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An Analysis of Philippine Trade Reforms in 1995-2000 Using the 1994 APEX Model

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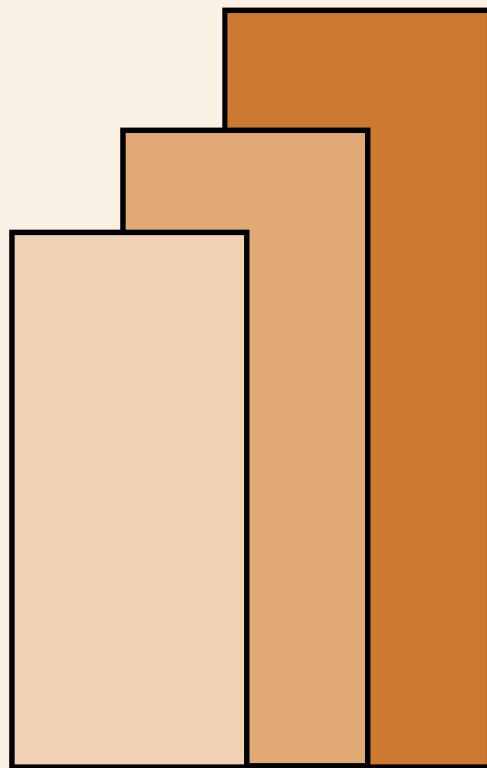
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***An Analysis of Philippine Trade Reforms
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Abstract

There are three major developments in the area of foreign trade in 1990s: (a) the WTO-Uruguay Round agreement in 1995; (b) the AFTA agreement; and (c) the series of unilateral trade reform programs of the government. The paper attempts to make an impact assessment of these reforms during the period 1995 and 2000 using the updated APEX model, a computable general equilibrium of the Philippine economy. Part of the trade reform process is the shift transaction valuation of imports. The paper also attempts to analyze the possible effects of this shift.

An Analysis of Philippine Trade Reforms in 1995-2000 Using the 1994 APEX Model¹

Caesar B. Cororaton and
Janet S. Cuenca²

I. Introduction

There are three major developments in the area of foreign trade in 1990s: (a) the WTO³-Uruguay Round agreement in 1995; (b) the AFTA⁴ agreement; and (c) the series of unilateral trade reform programs of the government. The paper attempts to make an impact assessment of these reforms during the period 1995 and 2000 using the updated APEX model, a computable general equilibrium. However, the paper does not isolate the impact of each of these developments on the economy, but instead analyzes the overall impact of the entire reform program during the period. The overall trade reform program is captured by the changes in the sectoral nominal tariff rate, implicit tariff rate, and the ratio between export value (the value of the country's imports from the country of origin) and invoice value (the value of imports based on invoices). Nominal tariff rate is the weighted sectoral average of nominal tariff rates, while sectoral weighted implicit tariff rate is the ratio between border and domestic prices which, in principle, captures tariff as well as non-tariff barriers. The export-value-invoice-value ratio could have three possible range of values: greater than one which implies under invoicing, less than one over invoicing; and equal to one the ideal case. Furthermore, the paper will attempt to analyze the possible effects of the shift to transaction value in imports.

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³World Trade Organization

⁴ASEAN Free Trade Area

II. Trade Reforms⁵

The discussion in this section will briefly include trade reforms which took place before the period 1995-2000 to have some historical perspective of the trade reform development, although the principal focus of the paper is on the trade reforms during period 1995-2000. In particular, the discussion will include reforms before the 1990s and within the 1990s, including 1995-2000. The discussion of the reforms, particularly within the 1990s, is essentially based on the various Executive Orders (EO) and Republic Acts (RA) on tariff reforms enacted during the period as compiled by the paper of Manasan and Querubin.

II.1. Before 1990s

There were indeed serious moves and motivations on the part of the government in the past to reform the trade sector. In fact, major turning points in trade policy reforms in the Philippines before the 1990s took place during the following years: (a) 1962, when the government dismantled the import and foreign exchange restrictions; (b) 1965, when the Philippine peso was officially devalued from P2 to P3.9 per US dollars; (c) 1967, when the foreign exchange controls were re-imposed because of persistent BOP imbalance, and when the exchange rate was further devalued from P3.9 to P6.4 to US dollar; (d) 1973, when a major tariff reform program was put in place to simplify the tariff rate structure to a system of six tariff rates, and at the same time to intensify the implementation of non-tariff measures such as quantitative restrictions; and (e) 1980, when a major trade reform program was launched wherein the following developments took place: (e.1) the 1981-1985 Tariff Reform Program (TRP) wherein the tariff rate structure was narrowed from 100-0 to 50-10 percent range; (e.2) the Import Liberalization Program (ILP); and (e.3) the complimentary realignment of the indirect taxes wherein sales taxes on imports and locally produced were equalized and the mark-up applied on the value of imports (for sales tax valuation) was reduced

⁵Based on the paper of Manasan and Querubin (1997).

and eventually eliminated⁶; and lastly (f) 1986, when the Aquino government resumed the 1980 trade program by reducing the number of regulated items was reduced from 1,802 in 1985 to 609 in 1988 and by abolishing export taxes on all products except logs.

II.2. Within 1990s

Table (1) lists down the various Executive Orders (EO) and Republic Acts (RA) on tariff reforms enacted during the 1990s. The government launched a major reform program in 1991 with the issuance of the Executive Order (EO) 470 (also called the TRP-II, an extension of the previous trade reform program). Under this program, tariff rates were realigned over a five-year period. The realignment involved the narrowing of the range of the tariff rate structure through a series of reduction of the number of commodity lines with high tariffs and an increase in the commodity lines with low tariffs. In particular, the program was aimed at clustering the commodities with tariffs within the range 10–30 percent by 1995. Despite the programmed narrowing of the tariff range, about 10 percent of the total number of commodity lines were still subjected to 0-5 percent and 50 percent tariff rates by the end of the program in 1995.

“Tariffication” of QRs started in 1992 with the implementation of EO 8. There were 153 commodities whose QRs were converted into tariff equivalent rates. Also, under the same EO, tariff rates on 48 commodities were further re-aligned. EO 8 raised the tariff rates applicable to the relevant commodities by 100 percent of their pre-EO 8 levels. In effect, the tariff rates imposed were higher than the tariff equivalent rates in a number of cases, especially during the initial years of the conversion. However, EO 8 has a built-in program for a five-year phase-down of the “tariffed” rates.

⁶Lastly, because of the balance of payments crisis during the mid-1980s the import liberalization program was postponed. In fact, some of the items that were deregulated earlier were re-regulated.

Under the import liberalization program, de-regulation continued on 286 items. At the end of 1992, only 164 commodities were covered under the QRs. However, the implementation of the Memorandum Order (MO) 95 in 1993 reversed the de-regulation process. In fact, QRs were re-imposed on 93 items, bringing up the number of regulated items under the QR to 257. This re-regulation came largely as the result of the Magna Carta for Small Farmers in 1991.

Major reforms were implemented under the TRP-III. The program embodied in the following EOs: (i) EO 189 implemented in January 1, 1994 which provided reduced tariff rates on capital equipment and machinery; (ii) EO 204 in September 30, 1994 which mandated tariff reduction in textiles, garments, and chemical inputs; (iii) EO 264 in July 22, 1995 which reduced tariffs on 4,142 harmonized lines (HS) in the manufacturing sector; and (iv) EO 288 in January 1, 1996 which reduced tariffs on “non-sensitive” components of the agricultural sector. The restructuring of tariff under these EOs refers to a reduction in the number of tariff tiers and the maximum tariff rates. In particular, the program was aimed at establishing a 4-tier tariff schedule: 3 percent for raw materials and capital equipment which are not available locally; 10 percent for raw materials and capital equipment that are available from local sources; 20 percent for intermediate goods; and 30 percent for finished goods.

Another major tariff program which is in the pipeline and is likely to be implemented starting 2004 is the uniform tariff rate. At the moment, debate is still going on as to the possible effects of this tariff program and at what rate will the tariff be made uniform across sectors. Suggestion of five percent has been put forward.

In a recent paper, Manasan and Querubin (1997) analyzed the impact of the different trade and tariff reform programs that took effect in the 1990s on tariff simplification and international competitiveness. Their analysis of tariff simplification was based on the frequency distribution of tariff rates across HS (harmonized system) lines, while their international competitiveness analysis

was based on mean, standard deviation, and coefficient of variation of tariff rates and effective rates of protection (EPRs) and on the movement of the index $(1+EPR)$.

There is an extensive system of incentive provisions and exemptions in the economy. Thus to account for these factors, they adjusted the nominal tariff, as well as the implicit rates for duty exemptions. Furthermore, they have two indicators for implicit tariff rates: one, involving book rates, and, another price comparison. Price comparison implicit tariff rates were computed using domestic prices and border prices, where border prices were indicated by Hong Kong price and FAO prices on selected agricultural products.

The study found that as a result of all these trade and tariff reform programs, there have been significant achievements in the area of tariff simplification. The programs transformed the tariff system from a five-level rate schedule to a three-level rate schedule. In fact, most of the commodities cluster around the 3-20 percent range. Moreover, the HS lines are programmed to reduce from 6,197 in 1990 to 5,725 in 2000. This is a significant development as it streamlines customs administration and minimizes incentives for evasion.

Based on the results of the computation, they claim that there are some gains in terms of the reduction in the average nominal and implicit tariff rates, as well as in the EPRs over the 1990-2000 period. Overall, the average nominal tariff rate shall have been reduced from 33.3 percent to 19.5 percent in 2000. Likewise, the average implicit rate based on price comparison shall have been reduced from 28.6 percent in 1990 to 16.8 percent in 2000. In addition, the overall EPR based on price comparison shall have been reduced from 29.4 percent to 18.0 at the turn of the century.

It should be emphasized that their results indicate that the decline in the EPRs is more pronounced for the manufacturing group than for the primary group, particularly the agriculture sub-group. This means that there is a switch-over in the relative protection in agriculture and manufacturing

sectors. Relative protection is found to be increasing from 1995 to 2000, in sharp contrast to the previous decades when the agricultural sector was penalized heavily relative to the manufacturing sector. During the period 1990-1994, the manufacturing group enjoyed relatively higher protection than agriculture. There is a major switch during the period 1995-2000 in favor of agriculture.

All these developments in the trade policies are captured by the sectoral implicit tariff rates shown in Figure 1. One should note that these implicit tariff rates were computed using border price comparison, and as such, they capture not only changes in the nominal tariff rates, but as well as the other non-tariff barriers present in the system. One can observe from the figure that there is a general decline in the implicit tariff rates for all major sectors starting 1995. Food manufacturing still has the highest implicit tariff rate level, while mining has the lowest. In 1992, the implicit tariff rate of agriculture crossed the declining rate of other manufactures. It increased up to 1994 and started to decline in 1995. From 1996 to 2000, its implicit tariff rate is above other manufactures but below total manufactures.

III. The APEX Model

The model used in the analysis is the APEX model. APEX stands for Agriculture Policy Experiments. It was developed by Clarete and Warr (1991) using 1989 database. In the present exercise the model was calibrated using an updated social accounting matrix. In particular, the previous 1989 SAM was updated to 1994 database.

APEX is a computable general equilibrium model (CGE). So far, it is the most disaggregated model having fifty production sectors. The agricultural sector is represented by sixteen subsectors starting from rice (disaggregated further into irrigated and non-irrigated or rain-fed rice) and up to forestry. The industrial sector has twenty-eight subsectors, twenty-four of which are manufacturing industries. The other four industrial sectors are mining and utilities. The service sector is represented by six sub-sectors in the model.

The APEX model is essentially a neoclassical, Walrasian, CGE model wherein the different markets in the model are cleared by prices. That is, the model has a well-defined production (or supply) sector, as well as a consumption (or demand) sector, and the two sectors are cleared using market-clearing prices.

The APEX model belongs to the Johansen (1962) class of CGE models in which the system of equations are linearized in percentage changes of the variables.⁷ To illustrate, consider a 2-sector model whose production function can be written as

$$(1) \quad Y = f(X_1, X_2)$$

where Y is output and X_1 and X_2 are inputs. In a Johansen-type model (1) is rewritten in linear percentage change form as

$$(2) \quad y - e_1x_1 - e_2x_2 = 0$$

where e_i is the elasticity of output with respect to inputs of factor i , while the small-letter variables y , x_1 , and x_2 are percentage changes of the big-letter variables, Y , X_1 and X_2 .

In matrix notation, this type of a model can be represented by

$$(3) \quad Az = 0$$

where A is an $(m \times n)$ matrix of coefficients and z is an $(n \times 1)$ vector of percentage changes in the variables of the model. Since matrix A is assumed fixed, (3) provides only a local representation of the equations suggested by economic theory, i.e., the equation is valid only for "small" changes in X_1 and X_2 .

Through an appropriate closure, z may be partitioned into a vector of endogenous variables (y) and a vector of exogenous variables (x)⁸.

Once the choice of the set of exogenous variables has been made, (3) can be rewritten as

$$(4) \quad A_1 y^* + A_2 x^* = 0.$$

Provided A_1 is invertible, one can proceed from (4) to the solution

$$(5) \quad y^* = -A_1^{-1} A_2 x^*.$$

This equation expresses the percentage change in each endogenous variable as a linear function of the percentage changes in the exogenous variables.

The exogenous variables can be chosen in many different ways. In fact, much of the flexibility of the APEX model in policy applications arises from the user's ability to swap variables between exogenous and endogenous categories.

To date, the APEX model is the most disaggregated CGE model of the Philippine economy. As briefly mentioned above, apart from the fifty sectors in the production block, the model has seven categories of consumer goods and services and five household types grouped in quintile, with the first quintile the lowest income bracket.

The model is divided into agriculture and non-agricultural sectors. There are three primary factors that are mobile among the various non-agricultural industries. These are variable capital, skilled labor and unskilled labor. Variable capital includes non-agricultural land and structures that are

⁷ Another widely known Johansen-type CGE model is the Orani model of the Australian economy that is twice as big as the APEX model.

⁸To solve the model, $(n-m)$ variables must be declared as exogenous.

not necessarily devoted to any particular line of production activity, e.g., buildings and related fixed structures. Thus, when relative prices change, owners of such land and capital assets can rent these assets out to producers who face more favorable terms of trade. Unskilled labor is also freely mobile between non-agricultural and agricultural sectors in the model. However, skilled labor (defined to include high school graduates) and variable capital are not used in agriculture, and are mobile only among the non-agricultural industries of the model.

Also mentioned above, there are five household groups in the model. Households are assumed to have their own endowment of primary factors, i.e., they derive their income from the sale of factor services and non-factor income. The sources of household income include labor income, returns to variable and fixed capital, and rental income derived from renting out their farm lands for primary agricultural production. The households' non-factor income consists of lump sum net income transfers from the government.

There are seven consumer goods and services which are directly consumed by the various households in the model. The consumed amount of each of these consumer commodities and services are used as arguments in the underlying utility functions of the various households. Unlike producer goods, consumer goods production requires only intermediate goods as inputs, and not primary factors.

Household savings determine the total savings available for investment. The model assumes that only physical capital assets are obtainable using such savings. Financial assets such as bonds, equity and bank deposits are not incorporated into the model. With this level of savings, additional units of physical capital are produced during the current period. This capital is then allocated to each sector-specific capital goods and variable capital, using the relative user cost of such capital inputs.

An implicit financial assets market is assumed to exist whereby every household buys claims to every one of the fixed and variable capital stock.

Such claims entitle the household to a portion of the newly produced capital during the current period. On the supply side of such a market are the respective supplies of fixed capital for each of the 50 sectors and the variable capital. Their respective entitlements are then used to update the household's endowment in capital inputs, both fixed and variable.

Various industries of the model are classified as either export-oriented or import-competing. The criterion used to classify these industries is the proportion of an industry's imports to its exports. If the ratio exceeds 1.5 then the industry is regarded as producing importable. The observed exports of this industry are regarded as exogenous in the model. However, if the ratio is less than 0.5, then the industry is considered export-oriented. For ratios between 0.5 and 1.5, other relevant information were utilized to classify them.

The APEX model assumes the country to be price taker for its imports. As in other CGE, the model imposes imperfect substitutability between imports and locally produced products through the use of the Armington trade elasticities.

Export demands in the model have relatively large but finite elasticities. As such, the country can be regarded as price taker in a particular commodity in the world market.

The model is closed using fixed foreign capital inflow. This therefore means that equilibrium in the external sector is reached through adjustments in the foreign exchange rate. On the domestic sector, equilibrium is reached through adjustments in the domestic absorption. Adjustments are done until savings and government balances equate to zero. The model does this by introducing a lump sum tax which assumes a positive (negative) value whenever the government incurs a deficit (surplus). This tax is captured in the model by introducing a personal income tax rate shifter. The shifter scales this rate up or down depending upon whether the government is in deficit or surplus.

One important feature of the APEX model is that it uses empirically estimated behavioral parameters in its structure. Thus, essentially almost all of the elasticities in the production, consumption, and trade sector were estimated econometrically using Philippine data.⁹

Originally, the model was calibrated using a 1989 SAM. In the present effort, the SAM was updated to 1994 using the following information: (1) 1994 Input-Output (IO) table, (2) 1994 Family Income and Expenditure survey, (3) 1994 National Income Accounts, (4) 1994 Philippine Statistical Yearbook, and (5) other relevant economic data for 1994.

IV. Simulation Exercises

IV.a. Nominal Tariff Rates

Manasan and Querubin (1997) compiled the nominal tariff rates of various import commodities and computed the sectoral nominal tariff rate levels using sectoral import-plus-output levels as weights. The sectoral breakdown is the 169-sector 1988 IO table. In the present paper we further aggregated the sectors into the sectors of the APEX model. Similar to the Manasan and Querubin study, the weights used were also sectoral import-plus-output levels. Table 3a shows the percent change of the annual sectoral nominal tariff rates. The original nominal tariff levels were converted into percent change because all variables in the APEX model are all expressed in percent change. The rest of Table 3 presents the results of the simulation where these changes in sectoral nominal tariff rates were inputted to the model as an exogenous shock variable. In particular, these tariff changes affect the model through the following equation

$$(6) \quad \text{ppcom}(i) = \text{pimp}(i) + \text{exrt} + \text{Trx} * \text{mtrate}(i)$$

⁹ For a detailed discussion on the data set used to calibrate the model see Clarete and Cruz, 1992.

where $ppcom$ is the change in producer price of commodities, $pimp$ the change in import prices in foreign currency, $exrt$ the change in the foreign exchange rate, Trx a model parameter which incorporates the "power" of taxes on imported commodities, and $mtrate$ is the change in tariff rate. In the simulation exercises, $mtrate$ is represented by the change in: (1) sectoral weighted average nominal tariff rates; (2) sectoral weighted average implicit tariff rates; and (3) sectoral ratio of the EV and IV.

There are two columns showing the accumulated change during the period: one with the change in 1996 and another without the change in 1996. The reason behind separating the change in 1996 is that it was during this year when quantitative restrictions (QRs) of a number of agricultural commodities were "tariffed" in compliance with the WTO agreements. As a result, tariff rates increased dramatically during the year for some of these commodities. For example, in Table 3a the change in nominal tariff rate for corn jumped from 0 in 1995 to 1.089 in 1996. For other commercial crops it increased from a negative rate of -0.219 in 1995 to 1.282 in 1996. The same pattern is also seen in chicken and poultry products and other livestock.

The column showing the accumulated change with 1996 included shows that the sector with the biggest drop in nominal tariff is crude oil (-1.498), followed by products of coal and petroleum (-1.228). Other sectors with noticeable drop are: inland fishing (-1.196), milk and dairy products (-1.189), banana (-1.128). On the other hand, the accumulated change column that excludes the change in 1996 shows that the sector with the biggest drop in nominal tariff is meat (-1.401) followed by semi-conductor (-1.075). Other sectors which saw big drop in nominal tariff are: inland fishing, other commercial crops (-0.969), and paper products (-0.907).

Table 3b presents the macroeconomic results of the nominal tariff simulations. Real GDP registers an increase, both in the column under the overall accumulated change and the column without 1996 effects. However, these results, especially for 1996, have to be considered with extra care. One can observe the very large negative effect of tariffication of QRs in 1996. The

reason behind this drop is that the actual mechanism of the QR system is not specified in the model. Thus, the increase in nominal tariff in 1996 is considered in the model as a pure increase in the tariff rate, and not as a result of a shift from QR to tariff. As such, the big drop in real GDP in 1996 is overstated. Ideally, the net tariff effects of the tariffication of QR should have been analyzed. However, this was not done in the present paper.

The decline in the overall tariff results in a decline in both the tariff revenue and the overall revenue of the government. This decline also results in a decline in government expenditure, since expenditure is closely linked with revenue in the model. The overall effect on the trade account is favorable, with the overall effect on export surpassing the growth in imports.

The impact on income distribution is generally favorable as the lowest income group, HH1, shows a higher increase in income relative to the rest of the income groups. However, there is slight degree of regressivity in the change of gross income of households for HH2, HH3, HH4 and HH5, where HH5, or the fifth quintile, gets a highest increase. For labor income, this is not present.

The overall employment effect is generally favorable. For the total accumulated change column, employment registers an increase of 139 thousand. Under the column without 1996, the increase is 107 thousand. In fact, through out the period, the employment effects are all positive, except only for 1998 when a drop of 32 thousand in employment occurs. This drop is due to the decline in industry employment, which in turn due to the drop in the employment of the garments sector (see Table 3e).

Agriculture shows a decline in employment over the period, but not as much as the decline in the service sector. In the overall accumulated change the drop in agricultural employment is 18 thousand.

The drop in the government service employment has to be considered with caution also. With all other things held constant during the simulation, the

change in tariff results in a decline in government revenue. Since government expenditure is closely linked with government revenue in the model, this translates to a large drop in government service employment. However, in reality government service employment is not as variable and flexible as compared with employment in the other sectors because of the civil service constraints, among others, present in the system. Thus, in the last row of Table 3b, we tried to factor out the employment effect on government service and saw that the overall employment effect could reach as high as 350 thousand as a result of the nominal tariff change during the period.

Tables 3c to 3e show the sectoral results on output, prices, and employment. The discussion will focus on the analysis of sectoral employment effects.

Among agricultural crops, the biggest losers are irrigated palay, banana and other fruits and nuts, and coconut, including copra. Fishing also registers a relatively drop, as well as the forestry sector. On the other hand, the biggest employment gainers are vegetables, other commercial crops, and rootcrops. In industry, the biggest gainers are garments (except in 1998 when it registers a large drop in employment), and semi-conductor. Other made-up textile goods also registers a substantial increase in employment. The biggest loser is wood products. In the service sector, the biggest gainers are transportation, trade, and other services, while the biggest loser is government services.

IV.b. Implicit Tariff Rates

The sectoral implicit tariff rates were computed using price comparison wherein domestic prices are compared with border prices. In particular, the formula used to compute for the implicit tariff rate for commodity/product j is given by

$$(7) \quad T_j = P_d / P_b - 1$$

where P_d is domestic wholesale price obtained from the National Statistics Office and the Bureau of Agricultural Statistics, and P_b is data on border prices from Hongkong Trade Statistics and FAO.

The implicit tariff rate, derived using the above formula, was adjusted for duty exemption. The formula for adjustment is given by

$$(8) \quad T_j^{adj} = (T_j M_j - D_j) / M_j$$

where T_j^{adj} is the duty exempted implicit tariff rate of commodity/product j ; T_j is the computed implicit tariff rate; M_j total imports of sector j for a given year; D_j is the value of revenue foregone from duty exemptions of imports of sector j .

Data used to compute for the price comparison estimates were available for the years 1990-1995 only. To smoothen out year-to-year fluctuations, the average price relative in the three-year period ending in the current year was used in estimating implicit tariff rates. For example, the average price ratios for 1991, 1992 and 1993 were used to estimate the implicit tariff rate for 1993. Moreover, the relative price estimates obtained for 1995 were assumed to hold in 1995-2000 for the remaining regulated items in estimating the "price comparison" implicit tariff rates.

Manasan and Pineda estimated the implicit tariff rates with adjustments for 169 sectors. To make the sectors consistent with the sectors of the model, further aggregation to the 50-APEX sectors was done. The aggregation used import-plus-output as weights. This system of weighting overcomes the biases associated with output weights or import weights alone. Figure 1 shows the computed implicit tariff rates of the five major sectors: agriculture, mining, total manufacturing, food manufacturing, and other manufacturing.

Other sectors with large drop in implicit tariff are: products of coal and petroleum (-1.472); banana and other fruits and nuts (-1.317); inland fishing (-1.197) and marine fishing (-1.11); flour milling (-1.27) and beverage and

tobacco (-1.18). On the other hand, there are few sectors with positive change in implicit tariff rate. These include as sugar milling and refining (0.401); and animal feeds (0.248).

Table 4b presents the macro results of the implicit tariff rate simulations. The results are generally the same as with the results of the nominal tariff simulations, except that under the overall accumulated change column, real GDP declines marginally by -0.010. If 1996 effects are not included, similar to the nominal tariff simulation, real GDP increases by a sizeable amount. Both government revenue and expenditure decline as a result of the general decline in tariff rates. Favorable effect is seen in the trade account, while some degree of progressivity is observed in the results on household income.

The results on employment follow essentially the same trend with the results in the nominal tariff simulations. There is a favorable employment effect. There is a general decline in employment in agriculture, but a significant increase in employment in industry. The government service sector suffers the largest drop, resulting in a net employment loss in the overall service sector.

Tables 4c to 4e present the results on sectoral output, prices, and employment. The results here are generally the same as in the nominal tariff simulations. The industry losers and gainers are essentially the same.

IV.c. Export-Value-Invoice-Value Analysis

The results of the experiment in this section deal with the effect of the change in the ratio of export-value and invoice-value. The sectoral ratios used in the simulations were generated from the SGS database. Initial processing was done to convert the SGS database from its original format to the IO sectoral format, and finally to the sectors of the APEX model.

The export value data are information on import commodities of the Philippines valued at the country of import origin, while the invoice value are information on the value of imports from the respective invoices of the commodities. Theoretically, the two set of information are the same. However, because of imperfections, the ratio of the two sets of information could take three possible range of values: (1) greater than one which implies that, since the export value is smaller than invoice value, there is under invoicing of imports; (2) less than one which implies over invoicing; and (3) equal to one which is the ideal case.

Table 2 shows the EV-IV ratios for 1997, 1998 and 1999. The ratios for 1998 and 1999 are consistent because they came for the same original database of the SGS. As of this writing, we do not have the same information for 1997 in the same disaggregation as in 1998 and 1999. The 1997 ratios shown in the table were taken from a different study. It may not be consistent with the rest of the numbers in the table. Thus, for purposes of the simulation we only considered the figures for 1998 and 1999. Furthermore, we inputted the change in the EV-IV ratio in the simulation. An increase in the ratio implies additional protection afforded to the industry, while a decline means otherwise. Also, we only considered ratios that are greater or equal to one. The ratio for marine fishing was not included because it seems unrealistically too high at 3.18. For those sectors that do not either have computed EV-IV ratios or which were not included were assigned a zero change in the ratio in the simulations.

The results of the simulations are shown in Table 5. To analyze the EV-IV ratio, we conducted three simulation runs for 1999: (1) the 1999 change in implicit tariff; (2) the change in the EV-IV ratio; and (3) the sum of the change in the EV-IV ratio and the change in the 1999 implicit tariff.

Table 5b presents the macro results of the simulation exercises. The results indicate that the net effect of the 1999 change in the EV-IV ratio is negative in terms of GDP and overall employment. Real GDP declines by -0.0148, while total employment drops by 1,500. However, since the effect of

the implicit tariff change is positive and larger than the results of the change in the EV-IV ratio, the combined change results are still positive and favorable in terms of GDP and employment. The net employment effect is about 28,000.

The rest of Table 5 shows results on sectoral output, prices, and employment.

V. Shift to Transaction Value

There will be a shift in the system of valuation of imports in the Philippine from the home consumption value method to the transaction value method beginning next year, 2000, as part of the overall trade reform programs which is aggressively being implemented. This short note attempts to assess quantitatively the potential effects of this shift, along with the other components of the trade reform programs, such as tariff reduction and tariffication of quantitative restrictions. The assessment is made through simulation exercises using the updated 1994 APEX model.

Table 2 compares the EV-IV ratio for 1997, 1998, and 1999 (where EV is the export value from the exporting country of imported goods to the Philippines, while IV is the invoice value of the same imported goods). Theoretically, the two sets of information have the same value so that the ratio is one. However, because of imperfections, the value of the EV-IV ratio may deviate from one and may take three possible ranges: (a) greater than one which implies underinvoicing since the invoice value is greater than the export value; (b) less than one which implies overinvoicing; and (c) equal to one which is the ideal case. Although (b), overinvoicing, is possible it is improbable because there is no incentive to overinvoice imports. Underinvoicing, however, is very likely in reality, because the payoff in terms of import duty savings for the importers is huge. But this is also a big loss to the government.

The ratios for 1998 and 1999 are consistent because they came from the same original database of the SGS. We did not have enough opportunity

as of this writing to get access to similar information for 1997. The ratios shown in the table were taken from a different study, thus they may not be consistent with the ratios for 1998 and 1999 that we processed ourselves. Thus, for purposes of the simulation we only considered the figures for 1998 and 1998.

There are two possible ways one can underinvoice. It is through the price or through the quantity of imports, or both. For example,

$$IV = (P + \Delta P) * (Q + \Delta Q)$$

where IV is invoice value, P is price, Q and Δ is the change of the variable. Underinvoicing means Δ is negative, leading to a lower value of IV.

How is this captured in the simulation using the APEX model? It is captured directly through equations of the model that compute for the value of imports and the tariff revenue. There are indirectly effects as well which are well captured since APEX is a CGE model. However, only underinvoicing through the price is captured, ΔP . The effect through the quantity, ΔQ , is not captured.

Two equations in the APEX model are relevant in the present simulation (note that all variables are expressed in percentage changes):

$$(a) \quad mdollar(i) = \sum \delta(pimp(i) + xcom(i, "imp"))$$

where mdollar is the value of imports in foreign currency; pimp is import prices in foreign currency, xcom is the supply of commodity (where the argument "imp" means imports), and δ is model parameter.

$$(b) \quad trfrev(i) = pimp(i) + ert + mtrate(i) + xcom(i, "imp")$$

where trfrev is tariff revenue, ert exchange rate, mtrate is tariff rate.

In the simulation the potential effect of the shift to transaction value system is introduced into the model through variable *pimp*, while all other effects of the trade reform program is through the variable *mtrate*.

An improvement in the valuation of imports is realized when ΔP is positive. In the simulation we indicated this as the change in the *inverse* of the EV-IV ratio, or simply the change in the IV-EV ratio. Undervaluation is present when this ratio is less than one. If the change of this ratio between two periods is positive, it implies an improvement in the valuation of imports.

There were three independent simulation runs conducted: (a) the implicit tariff rate change for 1998-1998 which captures all other trade reforms; (b) the change in the ratio of IV-EV which indicates improvement in valuation system if the change in is negative, and (c) the combination of the two (see Table 2a for the values of the "shock" variables).

The results are shown in Tables 2b to 2e. In Table 2b the results under the "Change in Implicit Tariff" are similar to the previous results on tariff simulation for the year 1999. Note that the results under this column indicate positive overall output effect as real GDP increases by 0.0705. Overall employment also increases by 41 thousand. Government revenue declines as tariff declines. This in turn leads to the reduction in employment in government services. Agriculture declines slightly in this column, but employment in the industrial sector increases by 29 thousand.

The effects concerning improvements in the valuation of imports are shown in the next column. One can observe that indeed an improvement would carry with it positive economic effects in terms of output, employment, government revenue, etc. For example, real GDP increases by 0.0367 under this scenario. Tariff revenue also increases. All of these improvements lead to increases in employment. Agriculture employment increases by 2 thousand, industry by 9 thousand. However, the entire service sector employment

declines slightly by about 7 hundred. Because of the improvement in government revenue, government services improve marginally.

The last column shows the combined effects of both the improvement in valuation of imports and all other trade reforms. These combined effects were generated by introducing simultaneously the changes in the variables of the model: pimp and mtrate (discussed above). Real GDP increases at a higher rate, 0.1072. The impact on government tariff revenue is negative, indicating that the decline in the tariff rate because of the tariff reduction program is bigger than the effect of the improvement in the valuation of imports. Note that in Table 2a, there are still a number of industries with negative changes in the IV-EV ratio. If these can be corrected when the actual change to transaction value system materializes, then it can help offset the negative tariff revenue effect of the tariff reduction program.

The overall employment effect is 40 thousand. All three major sectors (agriculture, industry and services) show positive employment effects, except for government services because of the negative tariff revenue effects.

Results on sectoral output, prices, imports and employment are shown in the rest of the tables. We will just want to highlight in Table 2e that the industry that benefits greatly out of these reforms is the garments sector.

But an important question to ask is: Would the eventual shift to transaction value system improve the IV-EV ratio? Is the system comprehensive enough to address those sectors with still declining IV-EV ratios shown in Table 2a?

VI. Summary

The paper attempts to assess quantitatively the economic impact of the trade reform program in the Philippines during the period 1995-2000. While there are three major developments in the area of trade that transpired during the period, namely: WTO, AFTA, and unilateral trade programs, the paper

does not isolate the effect of each of these on the economy. Developments in the trade reform program during the period are captured by the changes in (a) the weighted average sectoral nominal tariff, (b) the weighted average sectoral implicit tariff; and (c) the sectoral ratio between export-value and invoice value. Changes in these indicators were simulated using the 1994 updated APEX model, which is a 50-sector computable general equilibrium model of the Philippine economy. The results indicate that there is a generally favorable trade reform program effect between 1995-2000. Real GDP inches up, while employment improves. There are a lot of variations in terms of sectoral and annual effects, though, On the whole, the effect is favorable. Furthermore, there are indications of progressivity.

However, the impact of the change in the ratio of EV-IV turns out to be negative. Fortunately, it turns out to be small in magnitude. This, combined with the overall trade reform program in 1999 as indicated by the change in the implicit tariff for the year, results still in a favorable economic effect.

One can therefore argue that, based on the simulation results, the trade reform program is positive and has to continue progressively. However, it may be worthwhile to consider those sectors that have been negatively affected. Perhaps, a continuation of the trade program plus a closer consideration of those sectors which have been adversely affected (probably, through safety-net programs) may further boost the overall economic effect of the program, thus making it a win-win situation for all sectors of the economy.

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**An Analysis of Philippine Trade Reforms
in 1995-2000 Using the 1994 APEX Model**

TABLES AND FIGURES

Table 1
LIST OF EXECUTIVE ORDERS AND LEGISLATION AMENDING THE TARIFF CODE

Executive Order No. 470 (dated July 1991)

- ◆ increases number of commodity line with high tariffs
- ◆ reduces number of commodity line with low tariffs

Executive Order No. 478 (dated August 23, 1991)

- ◆ imposes special duties of P0.95 per liter of P151.05 per barrel on imported crude oil falling under Hdg. No. 27.09 and P1.00 per liter on imported oil products.

Executive Order No. 1 (dated June 30, 1992)

- ◆ reduces rates of import duty on electric generating sets to 0% until June 30, 1995.
- ◆ intended to provide partial remedy to the energy crisis.

Executive Order No. 2 (dated July 1, 1992)

- ◆ extends the affectivity of the zero rate of duty on cement and cement clinker up to June 30, 1995 (under e.o. No. 470, these articles will be subjected to rates of duty of 20% and 10%, respectively, beginning July 1, 1992)
- ◆ intended to stop possible shortage of locally supply if zero duty will be lifted

Executive Order No. 5 (dated July 14, 1992)

- ◆ shortens the operation of the zero rate of import duty on cement and cement clinker from June 30, 1995 (as provided in E.O. No. 2) to June 30, 1993.

Executive Order No. 8 (dated July 24, 1992)

- ◆ provided for interim increased tariff protection in lieu of import restrictions
- ◆ items covered include livestock, meat, fish, crustaceans, mollusks, sausages and other prepared meat, cane or beet sugar, maize, cereal grains, air or vacuum pumps, fans, aircon, refrigerators/freezers, centrifuges, washing machines, sewing machines, electric accumulators, thermionic/cold cathode, public transport type passenger motor vehicle and parts.
- ◆ import restrictions lifted on November 1, 1992.

Memorandum Order No. 60 (dated November 5, 1992)

- ◆ held in abeyance until February 28, 1993 the implementation of E.O. No. 8 with respect to maize

Executive Order No. 43 (dated December 29, 1992)

- ◆ modified the rate of import duty on certain imported articles to implement the 1991 and 1992 Phil program submitted to the Third ASEAN summit providing a minimum level of 25% margin of preference.

Executive Order No. 61 (dated February 27, 1993)

- ◆ modified the nomenclature and tariff rates on certain agricultural products; animals fresh chilled or frozen, corn and feedwheat
 - ◆ in line with R.A. No. 7607 (The Magna Carta of Small Farmers)
-

Table 1
LIST OF EXECUTIVE ORDERS AND LEGISLATION AMENDING THE TARIFF CODE

Executive Order No. 94 (dated June 1, 1993)

- ◆ reduced the import duty on cement to 5% and cement clinker to 3% until June 30, 1994 (per E.O. No. 5, the zero duty on these items will only be effective until June 30, 1993 and therefore the rates of 20% on cement and 10% on cement clinker under E.O. No. 470 will be applied thereafter)
- ◆ implemented due to uncertainty in the power supply and therefore possible shortage in the local supply of cement

Executive Order No. 106 (dated July 16, 1993)

- ◆ lifted the suspension of the application of the tariff concessions granted by the Philippines in refractory bricks under the AFTA

Executive Order No. 115 (dated July 24, 1993)

- ◆ increased the special duty of P1.90 per kiter or P302.10 per barrel on imported crude oil and oil products under Hdg. No. 27.09 and P2.00 per liter on imported oil products falling under Hdg. No. 27.10 and 27.11

Executive Order No. 116 (dated July 29, 1993)

- ◆ amended E.O. No. 94 to conform with nomenclature

Executive Order No. 119 (dated July 29, 1993)

- ◆ lifted the suspension of the application of the tariff concessions granted by the Philippines on refractory bricks under the AFTA, amending E.O. 106 to reflect technical modifications

Executive Order No. 145 (dated August 9, 1993)

- ◆ modified rates of duty on certain imported articles under the CEPT-AFTA

Executive Order No. 146 (dated December 27, 1993)

- ◆ amended E.O. 43 and modified the margin of preference and the applicable ASEAN preferential tariffs

Executive Order No. 147 (dated December 27, 1993)

- ◆ modified the rate of import duty on certain imported articles to implement the agreement on the global system of trade preference among developing countries

Executive Order No. 148 (dated December 27, 1993)

- ◆ modified the rate of duty on certain imported articles

Executive Order No. 153 (dated January 25, 1994)

- ◆ modified the rate of duty on certain imported articles to implement the minimum 90% margin of preference included in the NESTLE ASEAN Industrial Joint Ventures
-

Table 1
LIST OF EXECUTIVE ORDERS AND LEGISLATION AMENDING THE TARIFF CODE

Executive Order No. 160 (dated February 23, 1994)

- ◆ reduced the special duties on crude oil products from p1.90 to P0.95 under Hdg. No. 27.09 and from p2.00 to P1.00 on imported oil products falling under Hdg. No. 27.10 and 27.11

Executive Order No. 172 (dated April 24, 1994)

- ◆ increased the minimum tariff rate from 0% to 3%

Executive Order No. 189 (dated July 18, 1994)

- ◆ modifies the nomenclature and rates of duty on capital equipment from 10%-20% to 3%-10% (Note: major changes)

Executive Order No. 204 (dated September 30, 1994)

- ◆ modifies the nomenclature and rates of duty on textile and chemical input thereto (Note: major changes)

Executive Order No. 227 (dated March 4, 1995)

- ◆ reduced the import duty on Portland cement (3%), cement clinker 93%), and Pozzolan Cement (10%); this suspends the implementation of the 20% and 10% under E.O. 470

Executive Order No. 264 (dated July 22, 1995)

- ◆ modified the nomenclature and rates of duty on manufacturing industries in line with the Tariff Reform Program; involves 4142 HS lines (Note: major changes)

Executive Order No. 287 (dated January 1, 1996)

- ◆ modified the rate of duty on certain imported articles to implement the 1996 Philippine schedule of tariff reductions under the new frame of the accelerated CEPT scheme for the AFTA

Executive Order No. 288 (dated December 12, 1995)

- ◆ modified the nomenclature and rates of import duty on certain imported articles, i.e., non-sensitive agricultural products; (Note: major changes)

Executive Order No. 313 (dated March 29, 1996)

- ◆ modified the nomenclature and rates of import duty on certain imported articles, i.e., sensitive agricultural products;
- ◆ implements tariffication after import restrictions were lifted under R.A. 8178
- ◆ IRR only issued on July 1 and effective July 10, 1996
- ◆ Note: major changes

Executive Order No. 328 (dated April 23, 1996)

- ◆ modified the nomenclature and rates import duty on imported wheat for food

Executive Order No. 365 (dated April 16, 1996)

- ◆ modified the rates of duty on crude oil (from 10% to 3%) and refined petroleum product from 20% to 7%).
-

Table 2: COMPARISON OF 1997, 1998 & 1999 EV-IV* RATIOS

| APEX Sectors | | EV-IV RATIO | | | Percent Change |
|--------------|--|-------------|--------|--------|----------------|
| | | 1997 | 1998 | 1999 | 1998-99 |
| 1 | Irrigated Palay | 0.9919 | 1.0000 | 1.0902 | 0.0902 |
| 2 | Non-irrigated palay | 0.9919 | 1.0000 | 1.0902 | 0.0902 |
| 3 | Corn | 0.9888 | 1.0368 | 1.0091 | -0.0268 |
| 4 | Coconut, incl copra | 0.3437 | 1.0000 | 1.0000 | 0.0000 |
| 5 | Sugarcane | 0.8722 | 1.0223 | 1.1007 | 0.0767 |
| 6 | Banana & other fruits & nuts | 0.9809 | 1.3798 | 1.4170 | 0.0270 |
| 7 | Vegetables | 1.0180 | 1.1985 | 1.2240 | 0.0213 |
| 8 | Rootcrops | 0.8021 | 1.0648 | - | - |
| 9 | Other commercial crops | 0.2974 | 1.0034 | 1.0140 | 0.0105 |
| 10 | Hogs | - | - | - | - |
| 11 | Chicken & poultry products | 0.8271 | 1.1292 | 1.2822 | 0.1355 |
| 12 | Other livestock | 0.8594 | 1.0158 | 1.0000 | -0.0156 |
| 13 | Agricultural Services | 0.2808 | 1.0036 | 1.0000 | -0.0036 |
| 14 | Marine fishing | 0.8165 | 1.0048 | 3.1812 | 2.1660 |
| 15 | Inland fishing | 0.9125 | 1.2333 | 1.1908 | -0.0344 |
| 16 | Forestry and logging | 0.1297 | 1.0069 | 1.0614 | 0.0541 |
| 17 | Crude oil, coal and natural gas | 0.0859 | 1.0036 | 1.0000 | -0.0036 |
| 18 | Other mining | 0.1898 | 1.0278 | 1.0256 | -0.0021 |
| 19 | Rice and corn milling | 1.0051 | 1.1350 | 1.0000 | -0.1190 |
| 20 | Sugar milling and refining | 1.0184 | 1.0425 | 1.0730 | 0.0292 |
| 21 | Milk and dairy products | 0.7593 | 1.0250 | 1.0176 | -0.0071 |
| 22 | Oils and fats | 0.8739 | 1.0279 | 1.0438 | 0.0155 |
| 23 | Meat and meat products | 0.9844 | 1.0669 | 1.0585 | -0.0079 |
| 24 | Flour milling | 0.9090 | 1.1402 | 1.0210 | -0.1045 |
| 25 | Animal feeds | 1.0229 | 1.1116 | 1.0715 | -0.0360 |
| 26 | Other foods | 0.2223 | 1.0839 | 1.0459 | -0.0351 |
| 27 | Beverages and tobacco | 0.9606 | 1.0511 | 1.0207 | -0.0289 |
| 28 | Textile and knitting mills | 0.0361 | 1.1564 | 1.1709 | 0.0126 |
| 29 | Other made-up textile goods | 0.0869 | 1.0726 | 1.0878 | 0.0141 |
| 30 | Garments, footwear, leather and rubber footwear | 0.0649 | 1.1800 | 1.1770 | -0.0025 |
| 31 | Wood products | 0.0934 | 1.0908 | 1.0939 | 0.0029 |
| 32 | Paper products | 0.0559 | - | 1.0721 | - |
| 33 | Fertilizer | 0.1791 | 1.0003 | 1.0189 | 0.0186 |
| 34 | Other rub. plastic & chem, products, except rub footwear | 0.1774 | 1.0564 | - | - |
| 35 | Products of coal and petroleum | 0.1138 | 1.1676 | 1.1613 | -0.0054 |
| 36 | Non-ferrous basic metal products | 0.2532 | 1.0740 | - | - |
| 37 | Cement, basic metals & non-metallic mineral products | 0.0543 | 1.0214 | 1.0079 | -0.0132 |
| 38 | Semi-conductors | 0.3980 | 1.0887 | - | - |
| 39 | Metal products and non-electrical machineries | 0.0639 | - | - | - |
| 40 | Electrical machinery, equipment and parts | 0.0974 | - | - | - |
| 41 | Motor vehicles (Transport Equipment) | 0.0605 | - | - | - |
| 42 | Other manufacturing | 0.0928 | 1.0771 | - | - |
| 43 | Construction | - | - | - | - |
| 44 | Electricity, gas and water | - | - | - | - |
| 45 | Transportation and communication services | - | - | - | - |
| 46 | Trade, storage and warehousing | - | - | - | - |
| 47 | Banks and non-banks | - | - | - | - |
| 48 | Life and non-life insurance and real estate | - | - | - | - |
| 49 | Government services | - | - | - | - |
| 50 | Other services | - | - | - | - |

* where EV is export value and IV is invoice value

3b. Macro Results

| | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | Accumulated Change | Accumulated Change (w/o 1996) |
|---|---------|---------|---------|---------|---------|---------|-----------------------|----------------------------------|
| Macro Items | | | | | | | | |
| 1 <u>Change in Real GDP</u> | 0.086 | -0.281 | 0.075 | 0.033 | 0.071 | 0.039 | 0.023 | 0.304 |
| 2 <u>Change in Total Government Revenue (in levels)</u> | -0.442 | -0.212 | -0.169 | -0.510 | -0.182 | -0.296 | -1.811 | -1.599 |
| 3 <u>Change in Total Government Expenditure (in levels)</u> | -0.084 | -0.056 | -0.024 | 0.012 | -0.011 | -0.053 | -0.215 | -0.160 |
| 4 <u>Change in Aggregate Tariff Revenue</u> | -0.205 | -0.178 | -0.065 | -0.216 | -0.062 | -0.138 | -0.865 | -0.687 |
| 5 <u>Change in Exports (In Foreign Currency)</u> | 0.035 | -0.016 | 0.013 | -0.017 | 0.005 | 0.021 | 0.042 | 0.057 |
| 6 <u>Change in Imports (In Foreign Currency)</u> | 0.023 | -0.006 | 0.006 | 0.001 | 0.004 | 0.015 | 0.043 | 0.049 |
| 7 <u>Change in Gross Income of Households:</u> | | | | | | | | |
| HH1 | 0.017 | 0.009 | 0.007 | 0.010 | 0.005 | 0.010 | 0.058 | 0.049 |
| HH2 | 0.009 | 0.003 | 0.004 | 0.005 | 0.003 | 0.005 | 0.030 | 0.026 |
| HH3 | 0.009 | 0.003 | 0.004 | 0.006 | 0.003 | 0.005 | 0.030 | 0.027 |
| HH4 | 0.009 | 0.003 | 0.004 | 0.006 | 0.003 | 0.005 | 0.031 | 0.028 |
| HH5 | 0.010 | 0.005 | 0.004 | 0.008 | 0.003 | 0.006 | 0.036 | 0.031 |
| 8 <u>Change in Labor Income of Households:</u> | | | | | | | | |
| HH1 | 0.014 | 0.007 | 0.005 | 0.008 | 0.004 | 0.009 | 0.048 | 0.041 |
| HH2 | 0.013 | 0.006 | 0.005 | 0.009 | 0.004 | 0.008 | 0.045 | 0.039 |
| HH3 | 0.012 | 0.005 | 0.005 | 0.009 | 0.004 | 0.007 | 0.043 | 0.038 |
| HH4 | 0.012 | 0.004 | 0.004 | 0.010 | 0.004 | 0.007 | 0.041 | 0.037 |
| HH5 | 0.007 | 0.000 | 0.003 | 0.012 | 0.004 | 0.004 | 0.029 | 0.029 |
| 9 <u>Change in Employment ('000):</u> | | | | | | | | |
| Agriculture (including fishery & forestry) | -29.073 | 11.995 | -7.065 | 24.585 | -2.504 | -16.208 | -18.270 | -30.265 |
| Industry (including construction & utilities) | 85.462 | 23.366 | 68.875 | -89.639 | 27.501 | 57.478 | 173.043 | 149.678 |
| Service Sector | -28.498 | -3.733 | -4.321 | 33.388 | 2.845 | -15.877 | -16.196 | -12.463 |
| - Government Service | -83.774 | -47.486 | -22.428 | 1.626 | -11.110 | -47.691 | -210.863 | -163.378 |
| Total: | | | | | | | | |
| - Including Government Service | 27.892 | 31.628 | 57.489 | -31.667 | 27.843 | 25.393 | 138.577 | 106.949 |
| - Excluding Government Service | 111.666 | 79.114 | 79.917 | -33.294 | 38.953 | 73.085 | 349.441 | 270.327 |

3c. Results on Sectoral Supply

| | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | Accumulated Change | Accumulated Change (w/o 1996) |
|---|--------|--------|--------|--------|--------|--------|-----------------------|----------------------------------|
| 3c.I. Total Supply (Domestic + Imports) | | | | | | | | |
| 1 Irrigated Palay | -0.024 | 0.006 | -0.007 | -0.006 | -0.006 | -0.012 | -0.048 | -0.054 |
| 2 Non-irrigated palay | -0.015 | -0.002 | -0.004 | -0.007 | -0.004 | -0.010 | -0.041 | -0.039 |
| 3 Corn | -0.014 | -0.563 | 0.166 | -0.111 | 0.088 | -0.008 | -0.440 | 0.122 |
| 4 Coconut, incl copra | -0.011 | 0.140 | -0.004 | 0.127 | -0.002 | 0.087 | 0.337 | 0.197 |
| 5 Sugarcane | -0.012 | -0.002 | -0.003 | 0.005 | -0.002 | -0.004 | -0.018 | -0.016 |
| 6 Banana & other fruits & nuts | -0.017 | 0.065 | 0.010 | 0.047 | 0.011 | 0.038 | 0.153 | 0.088 |
| 7 Vegetables | -0.013 | 0.030 | -0.007 | 0.012 | 0.000 | 0.001 | 0.022 | -0.007 |
| 8 Rootcrops | -0.004 | -0.003 | -0.001 | 0.002 | 0.000 | -0.002 | -0.008 | -0.005 |
| 9 Other commercial crops | -0.008 | -0.003 | -0.003 | 0.003 | -0.003 | -0.004 | -0.018 | -0.015 |
| 10 Hogs | -0.001 | 0.005 | -0.001 | 0.007 | 0.001 | 0.001 | 0.013 | 0.008 |
| 11 Chicken & poultry products | 0.011 | 0.007 | 0.006 | 0.021 | 0.009 | 0.010 | 0.064 | 0.056 |
| 12 Other livestock | 0.020 | 0.001 | 0.007 | 0.101 | 0.007 | 0.015 | 0.152 | 0.151 |
| 13 Agricultural Services | -0.008 | -0.004 | -0.003 | 0.001 | -0.002 | -0.004 | -0.020 | -0.016 |
| 14 Marine fishing | -0.009 | 0.088 | -0.002 | 0.097 | -0.001 | 0.042 | 0.214 | 0.126 |
| 15 Inland fishing | -0.017 | -0.011 | -0.005 | -0.003 | -0.004 | -0.010 | -0.050 | -0.039 |
| 16 Forestry and logging | 0.048 | 0.041 | 0.049 | -0.021 | 0.017 | 0.013 | 0.148 | 0.107 |
| 17 Crude oil, coal and natural gas | -0.014 | -0.108 | -0.002 | -0.058 | -0.001 | -0.003 | -0.186 | -0.078 |
| 18 Other mining | -0.015 | 0.030 | -0.011 | 0.022 | -0.005 | -0.009 | 0.013 | -0.017 |
| 19 Rice and corn milling | -0.010 | -0.155 | 0.028 | 0.008 | 0.032 | 0.003 | -0.094 | 0.061 |
| 20 Sugar milling and refining | 0.185 | -1.145 | 0.236 | 0.008 | 0.223 | -0.001 | -0.494 | 0.651 |
| 21 Milk and dairy products | 0.003 | 0.018 | 0.002 | 0.026 | 0.004 | 0.009 | 0.061 | 0.043 |
| 22 Oils and fats | 0.018 | 0.060 | 0.006 | 0.129 | 0.013 | 0.082 | 0.307 | 0.247 |
| 23 Meat and meat products | -0.021 | -0.022 | -0.004 | 0.013 | 0.000 | -0.010 | -0.043 | -0.021 |
| 24 Flour milling | -0.029 | 0.045 | -0.009 | 0.079 | -0.005 | 0.034 | 0.116 | 0.072 |
| 25 Animal feeds | 0.066 | -0.286 | 0.061 | -0.003 | 0.023 | 0.024 | -0.114 | 0.172 |
| 26 Other foods | -0.012 | -0.004 | -0.002 | 0.014 | 0.001 | 0.001 | -0.002 | 0.002 |
| 27 Beverages and tobacco | 0.009 | 0.031 | 0.004 | 0.032 | 0.014 | 0.026 | 0.116 | 0.085 |
| 28 Textile and knitting mills | 0.094 | -0.003 | 0.084 | -0.070 | 0.033 | 0.036 | 0.175 | 0.177 |
| 29 Other made-up textile goods | 0.226 | 0.000 | 0.194 | -0.157 | 0.076 | 0.102 | 0.440 | 0.440 |
| 30 Garments, footwear, leather and rubber footwear | 0.148 | -0.008 | 0.135 | -0.119 | 0.057 | 0.051 | 0.264 | 0.272 |
| 31 Wood products | -0.012 | 0.007 | -0.004 | 0.002 | -0.003 | -0.008 | -0.017 | -0.024 |
| 32 Paper products | -0.001 | -0.007 | -0.004 | 0.006 | -0.002 | 0.000 | -0.008 | -0.001 |
| 33 Fertilizer | 0.022 | 0.005 | 0.003 | 0.014 | 0.002 | 0.005 | 0.051 | 0.046 |
| 34 Other rub. plastic & chem. products, except rub footwear | 0.008 | 0.007 | 0.005 | 0.007 | 0.003 | 0.004 | 0.035 | 0.028 |
| 35 Products of coal and petroleum | 0.005 | -0.004 | 0.000 | 0.004 | 0.000 | -0.001 | 0.005 | 0.009 |
| 36 Non-ferrous basic metal products | 0.009 | 0.037 | -0.007 | 0.029 | 0.007 | 0.020 | 0.096 | 0.059 |
| 37 Cement, basic metals & non-metallic mineral products | -0.003 | 0.001 | -0.004 | -0.009 | -0.001 | -0.005 | -0.021 | -0.022 |
| 38 Semi-conductors | 0.644 | -0.059 | -0.023 | 0.027 | -0.008 | 0.469 | 1.049 | 1.108 |
| 39 Metal products and non-electrical machineries | 0.003 | -0.001 | -0.002 | -0.014 | -0.001 | -0.003 | -0.019 | -0.017 |
| 40 Electrical machinery, equipment and parts | 0.000 | 0.001 | 0.000 | 0.003 | 0.000 | 0.000 | 0.004 | 0.003 |
| 41 Motor vehicles (Transport Equipment) | -0.003 | 0.002 | 0.000 | 0.003 | 0.001 | -0.003 | -0.001 | -0.003 |
| 42 Other manufacturing | -0.004 | -0.002 | 0.000 | 0.001 | 0.000 | -0.003 | -0.008 | -0.006 |
| 43 Construction | -0.020 | 0.003 | -0.009 | 0.003 | -0.003 | -0.012 | -0.039 | -0.042 |
| 44 Electricity, gas and water | 0.000 | 0.005 | 0.000 | 0.008 | 0.000 | 0.000 | 0.013 | 0.008 |
| 45 Transportation and communication services | 0.014 | 0.016 | 0.004 | 0.017 | 0.003 | 0.010 | 0.064 | 0.048 |
| 46 Trade, storage and warehousing | -0.003 | -0.003 | -0.001 | 0.002 | 0.000 | -0.002 | -0.006 | -0.003 |
| 47 Banks and non-banks | -0.006 | -0.005 | -0.001 | 0.004 | 0.000 | -0.003 | -0.013 | -0.008 |
| 48 Life and non-life insurance and real estate | 0.009 | 0.015 | 0.003 | 0.016 | 0.004 | 0.006 | 0.052 | 0.037 |
| 49 Government services | -0.039 | -0.028 | -0.011 | 0.004 | -0.005 | -0.023 | -0.102 | -0.075 |
| 50 Other services | 0.003 | 0.005 | 0.001 | 0.011 | 0.002 | 0.002 | 0.025 | 0.020 |

| | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | Accumulated Change | Accumulated Change (w/o 1996) |
|---|--------|--------|--------|--------|--------|--------|-----------------------|----------------------------------|
| 3c.II. Domestic Supply | | | | | | | | |
| 1 Irrigated Palay | -0.010 | -0.004 | -0.003 | -0.003 | -0.003 | -0.006 | -0.029 | -0.025 |
| 2 Non-irrigated palay | -0.007 | -0.003 | -0.002 | -0.002 | -0.002 | -0.004 | -0.021 | -0.017 |
| 3 Corn | -0.005 | -0.004 | -0.003 | 0.000 | -0.001 | -0.003 | -0.016 | -0.012 |
| 4 Coconut, incl copra | -0.007 | -0.006 | -0.003 | -0.001 | -0.002 | -0.005 | -0.024 | -0.018 |
| 5 Sugarcane | -0.009 | 0.004 | -0.002 | 0.005 | -0.001 | -0.001 | -0.005 | -0.009 |
| 6 Banana & other fruits & nuts | -0.008 | -0.006 | -0.003 | -0.001 | -0.002 | -0.005 | -0.024 | -0.018 |
| 7 Vegetables | -0.001 | 0.003 | 0.000 | 0.003 | 0.001 | 0.001 | 0.007 | 0.003 |
| 8 Rootcrops | 0.001 | 0.000 | 0.001 | 0.001 | 0.001 | 0.001 | 0.006 | 0.006 |
| 9 Other commercial crops | -0.002 | -0.001 | -0.001 | 0.004 | 0.000 | 0.000 | 0.000 | 0.001 |
| 10 Hogs | 0.002 | 0.001 | 0.001 | 0.006 | 0.001 | 0.002 | 0.014 | 0.013 |
| 11 Chicken & poultry products | 0.001 | 0.001 | 0.000 | 0.006 | 0.001 | 0.001 | 0.011 | 0.009 |
| 12 Other livestock | 0.002 | 0.001 | 0.001 | 0.005 | 0.001 | 0.002 | 0.012 | 0.011 |
| 13 Agricultural Services | -0.004 | -0.002 | -0.001 | 0.000 | -0.001 | -0.002 | -0.009 | -0.007 |
| 14 Marine fishing | -0.009 | 0.007 | -0.002 | 0.001 | -0.002 | -0.008 | -0.013 | -0.020 |
| 15 Inland fishing | -0.013 | -0.007 | -0.004 | -0.005 | -0.004 | -0.008 | -0.041 | -0.034 |
| 16 Forestry and logging | -0.011 | 0.001 | -0.002 | -0.003 | -0.003 | -0.007 | -0.026 | -0.027 |
| 17 Crude oil, coal and natural gas | -0.013 | -0.116 | -0.002 | -0.064 | -0.001 | -0.003 | -0.199 | -0.082 |
| 18 Other mining | -0.007 | 0.014 | -0.005 | 0.014 | -0.003 | -0.005 | 0.008 | -0.007 |
| 19 Rice and corn milling | -0.010 | -0.006 | -0.003 | -0.003 | -0.002 | -0.006 | -0.031 | -0.024 |
| 20 Sugar milling and refining | -0.010 | 0.004 | -0.003 | 0.005 | -0.001 | -0.002 | -0.008 | -0.011 |
| 21 Milk and dairy products | 0.002 | -0.013 | 0.001 | -0.002 | 0.001 | -0.001 | -0.012 | 0.000 |
| 22 Oils and fats | 0.013 | -0.049 | 0.014 | 0.020 | 0.011 | 0.012 | 0.021 | 0.070 |
| 23 Meat and meat products | 0.002 | 0.001 | 0.001 | 0.007 | 0.002 | 0.002 | 0.015 | 0.014 |
| 24 Flour milling | -0.011 | -0.004 | -0.003 | -0.001 | -0.001 | -0.005 | -0.026 | -0.022 |
| 25 Animal feeds | -0.021 | 0.053 | -0.015 | 0.000 | -0.006 | -0.009 | 0.003 | -0.050 |
| 26 Other foods | -0.016 | -0.001 | -0.004 | 0.005 | -0.002 | -0.004 | -0.023 | -0.022 |
| 27 Beverages and tobacco | 0.003 | 0.002 | 0.000 | 0.004 | 0.000 | 0.000 | 0.009 | 0.007 |
| 28 Textile and knitting mills | 0.019 | 0.000 | 0.016 | -0.010 | 0.007 | 0.005 | 0.037 | 0.037 |
| 29 Other made-up textile goods | 0.169 | 0.002 | 0.147 | -0.117 | 0.053 | 0.089 | 0.343 | 0.341 |
| 30 Garments, footwear, leather and rubber footwear | 0.096 | -0.008 | 0.091 | -0.084 | 0.036 | 0.036 | 0.167 | 0.175 |
| 31 Wood products | -0.014 | 0.001 | -0.004 | -0.002 | -0.004 | -0.009 | -0.032 | -0.033 |
| 32 Paper products | -0.007 | -0.004 | -0.003 | -0.003 | -0.006 | -0.005 | -0.028 | -0.025 |
| 33 Fertilizer | 0.004 | 0.002 | 0.001 | 0.006 | 0.001 | 0.002 | 0.016 | 0.014 |
| 34 Other rub. plastic & chem. products, except rub footwear | 0.006 | 0.005 | 0.003 | 0.006 | 0.002 | 0.004 | 0.026 | 0.020 |
| 35 Products of coal and petroleum | -0.002 | 0.009 | 0.000 | 0.007 | 0.000 | 0.000 | 0.014 | 0.005 |
| 36 Non-ferrous basic metal products | -0.008 | 0.014 | -0.004 | 0.008 | -0.003 | -0.005 | 0.001 | -0.013 |
| 37 Cement, basic metals & non-metallic mineral products | -0.012 | 0.001 | -0.005 | 0.002 | -0.004 | -0.006 | -0.025 | -0.026 |
| 38 Semi-conductors | 0.349 | -0.032 | -0.013 | 0.015 | -0.005 | 0.254 | 0.568 | 0.601 |
| 39 Metal products and non-electrical machineries | 0.006 | -0.002 | -0.002 | -0.021 | -0.001 | -0.004 | -0.024 | -0.022 |
| 40 Electrical machinery, equipment and parts | -0.005 | -0.001 | 0.000 | -0.009 | -0.001 | -0.003 | -0.018 | -0.017 |
| 41 Motor vehicles (Transport Equipment) | -0.013 | 0.000 | -0.001 | -0.002 | 0.001 | -0.012 | -0.028 | -0.029 |
| 42 Other manufacturing | -0.011 | -0.002 | -0.002 | -0.007 | -0.003 | -0.007 | -0.033 | -0.030 |
| 43 Construction | -0.015 | 0.003 | -0.008 | -0.001 | -0.002 | -0.009 | -0.033 | -0.036 |
| 44 Electricity, gas and water | 0.005 | 0.002 | 0.002 | 0.003 | 0.001 | 0.003 | 0.015 | 0.013 |
| 45 Transportation and communication services | 0.002 | 0.003 | 0.001 | 0.005 | 0.001 | 0.002 | 0.012 | 0.009 |
| 46 Trade, storage and warehousing | 0.003 | 0.000 | 0.001 | 0.002 | 0.001 | 0.001 | 0.008 | 0.008 |
| 47 Banks and non-banks | 0.002 | 0.002 | 0.001 | 0.003 | 0.001 | 0.001 | 0.010 | 0.008 |
| 48 Life and non-life insurance and real estate | 0.003 | 0.006 | 0.001 | 0.008 | 0.002 | 0.003 | 0.023 | 0.017 |
| 49 Government services | -0.036 | -0.023 | -0.010 | 0.003 | -0.005 | -0.021 | -0.093 | -0.070 |
| 50 Other services | 0.002 | 0.003 | 0.001 | 0.006 | 0.001 | 0.002 | 0.015 | 0.011 |

| | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | Accumulated Change | Accumulated Change (w/o 1996) |
|---|--------|--------|--------|--------|--------|--------|-----------------------|----------------------------------|
| 3c.III. Imports | | | | | | | | |
| 1 Irrigated Palay | -0.014 | 0.011 | -0.003 | -0.003 | -0.003 | -0.006 | -0.019 | -0.030 |
| 2 Non-irrigated palay | -0.008 | 0.002 | -0.001 | -0.005 | -0.003 | -0.005 | -0.020 | -0.022 |
| 3 Corn | -0.009 | -0.559 | 0.169 | -0.111 | 0.090 | -0.004 | -0.424 | 0.135 |
| 4 Coconut, incl copra | -0.004 | 0.146 | -0.001 | 0.127 | 0.000 | 0.092 | 0.361 | 0.214 |
| 5 Sugarcane | -0.003 | -0.006 | -0.001 | 0.000 | 0.000 | -0.003 | -0.013 | -0.007 |
| 6 Banana & other fruits & nuts | -0.010 | 0.071 | 0.013 | 0.048 | 0.013 | 0.042 | 0.177 | 0.107 |
| 7 Vegetables | -0.012 | 0.026 | -0.007 | 0.009 | -0.001 | 0.000 | 0.016 | -0.011 |
| 8 Rootcrops | -0.006 | -0.003 | -0.002 | 0.001 | -0.001 | -0.003 | -0.014 | -0.011 |
| 9 Other commercial crops | -0.006 | -0.003 | -0.002 | -0.001 | -0.003 | -0.004 | -0.019 | -0.016 |
| 10 Hogs | -0.002 | 0.004 | -0.002 | 0.001 | 0.000 | -0.001 | 0.000 | -0.004 |
| 11 Chicken & poultry products | 0.010 | 0.006 | 0.005 | 0.015 | 0.008 | 0.009 | 0.053 | 0.047 |
| 12 Other livestock | 0.019 | 0.000 | 0.007 | 0.096 | 0.006 | 0.013 | 0.140 | 0.140 |
| 13 Agricultural Services | -0.005 | -0.002 | -0.002 | 0.001 | -0.001 | -0.002 | -0.011 | -0.009 |
| 14 Marine fishing | 0.000 | 0.081 | 0.000 | 0.096 | 0.001 | 0.050 | 0.228 | 0.146 |
| 15 Inland fishing | -0.004 | -0.003 | -0.001 | 0.002 | 0.000 | -0.002 | -0.008 | -0.005 |
| 16 Forestry and logging | 0.059 | 0.041 | 0.052 | -0.017 | 0.020 | 0.021 | 0.175 | 0.134 |
| 17 Crude oil, coal and natural gas | -0.001 | 0.008 | 0.000 | 0.006 | 0.000 | 0.000 | 0.013 | 0.005 |
| 18 Other mining | -0.007 | 0.015 | -0.006 | 0.007 | -0.001 | -0.003 | 0.005 | -0.010 |
| 19 Rice and corn milling | 0.000 | -0.149 | 0.031 | 0.011 | 0.034 | 0.009 | -0.064 | 0.085 |
| 20 Sugar milling and refining | 0.195 | -1.148 | 0.239 | 0.003 | 0.224 | 0.001 | -0.486 | 0.662 |
| 21 Milk and dairy products | 0.001 | 0.031 | 0.001 | 0.029 | 0.002 | 0.010 | 0.074 | 0.043 |
| 22 Oils and fats | 0.005 | 0.109 | -0.009 | 0.109 | 0.002 | 0.070 | 0.286 | 0.177 |
| 23 Meat and meat products | -0.022 | -0.023 | -0.005 | 0.006 | -0.001 | -0.012 | -0.058 | -0.034 |
| 24 Flour milling | -0.017 | 0.048 | -0.006 | 0.080 | -0.003 | 0.040 | 0.142 | 0.094 |
| 25 Animal feeds | 0.087 | -0.338 | 0.076 | -0.003 | 0.029 | 0.033 | -0.117 | 0.221 |
| 26 Other foods | 0.004 | -0.002 | 0.003 | 0.009 | 0.003 | 0.005 | 0.021 | 0.024 |
| 27 Beverages and tobacco | 0.006 | 0.029 | 0.004 | 0.028 | 0.014 | 0.025 | 0.107 | 0.078 |
| 28 Textile and knitting mills | 0.075 | -0.003 | 0.068 | -0.060 | 0.026 | 0.031 | 0.138 | 0.141 |
| 29 Other made-up textile goods | 0.056 | -0.002 | 0.047 | -0.040 | 0.023 | 0.013 | 0.096 | 0.099 |
| 30 Garments, footwear, leather and rubber footwear | 0.052 | 0.000 | 0.045 | -0.035 | 0.021 | 0.015 | 0.097 | 0.097 |
| 31 Wood products | 0.002 | 0.006 | 0.000 | 0.004 | 0.001 | 0.001 | 0.014 | 0.008 |
| 32 Paper products | 0.006 | -0.003 | -0.001 | 0.010 | 0.004 | 0.005 | 0.021 | 0.024 |
| 33 Fertilizer | 0.018 | 0.003 | 0.002 | 0.008 | 0.002 | 0.003 | 0.035 | 0.032 |
| 34 Other rub. plastic & chem. products, except rub footwear | 0.002 | 0.002 | 0.002 | 0.001 | 0.001 | 0.001 | 0.009 | 0.007 |
| 35 Products of coal and petroleum | 0.007 | -0.013 | 0.000 | -0.003 | 0.000 | 0.000 | -0.009 | 0.004 |
| 36 Non-ferrous basic metal products | 0.017 | 0.023 | -0.003 | 0.021 | 0.010 | 0.026 | 0.095 | 0.071 |
| 37 Cement, basic metals & non-metallic mineral products | 0.009 | 0.000 | 0.001 | -0.010 | 0.003 | 0.001 | 0.004 | 0.004 |
| 38 Semi-conductors | 0.295 | -0.027 | -0.010 | 0.012 | -0.004 | 0.214 | 0.481 | 0.508 |
| 39 Metal products and non-electrical machineries | -0.002 | 0.001 | 0.000 | 0.007 | 0.000 | 0.001 | 0.006 | 0.005 |
| 40 Electrical machinery, equipment and parts | 0.005 | 0.002 | 0.000 | 0.012 | 0.001 | 0.003 | 0.022 | 0.020 |
| 41 Motor vehicles (Transport Equipment) | 0.010 | 0.002 | 0.001 | 0.005 | 0.000 | 0.009 | 0.028 | 0.026 |
| 42 Other manufacturing | 0.007 | 0.000 | 0.002 | 0.008 | 0.003 | 0.004 | 0.025 | 0.024 |
| 43 Construction | -0.005 | 0.000 | -0.002 | 0.004 | 0.000 | -0.002 | -0.006 | -0.005 |
| 44 Electricity, gas and water | -0.005 | 0.003 | -0.002 | 0.005 | -0.001 | -0.003 | -0.002 | -0.006 |
| 45 Transportation and communication services | 0.012 | 0.013 | 0.003 | 0.012 | 0.002 | 0.008 | 0.052 | 0.039 |
| 46 Trade, storage and warehousing | -0.006 | -0.003 | -0.002 | 0.001 | -0.001 | -0.003 | -0.014 | -0.011 |
| 47 Banks and non-banks | -0.009 | -0.007 | -0.002 | 0.001 | -0.001 | -0.005 | -0.023 | -0.016 |
| 48 Life and non-life insurance and real estate | 0.005 | 0.008 | 0.002 | 0.008 | 0.002 | 0.003 | 0.029 | 0.020 |
| 49 Government services | -0.003 | -0.004 | -0.001 | 0.001 | 0.000 | -0.002 | -0.009 | -0.005 |
| 50 Other services | 0.001 | 0.002 | 0.001 | 0.005 | 0.001 | 0.001 | 0.010 | 0.008 |

3d. Results on Sectoral Producer Price (Domestic)

| | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | Accumulated Change | Accumulated Change (w/o 1996) |
|---|--------|--------|--------|--------|--------|--------|-----------------------|----------------------------------|
| 1 Irrigated Palay | -0.002 | 0.004 | 0.000 | -0.001 | -0.001 | -0.001 | -0.001 | -0.005 |
| 2 Non-irrigated palay | -0.003 | 0.003 | 0.000 | -0.004 | -0.001 | -0.002 | -0.007 | -0.010 |
| 3 Corn | 0.000 | 0.002 | -0.001 | 0.000 | 0.000 | 0.000 | 0.001 | -0.001 |
| 4 Coconut, incl copra | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 5 Sugarcane | -0.002 | 0.013 | 0.001 | 0.007 | 0.001 | 0.004 | 0.025 | 0.012 |
| 6 Banana & other fruits & nuts | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 7 Vegetables | 0.006 | 0.013 | 0.003 | 0.002 | 0.003 | 0.006 | 0.035 | 0.022 |
| 8 Rootcrops | 0.010 | 0.008 | 0.005 | 0.001 | 0.004 | 0.007 | 0.035 | 0.027 |
| 9 Other commercial crops | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 10 Hogs | 0.010 | 0.010 | 0.004 | 0.008 | 0.004 | 0.008 | 0.044 | 0.034 |
| 11 Chicken & poultry products | 0.010 | 0.008 | 0.004 | 0.009 | 0.003 | 0.008 | 0.042 | 0.034 |
| 12 Other livestock | 0.011 | 0.008 | 0.004 | 0.008 | 0.004 | 0.008 | 0.043 | 0.035 |
| 13 Agricultural Services | 0.009 | 0.010 | 0.003 | 0.006 | 0.003 | 0.006 | 0.037 | 0.027 |
| 14 Marine fishing | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 15 Inland fishing | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 16 Forestry and logging | 0.002 | -0.001 | 0.003 | -0.002 | 0.001 | 0.001 | 0.004 | 0.004 |
| 17 Crude oil, coal and natural gas | 0.002 | -0.081 | 0.003 | -0.043 | 0.002 | 0.004 | -0.112 | -0.031 |
| 18 Other mining | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 19 Rice and corn milling | 0.001 | 0.001 | 0.000 | 0.000 | 0.000 | 0.001 | 0.003 | 0.003 |
| 20 Sugar milling and refining | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 21 Milk and dairy products | -0.004 | -0.014 | -0.004 | -0.026 | -0.005 | -0.011 | -0.063 | -0.049 |
| 22 Oils and fats | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 23 Meat and meat products | 0.012 | 0.007 | 0.005 | 0.009 | 0.004 | 0.008 | 0.045 | 0.038 |
| 24 Flour milling | -0.004 | 0.002 | -0.002 | 0.002 | -0.002 | 0.000 | -0.004 | -0.006 |
| 25 Animal feeds | -0.003 | 0.019 | -0.004 | -0.001 | -0.002 | -0.002 | 0.006 | -0.012 |
| 26 Other foods | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 27 Beverages and tobacco | 0.005 | 0.001 | 0.002 | -0.003 | -0.001 | 0.001 | 0.005 | 0.004 |
| 28 Textile and knitting mills | -0.026 | -0.002 | -0.021 | 0.010 | -0.008 | -0.015 | -0.062 | -0.059 |
| 29 Other made-up textile goods | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 30 Garments, footwear, leather and rubber footwear | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 31 Wood products | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 32 Paper products | -0.010 | 0.002 | -0.001 | -0.023 | -0.014 | -0.009 | -0.055 | -0.056 |
| 33 Fertilizer | 0.000 | -0.001 | 0.000 | -0.004 | 0.001 | -0.001 | -0.004 | -0.003 |
| 34 Other rub. plastic & chem. products, except rub footwear | -0.002 | 0.000 | 0.000 | -0.007 | 0.000 | -0.003 | -0.013 | -0.013 |
| 35 Products of coal and petroleum | -0.009 | -0.128 | 0.001 | -0.071 | 0.000 | 0.000 | -0.208 | -0.080 |
| 36 Non-ferrous basic metal products | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 37 Cement, basic metals & non-metallic mineral products | -0.005 | -0.014 | -0.001 | -0.007 | -0.003 | -0.001 | -0.031 | -0.017 |
| 38 Semi-conductors | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 39 Metal products and non-electrical machineries | -0.013 | -0.005 | -0.005 | -0.003 | -0.007 | -0.006 | -0.039 | -0.034 |
| 40 Electrical machinery, equipment and parts | -0.007 | -0.002 | 0.000 | -0.008 | -0.001 | -0.004 | -0.023 | -0.021 |
| 41 Motor vehicles (Transport Equipment) | -0.035 | -0.005 | -0.003 | -0.014 | 0.000 | -0.031 | -0.089 | -0.084 |
| 42 Other manufacturing | -0.010 | 0.000 | -0.004 | -0.005 | -0.004 | -0.005 | -0.028 | -0.028 |
| 43 Construction | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 44 Electricity, gas and water | 0.006 | -0.032 | 0.004 | -0.016 | 0.003 | 0.005 | -0.029 | 0.003 |
| 45 Transportation and communication services | 0.003 | -0.016 | 0.003 | -0.008 | 0.003 | 0.002 | -0.012 | 0.003 |
| 46 Trade, storage and warehousing | 0.011 | -0.002 | 0.005 | 0.004 | 0.004 | 0.006 | 0.029 | 0.030 |
| 47 Banks and non-banks | 0.013 | 0.004 | 0.005 | 0.008 | 0.004 | 0.007 | 0.041 | 0.037 |
| 48 Life and non-life insurance and real estate | 0.016 | 0.013 | 0.006 | 0.015 | 0.005 | 0.010 | 0.065 | 0.053 |
| 49 Government services | -0.001 | 0.004 | -0.001 | 0.002 | 0.000 | 0.000 | 0.004 | 0.000 |
| 50 Other services | 0.006 | 0.003 | 0.003 | 0.003 | 0.002 | 0.003 | 0.020 | 0.017 |

3e. Results on Sectoral Employment ('000)

| Sectors | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | Accumulated | Accumulated |
|---|---------|---------|---------|---------|---------|---------|-------------|-------------------|
| | | | | | | | Change | Change (w/o 1996) |
| 1 Irrigated Palay | -6.573 | -2.273 | -2.106 | -0.878 | -1.765 | -4.390 | -17.986 | -15.713 |
| 2 Non-irrigated palay | -0.168 | -0.041 | -0.040 | 0.031 | -0.047 | -0.125 | -0.390 | -0.349 |
| 3 Corn | 0.127 | -0.628 | -0.405 | 2.259 | 0.181 | 0.052 | 1.587 | 2.215 |
| 4 Coconut, incl copra | -1.979 | -3.447 | -0.818 | 1.472 | -0.372 | -1.413 | -6.557 | -3.110 |
| 5 Sugarcane | -1.691 | 3.212 | -0.023 | 3.353 | 0.151 | 0.990 | 5.992 | 2.780 |
| 6 Banana & other fruits & nuts | -4.873 | -6.076 | -1.823 | 3.183 | -0.903 | -2.952 | -13.445 | -7.368 |
| 7 Vegetables | 5.022 | 6.431 | 2.339 | 5.079 | 2.584 | 4.358 | 25.813 | 19.383 |
| 8 Rootcrops | 3.629 | 1.535 | 1.765 | 1.877 | 1.516 | 2.577 | 12.899 | 11.364 |
| 9 Other commercial crops | 5.275 | 3.296 | 2.201 | 8.382 | 2.426 | 4.594 | 26.173 | 22.877 |
| 10 Hogs | 1.015 | 0.564 | 0.398 | 1.132 | 0.396 | 0.793 | 4.298 | 3.734 |
| 11 Chicken & poultry products | 1.130 | 0.729 | 0.429 | 1.495 | 0.466 | 0.878 | 5.127 | 4.398 |
| 12 Other livestock | 1.363 | 0.745 | 0.534 | 1.338 | 0.512 | 1.032 | 5.525 | 4.780 |
| 13 Agricultural Services | 0.104 | 0.259 | -0.014 | 0.040 | 0.020 | 0.043 | 0.452 | 0.194 |
| 14 Marine fishing | -14.219 | 14.469 | -4.005 | 2.437 | -3.100 | -12.542 | -16.959 | -31.429 |
| 15 Inland fishing | -14.392 | -7.373 | -4.925 | -5.642 | -3.739 | -8.118 | -44.190 | -36.817 |
| 16 Forestry and logging | -2.844 | 0.594 | -0.572 | -0.974 | -0.831 | -1.984 | -6.611 | -7.204 |
| 17 Crude oil, coal and natural gas | -0.055 | -0.582 | -0.005 | -0.245 | -0.003 | -0.006 | -0.896 | -0.314 |
| 18 Other mining | -1.311 | 3.998 | -1.153 | 3.562 | -0.770 | -1.079 | -3.247 | -0.752 |
| 19 Rice and corn milling | -0.745 | -0.356 | -0.281 | -0.473 | -0.245 | -0.554 | -2.653 | -2.298 |
| 20 Sugar milling and refining | -0.388 | 0.431 | -0.091 | 0.263 | -0.040 | 0.021 | 0.196 | -0.234 |
| 21 Milk and dairy products | 0.232 | -0.321 | 0.068 | -0.100 | 0.075 | 0.054 | 0.009 | 0.329 |
| 22 Oils and fats | 0.906 | -2.769 | 0.806 | 1.073 | 0.630 | 0.792 | 1.439 | 4.208 |
| 23 Meat and meat products | 0.607 | 0.492 | 0.198 | 0.651 | 0.231 | 0.472 | 2.652 | 2.160 |
| 24 Flour milling | -0.063 | -0.004 | -0.016 | -0.009 | -0.006 | -0.028 | -0.127 | -0.123 |
| 25 Animal feeds | -0.595 | 1.942 | -0.509 | 0.001 | -0.202 | -0.244 | 0.395 | -1.548 |
| 26 Other foods | -3.432 | 0.816 | -0.936 | 1.288 | -0.480 | -0.483 | -3.227 | -4.043 |
| 27 Beverages and tobacco | 0.889 | 0.747 | 0.183 | 0.429 | 0.062 | 0.370 | 2.680 | 1.933 |
| 28 Textile and knitting mills | 3.097 | 0.595 | 2.345 | -1.446 | 1.011 | 1.072 | 6.675 | 6.079 |
| 29 Other made-up textile goods | 13.229 | 0.541 | 13.517 | -12.428 | 4.988 | 8.920 | 28.766 | 28.225 |
| 30 Garments, footwear, leather and rubber footwear | 76.064 | -1.584 | 76.357 | -77.565 | 30.824 | 33.966 | 138.063 | 139.646 |
| 31 Wood products | -6.053 | 2.971 | -1.920 | -1.710 | -2.030 | -4.156 | -12.898 | -15.869 |
| 32 Paper products | -0.511 | -0.028 | -0.254 | -0.574 | -0.768 | -0.493 | -2.629 | -2.601 |
| 33 Fertilizer | 0.044 | 0.029 | 0.011 | 0.039 | 0.008 | 0.024 | 0.154 | 0.126 |
| 34 Other rub. plastic & chem, products, except rub footwear | 1.760 | 1.527 | 0.709 | 0.990 | 0.412 | 1.057 | 6.455 | 4.928 |
| 35 Products of coal and petroleum | 0.099 | 0.966 | 0.083 | 0.538 | 0.052 | 0.113 | 1.851 | 0.885 |
| 36 Non-ferrous basic metal products | -0.884 | 2.296 | -0.533 | 1.224 | -0.376 | -0.612 | 1.114 | -1.182 |
| 37 Cement, basic metals & non-metallic mineral products | -1.101 | 0.352 | -0.491 | 0.169 | -0.381 | -0.531 | -1.984 | -2.336 |
| 38 Semi-conductors | 37.551 | -4.614 | -1.866 | 2.174 | -0.593 | 40.245 | 72.897 | 77.510 |
| 39 Metal products and non-electrical machineries | 0.756 | 0.232 | -0.016 | -1.434 | 0.017 | -0.068 | -0.513 | -0.745 |
| 40 Electrical machinery, equipment and parts | 0.129 | 0.528 | 0.200 | -1.174 | 0.030 | 0.091 | -0.195 | -0.723 |
| 41 Motor vehicles (Transport Equipment) | -1.066 | 0.486 | 0.019 | -0.337 | 0.177 | -1.200 | -1.921 | -2.407 |
| 42 Other manufacturing | -0.616 | 0.438 | -0.018 | -1.034 | -0.281 | -0.432 | -1.942 | -2.380 |
| 43 Construction | -34.413 | 13.484 | -18.024 | -3.975 | -5.069 | -20.661 | -68.658 | -82.143 |
| 44 Electricity, gas and water | 1.333 | 0.753 | 0.494 | 0.463 | 0.228 | 0.824 | 4.095 | 3.342 |
| 45 Transportation and communication services | 13.951 | 16.435 | 4.383 | 13.794 | 3.287 | 9.391 | 61.242 | 44.806 |
| 46 Trade, storage and warehousing | 19.287 | 4.829 | 6.639 | 8.204 | 5.801 | 9.014 | 53.773 | 48.945 |
| 47 Banks and non-banks | 3.893 | 3.278 | 1.244 | 0.250 | 0.758 | 2.307 | 11.730 | 8.452 |
| 48 Life and non-life insurance and real estate | 2.289 | 2.653 | 0.781 | 1.157 | 0.595 | 1.495 | 8.971 | 6.318 |
| 49 Government services | -83.774 | -47.486 | -22.428 | 1.626 | -11.110 | -47.691 | -210.863 | -163.378 |
| 50 Other services | 15.857 | 16.558 | 5.059 | 8.357 | 3.514 | 9.606 | 58.951 | 42.393 |
| Total | 27.892 | 31.628 | 57.489 | -31.667 | 27.843 | 25.393 | 138.577 | 106.949 |

4b. Macro Results

| | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | Accumulated Change | Accumulated Change (w/o 1996) |
|---|---------|---------|---------|---------|---------|---------|-----------------------|----------------------------------|
| Macro Items | | | | | | | | |
| 1 <u>Change in Real GDP</u> | 0.087 | -0.291 | 0.076 | 0.019 | 0.071 | 0.027 | -0.010 | 0.281 |
| 2 <u>Change in Total Government Revenue (in levels)</u> | -0.468 | -0.231 | -0.166 | -0.493 | -0.185 | -0.278 | -1.821 | -1.590 |
| 3 <u>Change in Total Government Expenditure (in levels)</u> | -0.082 | -0.052 | -0.025 | 0.010 | -0.014 | -0.055 | -0.218 | -0.166 |
| 4 <u>Change in Aggregate Tariff Revenue</u> | -0.213 | -0.210 | -0.066 | -0.214 | -0.063 | -0.137 | -0.903 | -0.693 |
| 5 <u>Change in Exports (In Foreign Currency)</u> | 0.035 | -0.015 | 0.013 | -0.016 | 0.005 | 0.021 | 0.044 | 0.058 |
| 6 <u>Change in Imports (In Foreign Currency)</u> | 0.023 | -0.003 | 0.006 | 0.002 | 0.004 | 0.015 | 0.046 | 0.050 |
| 7 <u>Change in Gross Income of Households</u> | | | | | | | | |
| HH1 | 0.017 | 0.012 | 0.007 | 0.010 | 0.005 | 0.010 | 0.061 | 0.049 |
| HH2 | 0.010 | 0.005 | 0.004 | 0.005 | 0.003 | 0.005 | 0.031 | 0.026 |
| HH3 | 0.010 | 0.005 | 0.004 | 0.005 | 0.003 | 0.005 | 0.032 | 0.027 |
| HH4 | 0.009 | 0.005 | 0.004 | 0.006 | 0.003 | 0.005 | 0.032 | 0.027 |
| HH5 | 0.011 | 0.007 | 0.004 | 0.008 | 0.003 | 0.006 | 0.037 | 0.031 |
| 8 <u>Change in Labor Income of Households</u> | | | | | | | | |
| HH1 | 0.014 | 0.009 | 0.005 | 0.008 | 0.004 | 0.009 | 0.050 | 0.041 |
| HH2 | 0.013 | 0.008 | 0.005 | 0.009 | 0.004 | 0.008 | 0.047 | 0.039 |
| HH3 | 0.012 | 0.008 | 0.005 | 0.009 | 0.004 | 0.007 | 0.045 | 0.037 |
| HH4 | 0.012 | 0.007 | 0.004 | 0.009 | 0.004 | 0.007 | 0.043 | 0.036 |
| HH5 | 0.007 | 0.003 | 0.002 | 0.012 | 0.003 | 0.003 | 0.031 | 0.028 |
| 9 <u>Change in Employment ('000):</u> | | | | | | | | |
| Agriculture (including fishery & forestry) | -29.553 | 18.126 | -6.119 | 23.847 | -1.758 | -16.565 | -12.021 | -30.147 |
| Industry (including construction & utilities) | 84.530 | 13.917 | 69.152 | -86.763 | 29.053 | 59.986 | 169.875 | 155.958 |
| Service Sector | -26.954 | 2.085 | -5.103 | 32.669 | 1.549 | -23.483 | -19.237 | -21.323 |
| - Government Service | -82.864 | -47.106 | -23.188 | 0.766 | -12.758 | -49.324 | -214.474 | -167.368 |
| Total: | | | | | | | | |
| - Including Government Service | 28.023 | 34.129 | 57.930 | -30.246 | 28.844 | 19.937 | 138.617 | 104.488 |
| - Excluding Government Service | 110.887 | 81.235 | 81.117 | -31.012 | 41.602 | 69.261 | 353.091 | 271.855 |

4c. Results on Sectoral Supply

| | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | Accumulated Change | Accumulated Change (w/o 1996) |
|---|--------|--------|--------|--------|--------|--------|-----------------------|----------------------------------|
| 4c.i. Total Supply (Domestic + Imports) | | | | | | | | |
| 1 Irrigated Palay | -0.022 | -0.069 | 0.032 | -0.005 | -0.006 | -0.012 | -0.083 | -0.014 |
| 2 Non-irrigated palay | -0.014 | -0.035 | 0.014 | -0.005 | -0.006 | -0.010 | -0.055 | -0.020 |
| 3 Corn | 0.039 | 0.336 | 0.019 | 0.001 | -0.003 | -0.008 | 0.384 | 0.048 |
| 4 Coconut, incl copra | -0.011 | -0.009 | -0.004 | 0.001 | -0.002 | -0.007 | -0.032 | -0.023 |
| 5 Sugarcane | -0.012 | -0.002 | -0.001 | 0.003 | 0.000 | -0.004 | -0.017 | -0.015 |
| 6 Banana & other fruits & nuts | -0.016 | 0.064 | 0.035 | 0.024 | 0.034 | 0.045 | 0.186 | 0.121 |
| 7 Vegetables | -0.013 | 0.035 | -0.008 | 0.011 | 0.000 | 0.000 | 0.026 | -0.009 |
| 8 Rootcrops | -0.005 | -0.002 | -0.001 | 0.002 | 0.000 | -0.002 | -0.007 | -0.005 |
| 9 Other commercial crops | -0.008 | -0.002 | -0.003 | 0.002 | -0.003 | -0.004 | -0.018 | -0.016 |
| 10 Hogs | -0.001 | 0.007 | -0.001 | 0.007 | 0.001 | 0.001 | 0.014 | 0.007 |
| 11 Chicken & poultry products | 0.010 | 0.011 | 0.006 | 0.020 | 0.010 | 0.010 | 0.066 | 0.055 |
| 12 Other livestock | 0.019 | 0.004 | 0.008 | 0.101 | 0.008 | 0.015 | 0.154 | 0.150 |
| 13 Agricultural Services | -0.008 | -0.003 | -0.003 | 0.001 | -0.002 | -0.005 | -0.020 | -0.016 |
| 14 Marine fishing | -0.009 | 0.088 | -0.002 | 0.097 | -0.001 | 0.042 | 0.213 | 0.125 |
| 15 Inland fishing | -0.017 | -0.011 | -0.005 | -0.003 | -0.004 | -0.010 | -0.051 | -0.040 |
| 16 Forestry and logging | 0.048 | 0.041 | 0.050 | -0.019 | 0.018 | 0.013 | 0.150 | 0.110 |
| 17 Crude oil, coal and natural gas | -0.014 | -0.109 | -0.002 | -0.058 | -0.001 | -0.003 | -0.187 | -0.078 |
| 18 Other mining | -0.013 | 0.027 | -0.012 | 0.025 | -0.004 | -0.007 | 0.015 | -0.012 |
| 19 Rice and corn milling | -0.009 | -0.018 | 0.027 | 0.009 | 0.031 | 0.003 | 0.043 | 0.061 |
| 20 Sugar milling and refining | 0.185 | -1.145 | 0.239 | 0.006 | 0.225 | 0.000 | -0.491 | 0.654 |
| 21 Milk and dairy products | 0.002 | 0.020 | 0.002 | 0.026 | 0.004 | 0.009 | 0.062 | 0.042 |
| 22 Oils and fats | 0.022 | 0.079 | -0.015 | 0.137 | 0.009 | 0.068 | 0.301 | 0.222 |
| 23 Meat and meat products | -0.021 | -0.016 | -0.005 | 0.013 | -0.001 | -0.011 | -0.042 | -0.025 |
| 24 Flour milling | -0.030 | 0.044 | -0.006 | 0.077 | -0.002 | 0.034 | 0.117 | 0.073 |
| 25 Animal feeds | 0.066 | -0.296 | 0.062 | -0.003 | 0.024 | 0.024 | -0.124 | 0.173 |
| 26 Other foods | -0.014 | -0.001 | 0.000 | 0.012 | 0.002 | 0.000 | -0.001 | 0.000 |
| 27 Beverages and tobacco | 0.009 | 0.033 | 0.004 | 0.032 | 0.014 | 0.026 | 0.118 | 0.085 |
| 28 Textile and knitting mills | 0.094 | -0.001 | 0.084 | -0.068 | 0.033 | 0.036 | 0.177 | 0.178 |
| 29 Other made-up textile goods | 0.225 | 0.003 | 0.191 | -0.152 | 0.076 | 0.103 | 0.445 | 0.442 |
| 30 Garments, footwear, leather and rubber footwear | 0.148 | -0.010 | 0.135 | -0.117 | 0.057 | 0.051 | 0.264 | 0.274 |
| 31 Wood products | -0.011 | 0.007 | -0.004 | 0.002 | -0.003 | -0.008 | -0.017 | -0.024 |
| 32 Paper products | -0.001 | -0.006 | -0.004 | 0.006 | -0.002 | -0.001 | -0.007 | -0.002 |
| 33 Fertilizer | 0.021 | 0.010 | 0.003 | 0.014 | 0.003 | 0.005 | 0.056 | 0.046 |
| 34 Other rub. plastic & chem, products, except rub footwear | 0.008 | 0.010 | 0.005 | 0.007 | 0.002 | 0.004 | 0.037 | 0.027 |
| 35 Products of coal and petroleum | 0.010 | 0.003 | 0.000 | 0.004 | 0.000 | -0.001 | 0.016 | 0.013 |
| 36 Non-ferrous basic metal products | 0.007 | 0.040 | -0.008 | 0.029 | 0.006 | 0.020 | 0.094 | 0.054 |
| 37 Cement, basic metals & non-metallic mineral products | -0.004 | -0.001 | -0.004 | -0.009 | 0.000 | -0.004 | -0.023 | -0.022 |
| 38 Semi-conductors | 0.644 | -0.068 | -0.023 | 0.027 | -0.008 | 0.469 | 1.042 | 1.110 |
| 39 Metal products and non-electrical machineries | 0.003 | -0.001 | -0.002 | -0.015 | -0.001 | -0.003 | -0.019 | -0.017 |
| 40 Electrical machinery, equipment and parts | 0.000 | 0.002 | 0.000 | 0.003 | 0.000 | 0.000 | 0.004 | 0.003 |
| 41 Motor vehicles (Transport Equipment) | -0.004 | 0.003 | 0.000 | 0.003 | 0.001 | -0.003 | -0.001 | -0.004 |
| 42 Other manufacturing | -0.004 | -0.001 | 0.000 | 0.001 | 0.000 | -0.003 | -0.008 | -0.006 |
| 43 Construction | -0.020 | 0.000 | -0.009 | 0.003 | -0.003 | -0.011 | -0.040 | -0.041 |
| 44 Electricity, gas and water | 0.001 | 0.007 | 0.000 | 0.008 | 0.000 | 0.000 | 0.015 | 0.008 |
| 45 Transportation and communication services | 0.016 | 0.020 | 0.004 | 0.017 | 0.003 | 0.010 | 0.069 | 0.049 |
| 46 Trade, storage and warehousing | -0.003 | -0.002 | -0.001 | 0.002 | 0.000 | -0.002 | -0.006 | -0.004 |
| 47 Banks and non-banks | -0.006 | -0.004 | -0.001 | 0.003 | 0.000 | -0.004 | -0.013 | -0.009 |
| 48 Life and non-life insurance and real estate | 0.009 | 0.017 | 0.003 | 0.016 | 0.004 | 0.006 | 0.054 | 0.037 |
| 49 Government services | -0.039 | -0.026 | -0.011 | 0.003 | -0.006 | -0.024 | -0.104 | -0.078 |
| 50 Other services | 0.004 | 0.008 | 0.001 | 0.011 | 0.001 | 0.002 | 0.027 | 0.019 |

| | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | Accumulated Change | Accumulated Change (w/o 1996) |
|---|--------|--------|--------|--------|--------|--------|-----------------------|----------------------------------|
| 4c.II. Domestic Supply | | | | | | | | |
| 1 Irrigated Palay | -0.009 | -0.003 | -0.004 | -0.002 | -0.003 | -0.006 | -0.028 | -0.025 |
| 2 Non-irrigated palay | -0.007 | -0.003 | -0.003 | -0.002 | -0.002 | -0.004 | -0.020 | -0.018 |
| 3 Corn | -0.006 | -0.006 | -0.002 | 0.000 | -0.001 | -0.003 | -0.019 | -0.012 |
| 4 Coconut, incl copra | -0.007 | -0.006 | -0.003 | -0.001 | -0.002 | -0.005 | -0.024 | -0.018 |
| 5 Sugarcane | -0.009 | 0.003 | 0.000 | 0.003 | 0.001 | -0.001 | -0.003 | -0.006 |
| 6 Banana & other fruits & nuts | -0.008 | -0.006 | -0.003 | -0.001 | -0.002 | -0.005 | -0.024 | -0.018 |
| 7 Vegetables | -0.001 | 0.005 | 0.000 | 0.002 | 0.001 | 0.000 | 0.008 | 0.003 |
| 8 Rootcrops | 0.001 | 0.000 | 0.001 | 0.001 | 0.001 | 0.001 | 0.007 | 0.006 |
| 9 Other commercial crops | -0.002 | 0.000 | -0.001 | 0.003 | 0.000 | 0.000 | 0.001 | 0.001 |
| 10 Hogs | 0.002 | 0.002 | 0.001 | 0.006 | 0.001 | 0.002 | 0.014 | 0.012 |
| 11 Chicken & poultry products | 0.000 | 0.002 | 0.000 | 0.006 | 0.001 | 0.001 | 0.011 | 0.009 |
| 12 Other livestock | 0.001 | 0.002 | 0.001 | 0.005 | 0.001 | 0.002 | 0.012 | 0.010 |
| 13 Agricultural Services | -0.004 | -0.001 | -0.001 | 0.000 | -0.001 | -0.002 | -0.009 | -0.007 |
| 14 Marine fishing | -0.009 | 0.006 | -0.002 | 0.001 | -0.002 | -0.008 | -0.015 | -0.020 |
| 15 Inland fishing | -0.013 | -0.009 | -0.004 | -0.005 | -0.004 | -0.008 | -0.043 | -0.034 |
| 16 Forestry and logging | -0.011 | 0.000 | -0.002 | -0.003 | -0.003 | -0.008 | -0.026 | -0.027 |
| 17 Crude oil, coal and natural gas | -0.013 | -0.117 | -0.002 | -0.063 | -0.001 | -0.003 | -0.199 | -0.082 |
| 18 Other mining | -0.007 | 0.016 | -0.005 | 0.015 | -0.003 | -0.005 | 0.011 | -0.005 |
| 19 Rice and corn milling | -0.009 | -0.005 | -0.004 | -0.002 | -0.003 | -0.006 | -0.030 | -0.025 |
| 20 Sugar milling and refining | -0.010 | 0.003 | 0.000 | 0.003 | 0.001 | -0.001 | -0.005 | -0.008 |
| 21 Milk and dairy products | 0.001 | -0.011 | 0.001 | -0.003 | 0.002 | -0.001 | -0.012 | -0.001 |
| 22 Oils and fats | 0.013 | -0.031 | 0.010 | 0.019 | 0.008 | 0.009 | 0.027 | 0.059 |
| 23 Meat and meat products | 0.001 | 0.003 | 0.001 | 0.007 | 0.002 | 0.002 | 0.016 | 0.013 |
| 24 Flour milling | -0.012 | -0.004 | -0.002 | -0.001 | 0.000 | -0.005 | -0.026 | -0.022 |
| 25 Animal feeds | -0.021 | 0.055 | -0.015 | 0.000 | -0.006 | -0.009 | 0.005 | -0.050 |
| 26 Other foods | -0.017 | -0.002 | -0.003 | 0.004 | -0.001 | -0.004 | -0.023 | -0.021 |
| 27 Beverages and tobacco | 0.003 | 0.003 | 0.000 | 0.004 | 0.000 | 0.000 | 0.011 | 0.007 |
| 28 Textile and knitting mills | 0.019 | 0.002 | 0.016 | -0.010 | 0.007 | 0.005 | 0.039 | 0.037 |
| 29 Other made-up textile goods | 0.168 | 0.005 | 0.147 | -0.116 | 0.053 | 0.089 | 0.347 | 0.341 |
| 30 Garments, footwear, leather and rubber footwear | 0.096 | -0.010 | 0.090 | -0.083 | 0.036 | 0.036 | 0.167 | 0.176 |
| 31 Wood products | -0.013 | 0.001 | -0.004 | -0.002 | -0.004 | -0.009 | -0.032 | -0.032 |
| 32 Paper products | -0.007 | -0.003 | -0.003 | -0.003 | -0.006 | -0.005 | -0.028 | -0.025 |
| 33 Fertilizer | 0.004 | 0.005 | 0.001 | 0.006 | 0.001 | 0.002 | 0.018 | 0.013 |
| 34 Other rub. plastic & chem. products, except rub footwear | 0.006 | 0.007 | 0.003 | 0.006 | 0.002 | 0.003 | 0.028 | 0.020 |
| 35 Products of coal and petroleum | -0.003 | 0.008 | 0.000 | 0.007 | 0.000 | -0.001 | 0.012 | 0.003 |
| 36 Non-ferrous basic metal products | -0.009 | 0.014 | -0.004 | 0.009 | -0.003 | -0.005 | 0.002 | -0.012 |
| 37 Cement, basic metals & non-metallic mineral products | -0.012 | 0.000 | -0.005 | 0.002 | -0.004 | -0.006 | -0.025 | -0.025 |
| 38 Semi-conductors | 0.349 | -0.038 | -0.013 | 0.015 | -0.004 | 0.255 | 0.564 | 0.602 |
| 39 Metal products and non-electrical machineries | 0.005 | -0.002 | -0.001 | -0.022 | 0.000 | -0.004 | -0.024 | -0.022 |
| 40 Electrical machinery, equipment and parts | -0.005 | 0.000 | 0.000 | -0.009 | -0.001 | -0.003 | -0.018 | -0.018 |
| 41 Motor vehicles (Transport Equipment) | -0.018 | 0.001 | -0.001 | -0.002 | 0.001 | -0.013 | -0.032 | -0.033 |
| 42 Other manufacturing | -0.011 | -0.002 | -0.002 | -0.007 | -0.004 | -0.006 | -0.032 | -0.030 |
| 43 Construction | -0.016 | 0.000 | -0.008 | -0.001 | -0.002 | -0.009 | -0.035 | -0.035 |
| 44 Electricity, gas and water | 0.005 | 0.003 | 0.002 | 0.003 | 0.001 | 0.003 | 0.016 | 0.013 |
| 45 Transportation and communication services | 0.002 | 0.004 | 0.001 | 0.005 | 0.001 | 0.001 | 0.013 | 0.009 |
| 46 Trade, storage and warehousing | 0.003 | 0.001 | 0.001 | 0.002 | 0.001 | 0.001 | 0.008 | 0.008 |
| 47 Banks and non-banks | 0.002 | 0.002 | 0.001 | 0.003 | 0.001 | 0.001 | 0.010 | 0.008 |
| 48 Life and non-life insurance and real estate | 0.003 | 0.008 | 0.001 | 0.008 | 0.002 | 0.003 | 0.024 | 0.017 |
| 49 Government services | -0.036 | -0.023 | -0.011 | 0.002 | -0.006 | -0.022 | -0.095 | -0.072 |
| 50 Other services | 0.002 | 0.005 | 0.001 | 0.006 | 0.001 | 0.001 | 0.016 | 0.011 |

| | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | Accumulated Change | Accumulated Change (w/o 1996) |
|---|--------|--------|--------|--------|--------|--------|-----------------------|----------------------------------|
| 4c.III. Imports | | | | | | | | |
| 1 Irrigated Palay | -0.013 | -0.066 | 0.036 | -0.003 | -0.003 | -0.006 | -0.055 | 0.011 |
| 2 Non-irrigated palay | -0.007 | -0.033 | 0.017 | -0.003 | -0.004 | -0.005 | -0.035 | -0.002 |
| 3 Corn | 0.045 | 0.342 | 0.022 | 0.001 | -0.002 | -0.005 | 0.403 | 0.061 |
| 4 Coconut, incl copra | -0.004 | -0.003 | -0.001 | 0.002 | 0.000 | -0.002 | -0.008 | -0.005 |
| 5 Sugarcane | -0.003 | -0.005 | -0.002 | 0.001 | -0.001 | -0.003 | -0.014 | -0.009 |
| 6 Banana & other fruits & nuts | -0.009 | 0.070 | 0.038 | 0.025 | 0.036 | 0.050 | 0.210 | 0.140 |
| 7 Vegetables | -0.012 | 0.030 | -0.008 | 0.009 | -0.001 | 0.000 | 0.018 | -0.012 |
| 8 Rootcrops | -0.006 | -0.002 | -0.002 | 0.000 | -0.001 | -0.003 | -0.013 | -0.011 |
| 9 Other commercial crops | -0.006 | -0.002 | -0.002 | -0.001 | -0.003 | -0.004 | -0.018 | -0.016 |
| 10 Hogs | -0.003 | 0.004 | -0.002 | 0.001 | 0.000 | -0.001 | 0.000 | -0.005 |
| 11 Chicken & poultry products | 0.009 | 0.009 | 0.006 | 0.014 | 0.008 | 0.009 | 0.055 | 0.046 |
| 12 Other livestock | 0.018 | 0.002 | 0.007 | 0.096 | 0.006 | 0.013 | 0.141 | 0.140 |
| 13 Agricultural Services | -0.005 | -0.002 | -0.002 | 0.001 | -0.001 | -0.003 | -0.011 | -0.009 |
| 14 Marine fishing | 0.000 | 0.082 | 0.000 | 0.095 | 0.001 | 0.049 | 0.228 | 0.146 |
| 15 Inland fishing | -0.004 | -0.003 | -0.001 | 0.002 | 0.000 | -0.002 | -0.008 | -0.005 |
| 16 Forestry and logging | 0.058 | 0.040 | 0.052 | -0.016 | 0.021 | 0.021 | 0.177 | 0.136 |
| 17 Crude oil, coal and natural gas | -0.002 | 0.008 | 0.000 | 0.006 | 0.000 | 0.000 | 0.012 | 0.004 |
| 18 Other mining | -0.006 | 0.011 | -0.008 | 0.010 | -0.001 | -0.001 | 0.004 | -0.006 |
| 19 Rice and corn milling | 0.000 | -0.013 | 0.031 | 0.011 | 0.034 | 0.009 | 0.073 | 0.085 |
| 20 Sugar milling and refining | 0.195 | -1.148 | 0.239 | 0.003 | 0.224 | 0.001 | -0.486 | 0.662 |
| 21 Milk and dairy products | 0.001 | 0.031 | 0.001 | 0.029 | 0.002 | 0.010 | 0.074 | 0.043 |
| 22 Oils and fats | 0.009 | 0.110 | -0.026 | 0.119 | 0.002 | 0.060 | 0.273 | 0.163 |
| 23 Meat and meat products | -0.022 | -0.019 | -0.006 | 0.006 | -0.003 | -0.014 | -0.057 | -0.038 |
| 24 Flour milling | -0.018 | 0.048 | -0.004 | 0.079 | -0.002 | 0.040 | 0.142 | 0.094 |
| 25 Animal feeds | 0.087 | -0.351 | 0.077 | -0.004 | 0.030 | 0.033 | -0.129 | 0.223 |
| 26 Other foods | 0.002 | 0.001 | 0.003 | 0.009 | 0.003 | 0.004 | 0.022 | 0.021 |
| 27 Beverages and tobacco | 0.006 | 0.029 | 0.004 | 0.028 | 0.014 | 0.025 | 0.107 | 0.078 |
| 28 Textile and knitting mills | 0.075 | -0.004 | 0.068 | -0.059 | 0.026 | 0.031 | 0.138 | 0.141 |
| 29 Other made-up textile goods | 0.057 | -0.003 | 0.044 | -0.037 | 0.023 | 0.014 | 0.098 | 0.101 |
| 30 Garments, footwear, leather and rubber footwear | 0.052 | -0.001 | 0.045 | -0.034 | 0.021 | 0.015 | 0.098 | 0.098 |
| 31 Wood products | 0.002 | 0.007 | 0.000 | 0.004 | 0.001 | 0.001 | 0.015 | 0.008 |
| 32 Paper products | 0.006 | -0.003 | -0.001 | 0.009 | 0.004 | 0.005 | 0.021 | 0.024 |
| 33 Fertilizer | 0.017 | 0.006 | 0.002 | 0.008 | 0.002 | 0.003 | 0.038 | 0.032 |
| 34 Other rub. plastic & chem. products, except rub footwear | 0.002 | 0.003 | 0.002 | 0.001 | 0.001 | 0.001 | 0.010 | 0.007 |
| 35 Products of coal and petroleum | 0.013 | -0.005 | 0.000 | -0.003 | 0.000 | -0.001 | 0.004 | 0.010 |
| 36 Non-ferrous basic metal products | 0.016 | 0.025 | -0.004 | 0.021 | 0.009 | 0.025 | 0.092 | 0.067 |
| 37 Cement, basic metals & non-metallic mineral products | 0.008 | -0.001 | 0.001 | -0.011 | 0.004 | 0.002 | 0.002 | 0.003 |
| 38 Semi-conductors | 0.295 | -0.031 | -0.010 | 0.012 | -0.003 | 0.215 | 0.478 | 0.508 |
| 39 Metal products and non-electrical machineries | -0.002 | 0.001 | -0.001 | 0.007 | 0.000 | 0.001 | 0.006 | 0.005 |
| 40 Electrical machinery, equipment and parts | 0.005 | 0.002 | 0.000 | 0.012 | 0.001 | 0.003 | 0.023 | 0.021 |
| 41 Motor vehicles (Transport Equipment) | 0.014 | 0.002 | 0.001 | 0.005 | 0.000 | 0.009 | 0.031 | 0.029 |
| 42 Other manufacturing | 0.007 | 0.001 | 0.002 | 0.008 | 0.003 | 0.003 | 0.024 | 0.024 |
| 43 Construction | -0.005 | 0.000 | -0.002 | 0.004 | -0.001 | -0.003 | -0.006 | -0.006 |
| 44 Electricity, gas and water | -0.004 | 0.004 | -0.002 | 0.005 | -0.001 | -0.003 | -0.002 | -0.006 |
| 45 Transportation and communication services | 0.013 | 0.016 | 0.003 | 0.012 | 0.002 | 0.008 | 0.056 | 0.040 |
| 46 Trade, storage and warehousing | -0.006 | -0.003 | -0.002 | 0.001 | -0.001 | -0.003 | -0.014 | -0.011 |
| 47 Banks and non-banks | -0.009 | -0.006 | -0.002 | 0.001 | -0.001 | -0.005 | -0.023 | -0.017 |
| 48 Life and non-life insurance and real estate | 0.005 | 0.010 | 0.002 | 0.008 | 0.002 | 0.003 | 0.030 | 0.020 |
| 49 Government services | -0.003 | -0.003 | -0.001 | 0.001 | 0.000 | -0.002 | -0.009 | -0.006 |
| 50 Other services | 0.001 | 0.003 | 0.000 | 0.005 | 0.001 | 0.000 | 0.011 | 0.008 |

4d. Results on Sectoral Producer Price (Domestic)

| | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | Accumulated Change | Accumulated Change (w/o 1996) |
|---|--------|--------|--------|--------|--------|--------|-----------------------|----------------------------------|
| 1 Irrigated Palay | -0.002 | 0.005 | 0.000 | -0.001 | -0.001 | -0.001 | 0.000 | -0.005 |
| 2 Non-irrigated palay | -0.002 | 0.007 | -0.001 | -0.003 | -0.002 | -0.002 | -0.003 | -0.010 |
| 3 Corn | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | -0.001 | -0.001 |
| 4 Coconut, incl copra | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 5 Sugarcane | -0.002 | 0.013 | 0.004 | 0.005 | 0.003 | 0.005 | 0.029 | 0.015 |
| 6 Banana & other fruits & nuts | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 7 Vegetables | 0.007 | 0.015 | 0.003 | 0.002 | 0.003 | 0.006 | 0.037 | 0.022 |
| 8 Rootcrops | 0.010 | 0.012 | 0.005 | 0.002 | 0.004 | 0.007 | 0.040 | 0.028 |
| 9 Other commercial crops | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 10 Hogs | 0.010 | 0.011 | 0.004 | 0.007 | 0.004 | 0.008 | 0.045 | 0.034 |
| 11 Chicken & poultry products | 0.010 | 0.010 | 0.004 | 0.008 | 0.004 | 0.008 | 0.043 | 0.034 |
| 12 Other livestock | 0.011 | 0.009 | 0.005 | 0.007 | 0.004 | 0.008 | 0.044 | 0.035 |
| 13 Agricultural Services | 0.009 | 0.012 | 0.003 | 0.005 | 0.003 | 0.006 | 0.038 | 0.026 |
| 14 Marine fishing | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 15 Inland fishing | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 16 Forestry and logging | 0.002 | 0.000 | 0.003 | -0.002 | 0.001 | 0.001 | 0.004 | 0.004 |
| 17 Crude oil, coal and natural gas | 0.002 | -0.080 | 0.003 | -0.043 | 0.002 | 0.004 | -0.112 | -0.032 |
| 18 Other mining | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 19 Rice and corn milling | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.003 | 0.003 |
| 20 Sugar milling and refining | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 21 Milk and dairy products | -0.001 | -0.017 | -0.004 | -0.025 | -0.005 | -0.010 | -0.063 | -0.046 |
| 22 Oils and fats | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 23 Meat and meat products | 0.012 | 0.009 | 0.005 | 0.009 | 0.004 | 0.008 | 0.047 | 0.038 |
| 24 Flour milling | -0.004 | 0.002 | -0.002 | 0.001 | -0.001 | 0.000 | -0.005 | -0.006 |
| 25 Animal feeds | -0.003 | 0.013 | -0.004 | -0.002 | -0.002 | -0.002 | 0.002 | -0.012 |
| 26 Other foods | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 27 Beverages and tobacco | 0.005 | 0.001 | 0.002 | -0.003 | -0.001 | 0.001 | 0.005 | 0.003 |
| 28 Textile and knitting mills | -0.026 | -0.005 | -0.021 | 0.010 | -0.008 | -0.015 | -0.064 | -0.059 |
| 29 Other made-up textile goods | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 30 Garments, footwear, leather and rubber footwear | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 31 Wood products | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 32 Paper products | -0.010 | 0.001 | -0.001 | -0.023 | -0.014 | -0.009 | -0.055 | -0.056 |
| 33 Fertilizer | 0.001 | -0.003 | 0.000 | -0.004 | 0.001 | -0.001 | -0.005 | -0.003 |
| 34 Other rub. plastic & chem, products, except rub footwear | -0.001 | -0.004 | 0.000 | -0.007 | 0.000 | -0.003 | -0.016 | -0.012 |
| 35 Products of coal and petroleum | -0.010 | -0.130 | 0.001 | -0.072 | 0.000 | 0.000 | -0.210 | -0.081 |
| 36 Non-ferrous basic metal products | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 37 Cement, basic metals & non-metallic mineral products | -0.005 | -0.014 | -0.001 | -0.006 | -0.003 | -0.002 | -0.031 | -0.017 |
| 38 Semi-conductors | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 39 Metal products and non-electrical machineries | -0.012 | -0.005 | -0.005 | -0.002 | -0.007 | -0.006 | -0.039 | -0.033 |
| 40 Electrical machinery, equipment and parts | -0.007 | -0.003 | 0.000 | -0.008 | -0.001 | -0.004 | -0.024 | -0.021 |
| 41 Motor vehicles (Transport Equipment) | -0.045 | -0.006 | -0.004 | -0.014 | 0.000 | -0.031 | -0.100 | -0.094 |
| 42 Other manufacturing | -0.010 | -0.001 | -0.005 | -0.004 | -0.004 | -0.005 | -0.028 | -0.028 |
| 43 Construction | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 44 Electricity, gas and water | 0.004 | -0.032 | 0.004 | -0.016 | 0.003 | 0.005 | -0.031 | 0.001 |
| 45 Transportation and communication services | 0.003 | -0.016 | 0.003 | -0.008 | 0.002 | 0.002 | -0.013 | 0.002 |
| 46 Trade, storage and warehousing | 0.011 | 0.000 | 0.005 | 0.004 | 0.004 | 0.006 | 0.030 | 0.030 |
| 47 Banks and non-banks | 0.013 | 0.006 | 0.005 | 0.007 | 0.004 | 0.007 | 0.042 | 0.036 |
| 48 Life and non-life insurance and real estate | 0.017 | 0.016 | 0.006 | 0.015 | 0.005 | 0.010 | 0.068 | 0.052 |
| 49 Government services | -0.001 | 0.004 | -0.001 | 0.003 | 0.000 | 0.000 | 0.004 | 0.000 |
| 50 Other services | 0.007 | 0.003 | 0.003 | 0.003 | 0.002 | 0.003 | 0.020 | 0.017 |

4e. Results on Sectoral Employment ('000)

| Sectors | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | Accumulated | Accumulated |
|---|---------|---------|---------|---------|---------|---------|-------------|-------------|
| | | | | | | | | Change |
| 1 Irrigated Palay | -6.325 | 0.747 | -2.830 | -0.164 | -2.291 | -4.462 | -15.325 | -16.072 |
| 2 Non-irrigated palay | -0.156 | 0.155 | -0.077 | 0.069 | -0.073 | -0.128 | -0.210 | -0.365 |
| 3 Corn | -0.144 | -2.528 | 0.021 | 1.891 | 0.422 | -0.009 | -0.346 | 2.182 |
| 4 Coconut, incl copra | -2.072 | -2.658 | -0.906 | 1.513 | -0.480 | -1.499 | -6.103 | -3.444 |
| 5 Sugarcane | -1.718 | 3.408 | 1.110 | 2.368 | 1.148 | 1.291 | 7.606 | 4.198 |
| 6 Banana & other fruits & nuts | -5.027 | -4.358 | -1.806 | 3.104 | -0.937 | -3.053 | -12.077 | -7.719 |
| 7 Vegetables | 4.952 | 8.854 | 2.251 | 4.904 | 2.616 | 4.208 | 27.785 | 18.931 |
| 8 Rootcrops | 3.588 | 2.264 | 1.817 | 1.824 | 1.602 | 2.596 | 13.692 | 11.428 |
| 9 Other commercial crops | 4.913 | 5.671 | 2.411 | 7.977 | 2.676 | 4.456 | 28.105 | 22.434 |
| 10 Hogs | 0.962 | 0.847 | 0.406 | 1.093 | 0.414 | 0.769 | 4.491 | 3.644 |
| 11 Chicken & poultry products | 1.061 | 1.080 | 0.449 | 1.440 | 0.498 | 0.847 | 5.374 | 4.294 |
| 12 Other livestock | 1.296 | 1.100 | 0.546 | 1.291 | 0.536 | 1.004 | 5.773 | 4.674 |
| 13 Agricultural Services | 0.106 | 0.233 | -0.012 | 0.048 | 0.028 | 0.059 | 0.462 | 0.229 |
| 14 Marine fishing | -13.896 | 11.850 | -3.981 | 2.798 | -3.212 | -12.559 | -18.999 | -30.850 |
| 15 Inland fishing | -14.327 | -8.942 | -4.968 | -5.452 | -3.866 | -8.109 | -45.663 | -36.722 |
| 16 Forestry and logging | -2.765 | 0.404 | -0.550 | -0.858 | -0.839 | -1.976 | -6.584 | -6.988 |
| 17 Crude oil, coal and natural gas | -0.054 | -0.585 | -0.005 | -0.244 | -0.003 | -0.006 | -0.897 | -0.312 |
| 18 Other mining | -1.100 | 4.440 | -1.110 | 3.707 | -0.752 | -1.053 | 4.132 | -0.308 |
| 19 Rice and corn milling | -0.715 | -0.256 | -0.353 | -0.381 | -0.295 | -0.539 | -2.540 | -2.284 |
| 20 Sugar milling and refining | -0.390 | 0.374 | 0.064 | 0.136 | 0.097 | 0.071 | 0.354 | -0.020 |
| 21 Milk and dairy products | 0.199 | -0.260 | 0.075 | -0.115 | 0.086 | 0.047 | 0.032 | 0.292 |
| 22 Oils and fats | 0.920 | -1.726 | 0.605 | 1.049 | 0.482 | 0.612 | 1.942 | 3.669 |
| 23 Meat and meat products | 0.571 | 0.598 | 0.201 | 0.636 | 0.244 | 0.466 | 2.716 | 2.118 |
| 24 Flour milling | -0.070 | -0.009 | -0.008 | -0.014 | 0.003 | -0.027 | -0.125 | -0.116 |
| 25 Animal feeds | -0.594 | 2.009 | -0.515 | 0.006 | -0.203 | -0.241 | 0.463 | -1.546 |
| 26 Other foods | -3.747 | 0.544 | -0.547 | 1.028 | -0.053 | -0.417 | -3.192 | -3.736 |
| 27 Beverages and tobacco | 0.903 | 0.842 | 0.188 | 0.431 | 0.075 | 0.387 | 2.826 | 1.984 |
| 28 Textile and knitting mills | 3.092 | 0.756 | 2.336 | -1.379 | 1.020 | 1.091 | 6.916 | 6.160 |
| 29 Other made-up textile goods | 13.131 | 0.803 | 13.535 | -12.324 | 5.008 | 8.981 | 29.134 | 28.330 |
| 30 Garments, footwear, leather and rubber footwear | 76.139 | -3.871 | 75.866 | -75.808 | 30.929 | 34.135 | 137.390 | 141.261 |
| 31 Wood products | -5.887 | 2.329 | -1.848 | -1.393 | -1.997 | -4.058 | -12.855 | -15.183 |
| 32 Paper products | -0.521 | 0.047 | -0.261 | -0.559 | -0.789 | -0.480 | -2.563 | -2.610 |
| 33 Fertilizer | 0.042 | 0.045 | 0.012 | 0.039 | 0.009 | 0.025 | 0.170 | 0.126 |
| 34 Other rub. plastic & chem. products, except rub footwear | 1.795 | 1.796 | 0.712 | 0.999 | 0.425 | 1.071 | 6.798 | 5.003 |
| 35 Products of coal and petroleum | 0.025 | 0.888 | 0.078 | 0.539 | 0.053 | 0.118 | 1.702 | 0.813 |
| 36 Non-ferrous basic metal products | -0.925 | 2.365 | -0.507 | 1.263 | -0.364 | -0.595 | 1.237 | -1.128 |
| 37 Cement, basic metals & non-metallic mineral products | -1.096 | 0.258 | -0.508 | 0.236 | -0.395 | -0.533 | -2.037 | -2.296 |
| 38 Semi-conductors | 37.522 | -5.555 | -1.778 | 2.241 | -0.523 | 40.023 | 71.930 | 77.485 |
| 39 Metal products and non-electrical machineries | 0.716 | 0.201 | 0.019 | -1.479 | 0.046 | -0.009 | -0.506 | -0.707 |
| 40 Electrical machinery, equipment and parts | 0.123 | 0.507 | 0.206 | -1.170 | 0.040 | 0.096 | -0.198 | -0.705 |
| 41 Motor vehicles (Transport Equipment) | -1.619 | 0.526 | 0.008 | -0.322 | 0.191 | -1.174 | -2.390 | -2.916 |
| 42 Other manufacturing | -0.611 | 0.392 | -0.063 | -0.953 | -0.299 | -0.337 | -1.871 | -2.263 |
| 43 Construction | -34.705 | 5.528 | -17.738 | -3.407 | -4.206 | -18.485 | -73.014 | -78.542 |
| 44 Electricity, gas and water | 1.384 | 0.932 | 0.489 | 0.475 | 0.224 | 0.816 | 4.321 | 3.389 |
| 45 Transportation and communication services | 14.809 | 18.782 | 4.335 | 13.867 | 3.270 | 9.355 | 64.418 | 45.636 |
| 46 Trade, storage and warehousing | 18.812 | 6.594 | 6.520 | 8.033 | 5.767 | 8.752 | 54.478 | 47.884 |
| 47 Banks and non-banks | 3.851 | 3.184 | 1.281 | 0.315 | 0.854 | 2.420 | 11.905 | 8.721 |
| 48 Life and non-life insurance and real estate | 2.266 | 2.778 | 0.804 | 1.178 | 0.651 | 1.547 | 9.225 | 6.447 |
| 49 Government services | -82.864 | -47.106 | -23.188 | 0.766 | -12.758 | -49.324 | -214.474 | -167.368 |
| 50 Other services | 16.171 | 17.853 | 5.144 | 8.511 | 3.764 | 3.767 | 55.210 | 37.357 |
| Total | 28.023 | 34.129 | 57.930 | -30.246 | 28.844 | 19.937 | 138.617 | 104.488 |

Table 5: Simulation Results Using the 1994 APEX Model**5a. Change in Implicit Tariff and Export Value (EV) - Import Invoice (IV): 1998-1999**

(change is [present / previous - 1], unless otherwise stated)

| | Sectors | Change in Implicit Tariff | Change in EV/IV* | Change in EV/IV + Implicit Tariff |
|----|--|------------------------------|---------------------|--------------------------------------|
| 1 | Irrigated Palay | 0.0000 | 0.0902 | 0.0902 |
| 2 | Non-irrigated palay | 0.0000 | 0.0902 | 0.0902 |
| 3 | Corn | 0.0000 | -0.0268 | -0.0268 |
| 4 | Coconut, incl copra | 0.0000 | 0.0000 | 0.0000 |
| 5 | Sugarcane | 0.0000 | 0.0767 | 0.0767 |
| 6 | Banana & other fruits & nuts | -0.2176 | 0.0270 | -0.1906 |
| 7 | Vegetables | -0.0756 | 0.0213 | -0.0543 |
| 8 | Rootcrops | 0.0000 | 0.0000 | 0.0000 |
| 9 | Other commercial crops | -0.2161 | 0.0105 | -0.2056 |
| 10 | Hogs | 0.0000 | 0.0000 | 0.0000 |
| 11 | Chicken & poultry products | -0.1916 | 0.1355 | -0.0561 |
| 12 | Other livestock | -0.0096 | -0.0156 | -0.0252 |
| 13 | Agricultural Services | 0.0000 | -0.0036 | -0.0036 |
| 14 | Marine fishing | -0.0007 | 0.0000 | -0.0007 |
| 15 | Inland fishing | -0.0032 | -0.0344 | -0.0376 |
| 16 | Forestry and logging | 0.0000 | 0.0541 | 0.0541 |
| 17 | Crude oil, coal and natural gas | 0.0000 | -0.0036 | -0.0036 |
| 18 | Other mining | -0.0025 | -0.0021 | -0.0047 |
| 19 | Rice and corn milling | -0.0756 | -0.1190 | -0.1946 |
| 20 | Sugar milling and refining | -0.1864 | 0.0292 | -0.1571 |
| 21 | Milk and dairy products | -0.0363 | -0.0071 | -0.0434 |
| 22 | Oils and fats | 0.0000 | 0.0155 | 0.0155 |
| 23 | Meat and meat products | -0.1947 | -0.0079 | -0.2026 |
| 24 | Flour milling | -0.0007 | -0.1045 | -0.1052 |
| 25 | Animal feeds | -0.0742 | -0.0360 | -0.1103 |
| 26 | Other foods | -0.1163 | -0.0351 | -0.1514 |
| 27 | Beverages and tobacco | -0.1768 | -0.0289 | -0.2057 |
| 28 | Textile and knitting mills | -0.1247 | 0.0126 | -0.1121 |
| 29 | Other made-up textile goods | -0.1834 | 0.0141 | -0.1692 |
| 30 | Garments, footwear, leather and rubber footwear | -0.2033 | -0.0025 | -0.2059 |
| 31 | Wood products | -0.1501 | 0.0029 | -0.1472 |
| 32 | Paper products | -0.2109 | 0.0000 | -0.2109 |
| 33 | Fertilizer | 0.0000 | 0.0186 | 0.0186 |
| 34 | Other rub. plastic & chem, products, except rub footwear | -0.0668 | 0.0000 | -0.0668 |
| 35 | Products of coal and petroleum | 0.0000 | -0.0054 | -0.0055 |
| 36 | Non-ferrous basic metal products | -0.0801 | 0.0000 | -0.0801 |
| 37 | Cement, basic metals & non-metallic mineral products | -0.1659 | -0.0132 | -0.1791 |
| 38 | Semi-conductors | -0.0002 | 0.0000 | -0.0002 |
| 39 | Metal products and non-electrical machineries | -0.0778 | 0.0000 | -0.0778 |
| 40 | Electrical machinery, equipment and parts | -0.0396 | 0.0000 | -0.0396 |
| 41 | Motor vehicles (Transport Equipment) | 0.0035 | 0.0000 | 0.0035 |
| 42 | Other manufacturing | -0.1331 | 0.0000 | -0.1331 |
| 43 | Construction | 0.0000 | 0.0000 | 0.0000 |
| 44 | Electricity, gas and water | 0.0000 | 0.0000 | 0.0000 |
| 45 | Transportation and communication services | 0.0000 | 0.0000 | 0.0000 |
| 46 | Trade, storage and warehousing | 0.0000 | 0.0000 | 0.0000 |
| 47 | Banks and non-banks | 0.0000 | 0.0000 | 0.0000 |
| 48 | Life and non-life insurance and real estate | 0.0000 | 0.0000 | 0.0000 |
| 49 | Government services | 0.0000 | 0.0000 | 0.0000 |
| 50 | Other services | 0.0000 | 0.0000 | 0.0000 |

* ratio between export value (of exporting country) and invoice value (Philippine Imports). A ratio greater than 1 means under-invoicing; equal to 1 true value of imports is reflected; and greater than 1 overinvoicing.

5b. Macro Results

| | Macro Items | Change in Implicit Tariff | Change in EV/IV | Change in EV/IV + Implicit Tariff |
|---|--|------------------------------|--------------------|--------------------------------------|
| 1 | Change in Real GDP | 0.0705 | -0.0148 | 0.0559 |
| 2 | Change in Total Government Revenue (in levels) | -0.1849 | 0.0000 | -0.1856 |
| 3 | Change in Total Government Expenditure (in levels) | -0.0136 | 0.0000 | -0.0138 |
| 4 | Change in Aggregate Tariff Revenue | -0.0635 | -0.0029 | -0.0668 |
| 5 | Change in Exports (In Foreign Currency) | 0.0049 | -0.0004 | 0.0045 |
| 6 | Change in Imports (In Foreign Currency) | 0.0037 | 0.0001 | 0.0038 |
| 7 | Change in Gross Income of Households | | | |
| | HH1 | 0.0053 | 0.0001 | 0.0054 |
| | HH2 | 0.0028 | 0.0000 | 0.0028 |
| | HH3 | 0.0029 | 0.0000 | 0.0029 |
| | HH4 | 0.0029 | 0.0000 | 0.0030 |
| | HH5 | 0.0034 | 0.0001 | 0.0035 |
| 8 | Change in Labor Income of Households | | | |
| | HH1 | 0.0043 | 0.0001 | 0.0044 |
| | HH2 | 0.0041 | 0.0001 | 0.0043 |
| | HH3 | 0.0040 | 0.0001 | 0.0041 |
| | HH4 | 0.0039 | 0.0001 | 0.0040 |
| | HH5 | 0.0032 | 0.0002 | 0.0033 |
| 9 | Change in Employment ('000): | | | |
| | Agriculture (including fishery & forestry) | -1.7581 | 0.8115 | -0.9752 |
| | Industry (including construction & utilities) | 29.0534 | -2.6147 | 26.6129 |
| | Service Sector | 1.5487 | 0.3838 | 1.9205 |
| | - Government Service | -12.7579 | 0.2164 | -12.6388 |
| | Total: | | | |
| | - Including Government Service | 28.8439 | -1.4195 | 27.5581 |
| | - Excluding Government Service | 41.6019 | -1.6359 | 40.1970 |

5c. Results on Sectoral Supply

| | I. Total Supply (Domestic + Imports) | Change in Implicit Tariff | Change in EV/IV | Change in EV/IV + Implicit Tariff |
|----|--|------------------------------|--------------------|--------------------------------------|
| 1 | Irrigated Palay | -0.0062 | -0.1112 | -0.1175 |
| 2 | Non-irrigated palay | -0.0059 | -0.0577 | -0.0637 |
| 3 | Corn | -0.0033 | 0.0134 | 0.0101 |
| 4 | Coconut, incl copra | -0.0024 | 0.0001 | -0.0023 |
| 5 | Sugarcane | -0.0003 | -0.0002 | -0.0005 |
| 6 | Banana & other fruits & nuts | 0.0335 | -0.0045 | 0.0292 |
| 7 | Vegetables | -0.0004 | -0.0019 | -0.0023 |
| 8 | Rootcrops | 0.0003 | 0.0001 | 0.0004 |
| 9 | Other commercial crops | -0.0028 | 0.0002 | -0.0026 |
| 10 | Hogs | 0.0010 | 0.0001 | 0.0011 |
| 11 | Chicken & poultry products | 0.0095 | -0.0026 | 0.0070 |
| 12 | Other livestock | 0.0075 | 0.0025 | 0.0101 |
| 13 | Agricultural Services | -0.0015 | 0.0001 | -0.0015 |
| 14 | Marine fishing | -0.0014 | 0.0003 | -0.0010 |
| 15 | Inland fishing | -0.0042 | 0.0000 | -0.0042 |
| 16 | Forestry and logging | 0.0176 | -0.0064 | 0.0113 |
| 17 | Crude oil, coal and natural gas | -0.0013 | -0.0004 | -0.0017 |
| 18 | Other mining | -0.0044 | 0.0002 | -0.0042 |
| 19 | Rice and corn milling | 0.0315 | 0.0541 | 0.0858 |
| 20 | Sugar milling and refining | 0.2250 | -0.0355 | 0.1899 |
| 21 | Milk and dairy products | 0.0038 | 0.0008 | 0.0047 |
| 22 | Oils and fats | 0.0094 | -0.0043 | 0.0051 |
| 23 | Meat and meat products | -0.0010 | 0.0004 | -0.0007 |
| 24 | Flour milling | -0.0023 | 0.0156 | 0.0133 |
| 25 | Animal feeds | 0.0237 | 0.0130 | 0.0367 |
| 26 | Other foods | 0.0024 | 0.0017 | 0.0041 |
| 27 | Beverages and tobacco | 0.0138 | 0.0023 | 0.0162 |
| 28 | Textile and knitting mills | 0.0330 | -0.0031 | 0.0301 |
| 29 | Other made-up textile goods | 0.0756 | -0.0080 | 0.0680 |
| 30 | Garments, footwear, leather and rubber footwear | 0.0572 | -0.0044 | 0.0530 |
| 31 | Wood products | -0.0028 | 0.0000 | -0.0028 |
| 32 | Paper products | -0.0022 | 0.0000 | -0.0022 |
| 33 | Fertilizer | 0.0027 | -0.0005 | 0.0022 |
| 34 | Other rub. plastic & chem, products, except rub footwear | 0.0025 | 0.0000 | 0.0025 |
| 35 | Products of coal and petroleum | 0.0002 | 0.0001 | 0.0003 |
| 36 | Non-ferrous basic metal products | 0.0058 | 0.0002 | 0.0060 |
| 37 | Cement, basic metals & non-metallic mineral products | -0.0003 | 0.0004 | 0.0001 |
| 38 | Semi-conductors | -0.0076 | -0.0002 | -0.0076 |
| 39 | Metal products and non-electrical machineries | -0.0006 | 0.0004 | -0.0002 |
| 40 | Electrical machinery, equipment and parts | 0.0002 | 0.0001 | 0.0002 |
| 41 | Motor vehicles (Transport Equipment) | 0.0006 | 0.0001 | 0.0007 |
| 42 | Other manufacturing | -0.0002 | 0.0000 | -0.0002 |
| 43 | Construction | -0.0027 | 0.0004 | -0.0023 |
| 44 | Electricity, gas and water | -0.0003 | 0.0000 | -0.0004 |
| 45 | Transportation and communication services | 0.0029 | 0.0003 | 0.0032 |
| 46 | Trade, storage and warehousing | -0.0003 | 0.0000 | -0.0003 |
| 47 | Banks and non-banks | -0.0005 | 0.0000 | -0.0004 |
| 48 | Life and non-life insurance and real estate | 0.0039 | 0.0004 | 0.0042 |
| 49 | Government services | -0.0063 | 0.0001 | -0.0063 |
| 50 | Other services | 0.0014 | 0.0002 | 0.0016 |

| | II. Domestic Supply | Change in Implicit Tariff | Change in EV/IV | Change in EV/IV + Implicit Tariff |
|----|--|--------------------------------------|----------------------------|--|
| 1 | Irrigated Palay | -0.0030 | 0.0000 | -0.0030 |
| 2 | Non-irrigated palay | -0.0021 | 0.0000 | -0.0021 |
| 3 | Corn | -0.0011 | 0.0001 | -0.0010 |
| 4 | Coconut, incl copra | -0.0020 | 0.0001 | -0.0018 |
| 5 | Sugarcane | 0.0009 | -0.0003 | 0.0006 |
| 6 | Banana & other fruits & nuts | -0.0020 | 0.0001 | -0.0019 |
| 7 | Vegetables | 0.0009 | -0.0001 | 0.0008 |
| 8 | Rootcrops | 0.0014 | 0.0000 | 0.0015 |
| 9 | Other commercial crops | 0.0003 | 0.0002 | 0.0005 |
| 10 | Hogs | 0.0015 | 0.0003 | 0.0018 |
| 11 | Chicken & poultry products | 0.0012 | 0.0003 | 0.0015 |
| 12 | Other livestock | 0.0013 | 0.0003 | 0.0016 |
| 13 | Agricultural Services | -0.0007 | 0.0000 | -0.0007 |
| 14 | Marine fishing | -0.0021 | 0.0000 | -0.0021 |
| 15 | Inland fishing | -0.0037 | 0.0000 | -0.0037 |
| 16 | Forestry and logging | -0.0032 | -0.0002 | -0.0034 |
| 17 | Crude oil, coal and natural gas | -0.0013 | -0.0005 | -0.0018 |
| 18 | Other mining | -0.0033 | 0.0000 | -0.0033 |
| 19 | Rice and corn milling | -0.0029 | 0.0000 | -0.0029 |
| 20 | Sugar milling and refining | 0.0008 | -0.0003 | 0.0005 |
| 21 | Milk and dairy products | 0.0015 | 0.0004 | 0.0019 |
| 22 | Oils and fats | 0.0077 | 0.0002 | 0.0078 |
| 23 | Meat and meat products | 0.0016 | 0.0004 | 0.0020 |
| 24 | Flour milling | -0.0004 | -0.0005 | -0.0009 |
| 25 | Animal feeds | -0.0063 | -0.0025 | -0.0088 |
| 26 | Other foods | -0.0011 | 0.0007 | -0.0004 |
| 27 | Beverages and tobacco | -0.0003 | 0.0000 | -0.0004 |
| 28 | Textile and knitting mills | 0.0065 | -0.0006 | 0.0060 |
| 29 | Other made-up textile goods | 0.0531 | -0.0060 | 0.0474 |
| 30 | Garments, footwear, leather and rubber footwear | 0.0363 | -0.0033 | 0.0331 |
| 31 | Wood products | -0.0040 | -0.0002 | -0.0042 |
| 32 | Paper products | -0.0060 | 0.0000 | -0.0060 |
| 33 | Fertilizer | 0.0009 | 0.0000 | 0.0009 |
| 34 | Other rub. plastic & chem, products, except rub footwear | 0.0016 | 0.0000 | 0.0016 |
| 35 | Products of coal and petroleum | 0.0000 | 0.0000 | 0.0000 |
| 36 | Non-ferrous basic metal products | -0.0029 | 0.0000 | -0.0029 |
| 37 | Cement, basic metals & non-metallic mineral products | -0.0040 | -0.0002 | -0.0042 |
| 38 | Semi-conductors | -0.0043 | -0.0001 | -0.0043 |
| 39 | Metal products and non-electrical machineries | -0.0005 | 0.0005 | 0.0000 |
| 40 | Electrical machinery, equipment and parts | -0.0008 | 0.0001 | -0.0008 |
| 41 | Motor vehicles (Transport Equipment) | 0.0007 | 0.0001 | 0.0008 |
| 42 | Other manufacturing | -0.0035 | 0.0000 | -0.0036 |
| 43 | Construction | -0.0021 | 0.0003 | -0.0018 |
| 44 | Electricity, gas and water | 0.0007 | 0.0000 | 0.0007 |
| 45 | Transportation and communication services | 0.0005 | 0.0000 | 0.0006 |
| 46 | Trade, storage and warehousing | 0.0009 | 0.0000 | 0.0009 |
| 47 | Banks and non-banks | 0.0008 | 0.0000 | 0.0009 |
| 48 | Life and non-life insurance and real estate | 0.0018 | 0.0002 | 0.0019 |
| 49 | Government services | -0.0059 | 0.0001 | -0.0059 |
| 50 | Other services | 0.0008 | 0.0001 | 0.0009 |

| | III. Imports | Change in Implicit Tariff | Change in EV/IV | Change in EV/IV + Implicit Tariff |
|----|--|--------------------------------------|----------------------------|--|
| 1 | Irrigated Palay | -0.0033 | -0.1112 | -0.1145 |
| 2 | Non-irrigated palay | -0.0038 | -0.0577 | -0.0615 |
| 3 | Corn | -0.0022 | 0.0133 | 0.0111 |
| 4 | Coconut, incl copra | -0.0005 | 0.0000 | -0.0005 |
| 5 | Sugarcane | -0.0012 | 0.0001 | -0.0011 |
| 6 | Banana & other fruits & nuts | 0.0355 | -0.0046 | 0.0310 |
| 7 | Vegetables | -0.0013 | -0.0018 | -0.0031 |
| 8 | Rootcrops | -0.0011 | 0.0001 | -0.0010 |
| 9 | Other commercial crops | -0.0031 | 0.0000 | -0.0031 |
| 10 | Hogs | -0.0005 | -0.0002 | -0.0007 |
| 11 | Chicken & poultry products | 0.0083 | -0.0029 | 0.0055 |
| 12 | Other livestock | 0.0062 | 0.0022 | 0.0085 |
| 13 | Agricultural Services | -0.0008 | 0.0000 | -0.0008 |
| 14 | Marine fishing | 0.0007 | 0.0003 | 0.0012 |
| 15 | Inland fishing | -0.0005 | 0.0000 | -0.0005 |
| 16 | Forestry and logging | 0.0208 | -0.0062 | 0.0146 |
| 17 | Crude oil, coal and natural gas | 0.0000 | 0.0000 | 0.0001 |
| 18 | Other mining | -0.0011 | 0.0002 | -0.0009 |
| 19 | Rice and corn milling | 0.0344 | 0.0540 | 0.0887 |
| 20 | Sugar milling and refining | 0.2242 | -0.0352 | 0.1894 |
| 21 | Milk and dairy products | 0.0023 | 0.0004 | 0.0027 |
| 22 | Oils and fats | 0.0017 | -0.0045 | -0.0028 |
| 23 | Meat and meat products | -0.0026 | 0.0000 | -0.0026 |
| 24 | Flour milling | -0.0019 | 0.0161 | 0.0143 |
| 25 | Animal feeds | 0.0299 | 0.0155 | 0.0455 |
| 26 | Other foods | 0.0035 | 0.0010 | 0.0045 |
| 27 | Beverages and tobacco | 0.0141 | 0.0024 | 0.0166 |
| 28 | Textile and knitting mills | 0.0265 | -0.0025 | 0.0241 |
| 29 | Other made-up textile goods | 0.0225 | -0.0020 | 0.0205 |
| 30 | Garments, footwear, leather and rubber footwear | 0.0209 | -0.0011 | 0.0199 |
| 31 | Wood products | 0.0012 | 0.0002 | 0.0014 |
| 32 | Paper products | 0.0038 | 0.0000 | 0.0038 |
| 33 | Fertilizer | 0.0018 | -0.0005 | 0.0013 |
| 34 | Other rub. plastic & chem, products, except rub footwear | 0.0009 | -0.0001 | 0.0009 |
| 35 | Products of coal and petroleum | 0.0001 | 0.0001 | 0.0003 |
| 36 | Non-ferrous basic metal products | 0.0086 | 0.0002 | 0.0088 |
| 37 | Cement, basic metals & non-metallic mineral products | 0.0037 | 0.0006 | 0.0043 |
| 38 | Semi-conductors | -0.0033 | -0.0001 | -0.0033 |
| 39 | Metal products and non-electrical machineries | -0.0002 | -0.0001 | -0.0002 |
| 40 | Electrical machinery, equipment and parts | 0.0010 | 0.0000 | 0.0010 |
| 41 | Motor vehicles (Transport Equipment) | -0.0001 | 0.0000 | -0.0001 |
| 42 | Other manufacturing | 0.0034 | 0.0000 | 0.0034 |
| 43 | Construction | -0.0006 | 0.0001 | -0.0005 |
| 44 | Electricity, gas and water | -0.0011 | 0.0000 | -0.0011 |
| 45 | Transportation and communication services | 0.0024 | 0.0002 | 0.0026 |
| 46 | Trade, storage and warehousing | -0.0012 | 0.0000 | -0.0013 |
| 47 | Banks and non-banks | -0.0013 | 0.0000 | -0.0013 |
| 48 | Life and non-life insurance and real estate | 0.0021 | 0.0002 | 0.0023 |
| 49 | Government services | -0.0004 | 0.0000 | -0.0004 |
| 50 | Other services | 0.0006 | 0.0001 | 0.0006 |

5d. Results on Sectoral Producer Price (Domestic)

| | Change in Implicit Tariff | Change in EV/IV | Change in EV/IV + Implicit Tariff |
|---|------------------------------|--------------------|--------------------------------------|
| 1 Irrigated Palay | -0.0006 | -0.0002 | -0.0008 |
| 2 Non-irrigated palay | -0.0019 | -0.0003 | -0.0022 |
| 3 Corn | -0.0001 | -0.0001 | -0.0001 |
| 4 Coconut, incl copra | 0.0000 | 0.0000 | 0.0000 |
| 5 Sugarcane | 0.0035 | -0.0005 | 0.0030 |
| 6 Banana & other fruits & nuts | 0.0000 | 0.0000 | 0.0000 |
| 7 Vegetables | 0.0034 | -0.0007 | 0.0027 |
| 8 Rootcrops | 0.0036 | -0.0002 | 0.0034 |
| 9 Other commercial crops | 0.0000 | 0.0000 | 0.0000 |
| 10 Hogs | 0.0041 | 0.0001 | 0.0042 |
| 11 Chicken & poultry products | 0.0039 | 0.0003 | 0.0042 |
| 12 Other livestock | 0.0040 | 0.0003 | 0.0042 |
| 13 Agricultural Services | 0.0029 | -0.0001 | 0.0028 |
| 14 Marine fishing | 0.0000 | 0.0000 | 0.0000 |
| 15 Inland fishing | 0.0000 | 0.0000 | 0.0000 |
| 16 Forestry and logging | 0.0010 | -0.0002 | 0.0008 |
| 17 Crude oil, coal and natural gas | 0.0022 | -0.0003 | 0.0019 |
| 18 Other mining | 0.0000 | 0.0000 | 0.0000 |
| 19 Rice and corn milling | 0.0004 | -0.0001 | 0.0003 |
| 20 Sugar milling and refining | 0.0000 | 0.0000 | 0.0000 |
| 21 Milk and dairy products | -0.0053 | -0.0013 | -0.0066 |
| 22 Oils and fats | 0.0000 | 0.0000 | 0.0000 |
| 23 Meat and meat products | 0.0043 | 0.0002 | 0.0045 |
| 24 Flour milling | -0.0015 | 0.0000 | -0.0015 |
| 25 Animal feeds | -0.0017 | -0.0007 | -0.0025 |
| 26 Other foods | 0.0000 | 0.0000 | 0.0000 |
| 27 Beverages and tobacco | -0.0013 | -0.0001 | -0.0014 |
| 28 Textile and knitting mills | -0.0079 | 0.0008 | -0.0072 |
| 29 Other made-up textile goods | 0.0000 | 0.0000 | 0.0000 |
| 30 Garments, footwear, leather and rubber footwear | 0.0000 | 0.0000 | 0.0000 |
| 31 Wood products | 0.0000 | 0.0000 | 0.0000 |
| 32 Paper products | -0.0138 | 0.0001 | -0.0138 |
| 33 Fertilizer | 0.0006 | 0.0000 | 0.0006 |
| 34 Other rub. plastic & chem, products, except rub footwear | -0.0003 | 0.0001 | -0.0003 |
| 35 Products of coal and petroleum | 0.0005 | -0.0005 | 0.0000 |
| 36 Non-ferrous basic metal products | 0.0000 | 0.0000 | 0.0000 |
| 37 Cement, basic metals & non-metallic mineral products | -0.0029 | -0.0003 | -0.0031 |
| 38 Semi-conductors | 0.0000 | 0.0000 | 0.0000 |
| 39 Metal products and non-electrical machineries | -0.0071 | -0.0004 | -0.0076 |
| 40 Electrical machinery, equipment and parts | -0.0014 | -0.0001 | -0.0015 |
| 41 Motor vehicles (Transport Equipment) | -0.0001 | 0.0000 | -0.0001 |
| 42 Other manufacturing | -0.0041 | 0.0001 | -0.0040 |
| 43 Construction | 0.0000 | 0.0000 | 0.0000 |
| 44 Electricity, gas and water | 0.0031 | -0.0001 | 0.0030 |
| 45 Transportation and communication services | 0.0025 | -0.0001 | 0.0024 |
| 46 Trade, storage and warehousing | 0.0039 | 0.0000 | 0.0039 |
| 47 Banks and non-banks | 0.0041 | 0.0001 | 0.0042 |
| 48 Life and non-life insurance and real estate | 0.0055 | 0.0002 | 0.0057 |
| 49 Government services | -0.0002 | 0.0000 | -0.0002 |
| 50 Other services | 0.0018 | -0.0001 | 0.0017 |

5e. Results on Sectoral Employment ('000)

| | Sectors | Change in Implicit Tariff | Change in EV/IV | Change in EV/IV + Implicit Tariff |
|----|--|------------------------------|--------------------|--------------------------------------|
| 1 | Irrigated Palay | -2.2911 | 0.0222 | -2.2815 |
| 2 | Non-irrigated palay | -0.0733 | 0.0010 | -0.0726 |
| 3 | Corn | 0.4221 | 0.1123 | 0.5366 |
| 4 | Coconut, incl copra | -0.4795 | 0.1715 | -0.3109 |
| 5 | Sugarcane | 1.1479 | -0.1138 | 1.0365 |
| 6 | Banana & other fruits & nuts | -0.9365 | 0.2971 | -0.6451 |
| 7 | Vegetables | 2.6159 | -0.1279 | 2.5010 |
| 8 | Rootcrops | 1.6020 | 0.0367 | 1.6472 |
| 9 | Other commercial crops | 2.6760 | 0.3122 | 3.0015 |
| 10 | Hogs | 0.4135 | 0.0474 | 0.4629 |
| 11 | Chicken & poultry products | 0.4976 | 0.0597 | 0.5596 |
| 12 | Other livestock | 0.5362 | 0.0560 | 0.5948 |
| 13 | Agricultural Services | 0.0278 | 0.0018 | 0.0300 |
| 14 | Marine fishing | -3.2119 | 0.0043 | -3.2355 |
| 15 | Inland fishing | -3.8660 | -0.0085 | -3.8967 |
| 16 | Forestry and logging | -0.8387 | -0.0607 | -0.9031 |
| 17 | Crude oil, coal and natural gas | -0.0031 | -0.0015 | -0.0046 |
| 18 | Other mining | -0.7520 | -0.0007 | -0.7529 |
| 19 | Rice and corn milling | -0.2949 | 0.0015 | -0.2947 |
| 20 | Sugar milling and refining | 0.0974 | -0.0194 | 0.0782 |
| 21 | Milk and dairy products | 0.0860 | 0.0149 | 0.1012 |
| 22 | Oils and fats | 0.4818 | 0.0084 | 0.4918 |
| 23 | Meat and meat products | 0.2438 | 0.0332 | 0.2784 |
| 24 | Flour milling | 0.0026 | -0.0040 | -0.0015 |
| 25 | Animal feeds | -0.2028 | -0.0925 | -0.2960 |
| 26 | Other foods | -0.0534 | 0.1959 | 0.1408 |
| 27 | Beverages and tobacco | 0.0755 | -0.0081 | 0.0685 |
| 28 | Textile and knitting mills | 1.0199 | -0.0783 | 0.9463 |
| 29 | Other made-up textile goods | 5.0085 | -0.5568 | 4.4809 |
| 30 | Garments, footwear, leather and rubber footwear | 30.9290 | -2.7239 | 28.3353 |
| 31 | Wood products | -1.9970 | -0.1245 | -2.1291 |
| 32 | Paper products | -0.7894 | -0.0010 | -0.7937 |
| 33 | Fertilizer | 0.0095 | -0.0001 | 0.0095 |
| 34 | Other rub. plastic & chem, products, except rub footwear | 0.4249 | 0.0004 | 0.4284 |
| 35 | Products of coal and petroleum | 0.0533 | 0.0008 | 0.0544 |
| 36 | Non-ferrous basic metal products | -0.3635 | -0.0028 | -0.3672 |
| 37 | Cement, basic metals & non-metallic mineral products | -0.3953 | -0.0187 | -0.4159 |
| 38 | Semi-conductors | -0.5231 | -0.0211 | -0.5271 |
| 39 | Metal products and non-electrical machineries | 0.0462 | 0.0278 | 0.0726 |
| 40 | Electrical machinery, equipment and parts | 0.0402 | 0.0034 | 0.0430 |
| 41 | Motor vehicles (Transport Equipment) | 0.1910 | 0.0042 | 0.1968 |
| 42 | Other manufacturing | -0.2988 | -0.0073 | -0.3052 |
| 43 | Construction | -4.2065 | 0.7635 | -3.4420 |
| 44 | Electricity, gas and water | 0.2236 | -0.0081 | 0.2169 |
| 45 | Transportation and communication services | 3.2701 | 0.1250 | 3.4174 |
| 46 | Trade, storage and warehousing | 5.7671 | -0.0930 | 5.7002 |
| 47 | Banks and non-banks | 0.8537 | 0.0005 | 0.8604 |
| 48 | Life and non-life insurance and real estate | 0.6512 | 0.0251 | 0.6805 |
| 49 | Government services | -12.7579 | 0.2164 | -12.6388 |
| 50 | Other services | 3.7645 | 0.1097 | 3.9008 |
| | Total | 28.8439 | -1.4195 | 27.5581 |

Figure 1: Implicit Tariff
Major Sectors

