Table 15

U.S. AND JAPAN CONTRIBUTIONS TO CHANGES IN PHILIPPINE IMPORT PRICE INDEX AND EXPORT VALUE, 1971-1976

Item	1971-72	1972-73	1973-74	1974-75	1975-76
Import price index*					
United States	.070	.128	.068	.494	n.a.
Japan	.469	.395	.110	.015	n.a.
Export value					
United States	.411	.290	.636	1.072	1.281
Japan	.818	.402	.322	.198	-.815

*Based on export unit value for manufactures from the two countries.

Source: Calculated by the author as described in the text.

the United States and Japan.[30] Overall, significant export instability is attributable to the United States during 1974-1976; on the other hand Japan contributed heavily in 1972 and, in the opposite direction to the total export change, in 1976.

The trade balance figures given in the last line of Table 16 indicate that Philippine trade with the United States has consistently been on the surplus side during the period, except in 1975 when sugar exports fell drastically due to the loss of preferential treatment among U.S. importers with the expiration of both the Laurel-Langley agreement and the U.S. Sugar Act in the preceding year. Among other important export products to the United States, copra ceased to be exported significantly beginning 1974, giving way to the expansion of coconut oil exports to the United States. Shipment of canned pineapples has also increased substantially since 1973 despite the observed downturn of the U.S. economy.

While imports from Japan continued to increase during the period (cf. Table 17), export receipts suffered progressive cuts immediately after the export boom of 1973-74. The result was a continuous deterioration of the Philippine trade balance with Japan from the $156 million surplus in 1973 to a deficit of $355 million in 1976, the latter amount representing more than one-third of the total merchandise trade deficit for that year. The principal export commodities heavily dependent on the Japanese market, viz., logs and lumber, copper concentrates, molasses and bananas, appear to

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[30] It is worth noting that the value of Philippine exports to each of these two countries declined slightly in 1972 and relatively sharply in 1975. In 1976, however, exports to the United States increased even as exports to Japan declined further.

Table 16

PHILIPPINE TRADE WITH THE UNITED STATES, 1971-1976

Item	1971	1972	1973	1974	1975	1976
Imports ($ million)	291.2	312.6	449.5	733.0	754.3	801.8
	(24.6)	(25.4)	(28.2)	(23.3)	(21.8)	(22.2
Exports ($ million)	459.5	446.6	676.0	1,156.7	664.3	924.4
	(40.4)	(40.4)	(35.8)	(42.5)	(28.9)	(35.9
Sugar (thousand m.t.)	1,344.7	1,210.9	1,410.7	1,275.6	328.7	960.9
	(100.0)	(100.0)	(95.7)	(82.7)	(33.8)	(65.6
Copra (thousand m.t.)	187.2	222.4	211.3	10.0	-	-
	(27.0)	(24.0)	(28.8)	(3.7)		
Coconut oil (thousand m.t.)	292.8	336.3	271.7	298.2	473.8	556.4
	(73.7)	(72.2)	(63.6)	(71.7)	(77.1)	(64.5
Pineapple (thousand m.t.)	55.1	53.3	40.6	79.3	86.1	138.3
	(54.9)	(49.3)	(44.7)	(63.3)	(74.0)	(70.5
Trade balance ($ million)	168.3	134.0	226.5	423.7	-90.0	122.6

Notes: Numbers in parentheses are percentages of total imports or export for the year.

m.t. = metric ton.

Sources: Central Bank of the Philippines, Annual Report (1976) and Statistical Bulletin (December 1975).

Table 17

PHILIPPINE TRADE WITH JAPAN, 1971-1976

Item	1971	1972	1973	1974	1975	1976
Imports ($ million)	359.1	390.8	518.5	864.6	966.3	976.4
	(30.3)	(31.8)	(32.5)	(27.5)	(27.9)	(26.9)
Exports ($ million)	398.6	373.4	674.5	949.2	865.0	621.5
	(35.1)	(33.8)	(35.8)	(34.8)	(37.7)	(24.1)
Bananas (thousand m.t.)	266.6	412.0	458.0	644.4	741.8	701.3
	(99.8)	(97.5)	(98.3)	(97.2)	(90.2)	(89.1)
Logs & Lumber (thousand m.t.)	2,908.0	2,440.3	2,456.8	1,620.3	1,323.4	667.1
	(79.8)	(78.8)	(70.8)	(76.7)	(64.4)	(56.5)
Copper concentrates (thousand m.t.)	658.1	669.8	671.9	778.6	681.6	736.2
	(80.7)	(81.4)	(88.0)	(93.8)	(85.3)	(78.1)
Molasses (thousand m.t.)	392.8	325.9	549.5	612.8	589.6	n.a.
	(80.8)	(91.5)	(90.7)	(93.5)	(87.5)	
Trade balance ($ million)	39.5	-17.4	156.0	84.6	-101.3	-354.9

Notes: Numbers in parentheses are percentages of total imports or exports for the year.

m.t. = metric ton n.a. = not available

Sources: Central Bank of the Philippines, Annual Report (1976) and Statistical Bulletin (December 1975).

have been adversely affected by the recession in Japan in varying degrees. Logs and lumber exports show a sharply declining trend beginning 1973. The downturn for molasses and bananas came in 1975 and 1976, respectively. In the case of copper concentrates, it was widely publicized that contract obligations were being violated by Japanese importers trying to reduce inventories at the height of the recession; by 1976 a fairly strong recovery of copper exports seemed underway. While 55% of Philippine exports of sugar went to Japan in 1975 (amounting to $320 million), which constituted a remarkably large shift out of the traditional U.S. market, shipments in 1976 fell precipitously to $20 million, illustrating the high degree of uncertainty attending export sales of this commodity.

Table 18 gives data on capital inflows from Japan and the United States in the form of development loans[31] and net direct investment during 1971-1976. The terms of development loans are concessional, with interest rates mostly within 3-5% and maturities between 10 to 50 years inclusive of the grace period. The pattern of loan assistance by the two countries seems erratic, but there is no evidence of a significant effect of the recent economic instability, except possibly during 1976 for Japan which indicates a sharp drop. In the case of direct investments, the substantial improvement after 1972 may be attributed to the new investment climate engendered by the

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[31] The grant component of development assistance from bilateral sources to the Philippines has been relatively small, as exemplified by the amount of official grants from the United States averaging less than one million dollar annually during 1971-1976 according to Central Bank data). From multilateral sources, principally U.N. agencies, the average annual grant flow has been slightly above $12 million during the same period.

Table 18

DEVELOPMENT LOANS AND DIRECT INVESTMENT, 1971-1976
(in million U.S. dollars)

Item	1971	1972	1973	1974	1975	1976
Development loans						
United States*	28.88	69.12	26.20	36.50	50.06	70.68
Japan	48.56	57.07	61.74	56.20	60.35	33.01
Net Direct Investment						
United States	-1.21	-13.16	51.23	36.41	112.64	47.77
Japan	0.56	-1.31	0.25	8.30	13.59	17.74

*Includes PL 480 loans.

Sources: MEDIAD and Department of Economic Research, Central Bank of the Philippines (unpublished).

imposition of martial law which, as noted earlier, also served to countera any recessionary effects.

V. Policy Responses

In reacting to the unusually severe economic fluctuations in the ex sector in recent years, Philippine policymakers have had to contend also w some exogenous internal developments occurring during the period under stu This needs to be taken into account in the present discussion for a proper understanding of the conduct of economic policy from 1971 to 1976. Some reference would also be necessary to the policy adjustments made in the ea part of 1970 which effectively set the stage for later policy decisions. assessment of the policy actions taken as described below, together with t overall performance of the Philippine economy, is provided in the last par of this section.

1. Monetary and fiscal policy

As part of the stabilization program implemented in 1970 to accompa the de facto peso devaluation, a policy of monetary and fiscal restraint w adopted to reduce domestic liquidity and counter the anticipated inflation pressure. Reserve requirements against deposit liabilities of all banks were raised (by 2% in January and by another 2% in April), rediscount ceil of commercial banks were lowered and disqualifications from Central Bank r count windows were made. The overall effect was to hold down the growth o money supply to a modest 6.2%. Domestic credits of the monetary system increased by 10.9%, such a major shift in credit pattern from the public t the private sector in support of foreign exchange-earning production activ

A sharp reduction in public works and other government expenditures resulted in a net receipt of ₱107 million in its cash operations in 1970 (in contrast to an operational deficit of ₱934 million in 1969).

Restrictive monetary policy continuedthrough the third quarter of 1972, at which time two internal developments caused a policy shift toward expansion. In July and August a series of strong typhoons and floods brought heavy damage to the major food-producing agricultural regions, prompting the adoption of a Calamity Financing Program which could lend up to ₱200 million to financial institutions operating in the stricken areas. In September, following the proclamation of martial law, "the Central Bank extended some ₱375 million to banks on an emergency basis in order to allay uncertainty among the general public", preventing "the large withdrawals of bank deposits experienced during the first weeks of martial law from escalating into a major bank run" (Central Bank Annual Report 1972; p.4). The result was a 24% rise in money supply and a 17% increase in domestic credits in 1972, roughly double the corresponding increases in the preceding year. Fiscal policy apparently still aimed at reducing inflationary pressures even as expanded expenditures for reconstruction and rehabilitation had to be made; "the increase in domestically-generated money was basically a result of increased credits to the private sector as the substantial growth in government balances made the public sector a disinflationary factor" (Central Bank Annual Report 1972; p.6.).

The shortfalls in rice production during 1970-72 due to the occurrence of typhoons, floods and plant disease, together with the failure to procure adequate rice imports, weighed heavily on the inflation experience during the period (Bautista, 1976). In May 1973 the government embarked on a massive

credit expansion and fertilizer subsidy program called "Masagana 99" to ac
erate the recovery from damages to food crops and also in support of the l
held objective of food self-sufficiency. This program was designed for sm
farmers to obtain production credit without collateral, avail of improved
extension services and use modern farm practices. In the first six months
the program's operation, a total credit of ₱365 million was extended. The
major sources of credit were rural banks and the Philippine National Bank
government-owned commercial bank), funds being made available through redi
counts with the Central Bank.

Otherwise, contractionary monetary and fiscal policy prevailed in 19
as a reaction to the unparalleled expansion of the external sector which
experienced an overall surplus of $664 million in the balance of payments.
The Central Bank reduced its own credit operations, raised reserve require-
ments on marginal deposits on letters of credit, imposed reserves on deposi
substitute liabilities and sold in open market operations ₱2 billion worth
Certificates of Indebtedness (CBCIs). Current transactions of the national
government resulted in a surplus of ₱2.1 billion owing to an unprecedented
increase in operating receipts of 85% due to the record-setting collections
by the Bureau of Internal Revenue and Bureau of Customs (attributable to so
administrative tax and tariff reforms), while operating expenses rose by on
30%. Mainly as a result of the large surplus in the external account, mone
supply expanded by 21%, total domestic credits increasing by 16%.

The severe inflation being experienced in 1974 motivated anew the
adoption of contractionary monetary and fiscal policy. To moderate the expe
sion of domestic liquidity, the Central Bank transacted net sales of close

to ₱1.5 million worth of CBCIs. Interest rates on time deposits were raised to encourage longer term supply of investible funds. However, credit allocation to rural areas continued to be encouraged in support of on-going food production programs (Masagana 99 for rice production and the newly-introduced Masaganang Maisan for corn), as higher maximum loans per hectare were set and banking institutions were required to set aside a minimum of 25% of their loanable funds for agricultural credit purposes. There was a consequent growth of domestic credits by 31% in 1974, the highest in 25 years. Money supply registered an increase of 28% despite a substantial operating surplus of ₱2.8 billion in the government's cash operations; this is partly due to the overall balance of payments surplus of $110 million in 1974 as substantial inflows from nonmerchandise and capital accounts compensated for the trade deficit of $418 million.

Two tax policy measures introduced in the 1970s enabled the government to capture a portion of the windfall profits resulting from the export bonanza of 1973-74. The first derived from the Stabilization Tax Law of 1970 which imposed temporary taxes on traditional exports (from 4 to 10% ad valorem) to siphon off the gains from the February devaluation; this law was subsequently repealed but the export taxes were made permanent effective July 1, 1973 by its inclusion in the Customs and Tariff Code. Moreover, in February 1974, President Marcos announced the imposition of a higher additional tax on the premium derived by several export commodities from price increases which began in 1973. Rates of this premium export duty, ranging from 20 to 30%, were applied to the difference between the ruling export price and the base price as of February 1974 determined by the Bureau of Customs. When the

commodity price boom ended later in the year, the premium tax became ineffec ive (except for sugar in 1975), and even the regular export tax was temporar withdrawn on export commodities hardest hit by the world recession such as copper concentrates, wood products and cement. Table 19 gives the amounts c export and premium taxes collected each year during 1970-1976.

With inflation showing signs of substantial deceleration in 1975 and 1976, expansionary monetary and fiscal policy served to compensate for the deflationary impact of the balance of payments deficit. Liquidity-increasin measures were adopted by the Central Bank, whose credits expanded (by Decemb 1976) nearly three times the 1974 level. While there was continued support to food production programs, Central Bank loans and advances went up sharply due "mainly to increased borrowings on the part of the Government Service Insurance System (GSIS) for hotel assistance and other government financial institutions for hotel financing under repurchase agreement" (Central Bank Annual Report 1976; p.13). Total domestic credits increased by 38% in 1975 and 24% in 1976. In the latter year the national government incurred a deficit of ₱1,850 million in its cash operations, which was 2 1/2 times the deficit in 1975, relying chiefly on the issuance of Treasury bills and othe government securities--which has an expansionary influence on money supply. Overall, money in circulation increased by 14% in 1975 and 17% in 1976.

2. Foreign exchange policy

The Philippine peso was already in a floating rate system when the greater flexibility of the world's key currencies was initiated in the earl part of this decade. The foreign exchange rate, by which is normally meant the peso-U.S. dollar exchange rate, depended on the results of interbank

Table 19

EXPORT AND PREMIUM TAX COLLECTIONS, 1970-1976

(in million pesos)

Year	Stabilization Export Tax	Premium Export Tax	Total
1970	396.8	-	396.8
1971	548.7	-	548.7
1972	403.2	-	403.2
1973	286.9	-	286.9
1974	867.7	891.4	1,759.1
1975	581.8	872.9	1,454.7
1976	442.0	130.3	572.3

Source: Revenue Collection Office, Central Bank of the Philippines (unpublished).

trading, commercial banks taking "the initiative in influencing or respondi to demand and supply conditions in foreign exchange, particularly during th early months of the peso's release in the market" (Central Bank Annual Repo 1970; p.67) on February 21, 1970. Exchange rates of the peso with other foreign currencies were determined on the basis of the spot buying and selli rates in New York of these currencies vis-a-vis the U.S. dollar at the end the day preceding the actual purchase or sale in Manila.

While it has been officially claimed that a free exchange market was created and that the Central Bank would refrain from intervening in the for exchange market, the latter (or an agent bank acting on behalf of the Centr Bank) "stood ready to provide exchange at the current rate to maintain the stability of the exchange rate" (Central Bank Annual Report 1971; p.70). 1972, for example, the amount transacted by commercial banks was $240.3 million; during the same period the Central Bank sold foreign exchange amou ing to $129.0 million and bought $59.2 million. It is also worth noting th the exchange rate was allowed to float only within 4 1/2% below or above th interbank guiding rate, which is a weighted average of exchange rates for sales made in the preceding day.

The Central Bank's effective control of the peso-U.S. dollar exchan rate is also evident from the remarkable stability of the guiding rate duri the period August - December 1971 (cf. Appendix Table 4) at the height of dollar's weakening position in international exchange markets. A freely f ing peso would have shown some improvement in its exchange rate with the d as has taken place in the Hong Kong exchange market which showed new lows the December exchange rates of the peso with the U.S. dollar (note cross-r

from ₱6.870 in November to ₱6.808 in December and telegraphic cross-rates from ₱6.887 to ₱6.808). However, in the latter part of 1973 when the dollar was again being depreciated relative to other important currencies, there was a discernible improvement in the peso exchange rate. This might have been due to the substantial improvement in the country's balance of payments in a year in which the Central Bank transacted a net purchase of foreign exchange amounting to more than $300 million.

The Central Bank circular that introduced the floating rate also restricted the importation of certain types of commodities and remittance of invisibles, and placed capital movements under Central Bank control. In September 1972 a presidential decree restricted foreign travel by residents and from October to December other measures were adopted against blackmarketing of foreign currency. In 1973, the year which established a record surplus in the balance of payments, there was some liberalization of rules affecting foreign exchange transactions, e.g., those on foreign borrowings by export-oriented and pioneer industries, remittance of royalties or rentals on trademarks, patents and copyrights, and repatriation of foreign investments.

As one might expect, this movement toward foreign exchange liberalization was reversed in the subsequent years of worsening balance of payments as various Central Bank circulars and memoranda were issued requiring, among other things, "prior referral to the Central Bank" of an increasing number of commodity imports. It is surprising however that the Philippine peso has not depreciated substantially. Only on two occasions (during October-November 1974 and June-August 1975, which showed a 3.73% average monthly rate of increase of the peso-dollar rate) did the exchange rate exhibit any sign of volatility. This

would seem to indicate relatively successful intervention efforts by the Bank in trying to achieve a stable movement of the exchange rate. More f mentally, however, the high level of international reserves being maintai (above $1.0 billion since March 1974) and the adequacy of the Central Ban standby credit lines have provided the safeguards against speculative act in the foreign exchange market.

3. Direct controls

During the period under study the government intervened to control and wages in a variety of ways. Also in response to the recent external an increasing role was assumed by the government in the supervision of an participation in production and marketing activities, which the broad pow of martial law had facilitated.

The Price Control Law in the Philippines was enacted in April 1970 following the sharp price rises induced by the devaluation and was extend reflecting the perceived need to contain the inflationary pressure in mor years, by Congress in 1971 and by presidential decrees in 1973 and 1975. I established the Price Control Council, which was empowered to fix maximum ing prices of several basic commodities[32] representing in principle the of production (or landed cost, if the commodity is imported) plus specifi markups for the producer (or importer), wholesaler and retailer Enforceme of these price ceilings was through legal penalties, i.e., imprisonment a fines. For certain commodities like rice and fertilizer, price control w

[32] The commodity list has included rice, corn, fresh meat, canned f sugar, flour, milk, cooking oil, plywood, common drugs, galvanized iron s laundry soap, writing pads and notebooks, antibiotics and kerosene, among

also sustained by government subsidies and, under conditions of severe shortages, rationing had been resorted to -- as in the recent past for rice, gasoline and diesel fuel. The practice of "socialized pricing" served to provide low ceiling prices for certain types of goods consumed by poor families at the same time that more expensive grades were left uncontrolled. In the same spirit, rents on dwellings not above ₱300 per month were frozen in 1972 (and still in force currently).

The protection of low-income groups has been the principal motive not only of government price control but also of wage regulation. In 1970 the minimum daily wage rates were adjusted significantly upward to: ₱8 for non-agricultural employees (from the previous level of ₱6), ₱6 for sales and service employees in "small" establishments (of not more than 5 workers); ₱5 for local government employees; and ₱4.75 for agricultural workers. The pressure to raise wages was also felt during the more recent inflationary period. In 1974 the national government found it necessary to initiate the granting of an emergency allowance of ₱50 per month for every employee with a monthly income of ₱600 or less; this was made mandatory for all employers eventually. A 10% increase followed for all national government employees effective July 1, 1975, while private employers were required to give an extra one month's pay annually. The Wage Commission had also issued orders for several industries to adopt specific minimum wage rates higher than the national level.[33]

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[33] Namely, ₱12 for jeepney transport in Metro Manila, ₱9.20 for copra, ₱9.25 for coconut oil products, and ₱6.80 and ₱11.00 for agricultural and processing activities in the sugar industry.

Particularly after the imposition of martial law, government interven-
tion in critical areas of the Philippine economy has been increasing, presum-
ably spurred by the exogenous shocks emanating from the external sector.
With respect to food supply, self-sufficiency has become an overriding polic
objective. Because the local "rice crisis" of 1972-73 coincided with the
worldwide grains shortage, the government was unable to augment domestic ric
output by adequate imports. Perhaps reflecting the perception of the author
ities about the unreliability of foreign trade to supply food and the need f
the country to be self-reliant, several food production programs, starting
with Masagana 99, were launched, involving massive credit and fertilizer sub
sidy schemes. Other measures were adopted to complement these programs. By
General Order No. 47 corporations employing more than 500 workers were requi
to grow rice for sale to their employees at government-controlled prices. T
Fertilizer Industry Authority was established in 1973 and given control over
all aspects of trade, manufacturing, allocation and pricing of fertilizer; a
two-tiered price system was maintained soon after, with a much lower price c
fertilizer for use in food production (at 15% below import cost) compared to
that destined for export crops. In June 1975 importation of the country's
wheat grain requirements became an exclusive concern of the National Grains
Authority (which already has existing monopoly over rice and corn trade) by
presidential decree to insure "effective price stabilization at minimum cost

Greater government intervention in the market for export crops is als
evident during the period under study, illustrated by the imposition of floo
prices for exports of copra and coconut oil in August 1974 as described abo
With the expiration of the Laurel-Langley agreement and the U.S. Sugar Act

1974, terminating therefore the privileged position of Philippine sugar exports to the United States, the government took control of marketing sugar for export. In that year of phenomenal increases in the international price of sugar the Philippine Exchange Company (PHILEX),[34] which became the sole exporter of sugar, was authorized to set the price at which it buys sugar from the millers. PHILEX had been instrumental in the diversification of the sugar export market, shifting out of the United States to new markets such as Japan, Russia, Algeria and China, and in the negotiation of five-year supply contracts beginning 1977 with two large U.S. sugar refiners.[35] Exporting of logs was also recently subject to government regulation. A presidential decree in 1974 scheduled a phasing out of log exports as a means promoting the domestic processing of logs and exporting of wood products. However, enforcement of the complete ban, which should have started on January 1, 1976, has been deferred because of the need for foreign exchange; currently, log exports are allowed to comprise 25% of total hardwood timber exports.

Spurred by the oil crisis of late 1973, the government established the Philippine National Oil Corporation (PNOC) which in January 1974 purchased

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[34] PHILEX is owned by the government's Philippine National Bank, which already controlled the domestic marketing of sugar at the time.

[35] The American refining firms are Sucrest and Great Western United. The former contracted for shipments of 500,000 to 589,000 metric tons; the latter signed for 317,500 to 589,700 metric tons. In addition, for 1976, Imperial Refining Company contracted for 136,000 to 272,000 metric tons. The terms of sale are not public knowledge but the contracts are apparently being renegotiated in view of the unexpected movements in the price of sugar in the world market.

Exxon's shares of the large Bataan refinery (with a production capacity ab 40% of the national total) along with the marketing operations. For the f time therefore the government had a substantial direct role in petroleum refining and distribution. The PNOC has been negotiating oil supply arran ments directly with countries not previously exporting oil to the Philippi with an eye to diversifying the country's crude oil sources. Thus governm to-government supply contracts account now for about 45% of crude oil requ ments compared to zero in 1973. Oil imports from the Middle East, which s plied 95% of the country's total requirement in 1973, contributed only 75% 1976, the rest coming from Indonesia (12%), Malaysia (7%) and China (6%). Finally, to ensure delivery of the contracted oil supply, the PNOC acquire three tankers capable of carrying half of the country's crude oil imports.

Pricing policy on petroleum products has very roughly followed the rates of increase in the import price of crude oil supplied since October 1973. For instance, regular gasoline was selling in Metro Manila stations at ₱1.40 per liter in 1976 ; this represented more than a four-fold increas over the pre-October 1973 price of ₱.33 per liter. Taxes (net of subsidie on diesel oil and gasoline, which comprised 47% of total consumption of pe eum refining products in 1973, were raised by less than 25%, relatively sm tax rate changes applying to the other products (Bautista, 1976). Due to acute shortage of supply for about a month in early 1974, gasoline ration had to be resorted to, and was done in a fairly orderly fashion through th newly-formed "barangay" units (submunicipal districts).

In planning for the country's long-term energy requirements,[36] the government (through the Energy Development Board, created by presidential decree in March 1976) has aimed at reducing the dependence on imported petroleum from 95% of total energy needs in 1975 to 72% by 1985 and 53% by the year 2000. This is mainly to be achieved by an accelerated development of nuclear, geothermal and hydroelectric energy sources. Two nuclear power plants of 620 megawatts capacity each, ten 52 megawatts geothermal units and several hydroelectric power plants of varying capacities will be introduced over the period from 1977 to 1989. The first nuclear power plant, which will be operational by June 1982, is expected to supply 16% of the total energy requirements in Luzon where the bulk of Philippine industrial activity is situated. The estimated cost of the project is $1.1 billion, for which the National Power Corporation (a state enterprise) has to put up an equity contribution of $208.4 million, said to be the largest single commitment ever undertaken by the Philippine government. The rest of the financing for the nuclear project will come from loans/by the U.S. Export-Import Bank and a consortium of foreign commercial banks.

extended

While the energy plan does not assume eventual discovery of oil in commercial quantity, exploration activities have been encouraged in recent years. In particular, two presidential decreees have liberalized the requirements for foreign participation in the search for indigenous petroleum deposits. The

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[36] The present discussion of the Philippine energy plan draws heavily from the sectoral reports of the Energy Committee presented at the "International Conference on the Survival of Humankind: The Philippine Experiment", held in Manila, September 6-10, 1976. These reports have been published in Energy for Development by the Energy Development Board.

"production sharing" system has replaced the "concession" as the mode of arrangement between the government and oil exploration companies since 1973. By the end of 1976, twenty-four wells have been drilled, mostly offshore, by foreign and domestic companies at a reported total cost of $200 million. This was highlighted by the first discovery in March 1976 of significant amounts of oil in the NIDO I well in Northwestern Palawan, followed by a second discovery made at the Reed Bank some 240 kilometers from NIDO I in July 1976.

4. Bilateral and multilateral arrangements

In recent years the Philippine government has intensified its efforts in promoting the diversification of export markets and import sources as an ad hoc response to the trade fluctuations confronting the economy. In part due to favorable political developments of the period, much headway has been gained in developing trade relations with Communist countries and in exploring various areas of trade cooperation with other ASEAN member countries.

Government-to-government transactions with socialist countries in Eastern Europe have increased markedly, the most dramatic growth in trade flows (exports plus imports) being with Russia -- from zero in 1971 to a total amount of US$89 million in 1976. It is worth noting that in the latter year sugar was the main export commodity. Philippine trade with China in the postwar period did not begin until 1971; by 1976 exports have reached $43.6 million, while imports amounted to $53.8. The bulk of China's purchases consisted of lumber and wood products, while Philippine imports included significant amounts of crude oil. These transactions were facilitated by the operation of the Philippine International Trading Corporation, a state enterprise created in 1973 to serve in part as a central clearing house for bulk

trading and financing involving non-traditional trade partners. Although such trade flows did not account for a large portion of Philippine foreign trade (only 3.5% in 1976), they involved particular commodities of special interest to the Philippines in recent years of trade instability.

Philippine trade with other ASEAN countries (Indonesia, Malaysia, Singapore and Thailand) has also been relatively insubstantial, constituting 5.2% of the total value in 1976. Certain decisions taken in recent ASEAN meetings may lead however to expanded intraregional trade in future, particularly in certain basic commodities (rice and crude oil were the first two such commodities identified) "through preferential trading arrangements, priority of supply and priority of purchase ... in times of shortage and of oversupply, respectively".[37] The first industrial cooperation program that already has five large-scale projects allocated to the member countries and being expanded to include other industrial projects can be expected also to contribute eventually to export market and import supply diversification of Philippine trade. Additionally, various other measures toward ASEAN trade cooperation are being studied, viz., long-term (quantity) supply contracts, purchase finance support at preferential interest rates, preference in government procurement and extension of tariff preferences. Reflecting also the anxiety among ASEAN countries about common trade problems, machinery has been established for dialogues with other countries or regional groupings such as Australia, New Zealand, Canada, the United States, Japan, EEC and

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[37] Quoted from the Report of the Second Meeting of the ASEAN Economic Ministers, Kuala Lumpur, March 8-9, 1976.

COMECON.

These recent activities to promote bilateral and multilateral trade arrangements are significant for the Philippines, having lost preferential treatment for its exports to the United States with the expiration of the Laurel-Langley agreement in July 1974 and the U.S. Sugar Act in December 1974. While the Philippine and U.S. governments are currently negotiating a treaty to replace the Laurel-Langley agreement, it looks doubtful whether substantial concessions are forthcoming beyond that given to developing countries generally through the Trade Reform Act. There has also been an official move, well publicized during the April 1976 visit of President Mar to Tokyo, for a renegotiation of the existing bilateral treaty of amity, commerce and navigation with Japan that would allow, among other things, Philippine export products preferential treatment in the Japanese market. The largely "colonial" nature of trade relations with Japan has also been pointed out, Japan mainly importing raw materials and exporting manufacture goods -- fostered by high tariff rates on manufactured products that effect ively keep processed exports of the Philippines out of the Japanese market (cf. Bautista and Tecson, 1975). This has become a sore point in recent years of increasing trade deficits with Japan.

Finally, it is worth noting that the Philippines became a member of GATT in 1973, thus receiving since most-favored-nation treatment in its mul lateral trade relations. The government has also embarked on tax negotiati and investment treaties with key trading and investment partners; the benef accruing to foreign investors include the elimination of double taxation, provision for tax credits and protection of investment.

5. An assessment

Reflecting public concern about the unusually high rates of inflation experienced since 1970, the government's Four-Year Development Plan, FY 1974-77 declares that for the Plan period "all efforts shall be exerted to keep prices from increasing beyond 8 per cent per year" (p.27). As indicated above, the consumer price index began to increase at unprecedented rates with the onset of the "oil crisis" -- only a few months after the start of the Plan period. The Price Control Law showed immediate signs of ineffectiveness, as petitions by local producers and importers for price increases of commodities subject to price regulation were filed with and invariably approved by the Price Control Council. Indeed it appears doubtful whether the free market price would have been different from the imposed ceiling price, which tended to be revised frequently. While existing monopoly power had perhaps been discouraged from raising prices indiscriminately in the short run, consumers had not been protected from quality deterioration of the product being sold and contrived reduction in supply in order to stress the need for price ceiling adjustment. "Socialized pricing" only led to the discouragement of production of goods consumed by low-income families. The Rent Control Law fixing apartment and house rentals of at most ₱300 per month provides a glaring example: since 1972 a significant shift in building expenditures has occurred toward luxury residential houses and high-rise buildings at the expense of low-cost housing (Stretton, 1977).

Granting that there was limited scope to moderate the externally-induced inflation, wage policy could have responded more actively to protect the real income of laborers which, as shown above, has deteriorated sharply.

The wage and salary adjustments actually made were simply not adequate to match the erosion of purchasing power during the recent inflationary period. The role of government in safeguarding the welfare of workers is made necessary by the fact that only a small portion (10% in 1971) of the total employed are members of labor unions and an even smaller fraction (1.3% in 1972) are covered by existing collective bargaining agreements (Encarnacion et al.,1976). Also, under martial law, strikes, picketing and group assemblies of workers have been prohibited. More generally, an important area of policy to deal with the inflation problem concerns the need to offset the redistributional inequities of rising consumer prices (Bautista, 1976; pp.201-202). In the Philippine context it would appear that this has been neglected in a significant way.

It might be argued that one reason behind the dramatic decline in the inflation rate in 1975-76 was the absence of a price-wage spiral, so that if wages were allowed to rise commensurately, the high inflation rate would have been sustained. While this argument appears plausible in theory, it is not borne out by past experience: no significant correlation was observed by Treadgold (1969; p.197) between annual percentage changes in CPI during 1955-1965 and corresponding changes in either the wage rate index for unskilled industrial workers or the index of average monthly earnings.[38] This would seem to indicate some scope for the share of nonwage income to vary in the short run. As indicated above, the main factors that brought forth the sharp

[38] However, because price and wage changes during the observation period were relatively moderate, the possibility of a more sensitive price response to large wage increases cannot be ruled out.

fall in inflation rate during 1975-76 were the downswing in import and export prices and the marked increase in food supply.

The overall conduct of monetary and fiscal policy has mostly been in reaction to the country's balance of payments and certain internal developments during the period. However, the observed biases in the pattern of public expenditure and credit availment have effectively benefited two sectors, namely, food production since 1973 and tourist-related construction activities in 1975-76. Given the declared objective of food self-sufficiency, it was necessary that public works be oriented to agricultural infrastructure development and credit facilities be slanted to the financing of food production. Indeed, the consequent improvement in food output has contributed to the slowing down of inflation after 1974. It is more difficult to see the economic rationale for the huge expenditures in hotel-building and other tourist-oriented projects financed through loans by government financial institutions, considering the latter's high opportunity cost. As it turned out, a large overcapacity in hotel buildings was created, which may not be utilized until after 1980 (Stretton, 1977). One might claim that, as Singapore has demonstrated in the early 1970s, such tourist facilities would eventually pay their way. Whether this may apply in the Philippine context, only time can tell.

It is possible of course to rationalize the encouragement of construction activities generally as a counter-cyclical policy measure in 1975 and 1976 to offset the decline in foreign demand. The Philippine economy might not have performed as well during this period of world recession without such stimulation of internal demand. However, one's presumption would still be that there were production activities (e.g., low-cost housing) other than

hotel building, the active promotion of which would at least have entailed less foreign exchange disbursement and more employment creation.

Tax policy has managed to deprive major export producers part of their windfall profits from both the 1970 peso devaluation and the export boom of 1973-74 through the introduction of the stabilization export tax and the export premium tax. The important thing about these tax measures is their selectivity, i.e., larger windfall profits were taxed relatively more. While there is merit in such a system (assuming that government spending contributes to social welfare more than the spending of export producers), it has not been consistently followed in other policy areas. For instance, exchange rate policy has aimed essentially at keeping the movements of the peso - U.S. dollar exchange rate stable; no redistributive policy actions have been taken with respect to any undesirable sectoral gains and losses resulting from the observed realignments of trade partner currencies since 1971 (Bautista, 1977).

The "oil crisis", perhaps more than anything else, has jolted Philippine policymakers into the realization that strategic sectors of the economy need to be more tightly controlled. The petroleum industry at the time was heavily dominated by subsidiary firms of major international oil companies. As described above, the government has since taken steps to have substantial direct role in the importation of crude oil, refining and distribution of petroleum products through the newly-formed Philippine National Oil Corporation. Government intervention in the markets of other critical commodities, e.g., rice, fertilizer, wheat, sugar, copra and coconut oil, has also increased, facilitated by the creation of state enterprises charged with regulatory functions, if not also direct participation in production

and/or marketing activities. This is not without danger, however. Lack of experience and expertise may lead to wrong decisions being made -- in negotiations of export sale of sugar or import purchase of rice or crude oil, in setting floor prices on export commodities where no effective monopoly power exists, etc. Indeed there appears to have been some important policy measures adopted without the benefit of careful analysis. This may have been the case also in the preparation of sectoral plans. For instance, the ten-year power program for Luzon formulated by the National Power Corporation (NPC), related to the energy plan described above, has been judged by the World Bank to be "very costly ... and its construction schedules, particularly those for geothermal and nuclear plants are optimistic" (The World Bank, 1976; p. 506). The World Bank's recommended program is smaller and less expensive, specifying only one nuclear plant (instead of the NPC's two) and "is believed to reflect more closely the demand projected by NPC" (ibid).

VI. Conclusion

There seems no doubt that the Philippine economy has been profoundly affected by the exogenous shocks generated by the instability of the world economy during the first half of this decade. The greater flexibility of the exchange rate of the world's key currencies, the sharp changes in international commodity prices (including the "oil crisis"), and the subsequent recession have had both direct and indirect influences on the recent economic performance of the Philippines. As should be evident from the above discussion, it is extremely difficult to isolate them entirely from the effects of the policy responses to the external disturbances. In addition, there were exogenous internal developments -- a series of natural disasters

in 1970-1972 and the declaration of martial law in September 1972 -- that may have altered significantly the behavioral and policy parameters of the economy's performance.

While this paper has concentrated on the short-run effects of the recent instability of the world economy, we do not want to convey the impression that the long-term repercussions may not be significant. As Philippine policymakers became more aware of the need to protect the economy from the adverse impacts of external instability, there appeared noticeable trends toward: (1) the active promotion of self-sufficiency in important commodities,[39] e.g., food and fertilizer; (2) bilateral arrangements and regional economic cooperation, involving socialist countries and ASEAN member nations, respectively; and (3) government intervention in markets of critical commodities. Depending on whether relative social costs and benefits are thought of carefully or not, each of these may improve or worsen the conditions for Philippine economic development.

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[39] It is worth noting that "greater self-reliance in the supply of important commodities" is one of three declared objectives of the five-year Industrial Plan (1978-1982) recently drafted (cf. Chap. 6 of draft Development Plans; July 26, 1977).

Appendix Table 1

ANNUAL RATES OF CHANGE IN SELECTED PRICE INDICES, 1956-1976

(in per cent)

Year	Consumer Price Index	General Wholesale Price Index	Export Price Index ($US)	Wholesale Price Index of Export Products	Import Price Index ($US)	Wholesale Price Index of Import Commodities
1956	2.67	3.19	1.47	4.39	1.39	8.67
1957	1.78	4.27	1.33	4.59	3.24	5.32
1958	3.36	3.39	4.06	10.60	2.29	4.01
1959	0.91	1.37	8.33	13.06	2.00	9.00
1960	4.20	4.18	-1.46	2.63	2.20	5.77
1961	1.51	4.92	-8.00	3.90	1.47	5.20
1962	5.83	5.06	-1.07	20.95	1.90	9.42
1963	5.63	9.74	5.31	19.71	6.67	6.13
1964	8.21	4.60	-0.81	2.89	0.82	.91
1965	2.56	2.25	1.73	2.77	1.73	.50
1966	5.40	4.30	-0.90	1.30	1.60	.70
1967	6.26	2.59	1.78	6.12	2.26	.20
1968	2.32	2.71	5.06	12.00	0.58	-.30
1969	2.01	1.36	1.76	-1.74	2.52	3.18
1970	14.40	23.60	9.74	24.18	2.93	31.44
1971	14.60	15.72	-6.97	7.22	9.27	13.72
1972	10.20	10.10	-10.79	2.35	7.47	7.35
1973	11.00	24.52	9.00	53.91	16.48	27.94
1974	34.30	54.51	45.70	76.46	74.51	41.10
1975	8.00	2.87	-27.25	-30.56	7.96	18.04
1976	6.20	7.36	-16.86	2.53	-2.53	5.64

Sources: Central Bank of the Philippines, Statistical Bulletin (December 1975); 1976 data were obtained from the Department of Economic Research, Central Bank.

Appendix Table 2

INTERNATIONAL PRICES OF SELECTED COMMODITIES, 1971-1976

	1971	1972	1973	1974	1975	1976
Rice ($/m.t.)						
United States	191.8	216.1	396.8	555.6	418.9	308.6
Thailand	129.0	149.1	350.0	542.0	363.1	254.6
Wheat ($/bushel)						
Australia	1.57	1.85	3.94	5.32	4.03	3.4
United States	1.68	1.90	3.81	4.90	4.06	3.61
Urea ($/m.t.)						
Europe	46.0	59.2	94.8	315.8	197.7	111.8
Superphosphate ($/m.t.)						
United States	43.0	67.5	100.0	308.0	205.0	91.5
Petroleum ($/barrel)						
Saudi Arabia	2.19	2.46	3.29	11.58	11.53	12.38
Sugar (¢ /lb.)						
New York	8.52	9.09	10.29	29.47	22.49	13.31
Copper (¢ /lb.)						
London	49.05	48.47	80.81	93.07	55.85	63.62
Copra ($/m.t.)						
Europe	188.60	140.88	353.12	661.93	256.33	275.17
Coconut oil (¢ /lb.)						
New York	14.4	10.8	23.5	51.0	21.2	21.8
Plywood (¢ /sheet)						
Tokyo	81.7	95.3	189.6	152.9	121.8	147.7
Logs ($/cu.m.)						
Tokyo	43.09	40.47	68.37	81.80	67.51	87.01*
Bananas (¢ /lb.)						
United States	6.37	7.33	7.48	8.35	11.11	11.96*
Tobacco (¢ /lb.)						
United States	73.49	80.03	83.53	95.51	103.78	105.80

* Based on prices during January to September only.

Source: IMF, International Financial Statistics (August 1977).

Appendix Table 3

VALUE OF PRINCIPAL IMPORTS, 1971-76
(in million U.S. dollars)

Item	1971	1972	1973	1974	1975	1976
Crude oil	127.4	133.0	166.1	573.2	709.8	801.2
Machinery other than electric	255.1	239.9	296.0	424.0	654.9	625.3
Base metals	90.7	112.4	150.4	295.7	212.8	245.3
Cereals and cereal preparations	65.1	84.3	111.8	154.9	175.4	157.7
Transport equipment	122.2	123.7	102.3	265.3	301.6	276.1
Electric machinery, etc.	66.3	54.0	70.8	105.3	156.9	187.2
Chemical elements and compounds	39.9	48.2	75.4	216.1	153.6	141.8
Misc. chemical products	53.4	54.3	80.1	113.8	109.3	115.3
Textile fibers	48.8	45.8	60.3	88.7	77.6	80.3
Manufactures of metal	26.0	22.8	47.1	60.1	93.8	80.7
Total imports	1,186.0	1,229.6	1,594.6	3,143.3	3,459.2	3,633.8

Source: Department of Economic Research, Central Bank of the Philippines (unpublished).

Appendix Table 4

MONTHLY INTERBANK GUIDING RATE, 1971-1976

(in pesos per U.S. dollar)

	1971	1972	1973	1974	1975	1976
January	6.4350	6.4350	6.7814	6.7310	7.0664	7.4856
February	6.4350	6.4350	6.7762	6.7189	7.0522	7.4693
March	6.4350	6.4350	6.7719	6.7234	7.0261	7.4583
April	6.4350	6.5749	6.7662	6.7216	7.0177	7.4354
May	6.4350	6.7220	6.7632	6.7174	7.0178	7.4304
June	6.4350	6.7718	6.7592	6.7184	7.0150	7.4309
July	6.4350	6.7778	6.7583	6.7346	7.2719	7.4298
August	6.4245	6.7795	6.7467	6.7428	7.5018	7.4297
September	6.4105	6.7795	6.7392	6.7473	7.5091	7.4290
October	6.4324	6.7812	6.7396	6.7724	7.5001	7.4283
November	6.4331	6.7806	6.7382	7.0670	7.4975	7.4282
December	6.4350	6.7804	6.7353	7.0623	7.4992	7.4282
AVERAGE	6.4317	6.6710	6.7562	6.7880	7.2479	7.4402
(% change)		(3.72)	(1.28)	(0.47)	(6.78)	(2.65)

Source: Department of Economic Research, Central Bank of the Philippines (unpublished).

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well written !

RECENT EXTERNAL DISTURBANCES AND THE PHILIPPINE ECONOMY

by

Romeo M. Bautista

NOTE: This paper will appear in Laurence Krause and Sueo Sekiguchi (eds.), The Transmission Mechanism in the Pacific Basin, to be published by the Brookings Institution, Washington, D.C. An earlier version was presented at the Conference on the International Transmission Mechanism sponsored by the Japan Economic Research Center in Tokyo, June 27-30, 1977.

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E R R A T A

p. 41, line 11:
"3.4%" to read "3.5%"

p. 64, line 14:
"institution" to read "institutions"

p. 77, line 2:
"usually" to read "unusually"

p. 82, 3rd to the last line:
"thought of" to read "thought out"

RECENT EXTERNAL DISTURBANCES AND THE PHILIPPINE ECONOMY

Romeo M. Bautista*

I. Introduction

Towards the end of the 1960s the Philippines was experiencing a severe foreign exchange crisis precipitated by the need to service short-term credit which financed the trade deficits of the second half of the decade. As part of an IMF consultative group's set of recommendations whose implementation would enable the country to obtain the third credit tranche from the Fund as well as agreement by foreign banks on longer debt repayment terms, the government floated the domestic currency (peso) in February 1970, the exchange rate moving from 3.9 to 6.4 pesos per U.S. dollar by the end of the year. In the Philippines, therefore, the dramatic developments in the world economy during the first half of the 1970s affected a small developing economy recently perturbed in its external sector and already adjusting to a new set of domestic price relationships.

Accompanying the de facto devaluation of the peso in 1970 was a policy of monetary and fiscal restraint which did not prevent however a substantial increase in domestic prices.[1] Unlike the peso depreciation in 1962, import

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[1]According to Baldwin (1975), "the fear of further intensification of the social unrest that was triggered by price rises associated with the currency devaluation apparently accounts for the decision to fix the dollar value of the peso" (pp.80-81) in December 1970.

liberalization measures were not introduced, i.e., certain exchange and import controls remained, effectively continuing the ban on imports of some 400 commodities. Thus, while the foreign currency price of imports rose by only 2.9% in 1970, the domestic wholesale price index of imports increased by 31.4%. The CPI rose 14.4%, which represented the country's first postwar experience with double-digit inflation rates (cf. Appendix Table 1).[2] In 1971 the import price index climbed up 9.3%, contributing to the observed CPI increase of 14.6%.

The preceding two decades were a period of relative stability in the foreign trade of the Philippines. Table 1 gives a summary picture of the extent and dispersion of the fluctuations of aggregative trade variables in terms of the mean and standard deviation of their annual percentage changes within subperiods after 1950. Because they constitute the main links to the international economy, export and import prices, volumes and values bear the most immediate manifestation of external disturbances to the small, open economy. Easily discernible from Table 1 is the much higher standard deviation for 1969-1975 of each price and value index than for any other period. The dispersion of annual changes in export volume is also seen to be the

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[2] The consumer price index used in this study pertains to Manila and suburbs, prepared by the Department of Economic Research of the Central Bank and published regularly in its Statistical Bulletin. This index, which extends back to 1949, is highly correlated with the CPI for the Philippines developed later by the same office. It is also more widely used than the consumer price indices for Manila and the entire country prepared by the National Census and Statistics Office since 1970. For a comparison of these alternative measures, see Appendix 6.1 in Bautista (1976).

Table 1

MEAN AND STANDARD DEVIATION OF ANNUAL PERCENTAGE CHANGES OF AGGREGATIVE TRADE VARIABLES, 1951-1975

Variable	1951-1957		1957-1963		1963-1969		1969-1975	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
P_x	-2.65	13.55	1.55	5.17	1.44	1.77	9.91	28.59
P_m	-.97	2.86	2.76	1.77	1.59	0.72	19.77	24.89
Q_x	5.10	8.55	7.96	7.44	1.15	3.48	8.35	9.27
Q_m	5.93	10.67	-2.52	7.52	9.49	8.76	3.37	4.30
V_x	1.32	19.02	9.79	12.36	2.44	3.61	24.63	40.71
V_m	4.91	11.14	0.20	16.25	10.95	9.37	23.57	232.95

Notes: P_x = export price index; P_m = import price index; Q_x = export quantum index; Q_m = import quantum index; V_x = export value index; V_m = import value index

Source: Calculated by the author from data published in the Statistical Bulletin, XXVII (December 1975).

highest for 1969-75, but not markedly. In sharp contrast, the standard deviation for the import quantity index is lower for 1969-1975; this would have been a surprising finding were it not for the fact that import restrict ions had been in existence which varied in intensity over the postwar period (Bautista, forthcoming).

Exports increased significantly after the 1970 peso devaluation, despite the recession in the United States and Japan during 1970 and 1971, respectively. Managing to expand by a mere 17% during the entire six-year peri 1963-1969, Philippine export earnings exceeded for the first time US$1 billi in 1970, representing an increase of 24% from the preceding year's value. This was also due partly to the rise in dollar export prices of close to 10% the export quantum index therefore showing a 14% increase. In 1971 the volume of exports climbed up by 14.6% despite a discernible decline in the export price index. At a disaggregative level, coconut products (consisting of copra, coconut oil, copra meal or cake and desiccated coconut), copper concentrates and sugar showed the most impressive export performance (Baldwi 1971; p.81). Additionally, exports of nontraditional manufactured goods, th promotion of which had been the object of recent policy measures (e.g., the enactment of the Export Incentives Act of 1970) expanded significantly (by 2

On account of the continued controls on import transactions and the contractionary fiscal and monetary policies, the value of Philippine imports rose by only 6% from 1969 to 1971 (despite a 12% increase in foreign currenc import prices). The result was a substantial reduction in the country's mer chandise trade deficit from $276.9 million in 1969 to only $38.1 million in 1971. Furthermore, for the first time since 1967, invisible receipts

exceeded payments in 1971, reducing the deficit in the current account to $22.3 million.

Domestic investment appeared to have been negatively affected by the currency depreciation in the first year. However, it showed signs of recovery in 1971, expanding in real terms by about 4% over the 1970 value. Also, the gross national product increased by 5.4 and 6.5 per cent in 1970 and 1971, respectively, discernibly higher than the average annual growth of 4.9% between 1963 and 1969. With perhaps justifiable reason, the government's Four-Year Development Plan, FY 1972-75 "unfolds with the promise of brighter prospects" after noting that the country has regained "economic composure from a gruelling adjustment period in FY 1970 and 1971 that saw some powerful policy-shifts redirect the development path" (p.21).

It is against this backdrop that the recent instability in the world economy needs to be evaluated in its effect on the economic performance of the Philippines. We first examine certain elements of instability occurring in the first half of the 1970s, broadly indicating how they impinged on the Philippine economy and bringing out relevant characteristics of the country's external sector. This paper then analyzes the various channels through which the external disturbances had affected the economy; because Japan and the United States are the country's dominant trade partners, it is of some interest to determine the extent of imported instability coming from these two countries. Government policies adopted in response to these exogenous shocks will then be described, their effectiveness evaluated and means of improving them suggested. Some concluding remarks are given in the last

section of this paper.

II. Sources of External Disturbance

Four major developments in the first half of the 1970s might be considered, somewhat arbitrarily, the principal sources of instability for small, developing countries during the period. These are the (1) greater flexibility in exchange rates among the world's key currencies, (2) the sharp change in international commodity prices, (3) the oil problem, and (4) the economic recession of the world economy.

Discussions regarding "optimum currency areas"[3] point to the desirability for a small open economy, in facilitating international trade and payments, to peg its currency to that of the country with which it has most of its trade and financial transactions. If there are two large countries to which the small economy has strong links in trade and finance, no additional problem is created as long as the two dominant trade partners maintain a fixed exchange rate between their currencies. This was in fact the Philippine case during most of the postwar period, the United States and Japan accounting for more than two-thirds of Philippine trade flows[4] and until 1971, the exchange rate between the U.S. dollar and Japanese yen remaining relatively stable. With the greater flexibility in exchange rate

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[3] See for example, McKinnon (1963) and Mundell (1968, Chapter 8).

[4] The bulk of the remaining one-third would be contributed by Western European countries such as West Germany, United kingdom, Netherlands and Italy, as well as some Middle East countries supplying crude oil imports.

among the world's dominant currencies initiated in the early part of this decade, Philippine policymakers now have to contend with the exogenous change in the effective exchange rate of the domestic currency due to any realignment of the U.S. dollar and Japanese yen (Bautista, 1977).

Philippine export trade, like that of most developing countries, is also characterized by a high degree of commodity concentration. About four-fifths of the country's foreign exchange earnings from merchandise trade in the postwar period have been contributed by ten principal export commodities; four of the following products could easily account for two-thirds of total export value for any given year: sugar, copra, coconut oil, logs, abaca and copper concentrates. An additional consideration is that several of these principal export commodities have been dependent to a significant degree on only one or two dominant markets. For example, during 1962-69, the United States was the destination market of virtually all exports of Philippine sugar, 86% of coconut oil, 98% of plywood, 93% of veneer and 80% of desiccated coconut; on the other hand, Japan had absorbed 99% of Philippine exports of iron ore, 78% of copper concentrates, 81% of logs and 84% of molasses.[5] Except for crude oil, the country's principal import commodities have been supplied mainly by Japan and the United States. Thus, in the 1960s, these two countries accounted for 70% of total Philippine imports of machinery and equipment (including transport and electrical), 71% of metal manufactures, 42% of cereals and 62% of chemical products. These commodity groups jointly

[5] See Bautista and Tecson (1975).

accounted for about 68% of total Philippine imports in 1970.

One implication of the above is that any changes in the exchange rates of the U.S. dollar and Japanese yen could cause a redirection of Philippine trade flows as well as influence the magnitude of total exports and imports if the effective exchange rate of the peso is changed. Based on Philippine merchandise trade with the six principal trade partners, the peso depreciated from 1971 to 1976 effectively by 27.7%, computed as an average of the peso exchange rate changes with the currencies of these partner countries weighted by the 1973-74 trade flows. The induced changes in the prices of exported and imported goods expressed in domestic currency would have affected directly and indirectly the domestic prices of both tradable and nontradable goods. Moreover, there would also be some changes in the pattern of income flows in the sectors affected by the currency realignment in terms of the gains and losses of the importing and exporting industries as a result of the altered sets of prices and trade flow magnitudes.

Given the small, open character of the Philippine economy and the characteristics of its external sector as described above, the influence of externally determined export and import prices is also likely to be significant. The rise in world commodity prices in 1972-74, which was both comprehensive and sharp,[6] and the subsequent price decline in most commod-

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[6] According to Fried (1976), "from the beginning of 1972 to the middle of 1974 the U.N. index of export prices of all primary commodities increased by more than 150 percent, fully three times the advance that occurred during the Korean War commodity boom" (p. 941).

ities would have induced similar movements of Philippine export and import prices in foreign currency terms. The main causal forces behind these drastic price changes--some related to supply and others to demand--differed among the major commodity groups.[7] Cereals, which the Philippines imports heavily (about $100 million average annual value for 1971-1976), suffered crop failures in major producing regions beginning 1972. In the case of raw materials like copper, logs and coconut products (which are major export commodites of the Philippines), the simultaneous expansion of industrial countries which exerted upward pressures on demand was the principal cause for the price rise; the subsequent steep decline in demand was also the reason for the concomitant fall in industrial raw material prices. World supply of sugar, the principal export product of the Philippines, had tended to lag behind the accelerated growth in demand due to the rapid rise in world income. The depletion of stocks resulted in sharp increases in the world sugar price in 1974; this led in turn to surprisingly large reductions in consumption which, jointly with the significant response among sugar producers after 1974, pushed the price of sugar in international markets to a precipitous fall.

Changes in the world prices of export products of a developing economy like the Philippines would affect export earnings directly and also indirectly through the response of export volume. In addition to the standard export multiplier effects, there would also be a commensurate effect on the country's capacity to import which for foreign exchange-constrained economies has significant implications on the development effort. Other

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[7] The following discussion is partly based on Fried (1976).

things remaining the same, a change in foreign currency import price will have a negative proportionate effect on the capacity to import. The domestic price structure would be affected also by changes in export and import prices. An increase in the foreign currency price of exports would stimulate an increase in the domestic prices of home-consumed exportable products. Likewise a price rise of imports would induce higher domestic prices of imported goods, as well as import-competing products; moreover, industries using imported material inputs would be subject to rising production costs which tend to be passed on to final consumers through product price increases. Lastly, non-importing firms would also experience higher costs of local input purchases from import dependent suppliers. As with exchange rate changes, there would be further repercussions in the economy of such changes in domestic prices.

The third source of external disturbance identified above--the oil crisis--could have been subsumed under the second category. The drastic increase in the import price of crude oil in 1973-74 (and for a time the lack of adequate supply) affected however the country's economic performance in special ways and evoked particular policy responses that separate account needs to be taken of this particular exogenous shock. There is probably no other single commodity that represents so critical an input requirement; it is of crucial importance not only to the industrial sector of developing economies but also to agricultural production, where high prices of fertilizer and pesticides induced by the oil problem could jeopardize the success of the "green revolution". Because the Philippines is dependent on oil imports for over 90% of its energy requirements, the severity of the oil price rise

presented an enormous adjustment problem.

The slowdown in world economic activity beginning early 1974 would seem to be related to the dramatic changes in international commodity prices, particularly the oil price hike. For purposes of the present study, however, it is useful to distinguish this source of instability in view of the policy need to cope with the adjustment problem associated with this form of external disturbance regardless of the underlying cause. Any small developing economy with strong links in trade with developed countries is bound to have its export earnings determined in large measure by the level of economic activity in the latter countries. Given the commodity and geographic concentration of Philippine exports, economic fluctuations in Japan are likely to significantly affect in the short run the country's export proceeds from copper concentrates, logs and lumber, molasses and abaca; similarly, changes in economic activity in the United States would influence the demand for Philippine exports of sugar, coconut oil, desiccated coconut, plywood and veneer, as well as the nontraditional manufactured exports.

In addition to the trade effect of changes in the level of economic activity in developed countries, developing economies might also be affected through international capital movements, both public and private. In the face of a recession and the economic hardships it entails, political considerations may reduce the willingness of developed country governments to extend development assistance to less developed countries. Moreover, since variations in economic activity influence the availability of capital and the relative profitability of investment, private capital flows from developed to less developed countries might be adversely affected in a slowdown

in economic activity. In the Philippines the substantial part of net cap flows until 1972 has mainly taken the form of development loans; n direct investment (excluding reinvestment of foreign companies) has been very small, showing an annual net outflow during most of the 1960s.[8] According to the Central Bank-Board of Investments Study on Foreign Inves ments, 76% of the total direct equity investment in 1970 was held by U.S. investors. Along with Japan, the United States has also been a principal contributor to Philippine development assistance. During 1956-1976, total loan assistance from the United States amounted to $353 million (of which $171 was through the PL 480 program) while that from Japan amounted to $332 million;[9] other bilateral sources contributed $68 million, while multi lateral development loans (mostly coming from the World Bank and Asian Development Bank) accounted for $1,266 million.

III. Effects on the Philippine Economy

To what extent has the economic performance of the Philippines been affected by the exogenous shocks generated by the recent instability in th world economy? The most theoretically appealing way of evaluating the economic effects would be to use a complete model of the national economy

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[8] The ILO Report (1974) attributes the low level of direct foreign investment in the Philippines until 1972 to the "uncertain political situation, the rules stipulating Filipino ownership up to at least 50 per- cent ... and the uncertain status of American-owned assets after terminati of the Laurel-Langley Parity Agreement in 1974" (p. 281). Since the decla tion of martial law in September 1972, a policy of attraction of foreign investment has been adopted.

[9] Cf. Magno (1976; p. 314). It should be noted that these figures are based on total commitments rather than actual disbursements and that loans granted from June to December 1976 have not been included.

representing quantitatively the interrelations among disaggregative trade, production and price variables and work out the consequences of a change in any one or a combination of what may be called "external disturbance variables" immediately affected by the various sources of instability described above. Such a model for the Philippines might have, as external disturbance variables, the foreign currency prices of exports and imports, exchange rates applicable to the various trade transactions, and levels of economic activity in the Philippines and in the destination markets of Philippine exports. There is virtually no limit to the extent of disaggregation possible, distinguishing among various trade commodities, partner countries and forms of economic activity. Practical considerations would dictate, however, that only the more important aspects of Philippine foreign trade and payments be taken into account. Similarly, there are many forms in which the effects of external disturbances manifest themselves in the national economy, but only the more important economic effects need to be analyzed. The evaluation of such effects has to be made in a regime of neutral policy, i.e., allowing the economy to adjust to the external shocks without the adoption of compensating or reinforcing policy measures.

The present study does not employ a comprehensive model of the Philippine economy in assessing the economic impact of the recent external shocks. The theoretical and statistical difficulties of econometric modeling and simulation of a developing economy like the Philippines are too well known to warrant repetition here.[10] What we shall attempt in this paper is

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[10] See, for example, Shourie (1972); for some attempts at econometric modeling of the Philippines with emphasis on the foreign trade sector, see Bautista and Encarnacion (1972) and Bautista (1973).

to examine the actual movements of certain economic variables likely to be affected by the external disturbances during 1971-1976 and assess the latte contribution to the observed annual changes through some of the well-known channels of the international transmission mechanism (as identified, for example, in Krause and Sekiguchi (1977, Chap. 1)).

1. Exchange rate effects

With the breakdown of the Bretton Woods international monetary system, maintenance of exchange rate parities ceased to be a commitment by governments of IMF member countries. The Smithsonian Agreement of December 1971, for example, appreciated the Japanese yen and German mark by 17% and 14%, respectively, relative to the U.S. dollar, and most European currencies by something under 10%. Although the Philippine peso was technically on a floating rate system at that time, substantial participation of the Central Bank in the foreign exchange market effectively placed the peso exchange rate with the dollar under its control. The stable peso-dollar exchange rate observed until March 1972 would seem to reflect, therefore, a policy decision to depreciate the domestic currency with respect to the Japanese yen, Australian dollar, New Zealand dollar and most European currencies, while appreciating it with respect to the currencies of a few trade partners (Hong Kong, India and Spain).[11]

The effects on the economy of such peso exchange rate changes are far reaching, as suggested in the preceding section. The empirical evidence would seem to indicate, for example, that "changes in relative exchange

[11] Cf. Table 3 in Bautista (1977).

rates rather than in export prices (expressed in foreign currency) have been responsible for much of the recent shifts in Philippine export trade with Japan and the United States" (Bautista and Tecson, 1975; p. 414). Based on the estimates of the price elasticity of market shares of individual export commodities, it was concluded that the 1971 realignment of major currencies was responsible for changes within "28 per cent to 34 per cent of relative value shares of the two export markets; volumewise, the induced redirection of exports is estimated to be from about 11 to 17 per cent" (Bautista and Tecson, 1975; p. 413).

In another study (Bautista, 1977), the direct trade effects of the 1971 exchange rate changes were found to be significant for certain export and import commodity groups, particularly those faced with high effective depreciation rates of the domestic currency (mostly going to or coming from Japan and West Germany) and having high values of the price elasticity (in export supply or import demand) such as copper concentrates and copra meal/cake among exports and basic manufactures and miscellaneous manufactures among imports. The induced changes in exports and imports were estimated at 57.2 and -32.3 million U.S. dollars (at 1963 prices), respectively, implying an improvement in the country's merchandise trade balance -- which is not surprising since the peso had been effectively devalued with respect to the currencies of most of its trade partners. It bears emphasis that these "exchange rate effects" are attributable not only to the realignment of major currencies but also (and quite critically) to the policy reactions to the external disturbance, of which more will be said below.

There would of course be other repercussions on the economy from this source of economic instability, e.g., the implications on the domestic price structure of the induced changes in the peso prices of traded goods and in income flows in the sectors affected by currency realignments. However, instead of attempting to evaluate these effects on the Philippine economy in isolation from those attributable to the other sources of instability, we shall examine below how these disturbances jointly contributed to the observed movements of selected price and output variables during 1971-1976.

2. Direct price effects

As shown in Appendix Table 1, Philippine export and import prices in general fluctuated significantly during 1971-1976. Initially the country's exports suffered two consecutive years of declining prices in foreign markets. This was followed by sharp increases of the export price index associated with the commodity boom beginning March 1973 until October 1974, after which a precipitous fall in export prices among the country's leading export products, attributable to the world recession, took effect in the next twelve months. Within the latter period the export price index dropped to about half its initial value and in 1976 went down further by 17%.

The import price index was already rising significantly in the first three years - even before the oil crisis came on the scene in late 1973 and pushed up the index by 75% in 1974. Import prices increased further by 8% in the following year before registering a slight decline in 1976. The movement of the net terms of trade was therefore erratic but in the end showed a considerable deterioration from 110.6 in 1970 to 61.6 in 1976. This has

repercussions on the country's balance of payments and national income, as will be examined below.

Individual export commodities exhibited roughly similar time profiles of prices (cf. Table 2), most of which show peak levels in 1974 or 1975. On the other hand, the drastic increases in the import price index had been dominated by the oil component, the prices of other principal imports not rising as much over the period (cf. Table 3).

To what extent have these exogenous movements in the prices of traded goods influenced the general price level in the Philippines during the period? As indicated above, the double-digit inflation rates experienced in 1970-1974 were unprecedented in the country's postwar history. The 1970 de facto devaluation package, which brought up by 72% the peso-U.S. dollar exchange rate without accompanying import liberalization,[12] would be mainly responsible for the observed substantial CPI rise in 1970 and some part of the 1971 inflation. Based on the direct and indirect import dependence ratios computed from the 1965 input-output table compiled by the Bureau of the Census and Statistics, Mijares (1971) has calculated the net effect of a 60% peso devaluation on household consumption prices to be an increase of about 12%. A later study (Bautista, 1973) on the effects of currency devaluation using a dynamic, aggregative model of the Philippine economy suggests that the GNP deflator[13] would increase by 13% in two years as a result of a 70% devaluation.

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[12]The import volume index understandably dropped 10.8% in 1970 from the 1969 level.

[13]The actual increase in the GNP price deflator from 1969 to 1971 was 31.2%.

Table 2

UNIT VALUE OF PRINCIPAL EXPORTS, 1971-1976
(in U.S. dollars per metric ton, except as noted)

Commodity	1971	1972	1973	1974	1975	1976
Copra	164.6	119.4	225.8	522.2	226.4	181.7
Sugar	157.9	172.3	186.3	478.2	597.3	299.6
Logs & lumber (million board feet)	62.0	56.3	97.6	116.6	94.4	169.0
Bananas	57.6	57.5	59.7	68.6	88.9	95.0
Molasses	17.3	19.7	31.2	42.3	50.3	30.8
Coconut oil	260.4	181.0	353.5	915.8	374.8	346.3
Copra meal/cake	56.3	45.8	86.6	103.1	109.9	109.5
Gold (million ounces)	39.3	53.7	192.9	137.3	155.7	122.0
Canned pineapple	196.0	181.3	216.5	244.2	298.1	337.7
Copper concentrate	227.1	231.9	360.4	473.4	265.4	282.2
Iron ore	8	8	9	10	9	9
Chromite ore	22	23	19	24	32	50
Abaca	265	263	362	461	546	450

Source: Department of Economic Research, Central Bank of the Philippines (unpublished).

Table 3

IMPORT PRICE INDICES OF PRINCIPAL IMPORTS, 1971-1976
(in U.S. dollar terms; 1970 = 100)

Item	1971	1972	1973	1974	1975	1976
Crude oil	124.0	133.8	161.0	602.6	692.9	747.4
Machinery other than electric	110.8	104.0	113.1	124.3	134.6	147.9
Base metals	108.4	100.6	116.3	161.1	148.9	160.5
Cereals and cereal preparation	107.8	122.1	251.1	335.3	271.0	231.7
Transport equipment	117.6	111.7	118.2	131.1	147.8	160.0
Electric machinery, etc.	107.6	103.9	107.8	117.5	132.0	138.2
Chemical elements and compounds	106.6	97.6	113.0	154.9	170.0	176.6
Misc. chemical products	106.5	96.3	112.7	157.5	171.2	176.8
Textile fibers	105.2	100.8	118.5	123.5	121.9	135.7
Manufactures of metal	108.6	103.2	113.8	155.0	150.2	163.9

Sources: Crude oil - unit values, Central Bank data (unpublished).

Cereals - weighted average of wheat and rice prices in supplying countries, International Financial Statistics.

Others - weighted average of export (Japan) or producer price indices in supplying countries, OECD Main Economic Indicators and Bank of Japan, Price Index Manual.

In 1972 there was a further reduction in the value of the Philippine peso by 10.0%, computed as a weighted average of the peso exchange rate changes with the currencies of the six most important trade partners. This would in part explain the 10.2% increase in the CPI during the year. Another consideration is the inflationary effect of the 7.5% increase in the import price index, which the accompanying reduction in Philippine export prices of about 10% must have moderated somewhat. Finall an internal factor needs to be taken into account, i.e., the decline in agr cultural crop output caused by the extensive damage wrought by the severe typhoons and floods in 1971 and 1972 as well as the widespread infestation rice plants by the "tungro" virus disease. Thus, inspite of the wider use of high yielding rice varieties and expansion in hectarage by 4.3%, the country's production of palay (rough rice) expanded by only 2.1% in crop year 1970-71 (as contrasted to the 17.7% growth in 1969-70); in 1971-72 palay output even went down by 4.5% from the previous year's harvest. The supply of rice was augmented by imports of 319 thousand metric tons in 1972,[14] which was instrumental in keeping the price rise of cereals relatively low (6.3%).

Changes in the effective peso exchange rate after 1972 (-6.8% for 1972-73, 1.2% for 1973-74, -5.1% for 1974-75 and 4.7% for 1975-76) had beer relatively insignificant compared to the changes in export and import pric indices. The export price boom of 1973 combined with the substantial incr in import prices (cf. Appendix Table 1) in explaining a large part of the

[14] This mainly accounted for the 24% increase in the import value of "cereals and cereal preparations" in 1972.

year's inflation. There was again a decline in palay production (by 3.8%) which still suffered from weather misfortunes; rice importation failed to avert this time a marked rise in the cereal component of the CPI in view of the higher import price (cf. Appendix Table 2) and a substantial underestimation of import requirements by government officials.

Although phenomenal increases in the world prices of traded goods generally were witnessed in 1974, the severe inflation of that year could easily be judged to have been induced largely by the drastic increase in the import price of crude oil which started in late 1973. The Philippines imported 53.3 million barrels of crude oil during the first three quarters of 1973 at c.i.f. cost of US$152.7 million. The amount imported during the comparable period (January to September) in 1974 declined to 45.9 million barrels but the c.i.f. value went up more than three-fold ($463.7 million). The immediate effect was a sharp rise in the domestic price of refined petroleum products, posted prices ex-Pandacan terminal showing increases from October 1973 to July 1974 as follows: bunker oil - 192.9%, regular gasoline - 139.5%, premium gasoline - 123.7%, diesel oil - 121.8% and kerosene - 156.5%. The weighted average price increase of all petroleum products over this period is computed at 156%.

Application of static input-output calculations (Bautista, 1976) has suggested a 22% inflationary effect on household consumption, assuming that the upward pressures on consumer prices brought about by the drastic oil price rise have worked themselves out. This constitutes already close to two-thirds of the observed CPI increase of 35% from October 1973 to November 1974. While it bears emphasis that some aspects of this application of standard input-

output analysis are of doubtful validity, including the assumption of const mark-up pricing in each sector, one would be inclined to accept the above c clusion that the magnitude of the 1974 inflation in the Philippines had bee greatly influenced by the oil crisis.

To be sure there were other influences, some of them related to the price hike. As shown in Table 3, the country was also faced with increased prices of non-oil imports in 1974 (perhaps induced in part by the supplying countries' existing oil problem). Food (cereals and cereal preparations) registered a relatively significant import price rise, in this particular year, however, the much improved crop harvest (10% higher than in 1973) allow a 50% reduction in rice importation. Undoubtedly, a more significant contri bution to the 1974 inflation would have come from the continued export bonan which produced an 87% price increase of Philippine export products.

The dramatic decline of the inflation rate to only 8.0% in 1975 and 6.2% in 1976 reflected the sharp downturn in the country's import and expo prices attributable to the prevailing world recession which began in early 1974. As indicated in Appendix Table 1, prices of Philippine export prod went down on the average by 27% and 19% in 1976, respectively; on the othe hand import prices rose 8% in 1975 and decreased slightly in 1976. Moreov there was continued expansion of agricultural crop output, producing a very modest increase of 6.6% in the food component of the CPI in 1975 and 6.1% in 1976.

In summary, the causal factors behind the double-digit inflation rates during 1970-1972 were chiefly internal, i.e. having to do with the

management of the peso exchange rate and shortfalls in food supply. In 1973 and 1974, however, external developments, viz., the drastic increases in international commodity prices, especially the oil price rise, had strong inflationary effects on the Philippine economy. The ensuing recession reversed the direction of commodity price movements and served to reduce substantially the Philippine inflation rate at the same time that a significant improvement in domestic food production was being experienced.

3. Effects on the current account

One striking observation about the postwar performance of the Philippine external sector as portrayed in Table 1 is the relatively more rapid expansion of real exports exhibited in the 1970s on the average compared to the other subperiods distinguished in the table. There was however also a high degree of variability, the annual growth rate of export volume showing the highest standard deviation during 1969-1975. In sharp contrast the annual rate of increase in real imports in the first half of the seventies was relatively low on the average and far less variable. These recent divergent patterns of export and import volumes might be attributed in part to concerted policy efforts to promote exports and economize on imports in response to the externally-generated increases in tradable goods prices.

Table 4 gives annual export quantities by principal commodity items during 1971-1976. While substantial net increases from the 1971 levels are indicated for some products, most commodities had erratic movements over the period. The biggest gainers were coconut oil and its by-products, copra meal and cake (which expanded at the expense of copra), bananas, molasses and gold,

Table 4

VOLUME OF PRINCIPAL EXPORTS, 1971-1976
(in thousand metric tons, except as noted)

Commodity	1971	1972	1973	1974	1975	1976
Copra	692	926	734	268	761	824
Sugar	1,345	1,211	1,474	1,542	972	581
Logs & lumber (million board feet)	3,645	3,098	3,472	2,114	2,055	1,198
Bananas	267	422	466	663	823	796
Molasses	486	356	606	655	674	793
Coconut oil	397	466	427	416	614	862
Copra meal/cake	288	352	263	271	303	498
Gold (million ounces)	204	501	536	541	491	535
Canned pineapple	100	108	91	125	116	138
Copper concentrates	815	823	764	830	799	942
Iron ore	186	163	136	121	20	14
Chromite ore	275	238	478	534	407	295
Abaca	49	50	54	43	27	325

Source: Department of Economic Research, Central Bank of the Philippines (unpublished).

reflecting the favorable terms at which they were being sold in later years. For certain commodities, it may seem surprising that smaller volumes were being exported at times of higher prices. Exports of copra, for instance, declined sharply in 1974 when the unit value registered a historic peak. This was however due to a government policy measure, adopted in August 1974, setting a floor export price for copra at $590 per metric ton (f.o.b., Philippine port).[15] Market interference was likewise the reason for the decline of log exports after 1973 despite an improvement in export price: a presidential decree was issued in 1974 phasing out exports of logs in favor of domestic log processing and exports of wood products. In the case of sugar exports the government, which assumed control over marketing the entire sugar crop with the termination of preferential treatment in the U.S. market in December 1974, had to find new export markets beginning 1975.

As is evident from Table 5, nontraditional manufactured exports had expanded generally rapidly since after the 1970 devaluation. A marked deceleration occurred in 1972 and 1974, compensated however by high growth rates in other years. The impressive performers had been clothing, electrical machinery and appliances, transport equipment (mainly automotive spare parts), travel goods and chemical products. Energy-intensive commodity exports, especially cement and paper products, seem to have lost momentum with the onset of the oil crisis, perhaps having their international competitiveness

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[15] This was later rescinded when export sales suffered a steep decline.

Table 5

NONTRADITIONAL MANUFACTURED EXPORTS OF THE PHILIPPINES, 1970-1976

(f.o.b. value, million U.S. dollars)

Item	1970	1971	1972	1973	1974	1975	19
Bldg. elements and fixtures	1.0	0.7	1.6	0.5	1.3	1.9	3.
Cement and other nonmetallic mineral products	3.3	10.3	7.9	24.9	36.5	32.4	27.
Chemicals and products	5.2	6.2	6.2	10.0	15.2	21.2	26.
Clothing	0.4	0.7	2.4	11.4	23.7	33.1	80.
Electric machinery and appliances	0.03	0.4	1.8	0.9	2.1	2.7	7.
Footwear	0.4	0.7	1.2	2.1	3.7	3.0	5.
Furniture and fixtures	1.4	1.4	1.7	3.3	6.1	5.2	9.
Machinery and parts (exc. electrical)	0.6	1.8	3.0	2.3	4.2	6.8	7.
Metal products	1.0	0.9	1.4	2.4	3.2	3.4	3.
Oil products	17.3	24.2	19.3	16.0	17.3	37.4	22.
Paper and products	0.3	0.4	1.9	9.1	5.0	0.7	0.
Textile products (exc. clothing)	5.4	6.9	8.5	24.3	20.1	22.0	28.
Transport equipment	0.1	0.3	0.2	1.4	1.3	2.7	8.
Travel goods, handbags, etc.	0.9	0.8	1.7	4.5	7.6	10.2	22.
Miscellaneous	4.3	5.3	8.4	20.0	23.3	46.3	51.
Total	41.6	61.0	67.2	148.8	170.6	229.0	304.
(Annual percentage change)	(27.6)	(46.6)	(10.2)	(121.4)	(14.7)	(34.2)	(33.

Sources: Central Bank of the Philippines, Statistical Bulletin (December 19
1976 data were obtained from the Department of Economic Research,
Central Bank.

significantly impaired. Exports of some consumption goods, e.g., footwear, furnitures and textiles, are seen to have been adversely affected in 1975 by the global recession but appear to have recovered quickly the next year.

The pattern of Philippine import volume (cf. Table 6) reflects some differences among the principal commodity categories in the response to import price changes and the country's varying capacity to import over the period. Imports of petroleum had remained relatively stable, disturbed mainly by the 8% reduction in 1974 when the full force of the oil crisis was felt.[16] The observed increase of 4.3% from 1971 to 1976 constitutes a drastic departure from the average annual 10% rise in crude oil importation in the 1960s.

Cereal imports would be principally influenced by the need to augment domestic production of food crops, which was particularly severe in the early 1970s. The surprising reduction in 1973 was due to the difficulty of securing rice imports during that year of worldwide grain shortage, the government even having some import orders cancelled unilaterally by Thailand on account of the latter's own food problem.

Among the remaining commodity classes, machinery imports (including electric machinery, equipment and appliances) appear not to have been much affected by the inflation and recession of the period, judging by their uninterrupted annual increases. On the other hand, a sharp reduction in

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[16] Gonzalo (1976), using multiple regression on postwar annual data, obtained a price elasticity estimate of petroleum consumption of -.33 and an income elasticity estimate of 1.56.

Table 6

VOLUME OF PRINCIPAL IMPORTS, 1971-1976

(in million 1970 U.S. dollars, except as noted)

Item	1971	1972	1973	1974	1975	1976
Crude oil (in million barrels)	66.73	64.94	67.10	61.76	66.52	69.6
Machinery other than electric	230.2	230.7	261.7	341.1	486.6	422.8
Base metals	83.7	111.7	129.3	183.6	142.9	152.8
Cereals and cereal preparations	60.4	69.0	44.5	46.2	64.7	68.1
Transport equipment	103.9	110.7	86.5	202.4	204.1	172.6
Electric machinery, etc.	61.6	52.0	65.7	89.6	118.9	135.5
Chemical elements and compounds	37.4	49.4	66.7	139.5	90.4	80.3
Misc. chemical products (incl. explosives)	50.1	56.4	71.1	72.3	63.8	65.2
Textile fibers	46.4	45.4	50.9	71.8	63.7	59.2
Manufactures of metal	23.9	22.1	41.4	38.8	62.4	49.2

Source: Calculated from the import values and price indices presented in Appendix Table 3 and Table 3, respectively.

Philippine imports of intermediate materials such as chemicals, base metals and textile fibers is discernible in 1975, reflecting on the demand side a slowdown in the manufacturing and mining sectors but more importantly the relative severity of import restrictions involving these commodities in a year of substantial trade deficit (cf. below).

In combination with the dramatic developments in export and import prices during the period, these volume changes produced values of Philippine merchandise trade characterized by erratic movements in the trade balance. As indicated in Table 7, there was a growing deficit in the country's trade transactions in 1971 and 1972, followed by a reversal to a substantial trade surplus in 1973 as the explosion of international prices of primary commodities began to affect Philippine exports. The export boom continued on to the early part of the next year but its favorable effect on the trade balance was completely negated by the sharp increase in the import bill for crude oil which jumped from $166.1 million in 1973 to $573.2 million in 1974. This contributed substantially to the near doubling of total import value for that year and the resulting trade deficit of close to one-half billion dollars. In 1975 the effect of the world recession weighed down heavily on the export sector, reducing the country's export earnings by 16% which, jointly with the continuedrise in imports, jacked up the trade deficit to a record level of nearly $1.2 billion. While exports showed signs of recovery in the following year, total merchandise trade remained in deficit by slightly over $1 billion.

The country's merchandise trade balance had been influenced significantly by the movement of the terms of trade during 1971-1976. The direct

Table 7

CURRENT ACCOUNT IN THE BALANCE OF PAYMENTS, 1971-1976

(in million U.S. dollars)

Item	1969	1970	1971	1972	1973	1974	1975	1976
Exports	874.6	1,082.8	1,147.9	1,138.0	1,871.4	2,693.8	2,262.6	2,516.9
Imports	-1,131.5	-1,090.1	-1,186.0	-1,260.0	-1,596.6	-3,143.3	-3,459.2	-3,633.5
Trade balance	-256.9	-7.4	-38.1	-122.0	274.8	-449.5	-1,196.6	-1,116.6
Transportation and merchandise insurance	-93.9	-91.2	-77.0	-87.4	-154.1	-271.2	-263.2	-258.0
Travel	-10.6	67.5	37.6	97.9	61.4	41.1	82.7	64.5
Investment income	-77.9	-129.7	-101.1	-125.1	-113.4	-54.3	-125.6	-253.5
Services rendered to U.S. military	58.9	30.6	36.1	40.9	41.6	47.9	49.6	53.0
Pensions from U.S. government	62.3	63.8	69.0	71.5	74.2	78.4	86.6	88.3
Private transfers	43.4	29.2	34.2	80.7	94.2	122.8	165.3	148.3
Others	-8.4	-18.6	17.0	19.2	165.0	202.9	211.9	135.1
TOTAL	-283.2	-55.9	-22.3	-24.3	443.7	-281.9	-989.4	-1,138.9

Source: Central Bank of the Philippines, Annual Report (various issues).

effect is given by

$$\Delta B = X \cdot \Delta P_x / P_x - M \cdot \Delta P_m / P_m$$

where B is the trade balance, X and P_x are the export value and price index, and M and P_m are the import value and price index, each expressed in U.S. dollar terms. For 1974 alone, the reduction in the trade balance due to the deterioration of the terms of trade is calculated to be $1,111 million. In the preceding year of improving terms of trade, however, the positive direct effect on the trade balance was $654 million. Over the entire period 1971-1976, Philippine merchandise trade balance would have been higher at least by $2 billion had the country's terms of trade remained constant.

Non-merchandise transactions partly compensated for the substantial trade gap generally registered during the period. In Table 7 net receipts from private transfers (mainly in the form of remittances by Filipino immigrants) and from travel are seen to have increased markedly.[17] The latter is attributable chiefly to intensified efforts by the government, particularly after martial law was declared, to attract foreign tourists as well as Filipinos residing abroad[18] and to restrict foreign travel by Philippine residents. On the other hand there has been a substantial increase since 1974 in net disbursements for transportation, which was due to higher freight charges

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[17] The sharp reduction in travel receipts during 1973-74 was caused by a decline in expenditures from "rest and recreation" of U.S. military personnel following the de-escalation of the Vietnam war.

[18] Special privileges, notably a 50% discount on roundtrip air tickets, were granted to Filipino visitors under the "Balikbayan" project of the newly-created Department of Tourism.

occasioned by the oil crisis.

In total, current account transactions in the Philippine balance of payments were close to being balance in 1971 and 1972, produced a significa surplus in 1973 and deteriorated into increasingly large deficits through 1976.

4. Effect on capital flows

The external disturbances in recent years have also left an indelibl mark on the country's capital account. The need to offset the large defici in current transactions is reflected in the magnitude and direction of capi movements shown in Table 8. Long-term loans, both official and private, in creased progressively over the period, indicating relatively successful gov ment efforts to sustain favorable credit standing abroad. One consequence the nearly four-fold expansion of the country's external public debt from $1.0 billion in 1971 to $3.9 billion in 1976; during 1973-1976 alone, an increase of $2.7 billion was registered, substantial loan availments comin from the Oil Trade Financing Scheme, IMF, IBRD and foreign commercial banks At the end of 1975 the ratio of short-term external debt (one year maturity to total export earnings during that year was .377, which is more than doul the corresponding ratio in 1973 (.168). Private short-term capital, consisting mostly of import suppliers credits and advances for exports, expan

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19 It is worth noting that the combined "gross" publicized Euro-curre credits" to the Philippines from 1974 and 1975 amounted to $1.1 billion, w was exceeded only by Brazil, Mexico and Spain among developing country rec pients (cf. Sargent, 1976; p.21).

Table 8

CAPITAL ACCOUNT IN THE BALANCE OF PAYMENTS, 1971-1976
(in million U.S. dollars)

Item	1969	1970	1971	1972	1973	1974	1975	1976
Official grants & long term capital	151.0	131.3	45.0	153.6	212.2	248.0	548.3	1,216.0
Reparations from Japan	35.3	13.1	26.4	20.6	45.0	44.9	32.0	13.5
Other grants	13.6	13.4	4.9	15.2	32.3	30.3	34.2	18.9
Private loans	82.4	89.5	-34.4	-17.0	-5.1	32.2	126.0	336.5
Official loans	14.1	41.4	69.8	160.6	77.2	112.4	232.7	703.4
Other private capital	7.4	-24.3	3.9	-21.9	64.5	28.0	125.2	143.7
Other official capital	-1.8	-1.7	--	-3.8	-1.7	--	-1.7	--
Private short-term capital	57.9	75.9	91.7	55.8	74.6	231.3	102.0	-95.9
Net errors and omissions	-62.3	-147.2	-142.5	-107.0	-66.1	-87.4	-181.7	-145.0

Source: Central Bank of the Philippines, Annual Report (various issues).

in 1974 to more than three times the preceding year's value.[20]

The item "Other private capital" in Table 8 pertains to direct fore investment, which is seen to be either negligible or negative[21] in the in two years of the period under study. This may be attributed to the social unrest evident during these years and the uncertain status of American-own assets after the expiration of the Laurel-Langley Agreement scheduled in July 1974. With the imposition of martial law and the government's avowed policy of attracting foreign investment, substantial capital inflow began 1973. While a noticeable decline occurred in 1974, the rapid growth of di foreign investment in 1975 and 1976 is striking, attributable perhaps to t promotional efforts of the government that swamped any negative influence the continuing world recession.

Overall, capital movements have enabled the country to withstand th pressures on the balance of payments at least during 1971-1974, and even i the level of international reserves held by the Central Bank from about $ billion in 1971 to $1.3 billion in 1976. The repercussion on the country external debt has been quite severe: from a level of $2.2 billion in Jan 1971, total external debt outstanding (public and private) increased to $ billion by December 1976.

5. Overall monetary effects

Reflecting the instability of the overall balance of payments duri 1971-1976, changes in international reserves and other monetary movements

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[20]The net outflow of $96 million in 1976 was due to the "deposit w the U.S. Exim Bank of the proceeds from bond issues in New York for the country's nuclear power project" (Central Bank Annual Report 1976, p.44).

[21]Substantial sale of American asset holdings to Filipino national underlies the negative entry for 1972.

have had varying effects on the country's money supply over the period (cf. Table 9). The surplus years from 1971 to 1974 witnessed increases in money supply of external origin ranging from ₱566 million (in 1972) to ₱4,643 million (in 1973), prompting the monetary authorities to make offsetting adjustments in domestic sources of credit creation in order to maintan a semblance of stability in the growth of money in circulation. The resulting net changes in money supply were therefore due as much to the instability of the external sector as to the policy reaction to it.

The average rate of money expansion in the 1960s was 10.5% yearly, the standard deviation of annual changes being 6.5%. For the period 1971-1976 the corresponding figures are 21.4% and 6.5%, indicating a doubling of the average annual growth of money supply but the same degree of variability from year to year. However, examining only the contribution of the external sector to money supply changes, one finds the variability during 1971-1976 to be far greater than in any other postwar subperiod.

The largest money supply increases of external origin occurred in 1973 & 1974 and 1974; however, while public sector activities were contractionary during both years, net expansion of money stock increased most markedly in 1974 (by a record-setting 25.4%), which saw private domestic credits rising by 85% and contributing close to ₱2.5 billion to money supply -- an amount unmatched in the postwar period. In the succeeding years 1975 and 1976, the external sector was deflationary on account of the balance of payments deficit.

Clearly the conduct of monetary policy during the period under study has been made difficult by the instability of the external sector affecting in an unpredictable way the country's overall balance of payments.

Table 9

CHANGES IN MONEY SUPPLY BY ORIGIN
(in million pesos; December 31)

	1970-71	1971-72	1972-73	1973-74	1974-75	1975-
Internal	-85.9	662.8	-3,287.1	-321.7	5,236.2	3,135
Public sector	25.9	-419.1	-2,153.8	-2,768.5	4,865.7	3,652
Private sector	-111.8	1,081.9	-1,133.3	2,446.8	370.5	-516
External	605.9	566.4	4,643.0	2,389.3	-3,929.2	-1,375
Int'l reserves	200.0	719.1	4,173.8	3,696.5	-380.4	394
Compensatory borrowings abroad	405.9	-152.7	467.6	-937.5	-1,289.2	-981
Use of Fund credits			-49.6	242.9	-872.5	
Foreign currency deposits			152.3	-118.1	-889.2	
CBCI foreign currency			-101.1	-494.5	-497.9	
Net change in money supply	520.0	1,229.2	1,355.9	2,067.6	1,307.0	1,760
% change	(10.1)	(23.7)	(20.9)	(25.4)	(14.5)	(17

Source: Central Bank of the Philippines, Annual Report (various issues).

6. Effects on domestic production

According to the most recent official estimates, GNP at constant prices increased at an average annual rate of 6.5% from 1971 to 1976. From Table 10 the highest rate of increase (9.6%) occurred in 1972-73 and the lowest (4.9%) in 1971-1972, the remaining three-year period 1973-76 showing GNP growth rates within 5.9% and 6.3%. While "potential GNP" must be considered a highly elusive concept for developing countries, it seems plausible to argue that an annual growth of 8 - 10% for the Philippine economy would not have been unlikely during the period under more stable conditions in the country's external sector.[22] For one thing the loss in real income due to the worsening terms of trade has been relatively substantial. The change in GNP directly attributable to the movements in export and import prices (in U.S. dollar terms) is given by

$$\Delta Y/Y = s_x \Delta P_x/P_x - s_m \Delta P_m/P_m$$

where Y denotes real GNP, and s_x and s_m are the the ratios of exports and imports, respectively, to GNP. The following percentage changes in GNP were calculated: -3.31% for 1971-72, 6.18% for 1972-73, -7.81% for 1973-74, -5.54% for 1974-75 and -2.24% for 1975-76. On this basis, therefore, the Philippine economy could have grown faster by about 2.5% annually on the average during 1971-76 had the country's terms of trade remained constant.

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[22] That the official growth rate target of 6.5-7.5% during the Plan period FY 1974-77 is "quite modest ... in view of the changes in national policies which now enhance the climate for investment and output growth" has been expressed by Sicat (1974; p.246).

Table 10

PERCENTAGE CHANGES IN GROSS NATIONAL PRODUCT BY INDUSTRIAL ORIGIN, 1971-
(at constant 1972 prices)

Industry	1971-72	1972-73	1973-74	1974-75	1975-
Agriculture, fishery and forestry	3.8	5.2	1.6	3.7	5.7
Industrial Sector	7.5	12.5	3.4	9.7	8.4
Mining and quarrying	2.5	4.1	1.8	1.4	2.4
Manufacturing	6.3	14.8	3.3	3.5	5.6
Construction	17.1	7.8	6.2	52.4	22.0
Utilities	3.1	5.7	2.9	6.4	7.4
Service Sector	3.6	6.6	4.7	6.0	5.2
Transport, etc.	5.4	8.0	6.9	11.2	7.0
Commerce	2.9	5.5	3.5	5.5	5.3
Services	4.2	8.1	6.0	5.1	4.4
Gross National Product	4.9	9.6	6.0	5.8	6.3

Sources: Statistical Coordination Office, National Accounts Staff, Natio
Economic and Development Authority: "The National Income Accoun
of the Philippines, CY 1971 to 1975" (September 1976; mimeo.) f
1971-1973 data, and "The National Income Accounts of the Philip
CY 1974-1976" (December 1976; mimeo.) for 1974-1976 data.

Other sources of exogenous disturbance alluded to earlier, e.g., the series of natural disasters in the early 1970s and important changes in policies after the imposition of martial law, impinged on the Philippine economy during the period, affecting differently the various components of national product. In order to isolate their effects, disaggregative analysis is necessary.

Output levels of the major primary products from 1971 to 1976 are shown in Table 11. Their movements over the period would largely account for the observed annual changes of the agricultural sector in the national income accounts. As mentioned above, the food crops (palay and corn) suffered from weather and other misfortunes through 1973, which explains the downward trend of output. Subsequently, improved weather conditions and the government's massive food production campaign started in 1973 by the Masagana 99 program, caused an upturn in crop output. While these internal developments were mainly responsible for the observed patterns of agricultural food production, two relevant considerations pertaining to the external sector need to be pointed out. One is the possibility of a shift in some places from rice farming to sugar production due to the latter's greater profitability before the Masagana 99 subsidies;[23] Treadgold and Hooley (1967), for instance, have claimed that this was a significant development after the 1962 peso devaluation. The other consideration is the substantial increase in the prices of fertilizers and agricultural chemicals following the oil price rise in 1973-74; the cost of

[23] No quantitative information is however available to verify this particular hypothesis.

Table 11

AGRICULTURAL PRODUCTION, CROP YEARS 1971-76

(thousand metric tons, except as noted)

Item	1971	1972	1973	1974	1975	1976
Palay (rough rice)	5,344	5,100	4,415	5,594	5,660	6,15
Corn	2,005	2,013	1,831	2,289	2,568	2,76
Copra	1,574	1,703	1,698	1,703	1,820	1,86
Sugar	2,109	1,870	2,305	2,505	2,455	3,57
Pineapple	234	282	293	338	383	42
Logs (million board ft.)	4,528	3,577	3,812	2,959	2,588	3,66

Sources: Central Bank of the Philippines, Statistical Bulletin (December 1975) 1976 data were obtained from the Department of Economic Research, Central Bank of the Philippines.

subsidizing food production has therefore increased significantly.

The remaining primary commodities listed in Table 11 are exportables, their level of output generally following the pattern of actual export flows during the period (cf. above). Hence the recent instability in the world economy has significantly affected production of agricultural export commodities, which jointly account for about one-fourth of value added in the agriculture, fishery and forestry group. Indeed the same statement applies to the heavily export-oriented mining sector, which was hardest hit during the recession years 1974 and 1975.

Manufacturing industries also performed relatively poorly during 1974 and 1975, the growth of total production dropping steeply to 3.3% and 3.5%, respectively, from the 14.8% increase observed in 1972. These aggregative growth rate figures conceal however large differences in the output performance of individual manufacturing branches. As shown in Table 12, electrical machinery, transport equipment and miscellaneous manufactures enjoyed continued output expansion at high rates through 1975. The most adversely affected were such export-oriented industries as footwear, textiles, wood products and furniture, as well as the heavy oil-using sectors like chemicals and petroleum. Other industries such as paper, food manufactures, tobacco, rubber and metal products began to falter only in 1975. On the other hand production in some sectors, e.g., leather products, nonmetallic mineral products and basic metals, rebounded quickly in 1975 from depressed levels in the preceding year.

As a general observation, the increasing trend after the 1970 devaluation in both mining and manufacturing output was interrupted by the adverse external conditions during 1974-75; it would appear however that recovery

Table 12

PERCENTAGE CHANGES IN GROSS VALUE ADDED IN MANUFACTURING, 1971-1976

(at constant 1972 prices)

	Industry Group	1971-72	1972-73	1973-74	1974-75	1975-
1.	Food manufactures	-1.8	6.8	6.7	2.8	6.
2.	Beverage industries	9.4	4.7	3.8	2.7	0.
3.	Tobacco manufacturers	16.1	35.9	12.9	5.8	1.
4.	Textile manufacturers	6.3	6.8	5.5	2.7	9.
5.	Footwear, wearing apparel	-12.2	23.7	2.1	8.6	7.
6.	Wood and cork products	2.5	7.7	1.8	-26.2	23.
7.	Furniture and fixtures	-12.2	4.7	-2.2	-15.9	12.
8.	Paper and paper products	19.0	21.7	14.3	1.2	2.
9.	Publishing and printing	2.7	27.9	26.8	4.0	2.
10.	Leather and leather products	-8.3	13.6	4.0	15.4	10.
11.	Rubber products	5.3	8.2	8.0	2.3	-1.
12.	Chemicals and chemical products	33.6	10.0	4.1	4.3	11.
13.	Products of petroleum and coal	11.6	29.6	-10.2	0.9	-0.
14.	Non-metallic mineral products	-2.2	34.2	-9.4	10.4	4.
15.	Basic metal industries	4.6	28.6	-4.0	16.2	7.
16.	Metal products	2.0	3.2	2.4	-6.1	1.
17.	Machinery except electrical	8.9	12.0	-6.3	-1.6	1.
18.	Electrical machinery	-3.8	5.9	8.5	8.6	0.
19.	Transport equipment	-0.4	8.7	22.6	22.4	5.
20.	Miscellaneous	4.9	2.3	9.7	6.2	2.

Source: Statistical Coordination Office, National Accounts Staff, National Econ
Development Authority: "The National Income Accounts of the Philippines
CY 1971 to 1975" (September 1976; mimeo.) for 1971-1973 data, and "The
National Income Accounts of the Philippines, CY 1974-1976" (December 19
mimeo.) for 1974-1976 data.

was underway by early 1976, underscoring the strong dependence of these production sectors of the Philippine economy to the level of world economic activity.[24]

Among the industry groups distinguished in the national income accounts, construction exhibits the greatest variability in output during the period. However, internal factors rather than external developments chiefly underlie the observed pattern of construction activity. In 1972 the extensive damage caused by the severe typhoons and floods to infrastructure facilities, particularly in the food-producing regions, required a step-up in government construction expenditures, which increased by 64.6% in that year. Including private construction, real value added in this sector expanded by 17.1% (cf. Table 10). This represented a drastic departure from the average annual growth rate of only about 3% in the 1960s. More substantial increases in construction output occurred in 1975 and 1976 (by 52% and 22%, respectively), this time hotel-building[25] and other tourism-related projects were the principal concentration of expanded construction activity, participated in by the private sector but heavily underwritten by government financial institutions.

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[24] The growth rate of value added in real terms from the first semester 1975 to the corresponding period in 1976 was 4.6% in mining and 4.3% in manufacturing.

[25] Fourteen international standard hotels were constructed in 1975-76 at an estimated cost of $3,750 million (Stretton, 1977) for the immediate purpose of accommodating the delegates to the IMF-World Bank Conference held in Manila in October 1976. As of September 1977 the 14 hotel companies reportedly owed the Development Bank of the Philippines and the Government Service Insurance System ₱1.8 billion, which debts were to be rescheduled (Philippine Daily Express, September 6, 1977).

7. Effects on employment and wage income

For labor-surplus economies like the Philippines an especially important aspect of the effects of recent external disturbances is how the extent of labor use has been affected. In view of the existing inequity in income distribution (Tan, 1976), it is also of significant interest to examine the resulting movements in the earnings of Filipino laborers from 1971 to 1976.

Because post-1973 employment data from official household surveys are not yet available at the present time, it is not possible to provide a comprehensive examination of the actual pattern of labor utilization during the period under study. One would expect, however, some correlation between the output and employment effects of the recent instability, differences among industries being attributable to differences in the elasticity of employment with respect to output. Based on the above discussion of the changes in sectoral production, employment in the primary export industries (including mining), as well as the manufacturing sector, would have been adversely affected by the 1974-75 recession.

Evidence for the mining sector is provided by the movement in the Central Bank employment index (based on a sample of 18 mining corporations) as follows: 1971 - 93.7, 1972 - 100.0, 1973 - 110.7, 1974 - 106.8, 1975 - 102.3 and 1976 - 107.6. Although a sharp increase in mining employment accompanied the export boom in 1973, absolute decreases in the number of persons employed characterized the recession years 1974 and 1975. Even with the recovery observed in 1976, the level of mining employment has not quite attained the 1973 mark.

For the manufacturing sector, employment data are available until 1974 only from the Annual Survey of Establishments (ASE) published by the National Census and Statistics Office. It would appear that manufacturing employment increased in 1971 by 4.5% over the preceding year's level. During the next two years[26] there was a remarkable expansion by 27.4%, reflecting the rapid growth of manufacturing value added in 1972 and 1973 as noted above. In the following year a weakening of manufacturing employment occurred, again following the pattern of manufacturing output, except that there was even a decrease in employment level in 1974 by 1.1%.

While recent employment data are scarce, there is much available information on worker earnings. Table 13 contains data for 1971-1976 on wage rates of skilled and unskilled laborers in industrial establishments in the Greater Manila area and average earnings of salaried employees and wage earners in nonagricultural industries in the Philippines.[27] Apparently, for each of these four categories of workers, the gradual upward movement in money earnings has not matched the sharp increases in cost-of-living (especially in 1973-74), resulting in a general deterioration of real incomes during the period. There was however some improvement in the real earnings

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[26] For 1972 a manufacturing census was conducted in which only establishments employing 10 or more workers were covered, precluding comparability with the ASE data for other years.

[27] Real wage rates and earnings were obtained by deflating nominal values by the relevant consumer price index.

Table 13

INDICES OF NONAGRICULTURAL WAGES AND SALARIES, 1971-1976

Item	1971	1972	1973	1974	1975	1976
Money wage rates*						
skilled laborers	95.3	100.0	105.3	115.1	119.7	124.4
unskilled laborers	94.3	100.0	102.7	110.8	120.1	126.2
Real wage rates*						
skilled laborers	105.2	100.0	95.4	77.4	74.4	73.2
unskilled laborers	104.0	100.0	92.8	74.5	74.6	74.3
Nominal earnings**						
salaried employees	93.4	100.0	111.1	121.6	136.9	154.7
wage earners	90.6	100.0	112.2	110.9	124.4	143.1
Real earnings**						
salaried employees	101.1	100.0	99.0	77.6	81.2	86.6
wage earners	98.1	100.0	100.0	70.7	73.8	80.6

* Manila and suburbs. ** Philippines.

Sources: Central Bank of the Philippines, Annual Report (1976) and Statistical Bulletin (December 1975).

salaried and wage employees in nonagricultural industries in the Philippines after 1974 as the inflation rate fell significantly. Skilled industrial workers in Manila have suffered a loss in real purchasing power by 30%, the unskilled workers by slightly less. It would appear also that nonagricultural wage earners working outside Greater Manila had not been as severely penalized, and that salaried workers experienced the least (but still significant) reduction in real income.

Such deterioration of worker earnings would be due to the effects of both the recent external disturbances which reduced the demand for labor (at least during the recession years) and the various policies adopted by the government with respect to prices and wages that failed to protect the real income of laborers, which will be further discussed below.

8. Investment effects

No survey of the effects of recent external disturbances on a developing country like the Philippines would be complete without looking at how the level and allocation of domestic investment might have been influenced. One normally expects that investment would depend positively on the level of national income and, in foreign exchange-constrained economies relying heavily on imports for physical capital accumulation (such as the Philippines), also on the country's capacity to import. This is borne out by the following estimated equation based on Philippine data for 1952-1975:

$$I = -2125 + \underset{(4.91)}{.166Y} + \underset{(3.08)}{.667M}$$

$$\bar{R}^2 = .954 \qquad D.W. = 1.20$$

where the numbers in parentheses underneath the regression coefficients are the t-values, and

I = gross domestic capital formation

Y = gross national income

M = total imports,

each expressed in million pesos at 1967 prices. Thus the marginal propensity to invest is about .17 and two-thirds of any increments in imports take the form of investment goods.

It turns out, however, that large regression residuals characterize the recession years 1974 and 1975, i.e., the predicted values are much below actual investment levels. Indeed, while real GNP and imports registered relatively low rates of increase in 1974 and 1975, capital formation has expanded at unprecendented rates of 24% and 20%, respectively.

A clue to the explanation of such divergence could be provided by an examination of sectoral investment data, which information however is not available. While the Central Bank publishes data on "capital investments of newly registered business organizations classified by industry", it is not possible to obtain recent data on reinvestments of existing firms. For what they are worth, the Central Bank data (when appropriately deflated) indicate substantial new investments in 1974 for the following sectors: agriculture (39% over 1973 level), forestry, fishing and livestock (121%), manufacturing (57%), and construction (43%). In the following year, however sharp reductions occurred in forestry and manufacturing, while new invest-

ments in construction increased at an even higher rate of about 100%.[28] The latter is in accord with the earlier finding of rapid expansion in construction activity during 1975-1976. For the other sectors mentioned above,[29] it would appear that only in the second year of the world recession were profit expectations sufficiently affected to deter large investments by prospective investors.

9. Other effects

There are of course other channels through which the international transmission mechanism operates, and on which only a few observations will be made here as they impinged on the Philippine economy. For one thing, the deterioration of real income of workers which, as noted above, was most serious among skilled industrial laborers in Manila, might have impelled some of them to seek better job opportunities abroad. Indeed the overseas migration of Filipino workers has expanded markedly in recent years, which is consistent with the substantial increases in net receipts from private transfers in the form of remittance noted earlier.

Not only labor but also domestic capital and technology may transfer to another country in response to economic forces created by some instability in the world economy. (A disequilibrium situation invariably improves the economic opportunities in some places relative to others). This is illustrated

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[28] This was facilitated presumably by the much expanded credits extended by government financial institutions to the construction sector. For instance, while the total amount of loans granted by development banks (which is dominated by the government-owned Development Bank of the Philippines) trebled in 1974-75, loans to "real estate" increased more than six-fold.

[29] Central Bank data on new investments (undeflated) in mining show remarkably stable values from 1973 to 1975.

by the recent establishment and expansion of subsidiary firms in other Southeast Asian countries by certain Philippine accounting and development banking companies. A few local construction and engineering firms have likewise gone "international" in recent years, winning bids to set up infrastructure facilities in some Middle East and African countries.

Finally, there are demonstration effects that may defy quantitative evaluation (Krause and Sekiguchi, 1977). The growing trade imbalance since 1973 has accentuated the need to increase foreign exchange earnings in the Philippines. Among other things, the government has exerted much effort to promote tourism. Taking cognizance of the demonstration channel, it would be useful to determine the extent to which the increasing flow of tourists and other foreign visitors into the country has affected the economic behavior of the local population, and also to ascertain the economic repercussions of tourism development beyond that of raising foreign exchange. Tourism does present a dilemma in that the expenditures of foreigners provide direct benefits to the economy but also encourage luxury spending by the local population (since tourist facilities and amenities are not fenced off for foreigners only). Moreover, tourism-related activities may not even yield as high rates of return as other industries, as the recent overbuilding of hotel capacity in the Philippines seems to indicate.

IV. The United States and Japan as Sources of External Disturbance

Due to colonial ties dating back to the turn of the century, the Philippines has historically been highly dependent on the United States as a market for exports and as a supplier of imports. Since the granting of

political independence in 1946, however, a gradual reduction of the U.S. share in Philippine foreign trade has taken place, particularly in the 1950s and 1960s, accompanied by an increasing level of trade flows with Japan. By 1970 Japan was contributing about the same proportion to total Philippine trade (30% of imports and 40% of exports) as the United States. With the recent drastic increase in the relative importance of crude oil to the total import bill, the combined share of the United States and Japan in Philippine imports has dropped to about 50%; similarly the export share of these two countries has been reduced to a total of about 60% after 1974.

Such strong links in trade with Japan and the United States make the Philippine economy inherently subject to exogenous shocks emanating from these two large countries. Indeed, given the extent to which they dominate Philippine foreign trade and payments, a large part of the recent external disturbances described above, with the exception of the "oil crisis", would be traceable to the economic instability in Japan and the United States. The severity of the recent external shocks is due in part to the unusually high degree of synchronization of economic changes in the two countries, as suggested by the movements during 1971-1976 of certain price and activity variables shown in Table 14. (A possible exception is the observed changes in exchange rates, whose effects on the Philippine economy have been described above).

It is worth noting that the sharp downturn in GNP and industrial production occurring in 1974 in both countries was accompanied by a substantial increase in their export price indices. Presumably, the

Table 14

ANNUAL RATES OF CHANGE IN SELECTED ECONOMIC INDICATORS: THE UNITED STATES AND JAPAN, 1971-1976

(in per cent)

Item	1971	1972	1973	1974	1975	1976
GNP (at constant prices)						
U.S.	3.0	5.7	5.5	-1.7	-1.8	6.2*
Japan	6.8	9.0	9.9	-1.2	2.1	6.0**
Industrial production						
U.S.	1.7	9.2	8.4	-0.4	-8.9	10.2*
Japan	2.8	7.2	15.6	-3.1	-10.6	13.75**
Export price index (in national currency)						
U.S.	3.2	3.7	17.7	28.3	10.0	3.4
Japan	0.7	-2.9	9.0	33.7	-2.9	1.4
Exchange rate (Phil. peso per:)						
U.S. dollar	8.6	3.7	1.3	0.5	6.8	2.7
Japanese yen	22.2	8.0	9.1	-6.3	5.3	6.9

*Preliminary. **OECD forecast as of December 1976.

Sources: Economic Indicators (January 1977), prepared for the Joint Economic Committee of the U.S. Congress by the Council of Economic Advisers.

OECD, Main Economic Indicators (January 1975 and March 1977).

International Economic Indicators and Competitive Trends, U.S. Department of Commerce (various issues).

simultaneous recession and inflation in the two countries affected adversely the foreign trade of the Philippines, as did other small economies strongly attached to the United States and Japan, in many ways. Here we are interested in estimating the contribution of the economic instability in these two countries to the observed changes in the external disturbance variables which initiate the macroadjustment of the economy, in particular the movements of the import price index and value of exports. The latter variables jointly determine the country's capacity to import, and hence the trade balance, etc.

Table 15 presents such estimates, obtained for each year by multiplying the import or export share of Japan (U.S.) in Philippine trade flows during 1973-74 by the ratio of the percentage change of the price index of imports from or value of exports to Japan (U.S.) to the percentage change of the aggregate import price index or total value of exports. Japan is seen to have contributed more than the United States to the changes in the import price index from 1970 to 1974; in the latter year when world oil prices quadrupled, the combined contribution of the two countries was understandably small (28%). Annual fluctuations of Philippine export earnings during the period had been quite severe, as shown earlier; from Table 15 one finds the contributions of the United States and Japan to be very large. Indeed, in the two years (1972 and 1975) for which the sum is greater than unity, there were changes in Philippine export flows to other countries which tended to offset the synchronous movements of export receipts from