

Discussion Paper No. 0504

March 2005

**Ex-post Effects of Trade Liberalization
in the Philippines**

by

*Ramon L. Clarete**

*Professor, School of Economics.
University of the Philippines.

Note: UPSE Discussion Papers are preliminary versions circulated privately to elicit critical comments. They are protected by the Copyright Law (PD No. 49) and not for quotation or reprinting without prior approval.

Ex-post Effects of Trade Liberalization in the Philippines*

Ramon L. Clarete
Professor of Economics
University of the Philippines

Abstract

This paper examines the Philippine experience with trade liberalization policies and their impact on the economy. Although the relationship between trade liberalization and poverty is not straightforward, empirical evidence suggests that there are beneficial effects of freer trade on the poor in the long run. Since the 1980s the Philippines has considerably lowered import restrictions and expanded trade. An ex-post assessment of the effects of trade liberalization produces results that fall short of the net positive expectations produced by ex-ante studies. An ex-ante assessment of the impact of freer trade in the Philippines using models of the Philippine economy indicates net positive gains for the economy and for representative Filipino households. However, per capita income changed very little over the period 1980–2002. This study seeks to explain the divergence as being due to transaction costs.

* This paper was presented at the conference, Adjusting to Trade Reforms: What are the Major Challenges for Developing Countries? organized by the Trade Analysis Branch, United Nations Conference on Trade and Development, in Geneva, Switzerland, 18- 19 January 2005.

Ex-post Effects of Trade Liberalization in the Philippines

Ramon L. Clarete
Professor of Economics
University of the Philippines

1. Introduction

This paper examines the Philippine experience with trade liberalization policies in the 1980s and 1990s, and their impact on the economy. Although the relationship between trade liberalization and poverty is not straightforward, empirical evidence from over 100 studies indicates that there are beneficial effects of freer trade on the poor in the long run (Winters, MuCulloch and McKay, 2004).

Ex-ante assessments of the impact of freer trade on the Philippine economy using computable general equilibrium models report net positive gains (e.g. Habito and Cororaton, 2000; Cororaton, 1998; Clarete 1991). However, an ex-post assessment of the effects of trade liberalization produces less favourable results. Per capita income in the country has changed very little over the past 25 years. The economy appears unable to provide an adequate number of jobs for its labour force, and nearly one million Filipinos are working outside the country. Moreover, while trade has expanded, the increasing concentration of exports in semi-conductors and electronic components is cause for concern.

This paper aims to explain that this divergence is due to transaction costs. When import restrictions are lowered, the owners of activity-specific existing capital assets and currently employed workers in import-substituting industries face adjustment costs. In the absence of transaction costs, these import-substituting firms are likely to move out of their current business activities and invest resources in export-oriented production. But if transaction costs in the export sector of the economy are substantial, it becomes difficult for the firms and workers adversely affected by the more liberal import policies to adjust to the new trading opportunities. Those jobs in the import-substituting industries that are lost due to freer trade are unlikely to be fully replaced with new ones in export-oriented activities because of the transaction costs involved. Thus such costs have the potential of distorting, if not preventing, the expected reallocation of productive resources.

2. The Philippine economy: overview and recent trends

Population, employment and per capita income

The Philippine economy had experienced slow growth during the period 1980–2001. The average annual growth rate of GDP has been only 2.4 per cent, which barely keeps up with that of its population of nearly 80 million. One of the fastest growing in Asia, the Philippine population expanded at an annual rate of 3 per cent in the early 1970s, followed by 2.4 per cent in the mid-1980s and 2.33 per cent in 2000 (table 1). According to the United Nations (1986), the population is projected to reach 86 million in 2010. By

comparison, Indonesia and Thailand had similar population growth rates to those of the Philippines in the early 1980s, but at the turn of the century, both countries had achieved significantly lower rates, of 1.5 per cent.

As shown in table 1, the demographic structure of the country's population has changed. The economically active age group, between 15 and 64 years, accounted for 54 per cent of the population in 1980, and 20 years later this cohort comprised 60 per cent of the total population. The country's relatively rapid population growth is hampering efforts to solve its unemployment and underemployment problem (Orbeta and Pernia, 1999). In 2001, the unemployment rate was estimated at 10.1 per cent of a labour force of 32.6 million. The underemployment rate was even higher: an estimated 18 per cent of the labour force. In 2004, the unemployed and underemployed exceeded 5 million. If about one million Filipinos did not have jobs abroad, the unemployment problem would have been even more serious. Their annual remittances, which amounted to \$8.5 billion in 2004 according to the Bangko Sentral ng Pilipinas, substantially bolster disposable incomes in the Philippines, alleviating significantly the level of poverty in the country. The central bank had even reported that an additional \$1.8 billion may have come into the country in 2004 through channels other than the country's banking system.

Nearly half of the employed are in the services sector, which provided only about one third of all jobs in 1980. The agriculture sector, which was the source of half of all available jobs a quarter of a century ago, now accounts for only 37.5 per cent of employment. The industrial sector has failed to create any significant number of new jobs for the labour force. The number of jobs offered by the services sector has grown at an annual rate of 1.7 per cent since 1980, while the jobs provided by industry expanded at 0.33 per cent (see table 1).

The employment distribution of the different sectors reflects their respective contributions to GDP. The shares of agriculture and industry have steadily fallen since 1980, while the value added of the services sector in proportion to GDP increased, as discussed below and shown in table 2. Agriculture's declining contribution to job creation is to be expected as the economy develops, but the industry's share in total employment hardly changed and thus industry failed to make up for the decline of agriculture's contribution. The services sector has turned out to be the largest provider of jobs. Jobs in the services sector increased from 21.8 % of total in 1980 to 46.4 % in 2001 (see table 1).

Per capita GDP growth in the Philippines has been hovering at around 0.4 per cent since the 1980s. In 1980 the per capita income was \$1,173, while in 2001 it was even slightly lower, at \$1,165. The incidence of poverty is about 33 per cent. The Government's medium-term development plan, to 2010, aims to reduce poverty to less than 20 per cent of the population. This target appears to be difficult to attain given the historical growth performance of the Philippines. In order to reduce the incidence of poverty by at least 1 per cent, the Philippine economy would have to grow by an average of at least 3.36 per cent per annum, or by 1 per cent higher than its current population growth rate (Alonzo et al., 2004).

Trade integration

Over the past 25 years, the Philippine economy has changed in several important respects, as reflected in the selected economic indicators in table 2. It has become increasingly integrated with the rest of the world. Trade dependence increased from 52.27 per cent in 1980 to 98.81 per cent in 2002. The average annual share of imports to total supply or the sum of in GDP and imports was almost 21 per cent in the 1980s, increasing to 31.31 per cent for the period 1991–2002. Imports accounted for 22.24 per cent of total supply in 1980 and 33.18 per cent in 2002. Exports have also increased progressively as a share of total demand from 18.41 per cent in 1980 to 32.84 per cent in 2002. In the 1990s, the average share of exports in total expenditures was 27.93 per cent, up from 19.6 per cent in the 1980s.

The expansion in the share of exports has been at the expense of personal consumption expenditure and gross domestic capital formation. The average annual share to total expenditure of personal consumption fell from 54.28 per cent in the 1980s to 49.98 per cent in the 1990s. Personal consumption expenditure was 50.03 per cent of total demand in 1980, but at the turn of the century its share had fallen to 45.29 per cent. The corresponding figures for capital formation were 19.43 per cent and 14.17 per cent. The average share of government consumption increased slightly from 6.7 per cent in the 1980s to 7.92 per cent in the 1990s.

On the supply side, the sectoral composition of GDP has also changed as also shown in table 2. In 1980, the value added from the agriculture sector was 25.12 per cent of GDP in 1980, but this declined progressively to reach 20.1 per cent in 2002. Likewise, the value added share of industry, about one third of which is manufacturing, declined progressively, from 38.79 per cent in 1980 to 33.8 per cent in 2002. It was only the services sector's share which showed an increase, from 36.1 per cent in 1980 to 46.2 per cent in 2002.

All three sectors have contributed lower shares to total supply compared to their shares in GDP. In 1980, the share of agriculture was 19.53 per cent that of industry was 28.07 per cent and services 28.07 per cent. By 2002, their shares in total supply were 13.4 per cent, 22.6 per cent and 30.9 per cent respectively. Imports made up the difference. Over the years, imports have expanded at a faster rate than total supply and faster than each of the three economic sectors.

These changes in composition of aggregate demand and supply are indicative of the country's growing integration with the rest of the world, but apparently without a corresponding mobilization of domestic resources. Increasingly, merchandise exports depend on imported inputs and have relatively smaller value added content.

Trade in goods expanded at an average annual rate of 4.3 per cent in the 1980s and at 11.17 per cent since 1990 (table 3)¹. Overall trade in goods reached \$13.515 billion in 1980, increasing to \$68.358 billion in 2002. The average trade in services was \$3.513 billion in the 1980s and \$12.354 billion in the 1990s. It represented about 21.35 per cent of merchandise trade in 1980, although its share declined to about 10.8 per cent in 2002, indicating that trade in goods has been growing at a faster rate than that in services. The average growth rate of trade in services changed very little between the two periods: 6.73 per cent in the 1980s and 7.22 per cent in the 1990s.

The overall trade deficit was \$1.931 billion in 1980, \$1.384 billion in 2000 and 0.856 billion in 2002 (table 3). In the 1980s, the average trade deficit was \$1.535 billion and it has been \$3.769 billion since 1990. Rising much faster than exports, the value of average annual imports was \$8.529 billion in the 1980s and \$31.399 billion in the 1990s. In 2002, imports amounted to almost \$38.3 billion, following an average annual rate of expansion of 4.54 per cent in the 1980s and 10.47 per cent in the 1990s. In the 1990s, exports of goods and services picked up to reach \$28.04 billion, up from \$7.858 billion in the 1980s. Their average annual growth rate was 5.15 per cent in the 1980s and it has been 10.67 per cent since 1990.

Net exports of services have been declining over the years. In the 1980s, they amounted to \$801 million, falling to \$410 million in the 1990s. Imports of services grew 8.94 percentage points faster in the 1990s than in the 1980s, when they grew at an average annual rate of 3.19 per cent. On the other hand, the receipts from services exports decelerated to slightly over 4 per cent in the 1990s from nearly 11 per cent in the 1980s.

The income receipts of the country from the rest of the world for factor services used up abroad, such as cash remittances of overseas Filipino workers, amounted to \$0.762 billion in 1980, increasing to \$7.931 billion in 2002. The payments made by residents for their use of foreign factor services on the other hand were \$1.182 billion in 1980 and \$3.381 billion in 2002. The average inflow of income receipts in the 1980s was \$1.095 billion, rising to \$5.397 billion in the 1990s. Net income flows were negative in the 1980s at - \$1.055 billion, but became positive in the 1990s at \$2.643 billion. This trend was particularly pronounced over the five years ending in 2002, when the five-year average annual income receipts were about \$7.5 billion.

The Philippines has increasingly depended on cash remittances from overseas Filipino workers to support its balance of payments. Over the past two decades, net income inflows have become an important asset item in the country's balance of payments. By 2002, net income inflows more than exceeded the country's current-account deficit. This is particularly important, given that, since 2000, net private FDI has been declining to reach a little over \$1 billion in 2002 from nearly \$1.5 billion in 2000. Loans and bonds, had moved out of the country just when the country's residents started paying their foreign debt by more than they contracted new ones. That is, net other investments for the

¹ The numbers reported in table 3 are five-year snapshots which are taken from a series of annual statistics in the period 1980 to 2002. The growth rates and shares that are referred to in the discussion till the end of the subsection are computed using the annual data of the statistics reported in the table.

period 2002 to 2002 were on average -\$4.466 billion. The importance to the country of the cash remittances from overseas Filipino workers is thus clear: were it not for these receipts, the country would have experienced serious balance-of-payments difficulties in 2002.

Concentration of trade

Table 4 shows the shares of merchandise imports and exports of key sectors of the Philippine economy in the country's total trade between 1980 and 2002. The composition appears to have moved away from increasing diversity to a concentration in one key sector: machinery and transport equipment. Analysing the basket of imports, the shares of the country's imports in such products as food and live animals, beverages and tobacco, crude materials, animal and vegetable oils and fats, chemicals and chemical products and miscellaneous manufacturing changed very little over the last two decades. However those of mineral fuels and manufactured goods declined, while that of machinery and transport equipment increased.

More interesting observations emerge from the basket of exports. The shares in total exports of products such as food and live animals, crude materials, animal and vegetable oils and fats, manufactured goods and miscellaneous manufacturing declined. The main increase was in machinery and transport equipment. This shows that the country's trade has increasingly become concentrated in a few exportable items, while losing competitiveness in its traditional export items. For example, coconut exports constituted nearly 10 per cent of total merchandise exports in 1980, but after two decades their share was only slightly over 1 per cent. Processed food exports were nearly a quarter of total exports in 1980, but their share dropped to nearly 4 per cent in 2002. The mining industry shows a similar pattern: in 1980, its exports represented about 25 per cent of total exports, but by 2002, their share had fallen to less than 1 per cent.

Trade in services has steadily increased, with service imports increasing from about \$1.5 billion in 1980 to \$4.3 billion in 2002 (table 4). Receipts for services have likewise grown, from nearly \$1.5 billion in 1980 to slightly over \$3 billion in 2002. Payments for transportation services provided by non-residents to Philippine residents were the top contributor at nearly 52 per cent in 2002. The share of travel-related services in total services imports rose from 7.37 per cent to 20.16 per cent in 2002. Other service items that account for a rising share are royalties and licence fees, and insurance. The shares of other business services, communications and government services in total service-related payments, on the other hand, have been declining.

On the receipts side, the largest contributor is again travel-related services. In 2002, this sector's share accounted for nearly 57 per cent of total receipts, or about \$3 billion. Financial services, computers and information have seen a declining share, while communications is the only service sector with an increasing contribution to total receipts.

3. Trade reforms and recent trends

Unilateral trade reforms

In 1982, the Philippine Government introduced a unilateral, comprehensive trade reform programme aimed at increasing the competitiveness of the Philippine economy. It was implemented in three phases during the 1980s and 1990s. The Tariff Reform Program (TRP), implemented from 1981 to 1985, narrowed down the tariff structure from a range of 100–0 per cent to 50–10 per cent. This was accompanied by the Import Liberalization Program (ILP), which sought to eliminate non-tariff import measures, but it was interrupted by the economic and political crises in the country in the mid-1980s. It was not until the change of government in 1986 that this programme was resumed. The number of regulated items was reduced from 1,802 in 1985 to 609 in 1988, and export taxes on all products except logs were removed.

The Government launched the second phase of its trade liberalization programme in 1991 with Executive Order (EO) 470, which aimed at lowering tariff rates over a five-year period. The realignment involved the narrowing of the range of the tariff structure through a series of rate reductions for commodity lines with high tariffs and increases in commodity lines with low tariffs. Specifically, the programme aimed at clustering the commodities within a tariff range of 10–30 per cent.

In 1992, EO 8 introduced tariff protection measures to replace quantitative restrictions (QRs) on imports of 153 commodities. The tariffication raised the tariff rates applicable to affected commodities by 100 per cent of their pre-EO 8 levels. In effect, the tariff rates imposed were higher than the tariff equivalent rates, which are the tariff protection rates indicated by the respective proportionate difference between local and world prices of commodities in a number of cases, especially during the initial years of the conversion. However, EO 8 had a built-in programme for a five-year phase-down of the tariffed rates, and it realigned tariff rates for 48 items.

The unilateral tariff reform programme entered its third phase in 1994 with four Executive Orders, two of which are listed for 1994: EO 189 issued on 1 January 1994 reduced tariff rates on capital equipment and machinery; and EO 204 issued on 30 September 1994 lowered tariff rates on imported textiles, garments, and chemical inputs. But by far the largest overhaul of the country's tariff code was EO 264, introduced on 22 July 1995, which reduced tariffs on 4,142 lines of the Harmonized System (HS) in the manufacturing sector. This was followed by EO 288, introduced on 1 January 1996, which reduced tariffs on "non-sensitive" agricultural products. The TRP Phase III provided for a four-tier structure of tariff rates: 3 per cent for raw materials and capital equipment that are not available locally; 10 per cent for raw materials and capital equipment that are available from local sources; 20 per cent for intermediate goods; and 30 per cent for finished goods. The objective was to eventually achieve a "low, nearly uniform" tariff rate in the Philippines by 2002. The Philippine Government made this offer in its Individual Action Plan presented at the summit meeting of leaders of the Asia

Pacific Economic Cooperation (APEC) forum in Subic in 1996. It was also considered a necessary step in the implementation of the impending ASEAN Free Trade Agreement.

When the country acceded to the WTO as a founding member in 1995, it committed to eliminating all its quantitative import restrictions on agricultural products, except rice, and to converting the underlying trade protecting its protective ordinary customs duties. The Philippine Congress passed Republic Act (RA) 8178 on 29 March 1996 to implement this international treaty obligation. Accordingly, EO 313 was issued which specified the tariff equivalent rates for each agricultural QR. Rice was exempted because the Philippine Government asked for special treatment in accordance with Annex 5 of the WTO Agreement on Agriculture, which expires in 2005.

Accomplishments of the reforms

Table 6 shows the trade-weighted average tariff rates on imports from 1988 to 2003. The progressive reductions in tariff rates by sector were larger for manufacturing than for agriculture. However between 1994 and 1998, agricultural protection increased as a result of the “tariffication” of non-tariff import restrictions in that sector, as provided for by the WTO Agreement on Agriculture. David (1997) observed that quantitative restrictions were replaced by applied tariffs, most of which were equal to the high binding tariffs; these had the effect of increasing protection for agriculture. Even the tariffs on imports that are close substitutes for the tariffied imported commodities, such as feed wheat and barley substitutes for corn, were likewise raised to ensure protection for the corn farmers. Instead of taking the WTO-proposed path towards making agriculture more competitive, the policy-makers in the Philippines opted for more protection. The dramatic drop in tariff protection for agriculture between 1998 and 2000 reflects the changing basket of agricultural imports. Between 1996 and 1997, the agricultural products that were imported were those subject to tariff quotas, for which a relatively high out-of-quota tariff rate was imposed. This increased the trade-weighted average. Thereafter, imports of other agricultural items affected the average tariff rate on agricultural imports.

Manasan and Pineda (2000) observed that the respective standard deviations of nominal tariff rates in 2000 by sector were higher than those in 1990. The reforms reduced the average tariff rates but not their dispersion. Thus the policy aimed at a nearly uniform low tariff rate is not supported by the data. This observation holds as well for implicit tariff rates and effective protection rates. While the overall standard deviation in the price-comparison implicit tariff rates and effective protection rates decreased by some 15 per cent, their coefficients of variation increased during the period 1990–2000. The downward stickiness of tariff adjustments in agriculture and food processing is a key factor for explaining the increased dispersion of tariff rates after the reforms. Most of the tariff rates were cut sharply, but those for agriculture and food processing were cut only slightly because these products were politically sensitive.

Table 7 shows the changes in the effective protection rates (EPR) induced by the tariff reforms of the 1990s. These estimates were computed and reported by Manasan and Pineda (2000), who assessed the effects of the reforms on protection. The EPR of a given

sector is the proportionate increase in domestic value added to value added at undistorted world prices; it indicates how successfully the sector pulls economic resources to itself. The overall average effective protection rate in 2000 was lower than its level in 1990 by 48 per cent, reflecting the tariff reforms of the 1990s. As with nominal tariffs, the cuts in effective protection were larger for manufacturing than for agriculture. The EPR for manufacturing was reduced by at least one third compared to that for agriculture, which was reduced by only 31 per cent over the same period. Food processing has been the most protected in the manufacturing sector, while agriculture enjoys the highest effective protection among the primary and mining sectors. Both these sectors experienced an increase in their effective protection in 1996. According to table 7, the EPR for mining was reduced in 1996. Moreover, the dispersion of sectoral EPRs for industry was lower in 2000 compared to what it had been in 1990.

Arguments for and against liberalization

The Government's key purposes in liberalizing trade policies have been to achieve greater efficiency in resource allocation and to make consumers better off. Trade protection distorts allocation of resources, as they tend to move towards economic sectors that are protected by import restrictions rather than to those in which the country has a comparative advantage. With trade liberalization, this distortion is removed. As a result, the economy gains from the ensuing reallocation of resources towards industries with the greatest export potential – arising from technology or resource endowment advantages – as well as to those industries whose products are the most valued by consumers.

High import restrictions raise the prices of final goods at the expense of consumers. The domestic markets for those goods contract, and consequently consumers forgo the benefits they would have enjoyed had international market prices prevailed. If import-substituting intermediate goods are protected with trade measures, they become more expensive to those producers who use them in producing other goods. As a result, these producers forgo income in otherwise internationally competitive businesses that do not have trade protection. The competitiveness of the domestic producers in the domestic and export markets is therefore impaired by trade protection. Eliminating protection results in significant benefits to the consumers of these processed products in the form of lower prices, and increases export receipts.

Medalla (1998) observed that the trade protection policies of the 1960s and 1980s that favoured heavy over light industry, import-competing manufacturing over exports and agriculture, and consumer goods over capital and intermediate goods created an “imperfectly competitive structure characterized by unrealized scale economies and poor economic growth performance.” The unilateral trade liberalization reforms of the 1980s and 1990s were directed at “improving efficiency and resource allocation, and attaining global competitiveness and sustained economic growth.” To the extent that they improved resource allocation and enhanced the overall competitiveness of domestic industries, they were a success (Austria, 2001).

When the Philippine Government sought its Senate's approval to become a member of the WTO in 1994, the public debates mirrored those concerning the unilateral trade liberalization process, as membership in the WTO has come to mean free trade to the average Filipino. But besides the arguments stating why trade protection needed to be lowered, greater market access and high agricultural commodity prices became added issues. Since the country's trading partners were committed to easing their own trade restrictions and lowering import tariffs, WTO membership was expected to provide Philippine exporters with greater access to markets abroad, including, and especially, to its major trading partners (i.e. Japan, the United States and Western Europe). And since the WTO agreements require reciprocal exchange of trade concessions, it was believed that membership in this institution would give greater market access to the country's exports.

Particularly for agriculture, WTO membership was expected to bring about the reduction or elimination of trade-distorting domestic support measures and subsidies to agriculture, especially in developed countries. This would have the effect of raising international commodity prices, as they would then reflect the true costs of production in subsidizing countries. In turn, this would lead to an increase in the export earnings of domestic producers of such products, including the farmers in developing countries.

Critics have expressed reservations about trade liberalization and the serious threats that globalization poses to the country's economy. In their view, Philippine producers are ill-prepared for increased market competition, and are therefore likely to close down, resulting in the loss of job opportunities for Filipinos. While they acknowledge that winners may emerge, their number would be smaller than those forced out of business. Workers displaced by freer trade face adjustment costs in searching for new job opportunities and developing the appropriate skills for new jobs.

Reduced prices are expected to harm producers, particularly the primary producers or those at the top of the supply chain. In agriculture for example, the growing competition provided by competitive imported fruits and vegetables are generally expected to push down prices of tropical fruits and vegetables in the domestic market. With logistical costs relatively higher for local farmers, increased trade would reduce farm incomes and increase poverty in rural areas.

Opponents of globalization further cast doubts on the sincerity of the country's trading partners in making good their commitments to providing improved market access to the products of developing countries. Developed countries have found ways to circumvent the agreed rules and disciplines of the WTO and the respective trade concessions required of them. There are lobby groups in these countries that are better able to persuade their governments to become creative in their implementation of the multilateral trade agreement obligations. For example, environmental concerns have been used as a trade barrier, such as the United States ban on shrimps from countries that fail to employ protective devices for turtles. Small countries like the Philippines are generally unable to effectively counter these protectionist tendencies.

Clarete (1995) approached the public debate on the country's WTO membership issue by examining what the Philippine economy would forgo if the country had stayed out of the WTO. The methodology involved computing the decline in the Philippines' merchandise exports had the country lost MFN treatment, which he depicted as an increase by five percentage points in the tariff rates faced by Philippine exporters in importing countries. The World Bank-UNCTAD SMART computer program was used for this purpose. The result of this exercise indicated that the country stood to lose up to 80 per cent of its export earnings. The simulated forgone exports were then introduced as a shock to an applied general equilibrium model of the Philippines to calculate the income lost due to the decline in exports. Even estimating a conservative loss of only 20 per cent of earnings on its exports, in consideration of the possible bilateral deals that may continue MFN treatment on selected merchandise exports, the Philippine GDP would contract by nearly 8 per cent.

Trade liberalization can catalyse competitiveness-enhancing programmes. Commenting on the trade-related problems of Philippine agriculture, Clarete (1999) ascribes the lack of competitiveness in Philippine agriculture to two types of failures. The first pertains to the Government's failure to provide the required public support services necessary to increase productivity. The second is due to the failure of producers to keep their production costs down to the minimum. The policy in 1996 to provide maximum trade protection to the country's farmers may have had adverse consequences on their ability to become competitive. The problem with high tariff protection is that it serves as a disincentive to the producers to achieve higher levels of productive efficiency. Thus a high tariff protection rate absorbs the costs of inefficiencies in the sector arising from both Government and producer failure. This absorption process leads to a slowing down of the flow of investments in public infrastructure and in the common service facilities required by the sector. And since the producers' incomes are artificially propped by trade protection, the government is not politically compelled to act on the lack of infrastructure and common service facilities. In short, the high tariff protection rate currently in place makes the task of modernizing the grains sector, as well as the rest of agriculture, less obvious and urgent.

4. Assessing the effects of freer trade policies

Effects using simulation models

Habito and Cororaton (2000) simulated the effects of trade liberalization using a 50-sector computable general equilibrium of the Philippine economy. Its benchmark year is 1994, which makes the model particularly appropriate for simulating the actual trade policy reforms that took place after the ratification of the Philippines' accession treaty at the end of that year. The analysis involves simulating the effects of tariff rate changes from 1995 to 2000. These changes reflected both unilateral and multilateral tariff reforms, the latter representing the country's concessions to its trading partners covering applied tariffs on agriculture imports. The tariffication of non-tariff measures in agriculture ended up increasing agriculture tariff protection in 1996. With respect to non-agriculture tariffs, the changes depicted in the analysis are unilateral. The authors

performed sets of calculations covering nominal tariff reforms, implicit tariff reforms, and transaction valuation reform.

The ex-ante assessment of tariff reforms from 1995 to 2000 by Habito and Cororaton (2000) yielded a cumulative impact on real GDP of 2.3 per cent. The results indicated a relatively smaller drop in the number of jobs in both the agriculture and services sectors. However, this was more than compensated for by new jobs created in the manufacturing sector. Thus, overall, not only did real GDP increase, but also the inequality of its distribution declined, the poorest quintile income group receiving the largest share of the GDP growth.

In this section, a few indicators have been selected for comparing their performance over the past two decades with estimates of the effects of trade liberalization, which are obtained using a general equilibrium model of the Philippine economy.

Merchandise trade

One important effect of trade liberalization is that it expands trade, as more imports enter the country due to lower restrictions. Exports likewise gain resources, which move out of import-substituting industries as a result of increased competition. If trade liberalization is accompanied with improved market access, it creates new export opportunities, which reinforce the effect of pushing resources towards the export sector.

Figure 1 shows a panel of merchandise export and import charts starting with overall merchandise trade. Both exports and imports were at their lowest in 1985 when the Philippine economy contracted because of balance-of-payments problems coupled with the political crisis in the early 1980s. Aggregate imports exceeded exports for most of the years since 1985, contributing to the build-up of a trade deficit. Export growth in the 1980s was flat, but starting in 1990, aggregate exports expanded dramatically and peaked in 2000, despite the Asian financial crisis in 1997-1998. However, aggregate exports expanded at a slower rate than that of imports, and only caught up with aggregate imports after the Asian financial crisis. Aggregate imports peaked in 1997 when the financial crisis hit East Asia and thereafter declined before making a modest recovery in 2002.

Habito and Cororaton (2000) observed that merchandise exports have performed well since the Philippines' accession to the WTO as well as during the financial crisis. Except in 1993, their growth from 1991 to 1998 was significant. This led them to conclude that the export sector generally benefited from market opening in other countries and from the removal of trade barriers unilaterally or as offshoots of the WTO agreements. Even the slowdown of the economy in 1997-1998 did not prevent the export sector from posting consistently high rates of growth.

However, merchandise export growth was not as robust as it could have been because "the reductions in tariff and import restrictions have not been accompanied by a consistent exchange rate policy that favours (or is neutral to) exports" (Austria, 1997). The real effective exchange rate depreciated by 31.1 per cent during the period 1982-

1988, but appreciated from 1989 to 1996 because of the increase in foreign direct investment, from about \$0.5 billion in the 1980s to \$1.5 billion in the 1990s. Intal (1997) noted that the Philippines lost its competitiveness relative to its East Asian competitors in the 1990s. As a result, export expansion decelerated, from an average annual growth rate of 11.3 per cent in the second half of the 1980s to only 9.7 per cent in the first half of the 1990s. The depreciation of the peso following the Asian crisis probably helped boost export performance during the crisis, but it failed to arrest the slowing down of export growth. In the second half of the 1990s, exports expanded by only 3.6 per cent.

However, a different finding may be reached by breaking down overall export performance by sector. Figure 1 presents the merchandise trade of each major sector of the Philippine economy. This shows that exports of machinery and transportation equipment virtually explain aggregate export performance in the 1990s. Although exports of coconut oil (which is an important component of animal and vegetable oils and fats) recovered in the first half of the 1990s, and boosted overall export performance, their contribution was less than \$1 billion. Miscellaneous manufacturing also accounted for higher export earnings, which rose significantly through the 1990s, peaking at nearly \$5 billion in 2000, but falling thereafter. The other export sectors showed either a decline or hardly any improvement. Food and live animals, beverages and tobacco, and manufactured goods did not register any discernible pattern of export expansion.

Merchandise imports, as noted earlier, expanded much faster than exports in the 1990s, and this may be explained by the build-up of imports of food and live animals, beverages and tobacco, crude materials, mineral fuels, chemicals and chemical products, manufactured goods and miscellaneous manufacturing. Imports in almost all the sectors responded positively to the lowering of import restrictions and economic expansion, until the Asian crisis halted that trend. Since 2000, only a few sectors have recovered, but only moderately, including beverages and tobacco and food and live animals.

Figure 1 also shows the growing resource imbalances. Imports consistently exceeded exports in four sectors: mineral fuels, chemicals and chemical products, manufactured goods, and beverages and tobacco. Net imports ranged from about \$250 million to \$1 billion. Animal and vegetable oils and fats as well as miscellaneous manufactured goods, on the other hand, have consistently been net exporters. In two other sectors – food and live animals, and crude materials – exports had consistently exceeded imports, but in the 1990s they became net importers. Only machinery and transport equipment switched from being a net importer to a net exporter.

How much of these changes in merchandise trade may be attributed to reductions in applied tariffs on Philippine imports and those faced by Philippine exporters? Figure 2 shows the trade-weighted averages of these tariffs by selected sectors from 1988 to 2003, starting with agriculture. The general pattern shows that the changes in applied import tariffs do indeed reflect the trade liberalization process that occurred in the 1990s in the Philippines. While the generally applied import tariffs in the Philippines had been decreasing as a result of unilateral trade liberalization, they partly returned to their earlier levels between 1990 and 1994 in fisheries, textiles, tobacco, processed foods, wood

products, leather products, wearing apparel, paper products, non-metallic mineral products and furniture. In the case of agriculture, the increase in applied tariffs that occurred between 1994 and 1998 reflects the WTO's provisions for the tariffication of agricultural non-tariff measures. Since then, those out-of-quota tariffs have been decreasing as provided for in the WTO's agreement on agriculture.

These changes in applied import tariffs can be correlated with the increases in import values since 1990, as discussed earlier using the data in figure 1. The impact is relatively immediate, particularly on goods destined for final consumption. As import duties are lowered, the prices of these products for consumers also decline. However, the logistical costs of bringing the imported goods into the country may have slowed down some of the responses to the lower import duties. The response of imported intermediate goods, such as chemicals and chemical products, or machinery and transport equipment, was positive. Chemical and chemical products are materials in producing plastic packaging products needed by producers such as those of food and beverages. A big part of imported machinery and transport equipment are materials for producing exports of electronic products and semi-conductors. As shown in the chart of this sector in figure 1, imports of machinery and equipment slowed down in response to the Asian crisis about three years earlier than the sector's exports.

It is unclear if, overall, the average tariffs on Philippine exports declined, which would indicate improved market access for Philippine products. On the contrary, the country's trading partners appear to have increased average tariffs since 1998, especially for Philippine agricultural exports (figure 2). A similar pattern is observed for fisheries, forestry and basic metals. There were moderate tariff reductions on Philippine exports of such products as processed food, leather products, publishing and printing, fabricated metal products, office equipment, radio, TV, and communications equipment, furniture and mining. After increasing between 1998 and 2001, the average tariff on motor vehicles and other transportation equipment declined, while those on the other sectors barely changed.

The results obtained from this assessment of the impact using secondary data differ from those that came out of the ex-ante analysis using an equilibrium model of the Philippine economy. For most of the period covered by the analysis, imports exceeded exports, which meant that the country experienced a trade deficit as a result of trade liberalization. Secondly, rather than revealing a fairly diverse basket of exports from a large number of industries, as the simulation-based analysis indicated, the ex-post assessment indicates a concentration of exports in only a few industries.

Production and employment

Freer trade policies are expected to move resources towards industries in which the country has a comparative advantage. Table 8 shows the shares of 27 manufacturing industries in total manufacturing between 1980 and 1997. Changes in these ratios indicate how resources have shifted over time, which may reflect the impact of trade policy reforms.

There has been very little change in these shares. Food products and refined petroleum have been the top two industries in terms of production since 1980. These two industries contributed, on average, over 21 per cent and over 15 per cent respectively to total manufacturing output. In 1990, food products accounted for almost one quarter of total manufacturing output. Other important sectors are other chemicals, transport equipment, textiles, wearing apparel, beverages, iron and steel, and professional and scientific equipment. About 21 of the 27 manufacturing sectors in this table contribute no more than 5 per cent to total manufacturing output.

Over the past two decades, an average of nearly one million Filipinos have become economically active each year, but only about 63 per cent of them find jobs in the country. Figure 3 shows that the employment growth rate averaged about 2.73 per cent, which falls short of the 2.81 per cent annual growth rate of the population aged 15 to 64 years (see also table 9). Total employment growth fluctuated around its average of two decades, but with two fairly large downturns. These coincided with problems in the agriculture sector. One occurred in the mid-1980s and the other in 1997, both caused by droughts brought on by the El Niño. Agriculture not only failed to provide new jobs to new entrants into the work force, but also led to job losses, thereby pulling down total employment growth. Overall economic performance was also affected by the Asian financial crisis. By the early 2000s agriculture recovered, resulting in a resumption of employment.

Those who oppose trade liberalization and Philippine membership of the WTO use the loss of jobs in agriculture to prove their point that more trade is bad for Philippine agriculture. They link the contraction of agriculture during the El Niño-induced drought to the Philippine Government's implementation of provisions of the WTO's Agriculture Agreement, particularly those related to market access. This was quite simply a case of spurious correlation (Clarete, 1999). As figure 3 shows, agricultural employment recovered starting in 2000, even though the Philippines continued to implement the multilateral trade reforms in agriculture. Thus the agriculture sector continues to be an important generator of jobs in the Philippines. However, like industry, its performance in terms of providing jobs in the rural areas falls short of requirements.

Industrial employment growth has been better than expected. The sector's employment growth averaged 2.88 per cent over the period 1980–2000, which was higher than the growth rate of the economically active population. The economic contraction in 1985 appeared to have a moderate impact on employment in this sector, and, indeed, a much lower impact than that of the Asian crisis in 1997–1998; it reduced employment by about 4.7 per cent, or about two percentage points higher than the negative 6.94 per cent of agricultural employment. This shows that agricultural production is affected much more by weather conditions, such as the El Niño-induced drought, than by changes in economic policies.

The services sector provides the best job opportunities for Filipinos. It has been generating jobs at the rate of about 4.5 per cent per annum. Employment growth in

services has been positive, except in 1991, when it dipped slightly below 0 per cent. Since 1998, this sector has overtaken agriculture in providing jobs to Filipinos. In 1980, agriculture provided nearly 9 million jobs as against the services sector which provided 5.63 million (table 9). By 1998, the latter provided 12.55 million jobs or over 1 million jobs more than agriculture.

Job creation in the industry sector needs improvement. In 1980, it provided only 2.64 million jobs, and two decades later the sector only managed to add 2 million more or about 100,000 jobs each year. Industry and the services sector, which are insulated from the weather-related problems affecting agriculture, can compensate for the latter's vulnerability to natural shocks. However as the foregoing discussion implies, much needs to be done to achieve this objective.

A major problem with employment growth is that it is quite simply unstable. As mentioned earlier, average total employment growth was only about one-tenth of a per cent short of the entry rate of Filipinos into the work force. But over the past two decades, there were seven instances when industries failed to provide an adequate number of jobs to Filipinos just joining the labour force, that is, once every three years.

The percentage of the active population in employment barely changed in the 1980s and 1990s. Only about two thirds of the active population, on average, has jobs each year. This performance needs to be improved in order to provide more incomes, create a more effective domestic market for goods and services in the country, and reduce poverty. Industry has added only 100,000 jobs each year, agriculture 10,000 jobs more than industry, and services 410,000 jobs. However, the country needed to provide nearly a million jobs each year, based on the number of Filipinos entering the economically active cohort of the population.

The services sector is leading in creating jobs for the Philippine labour force. Contrary to the results obtained from simulating the effects of trade reforms using models of the Philippine economy, industry rather than making up for the observed reduction of jobs in agriculture and services in the ex-ante analysis, has turned out in this ex-post assessment of the effects of these reforms to be part of the problem. According to the results from the simulations, trade liberalization should have resulted in resources of industries rendered uncompetitive moving into those that were given a boost by lower import restrictions. However, as table 8 shows, the shares of the various manufacturing sectors to total manufacturing production barely changed, indicating that resources hardly moved.

Development indicators

Is the Philippines better off as a result of progressive trade liberalization over the past 25 years? In terms of per capita income, the country is not better off, as this has remained more or less unchanged, even falling slightly from \$1,173 (at 1995 prices) in 1980 to \$1,165 in 2001 (table 1 and figure 4 above). There were years when the average Filipino was worse off than in 1980, but relative to that year, when trade reforms began, the average Filipino's standard of living has remained roughly the same. However, this is no

indication that freer trade has made the country either better or worse off. Per capita income could have declined if trade had not been liberalized or if the Philippines had not joined the WTO. On the other hand, per capita incomes might have increased had trade protection not been reduced or, worse still, increased.

Looking at a few other development indicators, at least for the years for which data is available, there are positive trends of progress. Life expectancy at birth has risen by slightly more than eight years. The literacy rate has improved: the proportion of illiterate adult females fell from 13.2 per cent in 1985 to just short of 5 per cent in 2001, and the illiteracy rate of adult males fell from 11.22 per cent to 4.73 per cent (table 10).

The data also indicate that more Filipinos have access to infrastructure services and technologies. While the number of computer users is low, it has been rising, from nearly 3,500 per thousand persons in 1990 to nearly 21,700 in 2001. The use of mobile phones in the Philippines is among the highest in the world, with 15 per cent of Filipinos using them in 2001.

The incidence of poverty appears to be on the decline as shown in figure 5, although it worsened in the early 1990s. In 1985, the incidence of rural poverty was far worse than that of urban poverty, at 50.7 per cent compared to 33.6 per cent in the urban areas. There was an impressive decline in the incidence of urban poverty, which fell by 15.1 percentage points over the period 1985–1997. However, the number of rural poor fell by only 6.3 percentage points over the same period. Overall, the incidence of poverty declined from 44.2 per cent in 1985 to 32.1 per cent in 1997.

5. Transaction costs

The preceding discussion reveals important differences between the results emerging from an ex-ante analysis of the effects of trade liberalization using a general equilibrium model and the ex-post assessment of secondary data. The former reflect the underlying assumptions of the model, while the latter are the realization of a host of factors and economic shocks. This analysis does not proceed from the perspective that the two ought to be identical. Rather, it considers whether the movements of key development indicators over more than 25 years of progressive trade liberalization in the Philippines are consistent with a priori expectations. The analysis shows that they differ from the anticipated results.

The role of transaction costs in decision-making with respect to resource allocation cannot be emphasized enough. If trade protection is reduced, the expected reallocation of resources to export-oriented industries may not happen as quickly, or even at all, because of transaction costs. In conventional models of international trade, transaction costs are zero. That is, they assume that producers, consumers and the government have perfect information about everything that is relevant for their respective decisions, agreements are easy to make and property rights are well defined and easily enforced. When the effects of lower import restrictions on resource allocation are analysed with those models, resources are expected to move towards export-oriented industries, and consumers purchase more imported products.

However, in reality, transaction costs have the potential of dampening these effects, and, worse, preventing them from occurring at all. It is not surprising then that critics claim that globalization has led to less import substitution without the corresponding gain in export revenues, resulting in the loss of jobs and a worsening of the poverty situation. The examination of the economic data on production, employment and merchandise trade in the Philippines would seem to validate this claim. Reducing tariff protection goes as far as it can in generating jobs, lowering prices and improving productivity. However, if the country has a serious problem with transaction costs, the benefits that can be derived from trade reforms will not be maximized. This is consistent with Rodriguez and Rodrik (2000), who cautioned against oversimplifying the case that trade policies are a substitute for other macroeconomic reforms fundamental to economic development.

There are two interpretations of transaction costs in the literature (Allen, 1991). The type of transaction cost faced in the example above covers the costs associated with the transfer of assets. The neo-classical definition of transaction costs covers all market-related infrastructure, including highways, feeder roads, sea and air ports, communications, banking facilities, and other common services, which, taken together, define the capability of a group of producers to take advantage of known market opportunities. These costs cannot be passed on to the market because the producers concerned are price-takers. The burden of these costs falls on them and serves as a disincentive to participation in any market exchange. If the volumes are so large that the combined supply of producers in a given area constitutes a significant share of the market, then these necessary logistic costs may be passed on to the market. However, if other suppliers of the same homogeneous product or a close substitute can demonstrate that they have lower logistic costs, then the former group of producers have a comparative disadvantage and will set benchmark costs for the industry. Non-marginal suppliers with higher than the benchmark costs can supply them, but they will have to bear these transaction costs.

The relatively poor Philippine export performance may therefore be explained substantively by this problem of transaction costs rather than market access difficulties. As discussed earlier, most export sectors in the Philippines experienced a decline in their share of total export receipts, with the notable exception of electronic products. Because lack of market access involves MFN tariffs, other trading partners face the same set of import duties in importing countries. For example, when Philippine coconut oil exporters lost market share to their competitors producing coconut oil substitutes, including palm oil or other lauric oils, that problem reflected the growing perception of importers that the Philippines cannot be relied upon to meet the lauric oil requirement of the various industries in the importing countries. That perception stems from the inability of the Philippines to improve its efficiency in moving products from point of production to the market – a logistical rather than a market access issue. The problem is probably due to logistic cost disadvantages and the lack of responsiveness of Philippine exporters to the changing demands of the importers of the country's goods. Hence, those importing firms that had once bought coconut oil shifted to substitutes that assured a more reliable and adequate supply.

Exports require investments, which in turn depend upon the investment climate of the country. A good environment for investments requires a regime that keeps transaction costs of defining and enforcing property rights low (Coase, 1937).² High Coasean transaction costs dampen investments. These cover the costs incurred in acquiring information, negotiating the terms of transactions, monitoring the performance of the parties to an agreement, enforcing the terms of the agreement, adapting the agreement to the changing environment, and settling disputes. Absence of information per se is not a transaction cost, but it is an important component of the latter if considered in the context of making an economic transaction.

6. Concluding remarks

This ex-post assessment has sought to examine the impacts of trade liberalization in the Philippines since the 1980s on production, trade, income, income inequality and poverty. It compares these impacts with ex-ante simulations of the effects of trade reforms.

The Philippine experience reveals a case of only partial positive adjustment to a freer trade regime due to transaction costs. When trade-related costs or costs of enforcement of property rights are high, the investment needed to seize the opportunities created by freer trade fail to materialize. Consequently, the structure of the industrial sector, particularly manufacturing, barely changed. It is important for the Philippines to address this issue of transaction costs in its pursuit of greater integration into the global trading system. Improved economic performance, made possible by freer trade, involves a growing number of economic agents engaged in a cooperative, competitive, and mutually gainful exchange of assets to create additional wealth. Lower transaction costs are necessary for this to happen.

Contracting parties in trade negotiations request market access for products in which their economies have a comparative advantage. An understanding of what makes up that advantage is important and transaction costs offer important insights towards this. An economy may have a comparative advantage in producing a product because it may have the better technology or factor endowments. However with poor logistics systems it may lose the production advantage to those more efficient in moving their products to markets. This is particularly important in today's world when supply chains that span several countries and involve more than one product are increasingly being organized to cut down logistic costs as well as to take advantage of specialization and economies of scale. Furthermore, the investment climate of an economy is critical in multinational companies' decisions to include that economy in their production and logistical networks. This requires effective enforcement of property rights and adequate infrastructure capacity in host economies.

² While Coase (1937) first used the term "transaction costs", Williamson, O. (1979) developed the concept to refer to costs associated with determining and enforcing property rights.

Bibliography

- Allen DW (1991). What are transaction costs? *Research in Law and Economics*, 14: 1-18.
- Arrow KJ (1969). The organization of economic activity: Issues pertinent to the choice of market versus non-market allocation. In: US Joint Economic Committee, 91st Congress, *The Analysis and Evaluation Of Public Expenditure: The PPB System I*. Washington, DC, United States Government Printing Office: 59-73.
- Agenor P-R (2002). Does globalization hurt the poor? Yale University Working Paper www.econ.yale.edu/~srinivas/Globalization%20Growth%20and%20the%20Po or.pdf
- Alonzo, R. et al. (2004). Population and poverty: the real score. Diliman, Quezon City, Philippines, University of the Philippines School of Economics. Unpublished paper.
- Austria, M. (2001). Liberalization and regional integration: The Philippines' strategy to global competitiveness. PIDS Discussion Paper No. 2001-09. Makati City, Philippine Institute for Development Studies.
- Austria, M. (1997). The emerging Philippine trade environment. Paper prepared for the Department of Foreign Affairs and Trade of Australia under the project entitled, The Philippines: Beyond the Crisis.
- Barro R (1999). Inequality, growth and investment, *NBER Working Paper* 7038.
- Behrman J, Birdsall N and Szekely M (2001). Economic policy and wage differentials in Latin America. Penn Institute for Economic Research Working Paper 01-048. <http://lauder.wharton.upenn.edu/.../Economic%20Policy%20and%20Wage%20Differentials%20in%20Latin%20America.pdf>
- Birdsall N and Londono JL (1997). Asset inequality matter: An assessment of the World Bank's approach to poverty reduction. *American Economic Review*. 87 (2): 32-37. Please verify this title.
- Clarete R (1991). General equilibrium effects of the EO 413 tariff reforms in the Philippines. Paper prepared for the Philippine Center for Economic Development. Diliman, Quezon City, Philippines, University of the Philippines School of Economics.
- Clarete R (1995). How valuable is MFN treatment to the Philippines? *Philippine Review of Economics and Business*, XXXII (2), December.
- Clarete R (1999). Trade-related problems and policy issues in Philippine agriculture. *Philippine Review of Economics and Business*, XXXVI(1), June.
- Coase, R. (1937). The nature of the firm. *Economica*, 4: 386-405.
- Cornia GA and Kiiski S (2001). Trends in income distribution in the post-World War II period: Evidence and interpretation. World Institute of Development Economic Research Discussion Paper No. 2001/89.
- Cororaton CB (1998). The Philippine tariff structure: an analysis of changes, effects and impact. Microeconomic effects of Macroeconomic Adjustment Policies (MIMAP) Research Paper No. 39, October.

- Dollar D and Kraay A (2000). Poverty is good for the poor. World Bank Economic Research Group Paper www.worldbank.org/research. Washington, DC, World Bank.
- David C (1997). Agricultural policy and the WTO Agreement: The Philippine Case. PIDS Discussion Paper No. 2001-09. Makati City, Philippine Institute for Development Studies. Discussion Paper No. 97-13.
- Habito C and Cororaton C (2000). WTO and the Philippine economy: An empirical and analytical assessment of post-WTO trade reforms in the Philippines. Study report for the USAID/Philippines AGILE Program. Manila, Philippines.
- Habito C. *et al.* (2000). Farms, Food and Foreign Trade: the World Trade Organization and Philippine Agriculture. Study report for the USAID/Philippines AGILE Program. Manila, Philippines.
- Intal P (1997). Sustaining the Philippine economic resurgence. Paper presented at the symposium in honour of Dr. Gerardo Sicat and Dr. Jose Encarnacion, Jr.. Makati City, Philippine Institute for Development Studies, September 23-25.
- Kremer M and Maskin E (2003). Globalization and inequality. Cambridge MA, Economics Department, Harvard University.
http://post.economics.harvard.edu/faculty/kremer/webpapers/Globalization_Inequality.pdf
- Lundberg M and Squire L (1999). The simultaneous evolution of growth and inequality. www.worldbank.org/research/inequality/pdf/GLOBE5.pdf
- Manasan R and Pineda V (2000). Assessment of Philippine tariff reform: 1998 update. Study report for the USAID/Philippines AGILE Program. Manila, Philippines.
- Manasan R and Querubin G (1997). An assessment of the tariff reform in the 1990s. Study report for the USAID/Philippines AGILE Program. Manila, Philippines.
- Medalla E (1998). Trade and Industrial Policy Beyond 2000: An assessment of the Philippine economy. PIDS Discussion Paper No. 98-05. Makati City, Philippine Institute for Development Studies.
- Orbeta A and Pernia E.M. (1999). Population, growth, and economic development in the Philippines: What has been the experience and what must be done? PIDS Discussion Paper No. 99-22. Makati City, Philippine Institute for Development Studies.
- Ravallion M (2001). Growth, inequality and poverty: Looking beyond averages. World Bank Economic Research Group. Washington, DC, World Bank.
www.worldbank.org/research/growth/pdfiles/growth_inequality_poverty.
- Rodriguez F and Rodrik D (2000). Trade policy and economic growth: A skeptic's guide to the cross-national evidence. Harvard University Kennedy School of Government, Cambridge, MA.
<http://ksghome.harvard.edu/~drodrik.academic.ksg/skepti1299.pdf>
- United Nations. 1986. *World Population Prospects: Estimates and Projections as Assessed in 1984* (New York)
- Williamson, O. (1979) 'Transaction-Cost Economics: The Governance of Contractual Relations' *Journal of Law and Economics* (22): 233-61.
- Winters LA, McCulloch N and McKay A (2004). Trade liberalization and poverty: The evidence so far. *Journal of Economic Literature* XLII, March: 72-115.

World Bank (2004). Sustaining Trade Liberalization. WB 2004 Philippines DB10. World Bank Resident Mission, Manila, Philippines.

Table 1. Basic Indicators, Philippines: 1980-2004

	1980	1985	1990	1995	2000	2001
<i>Population</i>						
Ages 0-14, (% of total)	43.05	42.03	40.86	39.45	37.40	36.83
Ages 15-64, (% of total)	53.76	54.78	55.91	57.30	58.79	59.05
Ages 65 and above, (% of total)	3.18	3.19	3.24	3.24	3.81	3.85
Total (in million persons)	48.04	54.23	61.04	68.34	76.63	78.32
Annual growth rate* (%)	2.46	2.44	2.35	2.29	2.33	2.21
<i>GDP and GDP per capita</i>						
GDP (USD billions at 2000 prices)	48.5	45.5	57.3	63.8	75.9	78.5
Annual growth rate* (%)	3.42	-7.31	3.04	4.68	4.01	3.40
GDP per capita in USD	1,173	974	1,091	1,085	1,151	1,165
<i>Employment</i>						
Agriculture (% of total employment)	51.80	49.60	45.20	44.10	37.40	37.50
Industry (% of total employment)	15.40	13.80	15.00	15.60	16.00	16.10
Services (% of total employment)	32.80	36.50	39.70	40.30	46.50	46.40

Source: World Development Indicators 2003

* The figure for 1980 is that between 1981 and 1980.

Table 2. Selected Economic Indicators: 1980 to 2002

	1980	1985	1990	1995	2000	2001	2002
<i>GNP and GDP (USD billions at 2000 prices)</i>							
Gross National Income (GNI)	48.4	43.8	57.0	65.5	80.7	83.7	88.4
Net Primary Income from Abroad	-0.1	-1.6	-0.3	1.8	4.8	5.2	5.5
Gross Domestic Product	48.5	45.5	57.3	63.8	75.9	78.5	82.8
<i>International Trade (USD billions at 2000 prices)</i>							
Exports of Goods and Services	11.5	11.0	15.8	23.3	42.2	38.3	40.7
Imports of Goods and Services (-)	13.9	10.0	19.2	28.3	40.8	40.8	41.1
Trade Dependence (Trade to GDP in %)	52.27	46.11	61.06	80.89	109.37	100.73	98.81
<i>Expenditures (USD billions at 2000 prices)</i>							
Government Consumption Expenditures	4.4	3.5	5.8	7.3	9.9	9.5	10.1
Personal Consumption Expenditures	31.2	33.4	40.8	47.2	52.9	54.8	56.7
Gross Domestic Capital Formation**	15.3	7.6	14.0	14.3	11.7	16.6	16.6
<i>Expenditures (percent of GDP+Imports)</i>							
Government Consumption Expenditures	7.05	6.24	7.57	7.89	8.51	7.97	8.12
Personal Consumption Expenditures	50.03	60.32	53.37	51.31	45.29	45.96	45.69
Gross Domestic Capital Formation	24.51	13.67	18.35	15.51	10.01	13.95	13.35
Exports of Goods and Services	18.41	19.77	20.71	25.29	36.19	32.12	32.84
<i>Sector Composition (% of GDP)*</i>							
Agriculture	25.12	24.58	22.3	21.5	19.9	20.2	20.1
Industry	38.79	35.07	35.5	35.4	34.7	34.0	33.8
Services	36.10	40.35	42.2	43.1	45.4	45.9	46.2
<i>Sector Composition (% of GDP + Imports)*</i>							
Agriculture	19.53	20.15	16.7	14.9	12.9	13.3	13.4
Industry	30.16	28.75	26.6	24.5	22.6	22.4	22.6
Services	28.07	33.08	31.7	29.8	29.6	30.2	30.9
Imports	22.24	18.03	25.05	30.73	34.95	34.18	33.18

Source: IMF International Finance Statistics

* For 1990 to 2002, Source: Philippine National Statistics Coordination Board

** Calculated as GDP less expenditure items other than capital formation.

*** Figure for 1980 is growth rate for 1981 and 1980.

Table 3. Balance of Payments
(USD million)

	1980	1985	1990	1995	2000	2001	2002
1. Current Account							
Resource balance	-1,931	886	-2,537	-6,522	1,384	-2,793	-856
Trade in Goods	13,515	9,740	20,392	43,838	70,776	63,229	68,358
Exports	5,788	4,629	8,186	17,447	37,295	31,243	34,383
Imports	-7,727	-5,111	-12,206	-26,391	-33,481	-31,986	-33,975
Net Exports	-1,939	-482	-4,020	-8,944	3,814	-743	408
Trade in Services	2,886	3,102	5,005	16,274	10,374	8,346	7,376
Exports	1,447	2,235	3,244	9,348	3,972	3,148	3,056
Imports	-1,439	-867	-1,761	-6,926	-6,402	-5,198	-4,320
Net Exports	8	1,368	1,483	2,422	-2,430	-2,050	-1,264
Net income	-420	-1,300	-872	3,662	4,437	3,669	4,550
Income Flows	1,944	3,406	4,068	8,472	11,171	10,635	11,312
Receipts	762	1053	1598	6067	7804	7152	7931
Payments	-1182	-2353	-2470	-2405	-3367	-3483	-3381
Net current transfers	434	378	714	880	437	447	503
Current Account	-1,917	-36	-2,695	-1,980	6,258	1,323	4,197
2. Capital and Financial Account							
Net capital account, n.i.e.	n.a.	1	n.a.	n.a.	38	-12	-19
Net direct investments	-106	12	530	1,079	1,453	1,142	1,026
Net portfolio investments	4	5	-50	1,190	207	1,050	1,912
Net other investments	2,786	311	1,577	3,040	-5,702	-2,586	-5,678
Financial account balance	2,684	329	2,057	5,309	-4,004	-406	-2,759
3. Net Errors and Omissions							
Net Errors and Omissions	124	545	593	-2,094	-2,630	-433	-1,432
4. Overall Balance							
Overall Balance	891	838	-45	1,235	-376	484	6

n.a. - not available

Source: IMF International Finance Statistics

Table 5. Philippine Services Trade: By Sector, 1980 - 2002

	1980	1985	1990	1995	2000	2001	2002
Total debit (in USD million)	1,439	867	1,761	6,926	6,402	5,198	4,320
Share to total debit (%)							
Transportation services	52.05	42.91	55.65	29.61	46.67	46.50	51.76
Travel	7.37	4.27	6.30	6.09	15.70	23.64	20.16
Communications					4.08	4.14	1.99
Construction			0.28	0.84	1.94	5.75	2.85
Insurance	0.76	0.69	3.35	1.57	2.53	2.37	6.81
Financial					7.33	1.44	1.04
Computer and information					1.47	1.60	1.06
Royalties and licence fees	1.32	1.96	2.16	1.43	3.08	3.06	5.32
Other business services	30.09	47.64	29.98	60.16	14.90	10.37	8.40
Personal, cultural, and recreational					2.03	1.10	0.39
Government	8.41	2.54	2.27	0.29	0.28	0.04	0.21
Total Credit (USD millions)	1,447	2,235	3,244	9,348	3,972	3,148	3,056
Share to total exports (%)							
Transportation services	14.24	8.95	7.58	2.93	22.43	20.93	20.65
Travel	22.11	22.64	14.36	12.15	53.73	54.73	56.94
Communications					4.58	10.42	10.14
Construction			0.09	0.11	2.44	2.03	0.92
Insurance	n.a.	0.18	0.43	0.66	1.66	1.52	1.15
Financial					2.01	1.05	1.05
Computer and information					1.91	0.70	0.69
Royalties and licence fees			0.03	0.02	0.18	0.03	0.03
Other business services	47.55	51.54	66.80	83.86	9.04	6.96	7.33
Personal, cultural, and recreational					1.08	0.48	0.23
Government	16.10	16.69	10.70	0.27	0.93	1.14	0.88

Source: UN COMTRADE

Table 6. Trade-Weighted Average Tariff Rates Applied on Philippine Imports: 1988 to 2003
(in percent)

	1988	1994	2000	2002	2003
<i>Agriculture, Forestry and fishing</i>					
Agriculture hunting and related service activities	18.18	15.67	9.27	6.77	6.30
Forestry, logging and related service activities	10.65	5.61	0.77	0.70	0.70
Fisheries and aquaculture	31.45	25.34	5.82	5.80	4.42
<i>Mining</i>					
Mining of coal and lignite; extraction of peat	19.98	14.05	6.55	4.14	3.57
Extraction of natural gas and industry-specific services	10.00	10.00	3.00	3.00	3.00
Mining of metal ores	10.00	10.00	3.00	2.99	2.99
Other mining and quarrying	11.91	4.22	3.24	2.18	2.18
<i>Manufacturing</i>					
Food products and beverages	32.16	30.57	12.93	12.73	11.97
Tobacco products	49.54	49.66	9.98	6.98	6.98
Textiles	38.73	28.36	9.37	6.58	4.96
Wearing apparel; dressing and dyeing of fur	49.92	49.40	19.22	14.53	9.73
Tanning and dressing of leather; luggage, handbags, footwear	36.21	30.97	8.49	6.71	5.45
Wood and of products of wood and cork, except furniture;	32.36	21.80	9.82	7.82	5.64
Paper and paper products	34.50	20.87	6.82	4.58	3.60
Publishing, printing and reproduction of recorded media	25.05	18.60	6.43	4.43	3.98
Coke, refined petroleum products and nuclear fuel	19.71	10.31	3.00	2.64	2.64
Chemicals and chemical products	19.36	11.94	4.79	3.76	3.63
Rubber and plastics products	31.13	23.87	8.25	9.77	9.16
Other non-metallic mineral products	36.70	20.63	7.62	5.70	4.54
Basic metals	15.18	12.68	5.35	2.88	2.79
Fabricated metal products, except machinery and equipment	30.17	26.54	9.28	6.51	5.05
Machinery and equipment n.e.c.	22.36	12.29	3.33	1.90	1.71
Office, accounting and computing machinery	19.36	10.03	0.04	0.02	0.02
Electrical machinery and apparatus	26.45	18.42	5.24	3.25	2.68
Radio, television, and communication equipment	21.83	11.62	0.47	0.12	0.09
Medical, precision and optical instruments, watches	17.63	13.66	2.72	2.30	2.29
Motor vehicles, trailers and semi-trailers	31.70	21.49	13.07	11.14	11.14
Other transport equipment	14.23	11.67	9.78	8.80	8.79
Furniture; manufacturing n.e.c.	41.96	31.36	10.00	6.74	5.40
Electricity, gas, steam and hot water supply	10.00	10.00	3.00	3.00	3.00
<i>Total average</i>	22.43	15.22	4.13	2.82	2.60

Source: WTIS/Trains UNCTAD Computations

Table 7. Trade-Weighted Average Effective Protection Rates: 1990 to 2000
(in percent)

	1990	1992	1994	1996	1998	2000
<i>Total average</i>	27.86	32.20	27.09	25.43	18.68	14.43
<i>Agriculture, forestry and fishing</i>	23.63	24.32	22.94	22.19	18.43	16.39
Agriculture hunting and related service activities	26.42	26.39	25.92	28.70	24.97	22.48
Forestry, logging and related service activities	17.86	23.84	19.30	10.90	6.19	4.61
Fisheries and aquaculture	18.31	11.52	11.52	4.66	2.88	2.86
<i>Mining</i>	1.67	1.68	1.24	0.30	0.32	0.28
<i>Manufacturing</i>	31.02	36.99	30.18	28.15	19.86	14.52
Food Processing	40.40	57.98	42.88	51.61	36.43	27.26
Beverages and Tobacco	51.93	49.21	48.29	26.37	16.41	7.94
Textile, Garments and Footwear	25.35	24.25	22.22	13.55	11.15	8.38
Wood and Wood Products	33.81	20.46	20.16	22.64	17.37	10.30
Furniture and Fixtures	21.32	22.74	15.20	15.01	14.18	11.83
Paper, Rubber, Leather and Plastic Products	32.37	28.85	25.16	20.27	13.35	8.52
Chemicals and chemical products	23.50	18.26	17.99	11.89	7.33	5.85
Non-metallic mineral products	10.59	15.29	16.68	5.30	4.19	3.34
Basic metals and metal products	23.15	20.28	18.98	14.16	9.45	7.41
Machinery	24.22	22.29	16.36	10.67	8.13	6.26
Miscellaneous Manufactures	20.58	17.85	14.59	10.53	6.02	3.78

Source: Manasan and Pineda (2000)

Table 8. Manufacturing Production: 1980 to 1997

	1980	1985	1988	1990	1992	1994	1996	1997
<i>Total manufacturing (USD million)</i>	17,368	12,081	18,252	24,322	28,805	32,273	46,003	45,935
<i>Share to total (%)</i>								
Food products	21.72	21.87	21.65	24.69	20.16	19.84	20.28	20.28
Beverages	2.70	6.26	6.54	5.64	5.79	5.59	5.93	5.93
Tobacco	5.77	5.86	4.21	3.10	3.01	3.16	2.92	-
Textiles	7.27	4.59	5.08	4.68	3.98	3.12	3.21	-
Wearing apparel	2.68	2.15	3.95	4.34	4.43	4.29	4.17	-
Leather products	0.15	0.08	0.14	0.19	0.20	0.14	0.15	-
Footwear	0.22	0.24	0.17	0.19	0.36	0.42	0.40	-
Wood products	3.91	2.42	2.84	1.84	1.36	1.08	1.08	-
Furniture	0.96	0.52	1.00	0.88	0.68	0.66	0.64	-
Paper and products	2.93	2.41	2.66	2.12	2.58	2.03	2.04	-
Printing and publishing	1.51	1.08	1.08	1.24	1.27	1.29	1.48	1.48
Industrial chemicals	4.53	3.26	3.75	3.12	3.28	2.67	2.73	2.73
Other chemicals	8.22	6.77	7.94	7.08	7.79	7.42	7.28	7.28
Petroleum refineries	15.33	21.46	11.55	11.31	11.81	13.10	12.29	12.29
Misc. petroleum and coal products	0.04	0.10	0.13	0.09	0.13	0.10	0.13	0.13
Rubber products	1.56	1.26	2.19	1.50	1.89	1.16	1.20	1.20
Plastic products	1.40	1.17	1.74	1.59	1.91	1.83	1.83	1.83
Pottery	0.36	0.17	0.20	0.20	0.32	0.29	0.27	0.27
Glass and products	0.65	0.82	0.78	0.65	0.65	0.67	0.64	0.64
Other non-metallic mineral products	0.94	1.81	1.97	2.36	2.55	2.60	2.51	2.51
Iron and steel	3.00	4.24	5.13	4.98	4.62	4.15	4.63	4.63
Non-ferrous metals	0.67	2.43	3.10	2.27	1.60	2.06	2.16	2.16
Machinery and equipment n.e.c.	2.40	1.70	1.58	1.87	1.72	1.93	1.87	1.87
Office, accounting and computing machinery	1.29	0.75	0.86	0.82	0.93	1.35	1.60	1.60
Transport equipment	4.04	4.81	6.66	8.22	10.95	11.99	11.58	11.58
Professional & scientific equipment	5.01	1.13	2.31	4.13	5.15	5.99	5.89	5.89
Other manufactured products	0.05	0.14	0.16	0.07	0.11	0.20	0.23	0.23

Source: UNSTAT 2003 ISIC Revision2

Table 9. Employment: 1980-2001

	1980	1985	1990	1995	1998	2000	2001
Total Population (millions)	48.04	54.23	61.04	68.34	73.18	76.63	78.32
Population with ages 15-64 (millions)	25.83	29.71	34.13	39.16	42.59	45.05	46.25
Total Employment (millions)	17.15	20.33	22.53	25.70	28.26	27.78	30.09
<i>Agriculture</i>	8.89	10.08	10.18	11.33	11.28	10.39	11.25
<i>Industry</i>	2.64	2.81	3.38	4.01	4.44	4.44	4.69
<i>Services</i>	5.63	7.42	8.95	10.36	12.55	12.92	14.14
Employment rates (%)							
<i>Employment to population rate</i>	35.71	37.48	36.91	37.60	38.62	36.25	38.41
<i>Employment to active population rate</i>	66.42	68.42	66.03	65.62	66.35	61.66	65.05
<i>Unemployment to active population rate</i>	33.58	31.58	33.97	34.38	33.65	38.34	34.95

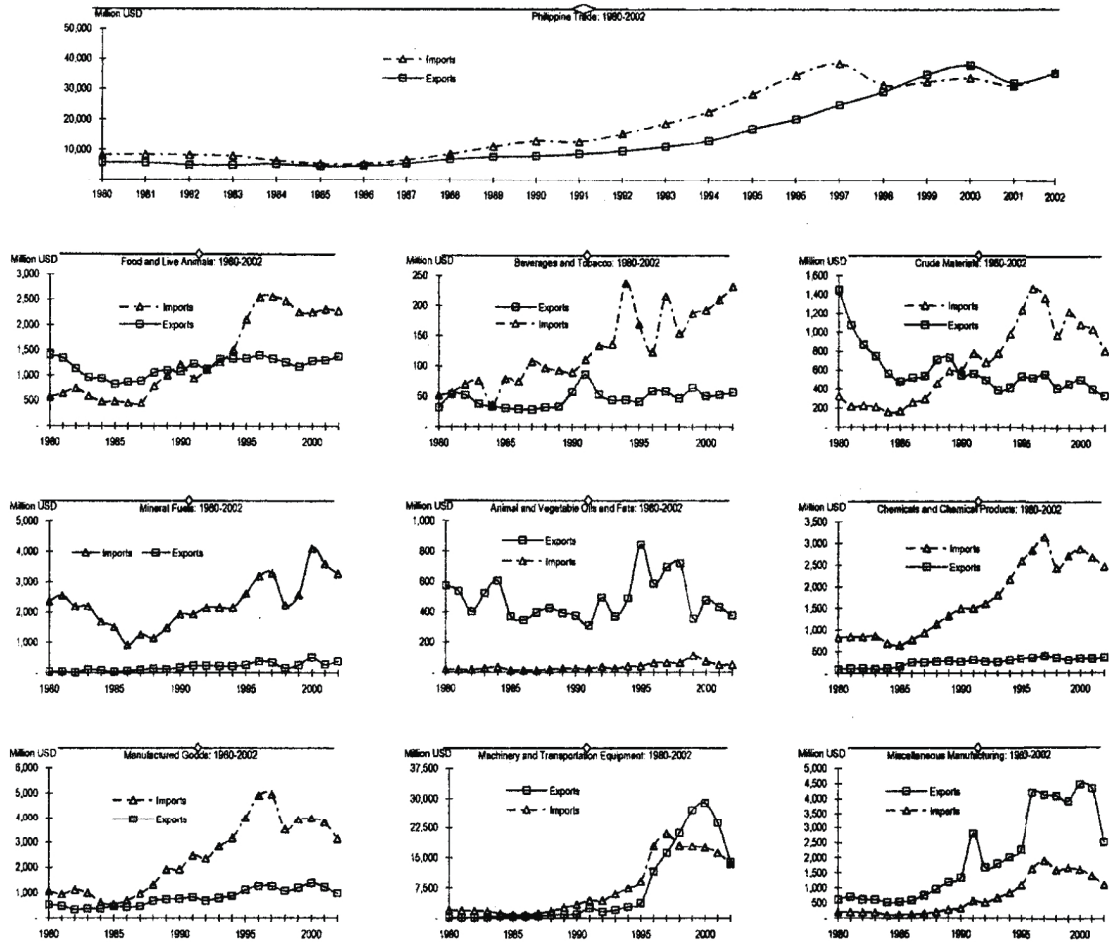
Source: ILO-KILMS

Table 10. Development Indicators: 1980-2001

	1980	1990	1994	1995	1997	2000	2001
1. Health							
Life expectancy at birth, female (years)	63.32	67.78	..	69.90	70.70	71.30	71.50
Life expectancy at birth, male (years)	59.44	63.58	..	65.70	66.50	67.34	67.62
Life expectancy at birth, total (years)	61.33	65.63	..	67.75	68.55	69.27	69.51
Hospital beds (per 1,000 people)	1.71	1.39	..	..	..	..	..
Health expenditure per capita (current US\$)	..	21.00	31.00	37.00	41.00	33.00	..
Malnutrition prevalence, height for age (% of children under 5)	..	37.20	..	..	..	..	..
Birth rate, crude (per 1,000 people)	36.36	32.44	..	29.68	28.40	26.72	26.16
2. Population&Urbanization							
Population growth (annual %)	2.43	2.26	2.26	2.27	2.29	2.18	2.06
Population density (people per sq km)	161.10	204.72	224.08	229.20	239.87	256.99	262.66
Urban population (% of total)	37.48	48.78	52.93	54.03	55.79	58.55	59.33
Urban population growth (annual %)	3.65	4.73	4.24	4.20	3.76	3.43	3.17
3. Distribution of Income							
Income share held by highest 10%	..	..	..	..	..	36.27	..
Income share held by highest 20%	..	..	..	..	..	52.28	..
Income share held by lowest 10%	..	..	..	..	..	2.20	..
Income share held by lowest 20%	..	..	..	..	..	5.38	..
4. Education							
Illiteracy rate, adult female (% of females ages 15 and above)	13.20	8.79	7.19	6.80	6.16	5.22	4.98
Illiteracy rate, adult male (% of males ages 15 and above)	11.22	7.75	6.51	6.20	5.68	4.92	4.73
Daily newspapers (per 1,000 people)	41.64	55.70	64.15	61.46	..	..	..
5. Infrastructures&Technology							
Vehicles (per 1,000 people)	..	9.89	25.34	27.01	30.89	..	..
Electric power consumption (kwh per capita)	354.68	342.28	368.07	389.12	444.39	477.04	..
Mobile phones (per 1,000 people)	..	..	2.57	7.20	18.55	84.37	149.58
High-technology exports (% of manufactured exports)	..	..	28.60	31.10	64.30	71.30	70.20
High-technology exports (USD millions)	..	..	1,815	2,474	14,371	25,263	21,032
Internet users (thousand persons)	..	..	4.00	20	100	1,540	2,000
Personal computers (per 1,000 people)	..	3.46	7.92	9.62	13.39	19.35	21.73
Television sets (per 1,000 people)	21.73	49.42	103.05	104.93	107.70	143.79	172.59

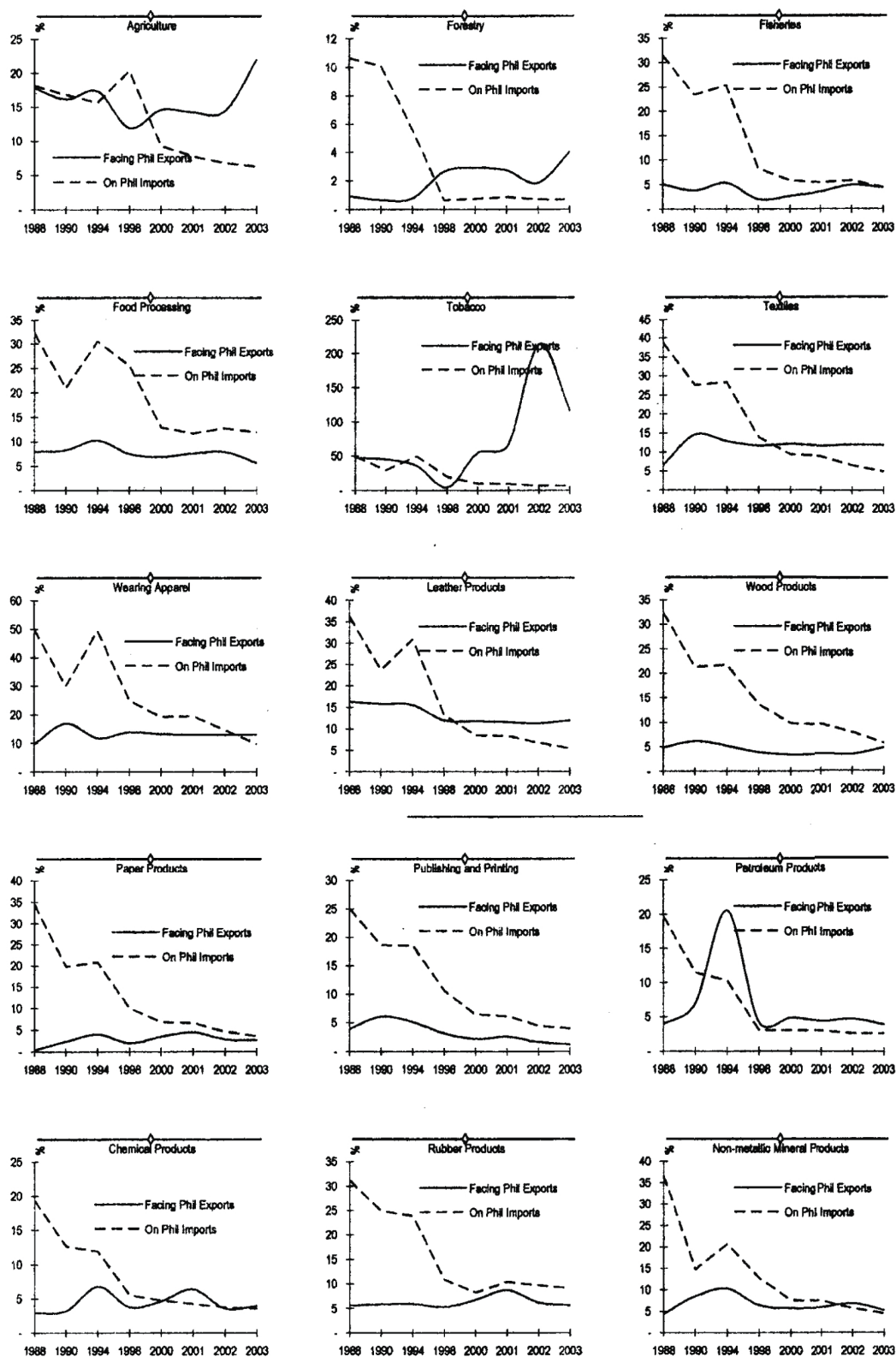
Source: World Development Indicators 2003

Figure 1. Philippine Merchandise Trade: By Sector, 1980-2002



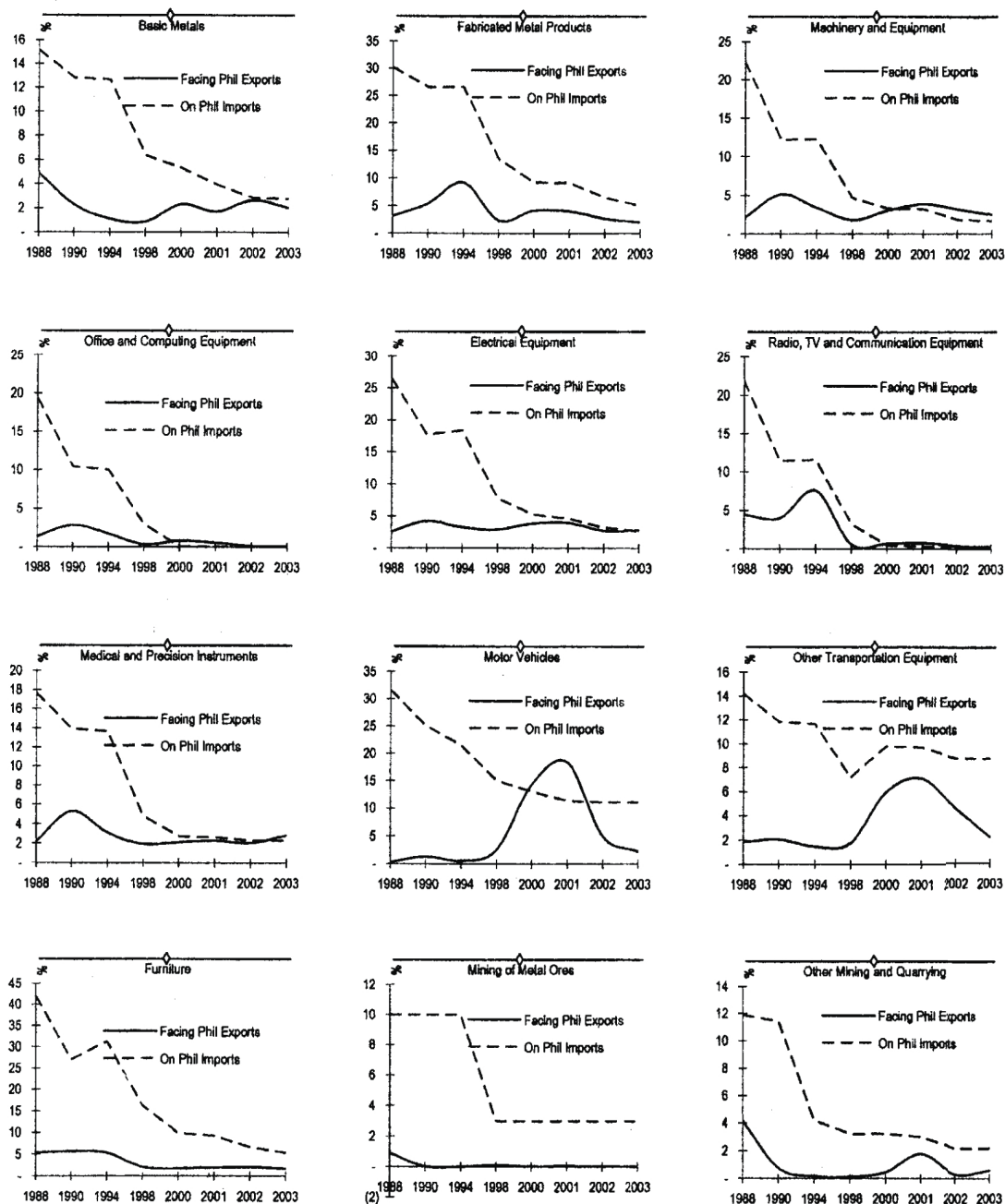
Source: UN COMTRADE

Figure 2. Trade-Weighted Average Tariffs Applied on Imports and Facing Exports of the Philippines: 1988-2003



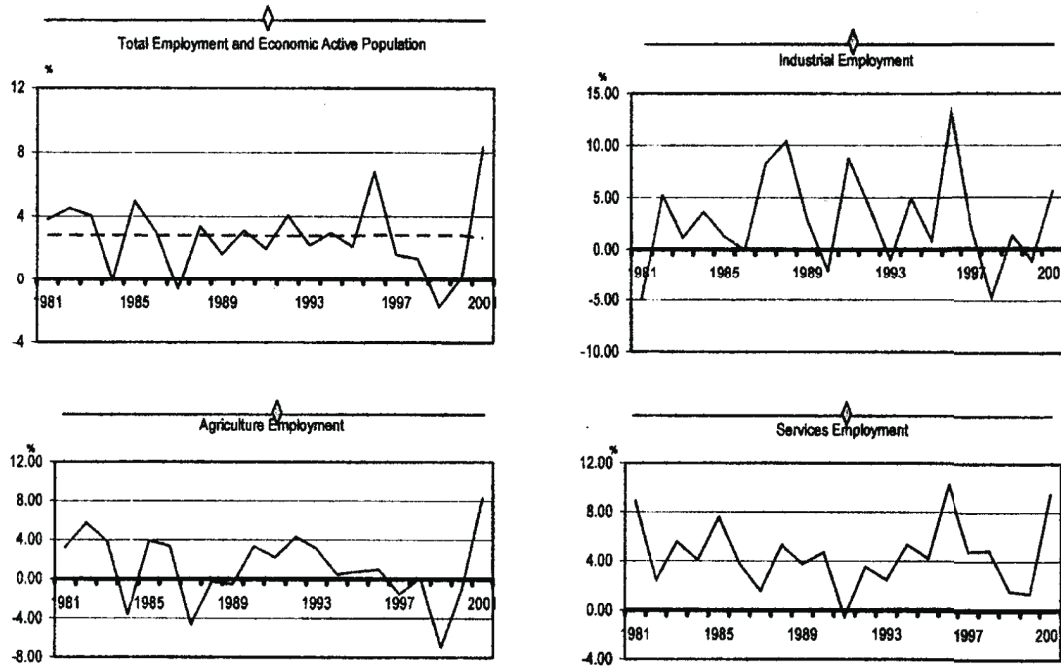
Source: WTIS/Trains UNCTAD Computations

Figure 2 (con't). Trade-Weighted Average Tariffs Applied on Imports and Facing Exports of the Philippines: 1988-2003



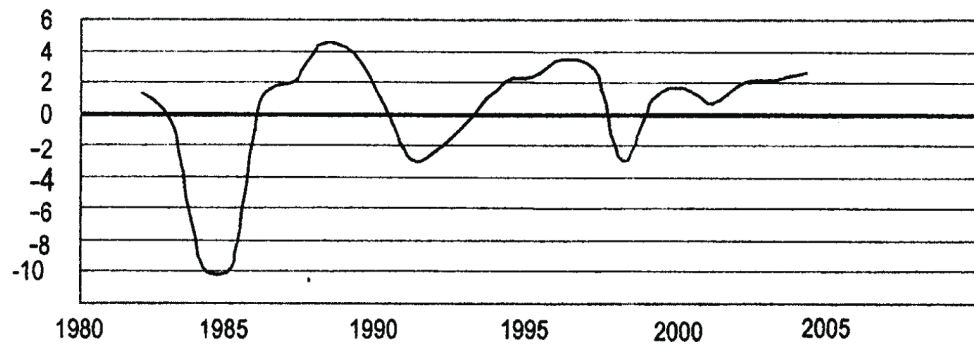
Source: WTIS/Trains UNCTAD Computations

Figure 3. Employment Growth: 1981-2001

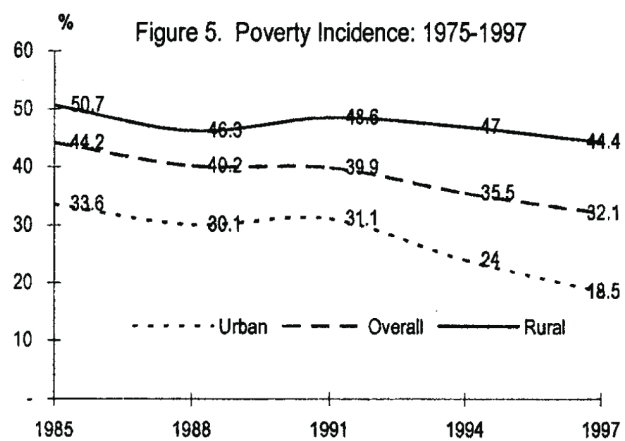


Source: ILO-KILMS

Figure 4. Philippines: GDP per capita annual growth rate: 1981 -2004



Source: National Statistics Office, as reported in Alonzo et al. (2004)



Source: National Statistics Office, as reported in Habito et al. (2000)