	10	4	3	1	868	5	-66	1 146
Philippines	87	198	2	2	4	2	7	1	0	513	36	852
ROW	-23	13	-35	4	26	14	3	-7	-4	-3	n.a.	-12
Total	726	3 414	6 181	123	40	94	198	691	986	559	490	13 501

Percentages

	Destination											
Origin	*USA*	*JPN*	*CHN*	*KOR*	*TWN*	*SGP*	*MYS*	*THA*	*IDN*	*PHL*	*ROW*	*Ave*
USA	0,2	23,5	13,2	13,6	12,5	3,6	10,6	9,6	18,4	20,6	-0,2	0,3
Japan	5,0	-0,2	14,9	12,3	13,0	3,1	14,0	12,8	21,3	23,4	-0,1	0,0
China	11,6	46,9	1,2	0,0	0,0	7,9	11,8	25,0	25,3	26,0	4,9	1,9
Korea	20,7	31,6	0,0	0,2	15,8	10,0	11,7	19,1	20,4	27,6	3,6	1,8
Taiwan	9,1	32,9	18,3	15,9	-0,5	3,7	8,4	9,7	14,4	23,2	-4,7	1,1
Singapore	9,3	5,6	13,6	14,9	10,8	-0,3	11,5	10,2	19,9	28,3	-6,2	0,6
Malaysia	7,3	50,4	12,6	25,0	18,5	3,7	1,9	13,6	23,1	23,9	-3,4	5,3
Thailand	10,9	52,2	15,4	28,4	21,1	9,0	10,9	3,1	24,8	32,3	2,8	4,8
Indonesia	5,6	30,4	7,9	15,5	12,9	3,0	7,2	8,7	1,4	21,9	-4,2	1,8
Philippines	17,7	47,3	10,6	16,5	16,0	10,3	19,2	14,0	15,2	2,6	3,6	4,3
ROW	-0,2	0,4	-3,8	0,9	5,5	5,0	1,4	-3,8	-1,3	-2,9	n.a.	n.a.

Table 7: Sectoral Results for PAC-10 Regional Tariff and NTB Removal

		(1) S	(2) D	(3) Cons	(4) L	(5) L (%)	(6) K	(7) M	(8) E	(9) LM	(10) LE
USA	AgForFish	4,9	1,8	0,5	108	5,3	4,8	-1,2	30,6	69	52
	PetMining	0,2	0,2	0,1	4	0,6	0,1	0,8	2,1	14	0
	FoodProc	0,8	0,6	0,5	17	1,1	0,6	0,3	4,6	2	3
	Textiles	-3,6	-0,6	0,9	-63	-3,5	-4,0	12,3	-0,6	306	0
	OthNonDur	0,3	0,2	0,2	16	0,4	-0,1	0,3	2,4	6	5
	Metals	0,0	0,0	0,1	2	0,1	-0,4	0,6	1,5	3	1
	Machinery	0,1	0,2	0,4	10	0,2	-0,3	1,7	1,2	40	8
	TranspEqp	-0,6	0,2	0,4	-10	-0,5	-1,0	5,1	0,4	16	1
	OthDurable	0,1	0,1	0,3	8	0,2	-0,3	1,3	1,0	21	3
	Services	0,1	0,1	0,1	221	0,3	-0,2	0,5	0,7	17	8
Japan	AgForFish	-6,4	0,1	1,2	-311	-6,7	-6,4	42,3	2,7	3 078	1
	PetMining	-1,3	0,2	1,0	-3	-1,4	-1,1	1,9	-0,1	91	0
	FoodProc	0,3	0,6	1,2	3	0,2	0,6	7,1	6,7	17	1
	Textiles	0,5	0,8	1,1	3	0,4	0,8	11,5	6,5	52	4
	OthNonDur	1,2	0,9	0,6	12	1,0	1,4	2,8	5,8	14	4
	Metals	2,3	2,1	0,7	29	2,2	2,5	3,2	4,6	12	6
	Machinery	2,1	1,5	0,8	75	2,0	2,4	2,7	4,2	5	36
	TranspEqp	7,6	4,8	2,6	79	7,5	7,9	3,8	13,5	1	43
	OthDurable	1,7	1,2	0,7	77	1,5	1,9	2,2	5,8	4	32
	Services	0,2	0,4	0,1	50	0,1	0,5	6,4	-1,4	239	-12
China	AgForFish	2,0	1,1	0,4	6 745	2,2	0,5	2,3	26,0	8	2 754
	PetMining	2,4	1,1	0,9	324	2,9	1,3	-2,3	9,1	0	143
	FoodProc	1,3	1,0	0,8	121	2,0	0,3	3,7	6,7	1	24
	Textiles	3,6	2,1	1,3	502	4,2	2,5	2,4	13,9	1	190
	OthNonDur	0,7	1,1	1,0	209	1,4	-0,2	4,8	5,6	4	29
	Metals	0,4	0,5	0,7	107	1,4	-0,3	0,9	4,0	-5	7
	Machinery	-0,2	1,2	1,9	110	0,6	-1,0	7,0	3,8	5	24
	TranspEqp	-3,4	2,3	3,6	-121	-2,5	-4,1	18,0	3,6	3	3
	OthDurable	0,7	1,0	1,2	89	1,3	-0,3	8,1	4,1	7	16
	Services	1,2	0,9	0,7	1 550	1,5	-0,2	-1,0	8,1	-2	287
Korea	AgForFish	-0,3	1,0	0,0	-1	0,0	-0,4	18,8	26,1	78	38
	PetMining	-1,0	-0,4	0,7	-1	-0,8	-1,1	0,7	3,4	0	0
	FoodProc	0,3	0,7	0,2	2	0,5	0,1	12,9	8,7	2	1
	Textiles	27,6	18,7	3,3	198	27,7	27,3	12,4	36,5	3	118
	OthNonDur	0,5	3,4	1,1	3	0,6	0,3	14,4	0,8	6	1
	Metals	-3,2	-2,0	1,1	-8	-3,0	-3,3	5,3	-1,5	1	-1
	Machinery	-0,9	1,1	3,6	-4	-0,8	-1,1	6,2	2,1	3	3
	TranspEqp	-2,1	0,8	1,5	-3	-2,0	-2,3	13,4	-2,4	1	-1
	OthDurable	-1,4	0,4	1,7	-3	-1,2	-1,6	12,1	1,0	5	1
	Services	-0,6	-0,2	-0,9	-14	-0,4	-0,8	4,7	-3,8	6	-8
Taiwan	AgForFish	3,2	2,9	1,2	67	3,0	3,6	15,5	38,5	34	68
	PetMining	-6,0	-2,4	2,3	-9	-6,4	-5,9	1,2	-6,4	1	-1
	FoodProc	2,1	2,7	2,2	9	1,8	2,4	13,6	5,9	3	4
	Textiles	24,1	16,2	4,0	124	23,9	24,6	12,7	32,0	3	78
	OthNonDur	-0,2	2,1	1,8	-2	-0,4	0,1	11,3	0,0	9	0
	Metals	-7,3	-4,7	2,4	-37	-7,5	-7,0	7,1	-5,2	1	-5
	Machinery	-2,0	1,1	6,5	-7	-2,1	-1,6	6,9	-0,7	4	-1
	TranspEqp	-9,6	0,8	6,4	-10	-9,7	-9,2	31,7	-9,5	1	-3
	OthDurable	-4,6	-1,3	1,9	-19	-4,8	-4,2	11,2	-5,4	4	-12
	Services	-1,7	-0,1	0,2	-38	-1,9	-1,3	10,0	-8,7	18	-13

Table 7 (continued)

		(1) S	(2) D	(3) Cons	(4) L	(5) L (%)	(6) K	(7) M	(8) E	(9) LM	(10) LE
Singapore	AgForFish	-3,5	0,4	1,7	0	-3,9	-3,2	4,7	4,9	22	0
	PetMining	6,7	5,2	2,7	2	6,2	6,9	5,3	7,2	43	2
	FoodProc	0,2	0,9	2,9	0	-0,1	0,5	2,8	1,9	1	0
	Textiles	32,3	11,5	3,6	18	32,0	32,9	8,6	40,8	5	13
	OthNonDur	3,6	2,0	2,5	3	3,2	3,9	3,4	6,7	2	3
	Metals	-0,2	0,3	2,2	0	-0,4	0,2	1,6	2,3	0	0
	Machinery	3,6	3,2	3,8	7	3,3	4,0	3,7	4,1	5	7
	TranspEqp	3,7	2,8	3,9	1	3,3	4,0	6,7	15,4	1	2
	OthDurable	2,9	1,2	3,0	1	2,6	3,2	1,6	6,4	1	1
	Services	-2,4	0,1	0,2	-23	-2,7	-2,0	7,1	-9,5	19	-15
Malaysia	AgForFish	12,4	1,6	1,8	257	14,6	11,8	5,4	34,6	55	185
	PetMining	2,4	1,2	3,2	2	4,1	1,6	5,1	5,0	0	1
	FoodProc	2,2	3,1	2,1	5	3,9	1,4	8,6	3,0	5	1
	Textiles	10,5	6,0	5,2	13	12,1	9,4	11,6	19,1	3	10
	OthNonDur	-5,7	-0,8	2,0	-12	-4,2	-6,5	7,0	-7,1	4	-9
	Metals	-2,8	-0,3	4,2	-1	-1,6	-4,0	2,1	-1,6	0	-1
	Machinery	3,7	5,9	8,5	10	5,3	2,7	6,8	4,5	9	7
	TranspEqp	-5,7	4,7	10,1	-2	-4,4	-6,7	18,0	10,4	2	0
	OthDurable	-5,8	1,0	4,1	-3	-4,2	-6,5	10,3	-5,1	2	-1
	Services	-0,4	0,6	0,7	29	1,0	-1,5	8,2	-2,3	10	-4
Thailand	AgForFish	4,2	1,9	0,2	800	6,3	3,3	4,3	23,7	26	302
	PetMining	-1,3	0,2	0,6	1	1,0	-1,9	2,5	3,9	3	0
	FoodProc	2,7	1,3	0,8	25	4,7	1,7	5,6	7,0	1	10
	Textiles	3,4	2,1	1,3	34	5,1	2,1	12,1	11,4	2	14
	OthNonDur	0,9	1,1	1,5	12	2,7	-0,2	4,3	6,2	1	6
	Metals	0,7	0,4	1,9	3	2,2	-0,7	1,6	4,2	-1	2
	Machinery	1,8	2,8	4,2	3	3,6	0,6	4,6	5,8	1	2
	TranspEqp	-4,7	1,8	3,7	-2	-3,1	-5,9	20,6	5,5	0	0
	OthDurable	0,5	0,8	0,9	4	2,4	-0,5	5,3	3,2	1	1
	Services	0,3	0,3	-0,1	118	1,9	-1,0	1,1	1,4	1	6
Indonesia	AgForFish	0,0	-0,3	-0,2	770	2,3	-0,5	14,8	9,6	102	210
	PetMining	4,2	1,6	0,6	48	6,9	4,0	4,5	6,4	1	25
	FoodProc	-0,3	-0,2	-0,2	28	1,7	-1,1	12,3	4,8	1	1
	Textiles	3,5	2,1	1,7	62	5,3	2,4	22,5	14,4	1	28
	OthNonDur	-2,8	-0,6	1,7	-10	-0,8	-3,5	7,3	1,0	3	3
	Metals	-6,3	-1,5	2,7	-12	-4,3	-6,9	6,2	-2,8	0	-2
	Machinery	-1,1	4,3	7,9	2	0,9	-1,8	7,7	10,9	1	2
	TranspEqp	-4,0	1,1	2,8	-16	-2,5	-5,1	15,4	-0,7	2	0
	OthDurable	-4,4	0,1	2,2	-9	-2,5	-5,1	18,9	-2,7	3	0
	Services	-0,2	-0,1	0,0	284	1,3	-1,5	3,3	1,7	4	12
Philippines	AgForFish	2,2	0,3	0,1	438	4,5	0,3	20,3	44,1	17	193
	PetMining	-0,9	1,0	1,8	2	1,7	-2,4	7,1	7,9	4	1
	FoodProc	0,0	0,2	0,1	13	2,5	-1,7	17,1	3,4	1	1
	Textiles	29,4	15,5	5,2	155	31,3	26,0	13,0	44,6	3	93
	OthNonDur	-2,5	1,1	2,4	-2	-0,4	-4,5	16,6	3,7	6	2
	Metals	5,5	4,2	2,3	8	8,2	3,8	7,6	9,2	1	3
	Machinery	19,7	10,6	8,0	38	22,0	17,1	11,4	21,0	9	32
	TranspEqp	-4,5	1,2	2,0	-1	-2,5	-6,5	24,9	-2,0	1	0
	OthDurable	-0,2	0,9	2,4	2	2,1	-2,1	13,3	3,6	1	1
	Services	0,3	0,2	-0,2	198	2,5	-1,7	1,4	1,3	4	13

Definition of variables: S = output, D = composite demand, Cons = consumption, L = employment, K = capital demand, M = imports, E = exports, LM = employment embodied in imports, and LE = employment embodied in exports.
Employment figures (columns 4, 9 and 10) in absolute changes (thousands); other figures are percentage changes.

Table 8: Output Results for Alternative Liberalization Scenarios
(percentages)

		(1) PAC-10 tm removal	(2) PAC-10 tm+1/2NTB	(3) PAC-10 tm+NTB	(4) Global tm removal	(5) Global tm+1/2NTB	(6) Global tm+NTB
USA	AgForFish	0,6	2,7	4,9	0,6	2,0	3,4
	PetMining	0,1	0,2	0,2	0,3	0,5	0,6
	FoodProc	0,3	0,5	0,8	0,3	0,6	0,9
	Textiles	-1,5	-2,6	-3,6	-4,7	-8,2	-11,4
	OthNonDur	0,2	0,2	0,3	0,2	0,2	0,2
	Metals	0,2	0,1	0,0	0,0	-0,1	-0,1
	Machinery	0,2	0,2	0,1	0,2	0,2	0,2
	TranspEqp	0,3	-0,2	-0,6	0,5	0,2	-0,1
	OthDurable	0,1	0,1	0,1	-0,4	-0,4	-0,3
	Services	0,1	0,1	0,1	0,1	0,2	0,2
Japan	AgForFish	-1,0	-4,0	-6,4	-1,5	-8,2	-13,3
	PetMining	-2,5	-1,9	-1,3	-3,2	-2,7	-2,3
	FoodProc	0,0	0,3	0,3	-0,3	0,2	0,5
	Textiles	0,0	0,3	0,5	-0,3	0,3	0,7
	OthNonDur	0,0	0,6	1,2	0,1	1,6	2,8
	Metals	0,1	1,2	2,3	0,5	3,1	5,6
	Machinery	0,8	1,5	2,1	1,1	3,1	4,8
	TranspEqp	0,1	3,8	7,6	1,4	7,9	14,8
	OthDurable	0,5	1,1	1,7	0,6	2,0	3,2
	Services	0,0	0,2	0,2	0,1	0,4	0,5
China	AgForFish	1,2	1,6	2,0	1,8	2,2	2,6
	PetMining	2,8	2,6	2,4	4,5	4,2	4,0
	FoodProc	1,2	1,3	1,3	2,2	2,3	2,4
	Textiles	2,9	3,2	3,6	2,9	3,3	3,6
	OthNonDur	1,3	1,0	0,7	1,0	0,7	0,5
	Metals	2,1	1,3	0,4	2,3	1,4	0,6
	Machinery	0,2	0,0	-0,2	0,6	0,3	0,1
	TranspEqp	-1,2	-2,3	-3,4	-1,8	-3,8	-5,7
	OthDurable	1,1	0,9	0,7	1,1	0,9	0,8
	Services	1,0	1,1	1,2	2,3	2,4	2,5
Korea	AgForFish	-1,0	-0,6	-0,3	-2,5	-2,8	-3,1
	PetMining	0,7	-0,1	-1,0	0,2	-0,4	-0,9
	FoodProc	-0,4	0,0	0,3	-0,8	-0,5	-0,2
	Textiles	13,6	20,7	27,6	15,9	22,2	28,5
	OthNonDur	0,6	0,6	0,5	-0,8	-0,6	-0,3
	Metals	2,1	-0,6	-3,2	3,9	2,1	0,5
	Machinery	2,4	0,7	-0,9	4,1	2,9	1,8
	TranspEqp	2,3	0,0	-2,1	8,9	7,9	6,9
	OthDurable	0,4	-0,5	-1,4	0,7	0,1	-0,6
	Services	-0,2	-0,4	-0,6	0,4	0,3	0,2
Taiwan	AgForFish	-0,1	1,6	3,2	-0,9	-0,2	0,5
	PetMining	-1,9	-4,0	-6,0	-3,1	-4,2	-5,2
	FoodProc	0,5	1,3	2,1	-0,8	-0,3	0,3
	Textiles	10,6	17,5	24,1	11,7	17,8	23,7
	OthNonDur	1,3	0,5	-0,2	1,6	1,4	1,3
	Metals	-1,1	-4,3	-7,3	-1,5	-3,6	-5,5
	Machinery	3,4	0,7	-2,0	8,5	7,0	5,6
	TranspEqp	-4,3	-7,0	-9,6	-2,7	-4,6	-6,5
	OthDurable	1,4	-1,6	-4,6	6,7	5,1	3,5
	Services	-0,5	-1,1	-1,7	0,4	0,0	-0,4

Table 8 (continued)

		(1) PAC-10 tm removal	(2) PAC-10 tm+1/2NTB	(3) PAC-10 tm+NTB	(4) Global tm removal	(5) Global tm+1/2NTB	(6) Global tm+NTB
Singapore	AgForFish	-2,7	-3,1	-3,5	-3,0	-4,7	-6,3
	PetMining	6,3	6,5	6,7	11,5	11,8	12,1
	FoodProc	-0,3	0,0	0,2	0,0	0,8	1,6
	Textiles	8,9	20,4	32,3	5,1	13,3	21,4
	OthNonDur	2,8	3,2	3,6	0,2	0,0	-0,2
	Metals	0,5	0,2	-0,2	-1,9	-2,6	-3,2
	Machinery	3,4	3,5	3,6	1,9	2,2	2,5
	TranspEqp	1,8	2,7	3,7	-1,0	-1,7	-2,3
	OthDurable	2,6	2,8	2,9	1,3	1,4	1,5
	Services	-1,8	-2,1	-2,4	-0,9	-0,9	-1,0
Malaysia	AgForFish	1,7	7,0	12,4	1,7	6,6	11,2
	PetMining	5,3	3,9	2,4	3,8	2,0	0,3
	FoodProc	0,6	1,5	2,2	0,9	1,8	2,5
	Textiles	6,2	8,4	10,5	4,3	6,4	8,5
	OthNonDur	2,4	-1,8	-5,7	7,6	5,2	3,0
	Metals	8,0	2,5	-2,8	19,1	14,6	10,5
	Machinery	9,9	6,8	3,7	15,0	13,1	11,3
	TranspEqp	-2,3	-4,0	-5,7	-4,1	-6,4	-8,6
	OthDurable	-2,0	-3,9	-5,8	-5,3	-6,9	-8,4
	Services	0,3	0,0	-0,4	0,8	0,5	0,2
Thailand	AgForFish	2,1	3,1	4,2	0,7	1,4	2,1
	PetMining	-0,2	-0,7	-1,3	-2,8	-3,7	-4,7
	FoodProc	2,3	2,5	2,7	4,7	5,2	5,7
	Textiles	1,7	2,5	3,4	2,6	3,6	4,5
	OthNonDur	2,2	1,5	0,9	0,5	-0,3	-1,0
	Metals	3,5	2,1	0,7	8,5	7,8	7,2
	Machinery	3,2	2,5	1,8	5,2	4,6	4,1
	TranspEqp	-1,9	-3,3	-4,7	-3,9	-6,6	-9,2
	OthDurable	1,2	0,8	0,5	0,1	0,1	0,1
	Services	0,5	0,4	0,3	1,7	1,8	2,0
Indonesia	AgForFish	-0,3	-0,2	0,0	-0,3	-0,2	-0,1
	PetMining	2,7	3,4	4,2	5,0	6,4	7,7
	FoodProc	-0,3	-0,3	-0,3	-0,6	-0,8	-0,9
	Textiles	1,1	2,3	3,5	2,1	3,9	5,7
	OthNonDur	-0,2	-1,6	-2,8	-0,9	-1,7	-2,4
	Metals	-1,8	-4,1	-6,3	-2,9	-5,2	-7,3
	Machinery	0,0	-0,6	-1,1	-1,5	-2,4	-3,1
	TranspEqp	-1,6	-2,8	-4,0	-5,2	-7,9	-10,4
	OthDurable	-2,5	-3,4	-4,4	-3,8	-5,1	-6,2
	Services	-0,1	-0,1	-0,2	0,1	0,1	0,2
Philippines	AgForFish	0,1	1,2	2,2	-0,3	0,6	1,4
	PetMining	1,7	0,4	-0,9	-0,8	-2,7	-4,5
	FoodProc	0,1	0,1	0,0	0,2	0,2	0,1
	Textiles	13,5	21,4	29,4	15,8	23,2	30,6
	OthNonDur	-0,9	-1,7	-2,5	-3,6	-4,7	-5,8
	Metals	8,3	6,9	5,5	16,0	16,6	17,3
	Machinery	21,6	20,7	19,7	39,6	42,1	44,7
	TranspEqp	-1,8	-3,2	-4,5	-3,9	-5,8	-7,5
	OthDurable	1,6	0,7	-0,2	1,5	1,2	0,9
	Services	1,3	0,8	0,3	3,0	2,9	2,8

(1) PAC-10 regional tariff liberalization; (2) tariff liberalization and 50 percent removal of NTBs among PAC-10 countries; (3) PAC-10 regional tariff and NTB removal; (4) PAC-10 global tariff liberalization; (5) tariff liberalization and 50 percent removal of NTBs by PAC-10 countries on all imports; (6) complete tariff and NTB liberalization by PAC-10 on all imports.