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Foreign Direct Investment
in the Philippines:
A Reassessment

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Rafaelita A. Mercado-Aldaba

PHILIPPINE INSTITUTE FOR DEVELOPMENT STUDIES

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Abbreviations

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Asean	Association of Southeast Asian Nations
BOP	balance of payment
CB	Central Bank of the Philippines now Bangko Sentral ng Pilipinas (BSP)
CPI	consumer price index
EPZA	Export Processing Zone Authority
FDI	foreign direct investment
FIA	Foreign Investment Act
FINL	Foreign Investment Negative List
NAFTA	North American Free Trade Area
NEER	nominal effective exchange rate
NICs	newly industrializing countries
REER	real effective exchange rate
RER	real exchange rate
SEC	Securities and Exchange Commission
TNCs	transnational corporations

Introduction

A considerable number of developing countries which were earlier skeptical about foreign direct investment (FDI) have, in recent times, become more receptive to the entry of transnational corporations (TNCs). Beginning in the late 1970s, their policies toward FDI have become more open. A central reason behind this is their need to expand exports (Blomström 1990). FDI is assumed to have the potential of making significant contributions to facilitating the marketing of exports. The knowledge and experience of TNCs in international marketing and their lobbying power in their home countries can help developing countries in expanding their exports. FDI can also contribute to their economic development through the transfer of financial resources, as well as of technology and improved management knowhow.

These contributions depend largely on the policies of developing countries and the behavior of TNCs. It is often suggested that a more outward-oriented policy is a necessary condition for the realization of TNCs' export potential and that host country trade policies are more important than policies toward TNCs. The four Asian NICs (newly industrializing countries) are the most successful in transforming their economies and creating a policy environment that encourages export competitiveness. More important, their trade policy regimes are less biased against exports. Their trade orientation attracted a substantial amount of foreign investment, which in turn contributed to their export expansion.¹ In the 1980s, they emerged as Asia's new capital exporting countries.

1. This is particularly true for Singapore and Hong Kong. In the case of South Korea, the bulk of its exporting has been done by local firms. Until 1984, South Korea had restrictive foreign investment policies (UNCTC 1988 and Helleiner in Singer 1991).

Recognizing the importance of an outward-oriented policy² approach, many countries today are abandoning the Prebisch-type of inward-looking strategy. They have liberalized their FDI regulations, and introduced various guarantees and incentives. Emulating the successful model of their Asian neighbors, the four ASEAN countries (Malaysia, Indonesia, Thailand, and the Philippines) have embarked on policies of deregulation, liberalization, and reforms. In the case of the Philippines, however, the volume of FDI has failed to meet expectations as the country compares itself unfavorably with its ASEAN neighbors. In the 1980s, the early wave of foreign investment flows from the Asian NICs, as well as those from Japan, benefited mostly Indonesia, Malaysia, and Thailand, within ASEAN.³

This study aims to identify the factors that may explain and help in understanding why the Philippines has lagged significantly behind other countries in attracting export-oriented FDI.

The paper is organized as follows. Section 2 provides a background on trade and investment policies of the government, as well as on the overall economic and political environment in the Philippines from

2. An inward-oriented trade strategy is one in which trade and industrial incentives are biased toward production for the domestic market. This strategy tends to rely on discretionary interventions, so that over time, an inward-oriented trade regime is often characterized by controls, high and variable tariff protection and quantitative restrictions and administrative allocations. Outward orientation, on the other hand, emphasizes linkages to the world economy through exports and enhanced import capacity. This strategy does not bias incentives in favor of the domestic market. Export activities are, therefore, treated at least as profitably as import-competing activities. While an important principle of outward orientation is a neutrality of incentives between production for home and export markets, it does not imply an absence of government intervention (Bhattacharya, A. and J. Linn, "Trade and Industrial Policies in the Developing Countries of East Asia," WB Discussion Paper, 1988).

3. This wave of FDI flows from the Asian NICs was driven by their search for new markets, the need to circumvent increasing protection in the developed countries, and the appreciation of their currencies. FDI flows from Japan surged due to the yen appreciation in 1985 as well as the wage increases, scarcity of land, and the graduation of the NICs from the GSP in 1989 (Pangestu et al. 1992).

the 1940s up to the early 1990s. Section 3 gives the trends, patterns, sources, and sectoral concentration of FDI in the Philippines. Section 4 analyzes the impact of domestic policy changes in the 1980s on the volume and type of FDI flows. It also examines the impact of FDI on exports. Along this line, there are questions to address. Has the increased policy attention to export promotion led to an increased export orientation of existing firms? If not, what prevented them from engaging in greater export activity? Section 5 compares the Philippines with its ASEAN neighbors in terms of trade and investment policies, as well as the characteristics of foreign firms operating in each country. Section 6 looks at the determinants of FDI, and assesses the impact of FDI flows on exports. Section 7 presents the conclusions and policy recommendations of the study.

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Overall Investment Climate in the Philippines: 1940s-1990s

THIS section provides an overview of the economic and political environment in the Philippines, and discusses the trade and FDI policies in the country from the 1940s up to the early 1990s. This serves as a background for the succeeding analysis on FDI flows. Box 1 summarizes the major economic and political events affecting FDI flows in the country.

PARITY AMENDMENT AND IMPORT SUBSTITUTION: 1940s - MID-1960s

The Philippines was a colony of the US for the period 1898 to 1946. Because of these traditional ties, the country's international economic relations were very much oriented toward the US. After independence in 1946, the enactment of the Bell Trade Act reinforced the relationship between the two countries. The Act had a parity provision which afforded the same rights and privileges to American firms in the exploitation of natural resources and operation of public utilities. In 1955, the Bell Act was revised by the Laurel-Langley Agreement which extended the parity privileges of the Americans to all forms of economic activities in the country.

The Philippines started to adopt an industrialization policy of import substitution when import and foreign exchange controls were imposed in response to a balance-of-payments (BOP) crisis in 1949. These controls were retained throughout the 1950s, and soon, a protective system was built up through the maintenance of an overvalued currency, defended by protective tariffs and quantitative import restrictions.

Box 1**Chronology of Significant Economic and Political Events in the Philippines**

Year	Event
1945	Bell Trade Act. This provided for the continuance of free trade between the US and the Philippines for a period of 8 years with gradually rising tariffs thereafter.
1949	BOP crisis Imposition of import and foreign exchange controls.
1955	Laurel-Langley Agreement. This accelerated the application of Philippine duties on imports from the US so that 90 percent of the Philippine duty was applied by 1965 earlier than previously scheduled. Duties would then rise to 100 percent in 1974.
1957	Adoption of a protective tariff structure. The 1957 tariff changes lowered the duties on raw materials, intermediate goods, and essential items which were not domestically available and raised the duties on non-essential, finished goods and items which could be domestically manufactured. This produced the familiar escalation of the tariff structure which has remained until today. The decontrol of imports in 1960-62 allowed this tariff structure to emerge as the dominant protection instrument.
1965	Election of Marcos
1967	RA 5186: Investment Incentives Act. This Act prescribed incentives and guarantees to investments in the Philippines and created a Board of Investment to carry out its provisions. Investments in pioneer industries could be totally foreign-owned while investments in non-pioneer industries were restricted up to 40 percent equity. The ownership requirement was relaxed if the enterprise proposed to engage in a pioneer activity or if it exported at least 70 percent of its production. It also offered various fiscal incentives to foreign investors in pioneer areas such as accelerated depreciation, net operating loss carry-over, tax exemption on imported capital equipment, tax credit on domestic capital equipment, tax credit for withholding tax on interest, and exemption from all revenue taxes except income tax.
1968	RA 5455: Foreign Business Regulations Act. This Act regulated foreign investment whose equity participation exceeded 30 percent in enterprises that were not registered under the Investment Incentives Act of 1967. Whenever foreign equity participation in these enterprises exceeded 30 percent, prior

authority from the BOI must be obtained. For investments that did not exceed 30 percent, the enterprise must only be registered with the BOI.

- 1969 Reelection of Marcos
Escalation of radical protests
- 1970 BOP crisis
RA 6135: Export Incentives Act. This Act was the first step towards redirecting investments away from import-substituting industries that had dominated the Philippine economy. It followed the same rules on foreign ownership as RA 5186 and provided almost the same incentives granted to firms registered under RA 5186 in addition to tax credit on duties and taxes paid on raw materials and additional deduction of the sum of direct labor cost and raw materials used.
- 1972 Declaration of Martial Law
PD 66: Export Processing Zones. RA 5490 of 1969 was legislated to pave the way for the country's first Export Processing Zone in Bataan, but no real progress was made until PD 66 was issued. Total production of firms must be entirely geared for exports; in certain instances, however, and subject to the approval of the EPZ Authority, 30 percent of production may be sold in the domestic market. Foreign ownership was permitted up to 100 percent, however, only promoted industries were allowed to be set up.
- 1974 Expiration of Laurel-Langley Agreement
- 1980 **Trade Liberalization Program.** Under a World Bank structural adjustment loan (SAL), the government embarked on a program to reduce the level and dispersion of tariff rates and remove quantitative restrictions over a period of 5 years ending in 1985. The Program proceeded broadly on schedule until the 1983 BOP crisis.
- 1981 Lifting of Martial Law
PD 1789: Omnibus Investments Code of 1981. This consolidated into a single code all incentive measures to investments, agriculture, and exports contained in separate pieces of legislation, but did not alter their overall thrust.
- 1983 **BP 391: Amendment of PD 1789.** This reduced the number of incentives under PD 1789. It did away with some of the capital cheapening measures such as accelerated depreciation and expansion reinvestment allowances. It also gave strong preference to exports and substituted performance-based for capital-based benefits.
Aquino assassination
BOP crisis

- 1984-85 Holding of massive demonstrations participated for the first time by the urban, middle class and the business community.
- 1986 February People Power Revolution
July coup attempt
November coup attempt
- 1987 **EO 226: Omnibus Investments Code of 1987.** Regulated the entry of foreign investment in enterprises not registered under Book 1 of the Code whenever their equity participation exceeded 40 percent (instead of 30 percent in the old Code). The new Code simplified and consolidated previous laws and provided two important additions: income tax holiday for enterprises engaged in preferred areas of investment and labor expenses allowance for tax deduction purposes.
August coup attempt
- 1989 Nearly successful December coup and persistence of rumors of further conspiracies.
- 1991 **RA 7042: Foreign Investment Act.** Liberalized the existing regulations by allowing foreign equity participation up to 100 percent in all areas not specified in the Foreign Investment Negative List (FINL). The FINL has three component lists: A, B, and C. List A covers areas where foreign participation is excluded or restricted by the Constitution or specific legislations. List B contains activities where foreign investment is limited for reasons of defense, risk to health and moral, and protection of local small and medium-scale enterprises. List C contains areas of investment in which there already exists an adequate number of enterprises to serve the needs of the economy and further foreign investments is no longer necessary. Foreigners who do not seek incentives and/or whose activities are not included in the negative list can invest up to 100 percent equity simply by registering with the Securities and Exchange Commission (SEC). They can also invest up to 100 percent in enterprises that export at least 60 percent (instead of 70 percent under EO 226) of their output, provided these do not fall within Lists A and B.
EO 470. Designed within a four-year phasedown period from July 1991 to July 1995, EO 470 aimed to lower the maximum tariff rate to 50 percent and reduce the number of tariff tiers within the range of zero minimum for raw materials to 50 percent (with some exceptions) for finished products.
- 1992 Election of Ramos

**MARTIAL LAW, EXPORT PROMOTION, AND DEBT-DRIVEN GROWTH:
LATE 1960s - 1970s**

The late 1960s was marked by economic and political turmoil. The economy again witnessed a renewal of BOP difficulties, which led to a crisis in late 1969. To encourage foreign investment, Republic Act (RA) 5186 or the Investment Incentives Act of 1967 and RA 6135 or the Export Incentives Act of 1970 were promulgated. These two Acts were the first laws aimed at streamlining and rationalizing foreign investment policy in the Philippines. In 1968, RA 5455 or the Foreign Business Regulations Act was legislated to regulate foreign investments in enterprises that were not registered under RA 5186.

After the 1969 election in which Marcos was reelected, radical protests escalated in both rural and urban areas. Purportedly to curb the expansion of these unrests, Marcos declared Martial Law in September 1972. Various measures were passed reducing restrictions on foreign investment. Earlier laws such as RA 5186, 5455, and 6135 were amended to enhance their attractiveness. To pave the way for the country's export processing zones, Presidential Decree (PD) 66 was issued in 1972.

During the 1970s, the government attempted to encourage non-traditional exports to spearhead its economic development. This, however, fell short of expectations. The growth of non-traditional exports became highly concentrated on a few commodities dominated by garments and semi-conductor devices, which were heavily dependent on imported raw material inputs as well as on export processing zones and bonded warehouses. During this period, the country's external indebtedness increased greatly as a result of the two oil price shocks and the heavy borrowing from the easily available recycled petrodollars.

**ECONOMIC CRISIS, TRADE LIBERALIZATION, AND PEOPLE POWER
REVOLUTION: 1980s - EARLY 1990s**

The economic and political atmosphere in the early 1980s was turbulent, reminiscent of the situation during the late 1960s.

Insurgency heightened as the Marcos government was beginning to lose its credibility and support. After the second oil price increase, the country began to encounter serious economic problems arising from its increasing debt service burden, declining export receipts, and low rates of economic growth. In January 1981, martial law was lifted, although it made no difference in terms of the power structure of the Marcos regime. The assassination in August 1983 of Benigno Aquino Jr., political arch-rival of Marcos, and the resulting political disturbances triggered capital flight and the most severe BOP crisis the country had ever faced.

Amidst this economic and political chaos, several economic reforms were initiated by the Marcos government. In 1980, the country embarked on a trade liberalization program under a World Bank structural adjustment loan. To consolidate the incentive measures to investments and exports, PD 1789 or the Omnibus Investments Code of 1981 was promulgated. In April 1983, major changes were introduced in the investment incentive system through the amendment of PD 1789 by Batas Pambansa Bilang (BP) 391. The latter reduced the number of incentives under PD 1789 and did away with some of the capital cheapening measures such as accelerated depreciation and expansion reinvestment allowances. It also gave strong preference to exports and substituted performance-based for capital-based benefits (Manasan 1986 and Power 1989).

In February 1986, an aborted military coup which was turned into a massive urban uprising by the people overthrew Ferdinand Marcos. The new regime of Corazon Aquino succeeded in restoring democratic institutions in the political arena, and recorded improvements in the country's economic growth, particularly from 1987 to 1989. However, the political stability of the country remained fragile with threats from right-wing military renegades and communist revolutionaries. Aquino's term saw a series of attempted coups and rumored coups involving elements of the military. The almost successful coup of December 1989 had severely damaged the government's standing.

After 1986, President Aquino strove to complete the import liberalization program which was suspended in 1983. Further tariff

reform was legislated through Executive Order (EO) 470. To encourage investments, EO 226 was promulgated in February 1987. The new code simplified and consolidated previous investment laws. Compared with BP 391, EO 226 diminished the preference for exports, and reinstated some of the capital cheapening measures that had characterized investment incentives prior to 1983. Thus, the Investment Code no longer served as a counterbalance to the import substitution bias of the protection system and was itself biased in favor of capital-intensive investments (Manasan 1986 and Power 1989). This tended to give the wrong signals to foreign investors.

In June 1991, RA 7042 or Foreign Investment Act (FIA) was legislated. This considerably liberalized the existing regulations by allowing foreign equity participation up to 100 percent in all areas not specified in the Foreign Investment Negative List (FINL). The FIA provided transparency by disclosing in advance through the FINL the areas where foreign investments were allowed or restricted. It also reduced the bureaucratic discretion arising from the need to obtain prior government approval whenever foreign equity participation exceeded 40 percent (World Bank 1993). Together with the incentives under EO 226, the Philippines was expected to be on an equal footing with its ASEAN neighbors with respect to policies toward TNCs.

In May 1992, the democratic transition process was completed with the election of Aquino's former defense secretary Fidel Ramos as president. His administration initiated peace negotiations with both right wing military rebels and communist insurgents. This move was a major factor in the establishment of political stability during his first year in office. However, the rise in criminality which severely affected the peace and order situation in the country, as well as the power crisis which resulted in hours-long blackouts, added to the negative perceptions on foreign investments in the Philippines (see Box 1, Appendix 1).

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FDI in the Philippines

As in most developing countries, there is lack of comprehensive FDI data in the Philippines. Although there are currently three government agencies⁴ monitoring FDI flows, their data suffer from lack of comparability and discrepancies due to differences in definition, coverage, and time period (Appendix 3 discusses these data issues extensively). The data used in this section are based on Central Bank statistics which, notwithstanding their weaknesses, are the most comprehensive in terms of coverage and the most complete in terms of number of years covered.

TRENDS AND PATTERNS

This analysis is based on the FDI item in the balance of payments computed by the Central Bank's Department of Economic Research International (DER-I). The DER-I's definition of foreign direct investment includes not only foreign direct equity investments but portfolio investments as well and foreign exchange holdings of corporations, partnerships, and banks due to other financial transactions.

Tables 1 and 2 show that the net inflow of FDI in the Philippines fluctuated widely. The history of economic and political instability in the country contributed greatly to this erratic trend. Table 1 presents the FDI flows for the period between 1950 and 1969. The table

4. These are the Central Bank, Securities and Exchange Commission, and Board of Investments.



Table 1

Net Foreign Investment Flows in the Philippines : 1950-1969
(in US\$ million)

	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
Net Foreign Investment	2	5	22	43	44	59	31	40	18	46
Inflow	2*	5*	22*	43*	44*	59*	46*	56*	55*	83*
Outflow	—	—	—	—	—	—	15	16	37	37
	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
Net Foreign Investment	18	-2	-27	-34	11	-10	2	49	184	130
Inflow	107	73	26	23	74	18	74	103	266	225
Outflow	59	75	53	57	63	28	72	54	82	95
* Net Flow										

Source: Department of Economic Research, Central Bank.

Table 2

Net Foreign Direct Investment Flow in the Philippines: 1970-1993
(in US\$ million)

Foreign Direct Equity Investment in the Philippines									
	New Foreign Investments	Reinvested Earnings	Debt Conversion	Technical Fees and Imports Converted into Investments	Total	Foreign Direct Investment Abroad	Portfolio Investment	Capital Withdrawn from the Philippines	Net Inflow
1970	4	—	—	—	4	-3	-26	-3	-28
1971	3	—	—	—	3	-5	2	-4	-4
1972	2	—	—	—	2	-9	-2	-13	-22
1973	83	—	—	—	83	-1	11	-29	64
1974	64	—	—	—	64	0	24	-60	28
1975	116	—	—	—	116	-1	28	-18	125
1976	91	67	—	—	158	-5	16	-25	144
1977	130	78	—	—	208	14	6	-12	216
1978	60	62	—	8	130	-9	-1	-20	100
1979	62	58	—	10	130	-38	13	-85	20
1980	75	39	—	—	114	-86	4	-134	-102
1981	91	62	—	90	243	-47	3	-24	175
1982	25	44	—	124	193	-61	1	-116	17
1983	119	26	—	102	247	-26	7	-116	112
1984	32	15	—	90	137	-15	-3	-102	17

Table 2 continued

Foreign Direct Equity Investment in the Philippines									
New Foreign Investments	Reinvested Earnings	Debt Conversion	Technical Fees and Imports Converted into Investments	Total	Foreign Direct Investment Abroad	Portfolio Investment	Capital Withdrawn from the Philippines	Net Inflow	
1985	9	10	—	45	64	-22	5	-30	17
1986	17	20	14	38	89	14	13	24	140
1987	34	22	287	31	374	2	19	-69	326
1988	81	17	806	13	917	25	50	-6	986
1989	93	56	306	39	494	7	372	-30	843
1990	171	28	226	24	449	0	152	-121	480
1991	130	34	273	56	493	13	212	-64	654
1992	234	42	269	46	591	6	451	-311	737
1993	334	43	193	5	575	6	955	-924	612

Net Foreign Direct Investment Inflow = Inflows - Outflows. This represents the net increase in foreign equity and non-equity investments plus net increase in foreign exchange holdings of domestic corporations and partnerships due to other financial transactions.

Source : Department of Economic Research - International, Central Bank.



shows that the year 1950, which marked the beginning of import substitution in the Philippines, was characterized by overall increases in the inflow of import-substituting FDI. This can be illustrated by looking at the foreign direct investment of the US which accounts for the bulk of FDI in the country. Table 3 reveals that US investment in manufacturing grew rapidly between 1957 and 1966. This period coincided with the adoption of import substitution by the government along with the granting of parity rights to the US. Table 3 shows that during this period, the US shifted its investment from trade and public utilities toward manufacturing. The share of manufacturing increased from 13.4 percent in 1957 to 34.2 percent in 1966. These investments in manufacturing were made largely in firms producing import-substitutes like toiletries and detergents (Colgate-Palmolive 1949), pharmaceuticals (Muller and Phelps 1950 and Mead Johnson 1962), batteries (Union Carbide 1951), aluminum products (Reynolds 1956),

Table 3
US Direct Investment in the Philippines by Industry
Percentage Distribution

	1940	1950	1957	1966
Manufacturing	7.6	15.4	13.4	34.2
Transportation, communication and public utilities	39.6	31.5	23.8	6.0
Trade	14.5	20.1	19.9	14.2
Other industries	38.3	32.9	(D)	(D)
Total	100.0	100.0	100.0	100.0
(in US\$ million)	90.2	149.2	306.0	486.0

(D) indicates that the data in the cell has been suppressed to avoid disclosure of data for a specific person or firm.

Sources: US Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* (Washington, D.C. Government Printing Office), various issues in Meiners, 1988.

wires and cables (Phelps-Dodge 1955), paper (Kimberly Clark 1956), dairy products (General Milk 1957 and Consolidated 1956), tires (BF Goodrich), and electrical appliances (General Electric [GE]).⁵

The early 1960s was beset by economic problems arising from the exchange controls instituted in the last decade. Until the middle of the 1960s, net FDI outflows were registered (Table 1). Net FDI inflows began to rise in 1966 and reached a peak of US\$184 million in 1968. However, this started to decline in 1969 as uncertainty loomed among foreign investors due to the country's growing economic and political difficulties as well as the anticipated termination of the Laurel-Langley Agreement in 1974.

Table 2 shows the FDI flows from 1979 up to 1993. Negative net inflows were registered from 1970 up to 1972. With the declaration of martial law in 1972, net FDI inflows increased steadily from 1973 to 1978, except in 1975 when net FDI inflow plunged due to the first oil price shock. During this period, the government enacted various measures to deregulate foreign investment. The anxieties of American investors were relieved by the passage of a series of presidential decrees which facilitated their divestments. Furthermore, the Central Bank liberalized regulations on the repatriations of capital and profits and the remittances of royalties. But as the second oil price shock hit the world in 1978-1979, net inflows again dropped substantially from 1978 until 1980. Abroad, the 1980s witnessed a downturn in world economic activity and sharp reductions both in international bank lending and foreign direct investment flows.

In the early 1980s, the country was again beleaguered by economic and political instability. Net FDI flows suffered a massive drop with large FDI outflows registered in the mid-1980. 1986 marked the end of the Marcos era and the beginning of the Aquino administration. From 1986 to 1988, steady increases in net FDI flows were registered with a peak of US\$843 in 1988. These flows were boosted by the government's debt for equity program. Under the program, foreign liabilities at commercial banks could be bought at a discount at the secondary market and the same could be redeemed at

5. *American Philippine Yearbook* 1967 published by the American Chamber of Commerce in Constantino, R. and Constantino, L., *The Continuing Past*, Manila, 1978.

full peso equivalent at the Central Bank for investment in Philippine equity. In 1988, debt conversions stood at US\$806 million and accounted for 88 percent of total foreign direct equity investment. Investor confidence was, however, dented by the nearly successful December 1989 coup. Amidst widespread investor uncertainty, a renewed fall occurred in net foreign investment in 1990. Although some recovery was observed in 1991 and 1992, net FDI flows again fell in 1993. Net portfolio investments in the Philippines were relatively small until the mid-1980s. Starting in 1986 net portfolio investments increased significantly with a surge in 1992 and 1993.

SECTORAL CONCENTRATION

This analysis looks at the changes in the sectoral distribution of Central Bank-registered foreign direct equity investments from 1973 to 1993. The CB Foreign Exchange Department is the main source of the data used in the analysis. Table 4 shows the percentage distribution of FDI stock based on cumulative flows. It is evident that foreign investment in the Philippines tended to concentrate in the manufacturing sector with its share steadily rising from 39 percent in 1973 to 48 percent in 1983 and to 53 percent in 1993. Within manufacturing, foreign investment is concentrated in industries like chemicals and chemical products, food processing, petroleum and coal, transport equipment, and machinery and appliances. Although chemicals and chemical products dominated the other manufacturing sectors, its share continuously fell during the past six years from 29 percent in 1988 to 23 percent in 1993. The same holds for food whose share gradually dropped from 22 percent in 1985 to 15 percent in 1993, as well as metal and metal products whose share declined from 13 percent in 1985 to 8 percent in 1993. Gaining in importance is the machinery, apparatus, appliances, and supplies sector whose share in total manufacturing went up sharply from 6 percent in 1987 to 17 percent in 1993. For the period 1982 to 1993, the share of textiles and garments remained constant at 5 percent. In 1973, it had a share of 13 percent which gradually declined thereafter. The share of

Table 4
Distribution of CB-Registered Foreign Direct Equity Investments by Sector
Cumulative Flows (In percent)

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Banks and Other																					
Financial Institutions	45.44	45.03	35.12	27.06	24.54	22.51	21.01	18.81	17.00	14.95	13.66	12.94	12.25	12.90	12.66	12.41	12.13	12.15	11.61	11.57	11.69
Banks	88.84	76.27	76.47	74.43	70.56	66.30	66.88	60.98	57.17	56.92	59.93	59.71	59.11	62.36	62.78	62.78	61.48	59.69	58.21	56.00	50.78
Other financial institutions	11.16	23.73	23.53	25.57	29.44	33.70	33.12	39.02	42.83	43.08	40.07	40.29	40.89	37.64	37.22	37.22	38.52	40.31	41.79	44.00	49.22
Manufacturing	39.18	34.31	44.80	48.66	55.10	55.63	53.39	50.42	49.20	47.23	47.92	48.35	49.10	48.05	48.10	47.86	48.21	48.66	51.28	51.62	53.02
Chemicals and chemical products	9.31	15.77	11.55	15.29	22.54	29.30	29.92	29.17	29.53	29.39	27.85	27.35	26.51	28.19	28.59	28.66	27.92	27.04	25.13	24.31	23.12
Food	6.15	14.35	11.99	9.22	12.79	12.19	14.66	13.68	17.10	15.52	18.55	19.44	22.10	21.70	21.32	21.01	19.99	19.60	16.98	16.55	15.49
Metal and metal products	3.55	2.19	27.67	30.37	22.11	18.12	16.46	15.80	13.82	16.45	15.29	14.71	13.13	13.00	12.55	12.30	11.46	10.77	9.82	9.31	8.46
Textiles and garments	12.70	11.03	8.16	6.76	5.45	5.93	5.71	5.61	5.19	5.47	4.84	4.64	4.37	4.42	4.41	4.59	4.81	5.07	5.05	5.41	5.09
Transport equipment	5.94	3.93	3.03	3.23	4.58	5.63	5.95	8.48	8.07	7.39	6.45	6.76	7.87	7.69	7.68	7.53	7.34	7.30	7.31	8.60	8.23
Petroleum and coal	41.78	25.87	13.83	11.31	7.37	6.05	5.11	4.60	4.61	3.95	7.26	6.74	6.18	6.24	6.10	5.98	5.55	5.17	5.01	4.57	9.61
Machinery, apparatus, appliances and supplies	2.66	4.36	3.09	3.84	5.20	4.88	5.00	6.02	5.81	6.72	6.08	5.97	5.68	5.67	5.85	5.91	8.75	9.76	17.14	18.27	17.37
Non-metallic mineral products	3.16	1.95	1.43	1.77	1.69	1.92	1.88	2.09	2.11	2.77	2.41	2.90	2.62	2.65	2.56	2.51	2.41	3.08	2.66	2.50	2.89
Others	14.75	20.55	19.24	18.20	18.27	15.98	15.30	14.54	13.75	12.34	11.27	11.48	11.53	10.43	10.95	11.51	11.76	12.21	10.90	10.48	9.75
Mining	3.25	8.26	7.81	11.22	8.48	9.34	13.51	17.57	19.60	24.54	26.02	26.64	26.44	27.16	27.46	27.14	26.73	26.06	23.95	22.30	20.43
Petroleum and gas	2.95	1.75	2.65	35.98	37.36	51.88	72.74	81.46	86.51	88.39	90.42	91.22	91.85	92.39	90.34	89.33	88.50	66.88	84.04	82.90	82.71
Copper	72.36	57.85	62.98	45.26	44.24	34.33	19.23	13.47	9.74	9.14	7.54	6.91	6.30	5.89	5.62	5.55	5.25	5.08	4.90	4.83	4.82
Iron ore	6.75	34.46	28.37	15.27	14.99	11.16	6.55	4.13	2.99	1.97	1.62	1.49	1.36	1.27	1.21	1.19	1.13	1.09	1.05	1.04	1.04
Nickel	17.93	5.94	4.46	2.36	2.31	1.71	0.96	0.60	0.44	0.29	0.24	0.22	0.20	0.18	0.18	0.17	0.17	0.26	0.25	0.32	0.31
Others	0.00	0.00	1.54	1.13	1.10	0.92	0.52	0.33	0.31	0.22	0.18	0.17	0.29	0.27	2.65	3.75	4.94	6.69	9.75	10.91	11.11

Table 4 continued

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Commerce	2.55	6.31	5.76	6.04	5.62	5.95	5.93	6.49	5.89	5.34	4.77	4.67	4.36	4.19	4.12	4.36	4.99	5.29	5.30	5.31	5.10
Wholesale	61.83	39.65	48.47	61.68	67.42	69.49	71.75	78.10	75.98	72.51	72.52	72.17	74.20	73.94	73.54	72.93	62.40	62.30	58.00	56.01	56.05
Real estate	35.48	52.82	40.74	30.45	26.18	20.96	18.16	14.26	17.24	21.34	21.72	22.32	22.11	22.38	22.35	21.20	24.55	26.11	31.73	34.59	35.00
Others	2.69	7.53	10.80	7.87	6.40	9.54	10.08	7.64	6.79	6.16	5.76	5.51	3.69	3.69	4.11	5.87	13.07	11.59	10.27	9.40	8.95
Services	0.18	0.31	1.70	2.96	2.94	2.77	2.66	2.55	4.13	3.94	4.05	3.85	3.96	3.93	3.89	4.50	4.39	4.28	4.60	5.96	5.68
Business	92.31	85.71	49.17	70.66	64.50	66.85	71.94	75.35	84.69	77.76	71.81	71.74	66.23	66.00	66.27	56.57	56.55	57.55	48.89	38.26	38.13
Others	7.69	14.29	50.83	29.34	35.50	33.15	28.06	24.65	15.31	22.24	28.19	28.26	33.77	34.00	33.73	43.43	43.45	42.45	51.11	61.74	61.87
Public Utility	6.76	3.73	3.20	2.62	2.00	1.71	1.63	1.51	1.69	1.59	1.44	1.38	1.31	1.30	1.36	1.34	1.30	1.26	1.16	1.18	2.18
Communication	9.21	9.07	21.09	19.67	20.66	19.73	22.11	19.57	31.36	33.99	33.00	33.38	36.60	38.28	42.89	42.54	43.96	44.78	44.68	46.98	58.97
Land transport	90.49	90.63	72.60	67.73	65.44	62.47	53.16	47.05	33.93	33.90	32.81	32.18	30.54	29.64	27.33	27.10	26.17	25.43	24.60	22.23	10.97
Others	0.30	0.30	6.31	12.59	13.89	17.80	24.74	33.39	34.71	32.11	34.19	34.43	32.86	32.08	29.79	30.35	29.87	29.79	30.72	30.79	30.06
Agriculture, Fishery and Forestry	2.49	1.81	1.44	1.26	1.14	1.06	0.99	1.27	1.29	1.28	1.17	1.24	1.74	1.67	1.63	1.63	1.53	1.63	1.46	1.34	1.23
Agriculture	5.49	13.58	15.66	18.14	29.76	26.14	36.14	27.13	34.00	42.63	44.44	48.64	65.63	84.63	84.81	84.28	83.69	81.09	81.27	81.14	81.08
Others	94.51	86.42	84.34	81.86	70.24	73.86	63.86	72.87	66.00	57.37	55.56	51.36	34.37	15.37	15.19	15.72	16.31	18.91	18.73	18.86	18.92
Construction	0.08	0.06	0.05	0.08	0.12	0.98	0.83	1.34	1.16	1.09	0.95	0.90	0.83	0.79	0.77	0.75	0.70	0.66	0.63	0.70	0.66
Transport facilities	0.00	0.00	0.00	41.03	27.38	82.51	79.01	43.51	40.61	35.53	35.84	35.25	48.53	48.49	48.35	48.35	48.56	48.39	45.26	37.15	36.24
Infrastructure	0.00	0.00	0.00	0.00	0.00	0.00	0.00	41.77	38.98	34.11	34.40	34.26	72.27	72.29	72.28	72.28	72.24	71.84	72.67	61.72	60.29
Others	100.00	100.00	100.00	58.97	72.62	17.49	20.99	14.72	20.41	30.36	29.76	30.49	-20.80	-20.78	20.63	20.63	20.81	20.23	17.93	1.13	3.47
Others	0.08	0.19	0.13	0.10	0.07	0.06	0.05	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01
Total Foreign Equity Investments	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: Central Bank of the Philippines.

transport equipment increased from 7 percent in 1982 to 9 percent in 1992, but this declined to 8 percent in 1993. The share of petroleum and coal was almost constant at 6 percent between 1980 and 1989, dropped to 5 percent from 1990 to 1992, but rose to 10 percent in 1993.

For the period 1973 to 1993, there were substantial shifts in the overall concentration of FDI. In the beginning of the period under study, banking and finance was the leading sector with its share amounting to around 45 percent in 1973 and 1974. This could be explained by the enactment of PD 71, which allowed minority foreign participation in banking and finance, and PD 1034, which created an offshore banking system in the Philippines. PD 1034 was legislated with the objective of competing with Singapore as a financial center in the region. However, further movements into this sector were not sustained. Its share continued to drop from 45 percent in 1973 to 12 percent in 1993.

In 1973, public utility was the third largest sector with a share of 7 percent. But with the expiration of the Laurel-Langley Agreement in 1974, Americans began to withdraw their investments from this sector. Between 1980 and 1992, public utilities had a constant share of only 1 percent which increased to 2 percent in 1993. The share of mining expanded tremendously from 3 percent in 1973 to 27.5 percent in 1987 due to large foreign investments in petroleum and gas. Its share, however, began to drop in 1988; in 1993 it accounted for 20 percent of total FDI. The share of commerce increased from 3 percent in 1973 to 5 percent in 1993. This could be explained by the passage of PD 714 which exempted foreign investors engaged in intermediate trade and bulk sales from the equity restrictions imposed by RA 1180.

The share of services also rose from less than 1 percent in 1973 to roughly 6 percent in 1993. Due to the equity restrictions imposed by the Constitution in the areas of agriculture, fishery, and forestry, as well as in construction, foreign investment in these sectors remained relatively low with the share of agriculture, fishery, and forestry shrinking from 3 percent in 1973 to 1 percent in 1993.

SOURCES OF FDI

The last two decades witnessed changes not only in the sectoral distribution but also in the sources of FDI. Although still the most important, the dominance of the US has been substantially diluted by the increasing presence of Japan and Hong Kong, and to a lesser extent, of South Korea and Taiwan.⁶

Between 1973 and 1993 (Table 5), the share of the US declined from 64.3 to 44 percent in 1993. Annual FDI flows from the US started to decline in 1987. The shares of Japan and Hong Kong both increased considerably from 9.7 percent in 1973 to 20 percent in 1993 and from 1.3 percent in 1973 to 7 percent in 1992, respectively. Substantial annual flows from Japan were registered between 1988 and 1992. Among the other Asian countries, South Korea and Taiwan have become significant sources of FDI. Starting to invest in 1976, South Korea increased its share from 0.01 percent to 1.6 in 1993. Taiwan's share rose from 0.2 percent in 1977 to 0.9 in 1993. The bulk of the flows from Taiwan and South Korea started to be felt in 1989 and 1990, respectively. In 1989, Taiwan had a share of 7 percent of the total non-cumulative flow, while South Korea had a share of 9 percent of the total non-cumulative flow in 1991. In 1993, Singapore's cumulative share stood at one percent while Malaysia registered a share of 0.3 (Table 5).

The cumulative share of the UK decreased from 16.5 percent in 1973 to merely 6.5 percent in 1993. FDI flows from the UK were the largest in 1993, accounting for 41 percent of the total non-cumulative flow. During the last decade, i.e., from 1982 to 1992, the shares of the other major European countries together with Australia and Canada either declined or remained unchanged. In 1993, Table 5 indicates increases in the shares of Switzerland, Germany, and Luxembourg.

6. FDI from Taiwan may be understated. Their investments may not all be reported to the Central Bank because some Taiwanese investors channel their investments through their Filipino-Chinese connections.

Table 5

Distribution of CB-Registered Foreign Direct Equity Investments by Country
Cumulative Flows (In percent)

Country	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
U.S.A.	64.25	55.11	48.37	47.93	49.39	52.90	55.06	54.60	53.89	52.82	55.11	55.48	56.17	57.28	57.75	57.34	55.80	54.07	50.02	47.33	44.08
Japan	9.66	14.79	23.54	24.22	21.72	19.27	17.69	16.79	14.74	15.27	14.10	14.05	13.91	13.72	13.45	13.72	14.50	15.29	18.69	21.00	20.25
Hong Kong	1.33	1.44	2.14	2.78	3.86	4.06	3.79	4.32	5.95	5.51	5.47	5.58	6.13	5.33	5.54	5.89	6.01	6.12	6.92	6.74	6.65
Netherlands	0.16	0.64	0.44	1.85	1.78	1.66	1.53	1.66	2.13	4.77	4.75	4.62	4.58	4.64	4.64	4.56	4.81	4.63	4.21	3.99	3.96
U.K.	16.45	9.15	7.33	5.79	4.72	4.09	3.61	3.36	4.25	4.16	3.55	3.52	3.40	3.72	3.62	3.57	3.44	3.50	3.52	3.28	6.49
Switzerland	0.77	1.22	1.64	1.77	2.15	2.37	2.43	2.56	2.51	2.40	2.16	2.35	2.31	2.32	2.24	2.20	2.22	2.31	2.28	2.29	2.44
Australia	0.31	2.14	2.43	2.51	2.48	2.32	2.31	2.45	2.25	2.03	1.96	1.86	1.69	1.65	1.64	1.61	1.92	2.04	1.80	1.78	1.64
Canada	0.34	8.60	8.66	7.82	6.97	5.72	4.79	3.94	2.82	2.37	2.08	1.95	1.79	1.73	1.70	1.65	1.53	1.58	1.43	1.34	1.22
France	0.77	0.42	0.30	0.24	0.22	0.19	0.74	1.39	2.27	1.97	1.88	1.77	1.61	1.55	1.50	1.46	1.37	1.32	1.20	1.24	1.14
Republic of Nauru	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63	0.52	0.46	0.43	0.39	0.37	0.36	0.35	0.33	0.31	0.27	0.29	0.27
West Germany	0.18	0.32	0.23	0.33	0.65	0.92	0.91	1.05	1.14	1.09	1.12	1.14	1.07	1.07	1.05	1.06	1.00	1.01	1.04	1.14	1.23
Sweden	0.00	0.00	0.13	0.45	0.53	0.51	1.06	0.91	0.80	0.71	1.07	1.08	1.02	0.99	0.96	0.94	0.88	1.02	1.05	0.99	0.92
Panama	0.18	0.10	0.32	0.40	1.31	1.22	1.11	0.97	0.89	0.95	0.86	0.81	0.77	0.74	0.72	0.70	0.69	0.72	0.64	0.58	0.56
Austria	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.24	0.44	0.69	0.73	0.69	0.67	0.64	0.63	0.59	0.55	0.75	0.69	0.63
Singapore	0.00	0.04	0.13	0.28	0.28	0.31	0.47	0.41	0.72	0.64	0.56	0.56	0.58	0.39	0.38	0.40	0.49	0.65	0.83	0.95	1.09
Denmark	0.22	0.16	0.19	0.16	0.35	0.38	0.53	0.58	0.49	0.71	0.64	0.60	0.55	0.56	0.54	0.58	0.58	0.58	0.53	0.48	0.49
Luxembourg	0.00	3.36	2.38	1.82	1.55	1.26	1.04	0.87	0.71	0.65	0.57	0.54	0.50	0.51	0.49	0.48	0.45	0.43	0.40	0.38	0.53
Malaysia	0.00	0.00	0.00	0.00	0.04	0.04	0.03	0.03	0.02	0.03	0.25	0.33	0.36	0.35	0.34	0.37	0.35	0.34	0.31	0.29	0.32
Bahamas	0.58	0.32	0.03	0.02	0.01	0.02	0.02	0.01	0.01	0.01	0.01	0.36	0.32	0.31	0.30	0.29	0.27	0.26	0.23	0.21	0.20
New Hebrides	0.00	0.00	0.00	0.00	0.38	0.39	0.31	1.28	1.03	0.85	0.74	0.35	0.32	0.30	0.29	0.29	0.27	0.25	0.22	0.20	0.19
Bermuda	0.15	0.15	0.15	0.15	0.35	0.31	0.36	0.46	0.41	0.34	0.30	0.28	0.26	0.25	0.24	0.29	0.28	0.27	0.27	0.25	0.31
South Korea	0.00	0.00	0.00	0.01	0.02	0.57	0.56	0.46	0.39	0.33	0.29	0.27	0.26	0.25	0.24	0.24	0.27	0.49	1.40	1.61	1.56
Taiwan	0.00	0.00	0.00	0.00	0.17	0.24	0.22	0.21	0.17	0.14	0.14	0.15	0.15	0.15	0.15	0.17	0.64	0.83	0.90	0.90	0.92
Other countries	4.63	2.04	1.60	1.47	1.09	1.25	1.42	1.46	1.53	1.30	1.24	1.19	1.19	1.16	1.21	1.20	1.26	1.44	1.11	2.02	2.94
Total Foreign Equity Investments	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: Central Bank of the Philippines.

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Trade and Investment Policy Changes in the 1980s: Impact on FDI Flows and Exports

FDI AND THE OVERALL TRADE AND INVESTMENT POLICY REGIME

FDI can be broadly divided into three groups: local raw material processing, import-substituting or protection-hopping, and outward-looking FDI. Since the 1950s, the country's trade policy has continued to provide a very strong incentive for import-substituting as opposed to export-oriented production. Because of these incentives to import substitution, FDI in the country has become heavily oriented toward the domestic market and has failed to attract substantial amounts of FDI geared to export markets.

Table 6 reveals that FDI is concentrated in the highly protected manufacturing sector. The table shows that the manufacturing sector has received the highest effective protection rate (EPR) since 1965. Although this has been reduced over the years, the effective protection that it receives still remains relatively high compared with other sectors like mining and agriculture, fishery, and forestry, which for some years received either negative or very low effective protection. Within the manufacturing sector, the same pattern is evident. Table 7 shows that FDI is concentrated in manufacturing subsectors receiving high effective protection. Prior to the 1980 tariff reform, chemicals had EPRs ranging from 15 to 227 percent, food 495, metal products 84, textiles and garments 106, transport, machinery and appliances 118, and petroleum and coal 38. Although the EPRs were reduced in the late 1980s, effective protection still remains high particularly in

Table 6
EPR and FDI Concentration, All Industries

	% Share in Total CB-Registered FDI	% Share in Total BOI-Approved Projects	EPR (tariffs)	EPR (price comparison)
Manufacturing				
1965	ND*	ND	51.00	ND
1974	34.31	ND	44.00	ND
1979	53.39	ND	58.00	ND
1985	49.10	75.71	77.00	102.10
1986	48.05	59.56	61.70	82.90
1988	47.86	76.41	62.40	75.00
1989	48.21	69.76	61.20	73.70
1991	51.28	60.86	59.50	74.10
1992	51.60	54.91	57.20	71.90
Mining				
1965	ND	ND	-17.00	ND
1974	8.26	ND	-13 to 16	ND
1979	13.51	ND	0.00	ND
1985	26.44	0.93	23.60	23.60
1986	27.16	0.00	22.00	18.20
1988	27.14	0.38	17.30	17.30
1989	26.73	4.54	17.30	17.30
1991	23.95	1.45	23.00	23.00
1992	22.42	2.33	23.00	23.00
Agriculture, Fishery and Forestry				
1965	ND	ND	17 / -26**	ND
1974	1.81	ND	9.00	ND
1979	0.99	ND	1.00	ND
1985	1.74	1.55	76.50	76.50
1986	1.67	5.21	33.70	44.30
1988	1.63	7.22	35.30	45.10
1989	1.53	3.69	35.30	45.10
1991	1.46	2.95	51.10	51.10
1992	1.35	1.91	46.10	47.70

ND — no data.

** -26 for Forestry and 17 for Agriculture.

Table 7

EPR and FDI Concentration in the Manufacturing Sector

	% Share in Total CB-Registered FDI	% Share in Total BOI-Approved Projects	EPR (tariffs)	EPR (price comparison)
Chemicals				
1965	ND	ND	13 to 94	ND
1974	5.40	ND	-7 to 221	ND
1979	16.00	ND	15 to 227	ND
1985	13.00	6.50	102.10	142.40
1986	13.50	50.70	72.40	110.30
1988	13.70	29.60	71.10	108.90
1989	13.50	4.70	71.10	108.90
1991	12.90	9.60	57.40	103.60
1992	12.60	2.50	53.00	99.20
Food				
1965	ND	ND	15 to 400	ND
1974	4.90	ND	-49 to 3371	ND
1979	7.80	ND	-6 to 495	ND
1985	10.90	12.30	76.90	53.20
1986	10.40	1.20	61.00	46.30
1988	10.10	2.70	60.30	43.70
1989	9.60	1.70	60.30	43.70
1991	8.70	4.10	59.20	42.60
1992	8.60	0.50	56.80	40.30
Basic Metal Products				
1965	ND	ND	ND	ND
1974	0.70	ND	47.00	0 to 27
1979	6.10	ND	84.10	47 to 176
1985	5.20	1.60	101.00	179.60
1986	6.30	2.90	71.90	71.90
1988	5.90	3.20	73.70	73.70
1989	5.50	3.50	73.70	73.70
1991	5.00	1.50	79.80	79.80
1992	4.80	2.90	78.90	78.90
Textiles and Garments				
1965	ND	ND	43 to 330	ND
1974	3.80	ND	-4 to 78	ND
1979	3.10	ND	106.00	ND

Table 7 continued

	% Share in Total CB-Registered FDI	% Share in Total BOI-Approved Projects	EPR (tariffs)	EPR (price comparison)
1985	2.10	1.20	136.40	337.80
1986	2.10	8.80	101.40	322.50
1988	2.20	6.40	120.90	120.90
1989	2.30	21.30	116.40	116.40
1991	2.60	4.00	87.50	87.50
1992	2.80	4.50	87.50	87.50
Transport Equipment, Machinery and Appliances				
1965	ND	ND	77 to 533	ND
1974	1.40	ND	9 to 127	ND
1979	3.20	ND	118.00	ND
1985	3.90	67.00	72.00	96.60
1986	3.70	28.60	50.70	68.70
1988	3.70	38.30	47.80	64.40
1989	5.10	37.60	46.80	63.40
1991	8.30	18.00	42.30	58.80
1992	9.90	48.90	32.80	49.80
Petroleum and Coal				
1965	ND	ND	45.00	ND
1974	8.90	ND	16 to 21	ND
1979	2.70	ND	1 to 38	ND
1985	3.00	1.40	38.80	182.10
1986	3.00	0.00	37.90	172.30
1988	2.90	0.01	46.60	171.60
1989	2.70	8.80	40.00	165.00
1991	2.60	44.60	40.00	175.90
1992	2.40	0.00	42.00	177.90

Sources (EPR estimates): Power and Sicat, 1970; Bautista, Power and Associates, 1979; Quinto, 1986; Power and Medalla, 1986; Tan, 1994.

textiles, chemicals, basic metal products, and processed food. This becomes even more glaring when one looks at the EPRs computed based on price comparisons. The latter is more meaningful since it captures the effects of non-tariff barriers which are mainly in the form of import restrictions. For instance, in line with BOI's local content programs, import restrictions were imposed on the appliance sector (consumer electronics in 1975) and transport sector (cars, jeeps, motorcycles, trucks, and buses in 1971). Furthermore, chemicals, coal, and machinery were regulated by the Central bank for reasons ranging from national security, public health and safety to protection of local industry. EPR estimates on the basis of price comparisons show that in the early 1990s, chemicals and petroleum and coal had EPRs that exceeded 100 percent. Textiles and basic metal products had EPRs of around 88 and 80 percent, respectively.

In principle, the investment incentives promulgated by the government favor export production. However, data on BOI-approved FDI projects show that these approvals are biased toward sectors with high EPRs such as machinery and equipment, chemicals, and transport (Tables 7 and 8). Between 1981 and 1992, the average share of these sectors in total manufacturing amounted to 52 percent. This leads us to conclude that the investment incentive system tends to reinforce the heavy domestic market orientation promoted by the trade regime. Moreover, the incentive system favors capital-intensive over labor-intensive producers of import substitutes (Manasan 1986). This is indicated by the increase in the capital-labor ratio for total manufacturing from 65.6 to 110.61 between 1983 and 1988 (Table G.9, World Bank 1993).

Because of the high level of protection promoted by the trade and investment incentive system, foreign competition, which could have been provided by imports, was virtually eliminated. The result was an inefficient manufacturing industry which was littered with infants that never grew up and required permanent protection for survival. Furthermore, the protection of domestic manufacturers penalized exporters, and since the import substitution policy failed to develop backward-linked industrialization, the export activities that thrived had weak backward linkages. The high cost of domestically produced



Table 8
Foreign Equity Investment
(In percent)

	1981	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Agriculture, Forestry and Fishery	5.65	2.02	0.84	1.55	5.21	8.98	7.22	3.69	1.35	2.95	1.91	0.17
Mining	6.42	7.55	1.79	0.93	0.00	1.31	0.38	4.54	4.03	1.45	2.33	1.39
Manufacturing (as % of manufacturing)	46.63	60.85	81.64	75.71	59.56	57.43	76.41	69.76	53.20	60.86	54.81	61.29
Processed food	13.49	2.50	26.18	12.34	1.23	12.46	2.68	1.71	2.72	4.14	0.47	2.26
Textile and garments	6.20	0.80	1.56	1.21	8.81	20.04	6.38	21.33	25.39	3.96	4.47	2.44
Chemicals	46.25	0.00	14.91	6.45	50.73	13.85	29.63	4.70	6.57	9.55	2.47	0.94
Petroleum products	0.35	0.00	2.17	1.43	0.00	3.82	0.01	8.82	0.00	44.56	0.00	0.31
Non-metallic mineral products	0.00	0.00	0.18	1.53	0.00	0.57	0.22	0.27	0.95	1.32	0.00	0.00
Basic metal products and fabricated metal products	6.59	0.00	17.00	1.63	2.87	0.76	3.15	3.48	1.14	1.54	2.87	11.27
Machinery and equipment and electrical products	6.44	43.07	24.18	44.52	19.23	21.93	32.30	35.03	26.92	12.16	30.34	46.27
Transport	0.78	0.36	3.55	22.46	9.36	3.41	6.00	2.53	18.65	5.84	18.51	4.00
Others	19.91	53.28	10.28	8.43	7.77	23.17	19.63	22.14	17.65	16.93	40.88	32.51

Table 8 *continued*

	1981	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Public Utilities	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.16	0.16	0.90	0.13
Commerce, Export Traders, Real Estate	8.33	2.08	6.89	4.18	20.15	9.55	4.91	7.23	2.60	3.94	0.08	0.09
Service, Service Exporters, Agricultural Farm Services	28.22	25.48	5.73	16.62	11.89	18.11	7.47	5.34	6.62	6.74	0.00	0.83
Financial Institutions	0.37	0.42	0.00	0.64	0.00	0.14	0.00	0.00	0.26	0.14	0.00	0.00
Construction and Infrastructure	0.63	0.22	0.94	0.02	1.27	0.68	0.04	0.04	5.11	2.82	0.30	0.00
Others	3.74	1.38	2.18	0.35	1.93	3.80	3.58	9.32	26.67	20.95	39.98	36.09
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: Board of Investments (BOI).

inputs discouraged exporters from sourcing their inputs locally. To retain their competitiveness, exporters had to rely on imported inputs. In addition to these problems, import substitution incentives led to a misallocation of resources. The overvalued currency encouraged the use of imported inputs, especially on those on which tariffs were low. Since tariffs on capital equipment were also typically low, capital-intensive investment was encouraged. With the excessive use of imports and capital, labor was not utilized intensively in the import-substituting manufacturing sector. The protected manufacturing sector remained a net burden in the balance of payments, since the import substitution policy only shifted dependence on imports of consumer goods to capital and intermediate goods (WB 1985).

FDI in the Philippines was very much influenced by the import substitution policy. Although the trade and investment policies were inappropriate, foreign investors nevertheless responded to the profit opportunities they offered by locating in the highly protected sectors of the economy. By taking advantage of the effective protection afforded by the tariff structure, the domestic investor, Filipino or foreigner, could earn extremely high profits, pay high wages, and/or simply accommodate inefficiencies and high costs substantially above those of foreign competitors. The higher the effective protection, the greater the potential for inefficiencies, high input costs or profits.

The distortionary policies accompanying import substitution resulted in investment in inefficient activities, as well as in investment decisions by both foreign and domestic investors, which caused a misallocation of resources and a suboptimal level of welfare. Investments made by multinationals in the transport industry are the prime example. This industry has been regulated and protected through BOI's progressive manufacturing program established in the early 1970s. The program resulted in high-cost domestic production and failed in inducing the industry and its subsectors to compete in the export market. The World Bank (1993) estimated the cost of maintaining this type of protective regime for automobiles and commercial vehicles to be around P5.2 billion a year.

The immiserization literature is often used to link trade and foreign investment. This shows that capital flows in protected

industries can lead to decreases in host economy welfare. For a small tariff-imposing country, within the standard two-commodity two-factor model of international trade, and assuming that foreign capital receives the full untaxed value of its marginal product, Brecher and Diaz-Alejandro (1977) demonstrated the possibility of Bhagwati's immiserizing growth when the host country continued to import the capital-intensive good while remaining incompletely specialized. Once protection has been granted, further reduction in welfare would result from any exogenous, as well as tariff-induced, capital inflows from abroad. Box 2, Appendix 2 illustrates the experience of Brazil in imposing foreign investment restrictions within the context of an inward-oriented development strategy, and how these resulted in the emergence of an inefficient and non-competitive industry.

FDI AND EXPORTS

The lack of comprehensive data⁷ on the exports of TNCs greatly impairs the analysis in this section. Data on FDI exports are necessary in assessing the export orientation of TNCs operating in the country, and how they reacted to the trade policy changes implemented by the government. Notwithstanding the data limitation, the picture that emerges is that although the export propensity of US TNCs, measured by the ratio of exports to total sales, had increased, a large proportion of their total sales was still mainly for the domestic market. Table 9 shows that with the gradual dismantling of protection, the export propensity of US firms increased from 16 percent in 1982 to 25 percent in 1987. However, compared with US affiliates in other Asian countries, these figures were much lower. In Malaysia, this ratio increased from 47 to 60 percent between 1982 and 1987. In Singapore, the ratio remained largely unchanged at 82 percent during

7. The data available are limited to exports of US TNCs from the benchmark survey of the US Department of Commerce and the export performance of TNCs belonging to the top 2000 corporations in the country published by the Mahal Kong Pilipinas Foundation.



Table 9

Export Performance of Majority-Owned Non-Bank Affiliates of Non-Bank US Parents (MONANUS)

	Total Sales of MONANUS US\$ million (1)	Total Export of MONANUS US\$ million (2)	Total Country Exports US\$ million (3)	Export Propensity In percent (4)=(2)/(1)	US Firms' Share of Total Exports In percent (5)=(2)/(3)
1982					
Philippines	3,596	564	5,020.6	15.7	11.2
Malaysia	4,319	2,046	12,031.4	47.4	17.0
Indonesia	12,543	8,289	22,293.3	66.1	37.2
Thailand	2,591	453	6,956.9	17.5	6.5
Hongkong	7,516	4,474	20,967.8	59.5	21.3
Singapore	14,114	11,579	20,788.0	82.0	55.7
South Korea	604	266	21,853.4	44.0	1.2
Taiwan	1,867	931		49.9	
1986					
Philippines	2,509	626	4,841.8	25.0	12.9
Malaysia	3,983	2,371	13,837.8	59.5	17.1
Indonesia	5,221	4,295	14,805.0	82.3	29.0
Thailand	2,760	525	8,835.6	19.0	5.9
Hongkong	8,059	4,916	35,465.7	61.0	13.9
Singapore	8,904	7,286	22,494.5	81.8	32.4

Table 9 continued

	Total Sales of MONANUS US\$ million (1)	Total Export of MONANUS US\$ million (2)	Total Country Exports US\$ million (3)	Export Propensity In percent (4)=(2)/(1)	US Firms' Share of Total Exports In percent (5)=(2)/(3)
South Korea	935	407	34,714.5	43.5	1.2
Taiwan	2,908	1,568		53.9	
1987					
Philippines	2,798	698	5,720.2	24.9	12.2
Malaysia	4,736	2,831	17,920.9	59.8	15.8
Indonesia	5,453	4,532	17,135.6	83.1	26.4
Thailand	3,391	718	11,659.2	21.2	6.2
Hongkong	9,807	5,653	48,501.8	57.6	11.7
Singapore	11,594	9,476	28,685.8	81.7	33.0
South Korea	1,292	606	47,206.6	46.9	1.3
Taiwan	3,758	1,815		48.3	
1989					
Philippines	2,905	649	7,746.7	22.3	8.4
Malaysia	5,419	2,086	25,106.5	38.5	8.3
Indonesia	6,120	2,680	22,028.9	43.8	12.2
Thailand	5,456	1,735	20,058.3	31.8	8.6

Table 9 continued

	Total Sales of MONANUS US\$ million (1)	Total Export of MONANUS US\$ million (2)	Total Country Exports US\$ million (3)	Export Propensity In percent (4)=(2)/(1)	US Firms' Share of Total Exports In percent (5)=(2)/(3)
Hongkong	16,408	8,779	73,156.0	53.5	12.0
Singapore	15,102	10,531	44,687.1	69.7	23.6
South Korea	2,463	594	62,377.2	24.1	1.0
Taiwan	6,773	2,621		38.7	

Sources:

US Direct Investment Abroad: 1982 Benchmark Survey Data.

US Department of Commerce Bureau of Economic Analysis, December 1985.

US Direct Investment Abroad, Operations of US Parent Companies and their Foreign Affiliates, Revised 1987 Estimates.

US Department of Commerce Bureau of Economic Analysis, July 1990.

US Direct Investment Abroad, Operations of US Parent Companies and their Foreign Affiliates, Revised 1986 Estimates.

US Department of Commerce Bureau of Economic Analysis, July 1989.

Survey of Current Business (July 1993).

1989 Export Sales by MONANUS were taken from Ramstetter, E.D. "Prospects for Foreign Firms in Developing Economies of the Asian and Pacific Region." *Asian*

Development Review. Vol. 11, No.1, 1993, Asian Development Bank (ADB).

the same period. Although Taiwan and Hong Kong experienced some reductions, their ratios were still relatively high. Taiwan's ratio declined from 50 percent in 1982 to 48 percent in 1987, while the same ratio for Hong Kong dropped from 60 percent in 1982 to 58 percent in 1987. TNCs in these countries have played a major role in their trade sector particularly in manufactured exports. In 1987, US TNCs alone accounted for as much as 33 percent of Singapore's total exports, 16 percent of Malaysia's exports, and 26.4 percent, mostly petroleum, of Indonesia's exports. In the case of the Philippines, US firms, which have been the country's largest foreign investors, accounted for 12 percent of the country's exports.

Investment by US TNCs operating in the Philippines were highly concentrated in two manufacturing sectors: electric and electronic equipment and chemicals. The share of electric and electronic equipment in the total manufacturing investment of US affiliates in the Philippines increased from 20 percent in 1982 to 28 percent in 1987. Similarly, the share of chemicals went up from 29 percent in 1982 to 35 percent in 1987. A large proportion of their manufactured exports consisted of electric and electronic equipment, mainly in the labor-intensive stage of semiconductor production. The share of electronics in the total manufactured exports of US affiliates in the country increased from 54 percent in 1982 to 65 in 1987. Texas Instruments, a US semiconductor giant, is one of the largest TNCs operating in the country in terms of sales. In the early 1980s, Malaysia and the Philippines became major sites for chip assembly (UNCTC 1992). Malaysia's semiconductor exports were much larger than the Philippines'. Table 10 reveals that from 1982 to 1987, the country's semiconductor exports remained roughly one-fifth of Malaysia's exports of the same. Table 10 also shows that the export propensity of US semiconductor affiliates in the Philippines increased significantly from 73 percent in 1982 to 92 percent in 1987. In Malaysia, the same figure rose from 96 to 97 percent between 1982 and 1987.

The share of chemicals in the total manufactured exports of US affiliates in the Philippines declined by half from 6 percent in 1982 to 3 percent in 1987. The export propensity of US chemical affiliates likewise dropped from 5.2 to 3.2 percent during the same period (Table 10). Compared with other countries, these ratios are relatively

Table 10
Exports and Total Sales of MONANUS

	Exports of MONANUS (in US\$ million)					
	Chemicals and Allied Products			Electric and Electronic Equipment		
	1982	1986	1987	1982	1986	1987
Philippines	25	9	16	242	325	376
Malaysia	12	20	15	1,283	1,614	2,068
Singapore	41	D	275	991	1,384	1,832
Taiwan	12	22	62	728	1,042	926
Hongkong	66	92	119	584	395	446

	Total Sales of MONANUS (in US\$ million)					
	Chemicals and Allied Products			Electric and Electronic Equipment		
	1982	1986	1987	1982	1986	1987
Philippines	479	455	507	334	357	411
Malaysia	87	114	136	1,335	1,649	2,139
Singapore	57	277	323	1,034	1,509	2,039
Taiwan	114	222	293	821	1,085	1,019
Hongkong	211	248	348	641	471	603

	Export Propensity (in percent)					
	Chemicals and Allied Products			Electric and Electronic Equipment		
	1982	1986	1987	1982	1986	1987
Philippines	5.2	2.0	3.2	72.5	91.0	91.5
Malaysia	13.8	17.5	11.0	96.1	97.9	96.7
Singapore	71.9	D	85.1	95.8	91.7	89.8
Taiwan	10.5	9.9	21.2	88.7	96.0	90.9
Hongkong	31.3	37.1	34.2	91.1	83.9	74.0

Sources:

US Direct Investment Abroad: 1982 Benchmark Survey Data.

US Department of Commerce Bureau of Economic Analysis, December 1985.

US Direct Investment Abroad, Operations of US Parent Companies and their Foreign Affiliates, Revised 1987 Estimates.

US Department of Commerce Bureau of Economic Analysis, July 1990.

US Direct Investment Abroad, Operations of US Parent Companies and their Foreign Affiliates, Revised 1986 Estimates.

US Department of Commerce Bureau of Economic Analysis, July 1989.

Table 11

**Export Earnings of TNCs Belonging to the Top 1000 Exporters
and Distribution by Sector and by Country: 1984-1990**

	1984	1985	1986	1987	1988	1989	1990
All Industries (in '000 pesos, current prices)	18,407.7	23,610.7	24,339.6	21,073.8	33,134.9	32,993.4	28,276.3
By Sector (in percent)							
Agriculture, Fishery and Forestry	9.6	11	12.8	14.2	10.9	13.3	16.7
Manufacturing	57.5	63.2	69	67.8	63.3	68.4	67.3
Electrical	20.53	19.7	27.68	32.73	23.46	33.37	26.23
Food	6.3	8.6	8.3	7.8	5.8	6.8	9.1
Chemicals	4.2	5.6	4.2	0.5	0.4	0.6	1.1
Textiles and wearing apparel	3.1	5.7	10.5	9.6	8.4	12.5	13.7
Transport	—	—	—	1.0	1.5	2.8	5.1
Iron and steel	4.2	3.9	0.9	0.9	2.9	2.5	3.4
Others	19.1	19.7	15.3	15.3	20.8	9.7	8.7
Mining	32.3	25.1	17.4	16.8	23.2	18.1	16
Others	0.6	0.8	0.8	1.2	2.6	0.1	0
By Country (in percent)							
US	63.21	52.81	62.26	70.53	67.24	57.09	40.19
Australia	—	0.43	0.98	0.68	0.74	0.35	0.61
Austria	—	1.92	2.19	—	—	—	—
Belgium	15.56	10.99	2.29	—	—	—	—
Bermuda	0.78	0.7	0.6	—	—	—	—
UK	3.58	8.39	9.79	1.23	2.99	4.24	5.81
Canada	—	—	1.34	1.41	1.36	1.93	2.1
China	0.54	5.26	6.61	4.89	3.49	4.51	4.78
Netherlands	2.27	3.4	4.15	9.94	8.68	8.14	11.73
France	0.24	0.26	0.25	—	0.39	0.43	0.8
Germany	1.48	1.32	0.75	3.06	2.85	2.74	4.27
India	—	0.06	0.23	0.4	0.27	0.53	0.82
Ireland	—	—	—	—	0.08	0.16	0.23
Japan	10.87	12.65	7.01	6.43	9.49	17.65	24.59
Korea	0.37	0.16	0.27	0.47	0.39	0.36	1.27
Liberia	—	0.41	0.39	—	—	—	—
Spain	0.31	0.21	—	—	—	0.12	0.35
Switzerland	0.78	0.82	0.64	0.95	1.95	1.6	2.44
Taiwan	—	0.22	0.25	—	0.09	0.16	—

low. US chemical affiliates in Malaysia exported 11 percent of their total sales in 1987. During the same year, Singapore had 85.1 percent, 21.2 in Taiwan, and 34.2 in Hong Kong.

Table 11 presents another set of TNC export data from the Top 2000 Corporations in the Philippines. Most of the export-oriented investments were from the US, Japan, and Netherlands. These investments were concentrated in electrical machinery, apparatus and appliances, chemicals, iron and steel, transport equipment, food manufacturing, and textile and garments.

The country was able to attract FDI flows in the past because of its protectionist policy. Our experience proved that protection discourages exports and the efficient production of manufactures. It is to be noted that garments and semiconductors, the country's major exports and leading exports of Philippine-based TNCs, have not developed strong backward linkages because of their high import content. Raw material inputs to these products top the country's total imports. Efficient industrialization requires the creation of strong inter-industry linkages. In our case, our manufactured exports are concentrated in garments on consignment and subcontracted electronic devices which are made from raw materials consigned abroad. The inter-industry linkages created are weak because these exports are produced separately from the domestic economy through export processing zones (EPZs) and bonded warehouses. In 1992, imports of EPZs accounted for 17 percent of the country's total imports. EPZs and bonded warehouses were established to allow exporters to import their inputs at world prices through tax and duty exemptions and tax credit/drawback schemes. However, these export incentives might have only partially offset the distortions created by the protectionist structure. These inconsistent policies may explain the inability of export incentives to attract substantial export-oriented FDI and promote significant expansion of the export sector.

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FDI in the Four ASEAN Countries: A Comparison

TABLE 12 (together with Figure 1) shows the differences in the FDI flows to the Philippines, Malaysia, Thailand, and Indonesia. FDI flows to the Philippines fluctuated widely between the years 1973 and 1990. Erratic annual FDI flows also characterized the situations in Indonesia and Thailand. However, steady increases were observed from 1987 in Indonesia and from 1988 in Thailand. Among the four countries, Malaysia's performance in attracting FDI is particularly impressive. Its FDI flows showed a relatively more stable pattern with sharp increases from 1976 to 1982 and reductions from 1983 to 1987. Like Indonesia and Thailand, a resumption of growth was felt from 1987 to 1990. With a short-lived recovery after 1986, the Philippines experienced increases in its FDI flows, but after reaching a peak in 1988, FDI flows started to fall. Compared with the three ASEAN countries, the performance of the Philippines had been disappointing.

Figure 2 gives an idea of the concentration of FDI flows during the past 18 years, i.e., 1973 to 1990. FDI flows were highly concentrated in Malaysia, followed by Thailand and Indonesia, while the Philippines came last. Malaysia's high average annual flows show that it had been the preferred site of foreign investors. Indonesia was also an important site, but since 1989, Thailand's annual average had outstripped the average flow of the former. Among the four, the Philippines had the lowest average annual flow.

Table 13 reveals that most of the investments in the Philippines and Malaysia are located in the secondary sector. In Thailand, these are predominantly found in the tertiary sector, although since 1975,

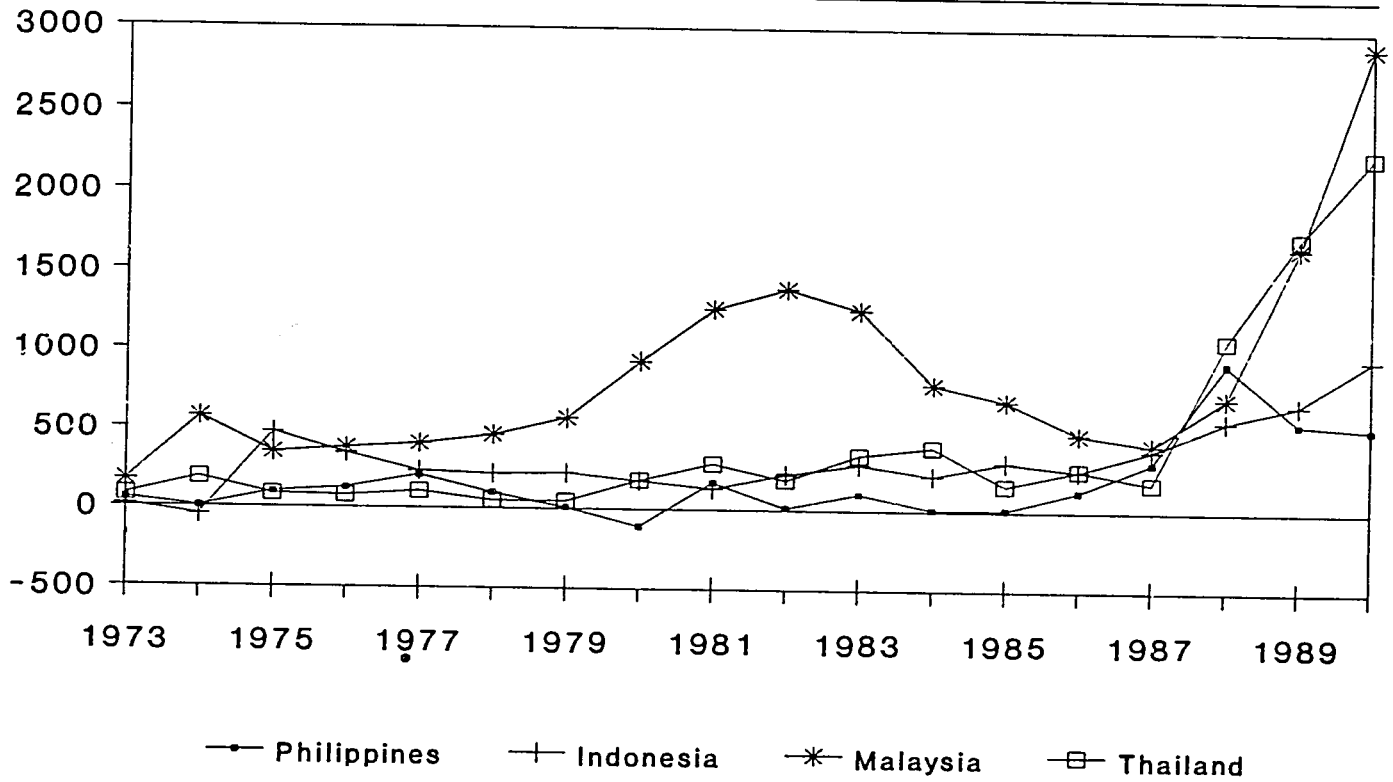
Table 12
FDI Flows in Four ASEAN Countries: 1973-1990
(In US\$ million)

Year	Philippines	Indonesia	Malaysia	Thailand
1973	55	15	171	77
1974	4	(49)	570	188
1975	98	474	348	86
1976	126	343	380	79
1977	209	235	408	106
1978	101	219	466	51
1979	8	226	573	50
1980	(107)	179	933	186
1981	172	133	1,266	291
1982	15	226	1,393	190
1983	105	292	1,261	348
1984	9	222	797	400
1985	12	310	695	162
1986	127	258	489	261
1987	307	385	423	182
1988	936	576	719	1,081
1989	563	682	1,668	1,727
1990	530	964	2,902	2,236
Total	3,270	5,690	15,462	7,704
Average				
1973-90	182	316	859	428
1973-77	98	204	375	107
1978-82	38	197	926	154
1983-87	112	293	733	271
1988-90	676	741	1,763	1,681

Source: International Monetary Fund, *Balance of Payments Statistics*, various issues.

Figure 1

FDI Flows in Four ASEAN Countries: 1973-1990
(In US\$ million)



Foreign Direct Investment in the Philippines

Figure 2

Total FDI Flows in Four ASEAN Countries: 1973-1990
(In US\$ million)

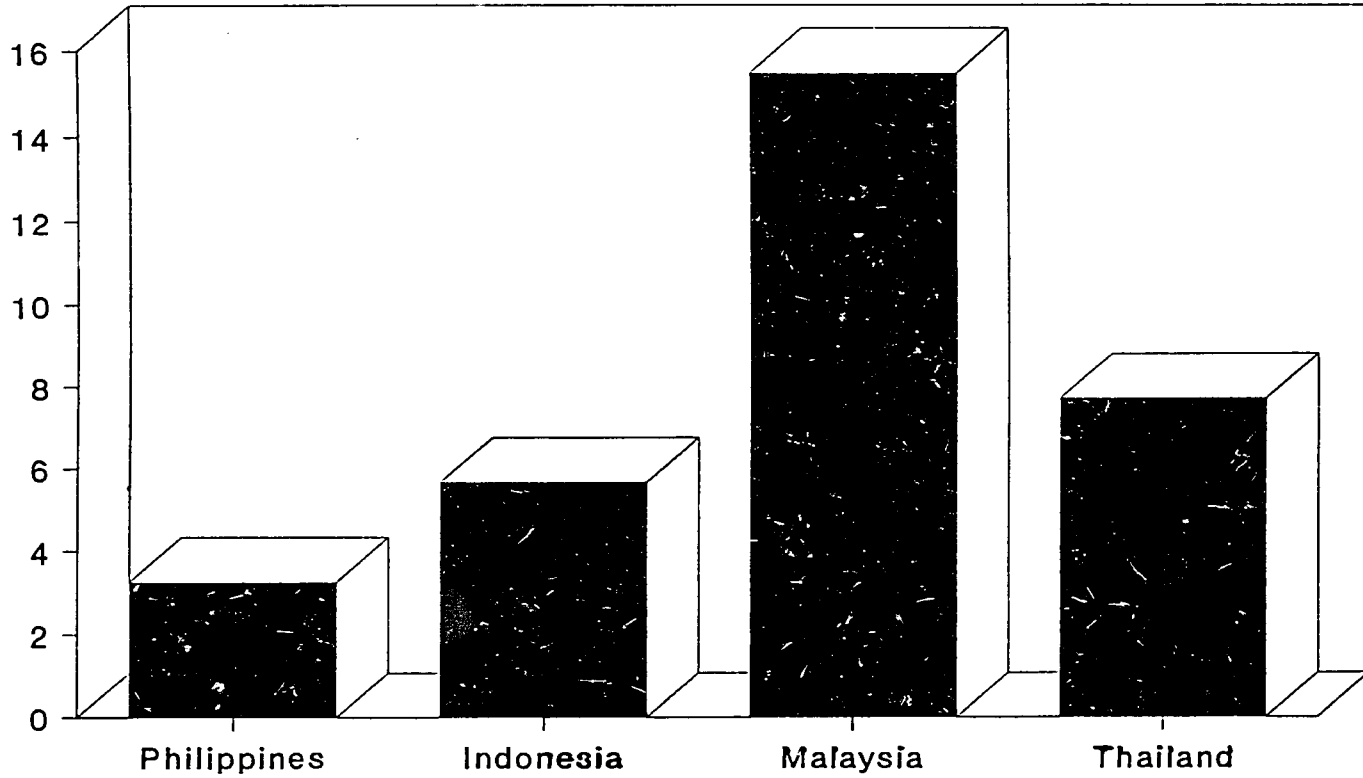


Table 13
Sectoral and Geographic Distribution of FDI Stock
(In percent)

		Primary	Secondary	Tertiary
Malaysia	1988	28.3	41.2	30.5
	1980	31.3	30.1	38.6
	1975	39.3	30.6	30.1
Thailand	1989	9.2	42.8	48.0
	1980	13.5	31.7	54.7
	1975	15.1	29.9	55.0
Indonesia	1990	81.7	15.4	2.9
	1980	70.4	25.4	4.2
	1975	61.2	32.5	6.3
Philippines	1990	28.6	48.3	23.1
	1980	18.8	50.4	30.7
	1975	9.2	44.9	45.9

Distribution of FDI Inward Stock by Home Country
(In percent)

		Developed Countries			All	All
		North	Western		Developed	Developing
		America	Europe	Japan	Countries	Countries
Malaysia	1987	12.4	46.1	33.9	59.2	40.8
		11.5	49.4	30.0	58.6	41.4
Thailand	1988	31.7	19.9	47.5	77.3	22.8
		40.5	22.5	36.2	80.2	20.3
Indonesia	1988	12.2	34.4	38.4	72.8	27.9
	1980	6.3	14.0	48.6	77.1	22.9
Philippines	1987	65.0	17.2	14.7	90.6	9.4
		63.7	13.7	18.3	92.0	8.0

Source: *World Investment Directory 1992*, Volume 1, Asia and the Pacific. UN Centre on TNCs, United Nations, New York, 1992.

the share of the secondary sector had been steadily gaining ground. In Indonesia, the primary sector, mostly petroleum, remains the most important recipient of FDI. The table also shows that between the 1970s and 1980s, the share of the primary sector in Malaysia and Thailand fell, while the secondary sector increased. In all four countries, the share of the tertiary sector declined during the period under review.

It is also evident from Table 13 that for Thailand, Indonesia, and the Philippines, the importance of developed countries as a source of FDI decreased, and in contrast, the share of developing countries increased. For Malaysia, the share of developed and developing countries remained roughly the same. Western Europe is the most important investor in Malaysia, Japan in Thailand and Indonesia, and the US in the Philippines. What are the factors that explain the uneven distribution of FDI flows in the four ASEAN countries? Compared with the three other countries, what accounts for the unfavorable position of the Philippines as a recipient of FDI flows?

In terms of their basic investment regulations and incentive policies, the four ASEAN countries do not differ much. In recent years, they have liberalized their FDI policies and have opened many sectors which were previously restricted. The four countries have guarantees for repatriation of profits, convertibility of currency, employment of aliens, and a guarantee against expropriation. They also provide tax holidays, although in the case of Indonesia, generous fiscal incentives are granted instead of tax holidays. They provide net loss carry forward provision (except for the Philippines), export incentives, duty-free importation of raw materials, machinery, equipment, and parts as well as investment and expansion allowance.

A vast literature exists on the ineffectiveness of investment incentives in attracting FDI flows. According to Helleiner, investment incentives play a minimal role in foreign investment decisionmaking. Incentives can never replace the fundamentals: the investment climate, political stability, and profit opportunities (OECD 1983 as cited in Helleiner 1991). In analyzing the effectiveness of incentives in attracting investment flows to the ASEAN 4, Albuero et al. (1992) pointed out that although there were no significant additions to the

incentives granted by these countries, their FDI flows have increased dramatically. Looking at the same issue, Manasan (1988) computed the impact of investment incentives on a hypothetical firm's user cost of capital and internal rate of return. She found that ASEAN countries are generally competitive before and after incentives. She concluded that "these countries are wasting away precious government revenues in exchange for an edge that is largely illusory."

The mid-1980s witnessed economic liberalization in Malaysia, Indonesia, Thailand, and the Philippines. Except for the Philippines, the three ASEAN countries vigorously pursued outward-looking strategies. The major economic policies consisted of the liberalization of import restrictions, promotion of foreign investment, particularly in export-oriented activities, adjustment of the exchange rate to maintain competitiveness,⁸ and liberalization of the financial system to facilitate trade and investment flows (Chintayarangan 1992). The implementation of these economic changes occurred at a time when Japan and Taiwan were relocating their labor-intensive industries and were investing abroad. This explains the huge FDI inflows in the three ASEAN countries after the mid-1980s.

Table 14 shows the direct investments of Japan in the ASEAN 4. In 1980, total Japanese investment in the Philippines was valued at US\$615 million, a respectable figure, in contrast with Thailand, US\$396 million and Malaysia, US\$650 million. Indonesia, which has been Japan's most preferred site, had a total investment of US\$4,424 million. In subsequent years, Japanese investments quickly expanded with Thailand and Malaysia becoming very important destinations.

Table 15 presents the direct investments of the US in the four ASEAN countries. In the 1960s and 1970s, Malaysia and Thailand did not claim a large portion of US direct investment. In the 1960s, US

8. International competitiveness summarizes an economy's success in world markets, generally as an exporter of manufactured goods. It is determined by the ability of the enterprises located in that country to produce goods and services that are more attractive than those of competitors, and the ability to take advantage of changing opportunities in the internal marketplace to sustain that attractiveness (World Bank 1993).

Table 14

**Japanese Overseas Direct Investments in Indonesia, Malaysia,
Thailand and the Philippines: 1973-1989**
(In US\$ million)

	Indonesia	Malaysia	Thailand	Philippines
1973	341	126	34	43
1974	376	48	31	59
1975	585	52	14	149
1976	929	54	19	15
1977	1,185	150	135	183
1978	610	48	32	53
1979	150	33	55	102
1980	529	146	33	78
1983	374	140	72	65
1984	374	142	119	46
1985	408	79	48	61
1986	250	158	124	21
1987	545	163	250	72
1988	586	387	859	134
1989	631	673	1,276	202
1990	1,105	725	1,154	258
1991	1,193	880	807	203
1992	1,676	704	658	160
Cumulative Total FY 1951-1980	4,424	650	396	615
Cumulative Total FY 1951-1990	11,540	3,231	4,422	1,580

Source: Ministry of Finance, Japan. *Monthly Finance Review*.
Research and Planning Division, Ministers' Secretariat.

Table 15**Capital Expenditures by Majority-Owned Foreign Affiliates of US Companies
(In US\$ million)**

	Indonesia	Malaysia	Philippines	Thailand
1966	(D)		61	
1967	19		78	
1968	50		60	
1969	58		46	
1970	155		56	
1971	261		65	
1972	250		67	
1973	289		62	
1974	524		97	
1975	776		120	
1976	318		102	
1977	236		106	
1978	324		170	
1979	431		256	
1980	656		323	
1981	849		267	
1982	1,963	681	192	252
1983	1,948	493	171	410
1984	1,182	460	157	366
1985	1,176	357	114	192
1986	1,114	360	129	82
1987	1,046	451	144	98
1988	851	485	145	259
1989	1,214	616	181	311
1990	970	828	181	377
1991	1,166	919	187	413
1992	1,801	932	266	621
1993	2,326	1,017	346	809
Average				
1982-1992	1,396.4	633.3	184.4	349.2

Source: US Department of Commerce, *Survey of Current Business*, March 1977, 1987, and 1993.

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direct investment was highly concentrated in the Philippines. Starting in 1970, however, the US started to invest heavily in Indonesia. In the 1980s, Malaysia and Thailand began to emerge as important recipients of US capital. The average annual investment flow of the US for the period 1982 to 1992 stood at \$1,396.4 million in Indonesia, followed by \$633.3 million in Malaysia, \$349.2 million in Thailand, and \$184.4 million in the Philippines.

The depressed economic conditions and political instability in the Philippines are central reasons for the sluggish FDI flows. In addition, the persistence of a trade policy regime that is biased toward import-substitution and that defends an overvalued currency has prevented the flow of export-oriented FDI. Unable to utilize its exchange rate policy as aggressively as its neighbors, the country is unable to make a genuine switch to an export-oriented type of industrialization. Indonesia, like South Korea, deliberately undervalued its currency to boost exports. Both theory and the experience of its Asian neighbors show that, *ceteris paribus*, countries pursuing export-oriented strategy rather than import substitution are likely to attract more FDI. The Philippines has been seeking to attract export-oriented FDI in a context where there is a high level of protection in the economy. This makes it difficult to export and to attract more FDI into export-oriented activities. As such, FDI in the Philippines has remained import-substituting.

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Regression Analysis

ONE of the early attempts to explain the determinants of FDI in the Philippines was done by Subido (1974). Based on a time series model, her regression results showed the rate of return as the most significant explanatory variable. Employing the regression technique, Lamberte (1993) found the real GNP growth rate, real effective exchange rate, and wage-productivity differential to be significant determinants of FDI flows in the Philippines.

The analysis in this section is based on two steps. First, the variables which may be statistically associated with total FDI and country-specific FDI are examined. For the latter, three equations are estimated for three selected source countries, namely, the US, Japan, and the EC 6 (UK, Netherlands, Germany, France, Luxembourg, and Denmark). Second, the relationship between FDI and exports is tested by the hypothesis that FDI flows stimulate our exports.

DETERMINANTS OF FDI

Market Size and Market Growth

Most studies suggest that FDI is a positive function of output and growth in the host country. Output is approximated by the size of the market, usually by the GDP or GNP of the host country, while market growth is measured by the GDP or GNP growth rate. In empirical analyses, GDP, GNP, per capita GNP, and GNP or GDP growth rates are often used as surrogates for market size. The size of the market and its potential growth can signal the attractiveness of the host country as

a site for FDI. It should be noted that the size and growth of the market of the host country are likely to influence FDI concentrated on the production of goods for the domestic market rather than for the world market. Access to a large domestic market is important to import-substituting FDI but is not necessary for export-oriented FDI. Size and access are guaranteed through import protection. For outward-oriented FDI, international competitiveness and stable exchange rates are the more important considerations.

Real Effective Exchange Rate

In its general form, the real exchange rate is defined as the price in real terms of a real foreign currency a country uses for its international transactions. The real exchange rate RER, can be expressed as: $RER = E_n * P_w/P_d$ where E_n is the nominal exchange rate expressed in units of domestic currency per unit of foreign exchange, P_w is the price deflator for the foreign currency, and P_d is the deflator for the domestic currency. The consumer price index (CPI) is used as deflator for the domestic currency. As regards the deflator for the foreign currency, a measure of the price level of international goods is needed. The CPI is not a good measure because it includes the prices of many domestic services and home goods. Instead, the wholesale price index (WPI), which is heavily weighted with tradable goods, is used as proxy for such an index.

An increase in the RER implies a real depreciation while a decline implies a real appreciation. The concepts of overvalued and undervalued currencies are frequently used to refer to situations in which the real exchange rate is considered to be “too high” or “too low” respectively, in relation to its “correct” or “equilibrium” level.

Many variants of the real exchange rate are possible, depending on what analysts want to emphasize. For our purposes, a trade-weighted real exchange rate known as real effective exchange rate (REER) is used. The REER is an indicator of the competitive position of a country with regard to its main trading partners. The real effective exchange rate REER, is defined as follows:

$$REER = w_j * E_{nj} * P_{wj}/P_d$$

where

- w_j = trade weight of partner country j ;
- E_{nj} = number of units of domestic currency per unit of foreign exchange j ;
- P_{wj} = price level of partner country j ; and
- P_d = domestic price level.

With unchanged exchange rate and constant foreign prices, an increase (decrease) in domestic prices or an appreciation (a depreciation) of the domestic currency constitutes a decline (an increase) in the country's competitiveness and is expressed by an index fall (rise). A persistent fall (increase) indicates an overvaluation (undervaluation) of the domestic currency, which makes domestically produced goods and services more (less) expensive than goods and services produced abroad. If the exchange rate does not equalize production costs among different countries, there is a potential disincentive (incentive) for foreign direct investments to flow in to the country with an overvalued (undervalued) currency.

Infrastructure Availability

Infrastructure availability — roads, ports, airports, telecommunication networks and facilities, energy — also affects the attractiveness of a country as a site for FDI. A country with poor infrastructure may have difficulties in capturing a significant amount of FDI.

Trade Policy

International trade policy is important in promoting a wider role for FDI. Foreign investors will respond to the profit opportunities in the economy arising from the country's trade policy. The type of FDI that a country attracts can be influenced by the type of trade policy that the country pursues. A protectionist trade policy with an anti-export bias implies a greater incentive for domestic production and encourages the establishment of import-substituting FDI.

Political Stability

Domestic political stability plays a crucial role in attracting FDI. Political risk is associated with production disruption, confiscation or damage to property, threats to personnel, changes in macroeconomic management or the regulatory environment. Because of these, foreign investors will not risk their capital in an environment that is perceived to be unstable.

Government Incentives

Another determinant of FDI flows are the fiscal incentives provided by the host country. These include tax holidays, accelerated depreciation, and other investment allowances and subsidies which are believed to encourage FDI. However, some studies found that government incentives have a statistically insignificant effect on the inflow of FDI. The major explanation for this cancellation of the positive effect of incentives is that, in most cases, incentives are accompanied by a number of disincentives like restrictions on size, ownership, location, dividends, and entry into certain industries, as well as mandatory provisions concerning local purchases and exports (Balasubramanyam 1984 as cited in Weng, 1990).

The above variables are operationalized as follows:

- (1) The market size of the Philippine economy is approximated by the country's real gross domestic product GDP (1985 prices).
- (2) The real exchange rate is given by the real effective exchange rate REER⁹ index (1985=100).
- (3) Infrastructure availability is represented by the stock of public investment PUBINV (1985 prices) which refers to buildings or construction and machinery or equipment expenditures of the

9. The real effective exchange rate index (REER) is the nominal effective exchange rate (NEER) multiplied by the ratio of the wholesale price index of the countries whose currencies comprise the NEER basket to the Philippine consumer price index. The NEER is a 15-year trade weighted average exchange rate of the peso vis-a-vis the basket of foreign currencies composed of the US dollar, Japanese yen, German DM, UK pound, South Korean won, Canadian dollar, Australian dollar, Belgian franc, and the Danish krone.

government reported in the National Income Accounts. The stock of public investment is derived using the perpetual inventory method.¹⁰

- (4) Trade restrictions are the principal instruments of industrial policy. Effective protection rates (EPRs) computed on the basis of non-tariff barriers are used to measure the restrictiveness of trade policy. Unfortunately, this kind of assessment is limited by the paucity of data. Instead, the average EPRs of the manufacturing sector, calculated on the basis of tariffs, are used as proxy for the restrictiveness of the country's trade policy (in percent).
- (5) Since there are no continuous representations available, a dummy variable is used to represent political instability, POLDUM, which takes a value of 1 if a certain year is characterized by political instability and 0 otherwise. Political instability is defined here as uncertainties and negative perceptions arising from mass unrest, demonstrations, political assassinations, anticipated and unanticipated government actions, as well as government discontinuities which may be brought about by left-wing or right-wing rebellion. The years 1984, 1985, 1989 and 1990 are chosen as political dummy variables.
- (6) A dummy variable is used to represent significant changes in government incentives policy, CHIP, which has a value of 1 if liberalizing changes in incentives policies are announced by the government in a certain year and 0 otherwise. Investment incentive laws in the Philippines have been changed several times to keep the domestic climate as attractive as possible. To analyze the effect of these changes, the years 1983 and 1987 are chosen as dummy variables. BP BLG 391 was promulgated in 1983 while EO 226 was legislated in 1987. These two laws represent the most significant changes in the country's investment incentives.

It is assumed that a positive relationship exists between FDI and,

- (1) the size of the host country economy as expressed by GDP;
- (2) REER;

10. $K_t = K_{t-1} - K_{t-1} * d + GI_t$ where K_t is capital stock in period t , K_{t-1} is capital stock in period $t-1$, d is assumed rate of depreciation, and GI_t is gross investment in period t . See Tan, E.S. in "Estimating the Shadow Price of Capital," unpublished paper, 1993.

- (3) PUBINV;
 (4) EPR, protection encourages the flow of FDI toward the domestic market; the higher the effective protection, the greater the incentive to invest; conversely, a decline in protection results in a reduction in this type of FDI;
 (5) CHIP; and
 (6) a negative relationship exists between FDI and POLDUM.

Multiple regression analysis is employed to estimate the relationship among host country economic variables, political risk, and total FDI. FDI from the US, Japan, and the EC6 are also regressed on the same host country economic and political variables. It is expected that there will be some delay between the decision to invest and the completion of the transaction. The FDI model was tested with explanatory variables containing lagged values.

Several alternatives were applied in estimating the relationship. First, the dependent variable used was the ratio of FDI flows from each investor country to total FDI flows in the Philippines (in percent). This was regressed on the following explanatory variables (all in percent): three-year moving average of real GDP growth rate, two-year moving average of the real effective exchange rate index, three-year moving average of the real growth rate of public investment stock, effective protection rate, political dummy, and investment incentive dummy. In the second alternative, the dependent variable used was the share of manufacturing FDI to total FDI (in percent) and this was regressed on the same explanatory variables. However, the results were found to be unsatisfactory in terms of fewer significant coefficients, as indicated by lower t-statistics, and lower adjusted R^2 . In order to improve the specification of the model, the logarithmic form was employed. A linear relationship of the logarithmic FDI model is assumed as follows:

$$\ln FDI_t = \alpha_0 + \beta_1 \ln GDP_{t-k} + \beta_2 \ln REER_t + \beta_3 \ln PUBINV_{t-k} + \beta_4 \ln EPR_t - \beta_5 POLDUM_t + \beta_6 CHIP_{t-k} + \mu_t$$

- where
- t = year 1, ... n;
 - α_0 = constant
 - μ = error term;
 - FDI = foreign direct investment flows (1985 prices in million pesos);
 - GDP = real gross domestic product (1985 prices in million pesos);
 - REER = real effective exchange rate index (1985=100);
 - PUBINV = stock of public investment (1985 prices in million pesos);
 - EPR = average effective protection rate of the manufacturing sector (in percent);
 - POLDUM = dummy variable representing domestic conflictive events in the Philippines, it is equal to 1 for year $t = 1984, 1985, 1989,$ and 1990 ;
 - CHIP = dummy variable representing changes in investment incentive policies, it is equal to 1 for $t = 1983$ and 1987 .

This equation is first tested using the log of country-specific FDI as dependent variable. USFDI, JAPANFDI, and EC6FDI are the direct investments of the US, Japan, and EC6, respectively (in million pesos at 1985 prices). Another equation is estimated with the log of total FDI in the Philippines (in million pesos at 1985 prices) as dependent variable. The regression results are presented in Table 16. The coefficients are the elasticities of the relevant variables with respect to the relevant FDI flows.

The empirical results provide strong support for the importance of EPR, GDP, PUBINV, REER, and POLDUM as determinants of total FDI in the Philippines. As hypothesized, the Total FDI variable is positively correlated with effective protection rate, real GDP, stock of public investment, and real effective exchange rate and is negatively correlated with political instability. The results for the country-specific FDI point to the importance of effective protection rate and the stock of public investment. Both variables play a role in explaining FDI from the US, Japan, and the EC6.

Table 16
OLS Estimates: Determinants of FDI

Variables	Regression Equations			
	(1) US FDI	(2) Japan FDI	(3) EC6 FDI	(4) Total FDI
Constant	-26.559*** (-4.02)	-35.953** (-2.62)	-8.893 (-1.05)	-20.504*** (2.83)
LN EPR	0.637** (2.38)	1.716*** (2.96)	1.716* (2.06)	0.651** (2.31)
LN REER	1.622*** (3.36)	0.636 (0.66)	0.232 (0.37)	1.08* (2.0)
LN GDP	1.680*** (3.12)	2.011* (1.75)	0.315 (0.46)	1.334** (2.39)
LN PUBINV	0.310** (2.23)	0.657* (1.91)	0.727*** (4.07)	0.444*** (3.17)
POLDUM	-0.150* (-1.70)	-0.393** (-2.14)	-0.048 (-0.42)	-0.197* (-1.83)
CHIP	-0.077 (-0.720)	-0.220 (-1.01)	0.023 (-0.17)	-0.1 (-0.81)
Adjusted R ²	0.964	0.869	0.945	0.946
F-STAT	81.004	21.946	52.081	53.882

For the country-specific equations (equations 1-3), the dependent variable is the log of foreign direct investment of each investor country described in the text. For the total FDI equation (equation 4), the dependent variable is the log of total foreign direct investment in the Philippines. The numbers from columns 2 to 5 are the beta coefficients and the numbers in parentheses are their corresponding t-statistics. The sample period is 1973-1992.

*** significant at the 1 percent level (two tails)

** significant at the 5 percent level (two tails)

* significant at the 10 percent level (two tails).

For both total FDI and FDI from the three countries under review, the results show that the effective protection rate plays a significant role in attracting FDI. This supports the hypothesis that high EPRs are likely to discourage trade movements and thereby encourage the establishment of affiliates to serve the domestic market.

The results also point to the importance of the stock of public investment as a determinant of total FDI and FDI flows from the three countries under study. The statistical results reveal a significant positive effect on the inflow of total FDI as well as FDI from the US, Japan, and the EC. This confirms the hypothesis that the presence of adequate infrastructure is important for the inflow of FDI.

The statistical results for the three countries differed with respect to the remaining variables. Although the GDP and political dummy variables have the expected signs for all three countries under study, they are statistically significant only for the US and Japan. FDI flows from these two countries are positively correlated with real GDP and negatively correlated with political instability. As hypothesized, the statistical results yield a significant positive relationship between American FDI and REER, indicating that a real depreciation of the currency has a positive effect on FDI flows from the US or an increase in competitiveness encourages the inflow of FDI from the US. In the case of Japan and the EC, the REER variable has the correct sign but is insignificant.

Contrary to the hypothesis, the coefficient of the CHIP variable has an insignificant t-value for both total FDI and country-specific FDI. This implies that the 1983 and 1987 changes in investment incentive policies did not have a significant statistical effect in attracting FDI flows. This may be because government investment incentive policy changes had little influence on foreign investors who were more strongly motivated by political and economic conditions.

FDI AND EXPORTS

In general, FDI flows to a specific host country are either meant to produce for the local market or to establish the host country as an

export base. The results of the previous analysis suggest that the Philippines is very responsive to the rates of effective protection. This may be due to the inward-oriented nature of multinational firms which are operating in the country. To determine whether these firms contribute positively to the country's exports, two equations which look at the relationship between FDI and exports are tested. In the first, the explanatory variables are denoted by the shares of FDI flows from the US, Japan, and the EC6. In the second, the explanatory variable is given by the share of manufacturing FDI to total FDI. To improve the specification of the models, the real effective exchange rate REER is included in the equations. The dependent variable is given by the share of manufactured exports. The first equation is as follows:

$$X_t = \alpha_0 + \beta_1 \text{USFDISH}_t + \beta_2 \text{JAPANFDISH}_t + \beta_3 \text{ECFDISH}_t + \beta_4 \text{REER}_t + \mu_t$$

- where
- α_0 = constant;
 - t = year 1, ..., n;
 - μ = error term;
 - X = ratio of manufactured exports to total Philippine exports (in percent);
 - REER = real effective exchange rate index (1985=100);
 - USFDISH = share of US to total foreign direct investment in the Philippines (in percent);
 - JAPANFDISH = share of Japan to total foreign direct investment in the Philippines (in percent);
 - ECFDISH = share of EC6 to total foreign direct investment in the Philippines (in percent).

In the first equation, the ratio of manufactured exports, X_t , is regressed on country-specific FDI and REER. In the second, the share of manufacturing FDI to total, TOTFDISH, is substituted for country-specific FDI variables. The beta parameters are expected to be positive. The results of the OLS estimation are shown in Table 17. The coefficient of manufacturing FDI, TOTFDISH, is positive as

expected, but is not significant. This result reinforces the earlier observation that FDI in the country is largely import-substituting. However, it can be observed that the coefficients of country-specific FDI are negative and are statistically significant at 1 percent (for the US and Japan) and at 5 percent (for the EC6) levels. This runs contrary to our assumption that there is a positive relation between exports and FDI flows from the US, Japan, and the EC. The negative sign of their coefficients suggests that FDI flows lead to a deterioration of our exports. This could be an indication of the anti-export orientation of FDI flows from the US, Japan, and the EC6. This also reflects that FDI flows from these countries are directed to the domestic market and are intended to substitute for imports instead of complement the country's exports. These results confirm the earlier finding on the prevalence of protection-hopping FDI in the Philippines. For both equations, the remaining variable, REER, is positive and significant. This indicates that an increase in competitiveness or a currency depreciation encourages our exports.

Table 17
OLS Estimates : FDI vs. Exports

Variables	Regression Equations	
	(1)	(2)
Constant	809.253*** (4.33)	68.994 (0.15)
TOTFDISH		0.129 (0.29)
USFDISH	-11.583*** (-4.55)	
JAPANFDISH	-12.778*** (-4.90)	
ECFDISH	-5.04* (-2.02)	
REER	1.121*** (3.75)	0.141** (2.06)
Adjusted R ²	0.643	0.896
F-Stat	9.103	52.416

The dependent variable is the ratio of manufactured exports to total exports. The numbers from columns 2 to 3 are the beta coefficients and the numbers in parentheses are their corresponding t-statistics. The sample period is 1973-1992.

- *** significant at the 1 percent level (two tails)
- ** significant at the 5 percent level (two tails)
- * significant at the 10 percent level (two tails).

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**Conclusions and Policy
Recommendations**

Foreign investment has played a key role in the industrial development of many countries throughout the world. It is not, however, a magic wand that will eliminate the problems of poverty and underdevelopment in a single stroke.

~ PROSPERITY PAPERS ~

THIS paper has shown that trade policy plays an important role in influencing the type of FDI that the country attracts. Since our trade policy has continued to provide strong incentives to import-substitution, FDI in the Philippines has become heavily oriented toward the domestic market and the country has failed to attract substantial amounts of export-oriented FDI. The high level of protection promoted by the trade and investment structure, however, resulted in an inefficient manufacturing industry. Although the protectionist policy was inappropriate, multinationals nevertheless responded to the profit opportunities it offered and set up inefficient local production in industries where the country did not have comparative advantage. This investment decision by both foreign and domestic investors clearly entailed a misallocation of resources and a loss of consumer welfare.

Four facts stand out in the paper:

- (1) FDI flows to the Philippines have been largely concentrated in the manufacturing sector, particularly in the following highly protected industries: chemicals, processed food, transport

equipment, machinery and appliances, textiles and garments, basic metal products, and petroleum and coal.

- (2) The investment incentive system tends to reinforce the import-substituting nature of the economy. BOI approvals are biased to sectors receiving high protection and toward the capital-intensive production of import substitutes.
- (3) The applied regression analysis supports a strong positive correlation between FDI and the level of effective protection. The statistical results also reveal significant positive relationships between total FDI and the stock of public investment, real gross domestic product, and real effective exchange rate. As expected, total FDI has a significant negative relationship with political instability. The same results are obtained for the US. FDI flows from this country have been responsive to *EPR*, *PUBINV*, *GDP*, *REER*, and political instability. FDI flows from Japan are influenced by *EPR*, *PUBINV*, *GDP* and political instability. For the EC6, only *EPR* and *PUBINV* are significant. The variable *CHIP* does not adequately explain FDI flows. Since it is not a significant inducement to FDI, the government should instead use tax revenues, otherwise foregone in the form of incentives, to develop much needed infrastructure in the country.
- (4) The empirical analysis provides support for the negative relationship between exports and FDI flows from the US, Japan, and the EC6. The result obtained for total manufacturing FDI and exports reveals an insignificant positive sign. This indicates the anti-export orientation of FDI flows, and may reflect the fact that these FDI flows are inward-oriented and are intended to substitute for imports instead of complementing our exports. Given this effect of FDI on exports, it is necessary to reexamine the country's export incentives and export strategy side by side with its trade policy which continues to promote import-substituting industries. Unless these inconsistent policies are corrected, export incentives alone may not be effective in attracting export-oriented FDI. Export incentives may only partially offset the distortions created by a protectionist structure. If FDI is expected to significantly increase the country's exports, then policies at all levels must make exports attractive.

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If the domestic market is not protected by high import barriers, then foreign investment is likely to be geared toward exports as well as the domestic market. But with the high level of protection in the economy, it becomes difficult to encourage exports and export-oriented FDI. Moreover, the restrictive trade regime tends to limit the contributions of multinationals to the economy. As Naya and Ramstetter (as cited in Ramstetter and James 1992) asserted, the promotion of free trade is the single most effective way of maximizing the benefits that multinationals offer. Unless a policy environment that encourages competitiveness and economic efficiency is created, the country will not be able to attract substantial amounts of export-oriented FDI.

With the decline in commercial bank loans and foreign aid, developing countries like the Philippines have to rely more on foreign direct investment to sustain their economic growth. Unfortunately, the task ahead is not made any easier by the world economic environment. Given the collapse of the Soviet Union, the market transition among the Eastern European countries, and the opening up of Vietnam; competition for resources and markets will be intense. Recent global developments like the creation of the European Union and the North American Free Trade Area (NAFTA) implies that competition in the industrialized countries will be fierce. As a result, TNCs will always be in search for new markets to develop. Developing countries which have pursued the appropriate policies are most likely to capture these foreign investments. Countries pursuing export-oriented strategy rather than import substitution are more likely to lure FDI flows which are geared toward industries where the countries have a comparative advantage. The prospects for an increase in FDI flows to the Philippines appear promising in view of recent reports on the current level of interest in the country among potential investors. However, the extent to which the potentials are realized depends ultimately on our attitude toward FDI and on our economic and political environment.



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Appendices

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APPENDIX 1

Box 1

Why Others Are Hesitant to Invest in Manila

Motorola Philippines is a Parañaque-based export-oriented US company that manufactures semiconductors. A truck filled with 12,000 liters of water goes around the plant eight times a day. The deep well in the Parañaque plant has dried up and water is hauled from the company's plant in Carmona, Cavite. Motorola also generates its own electricity. Brownouts lasting from four to eight hours daily forced the company to buy its fifth generator set costing half a million US dollars. Motorola had planned to invest US\$30 million to expand its manufacturing operations in a 19-acre lot in Carmona. However, these plans were shelved due to the 1989 coup attempt.

Like Motorola, Toyota Motors' auto transmission plant in Sta. Rosa, Laguna is supported by a US \$5 million, five-megawatt power generator. Both Motorola and Toyota have been operating in the country for quite some time and despite the brownouts, rash of kidnappings, and other problems; they are not withdrawing because they are confident that they know the country well enough to be able to manage the situations. According to the general manager of Motorola, "while the Philippines is Asia's economic laggard, investors are aware of its growth potentials, its central location, and its abundant resources." The president of Toyota Motors says that "the company will not withdraw because there is a market for Toyota vehicles in the country." But he added that "for new Japanese investors, the Philippines is a very dangerous and high-risk country because of news about kidnappings and past coup attempts." He cites vehicle parts companies as examples of investors that the Philippines had lost. "These companies manufacture airconditioners or radiators, export products which can easily be handled by skilled Filipino workers. But instead of the shaky Philippines, these Japanese companies chose to locate to other ASEAN nations."

APPENDIX 2

Box 2

How Not To Promote An Industry: The Brazilian Experience

In 1979, the government of Brazil created the Special Secretary of Informatics (SEI) to regulate the computer manufacturing industry. Foreigners were not allowed in the lower end of the market, i.e., personal computers and peripherals. Imports were banned and foreign participation even through minority stakes in joint ventures was not permitted. Between 1979 and 1988, domestic sales increased from US \$120 million to US \$3 billion while TNCs market share dropped from 77 percent to 33 percent during the same period. Despite this apparent success, a number of problems in the Brazilian computer industry emerged by the late 1980s. In prohibiting the entry of foreigners, the SEI outlawed a major vehicle for technology transfer in a technology-driven industry that changes rapidly in response to technological development. Thus, when Brazilian manufacturers started to replicate foreign technologies, foreign competitors had developed more advanced technologies, leaving the Brazilian firms in a perpetual state of obsolescence and noncompetitiveness. Moreover, local firms had little incentive to pursue technological innovation because they had the domestic market all to themselves and did not have to face foreign competition.

Although the market reserve policy created a local computer industry, it was inefficient and generated products of lower quality and higher cost than could be obtained in the international marketplace. Furthermore, local firms in other industries that relied on microcomputers had no recourse to the superior foreign products and were thus forced to use the locally manufactured ones. This, in turn, hampered their own competitiveness, as foreign firms in the same industries had access to superior equipment in a vital aspect of operational management.

For these reasons, the government has taken steps to revamp this policy. The domestic market reserve on informatics officially ended in October 1992. A new law allows for the importation of computer equipment regardless of whether the same equipment is produced in Brazil. This law also permits the formation of joint ventures.

"Attracting Foreign Investment," Prosperity Paper Series, Sept. 1992.

APPENDIX 3

MEASURING FOREIGN DIRECT INVESTMENT IN THE PHILIPPINES

DEFINITIONS AND SOURCES OF DATA

FOREIGN direct investment is a long-term investment made by nonresidents, typically but not always multinational corporations. It includes new equity capital, reinvested earnings, and net borrowing from a parent company or its affiliates. It involves establishing, acquiring, or expanding an affiliated subsidiary corporation or branch and implies full or partial control of the enterprise and physical presence by foreign firms or individuals. An essential element of direct investment is a continuing substantial interest in and an effective voice in managing the real assets of a foreign affiliated entity (Brewer 1991). Where there is no substantial influence in the management of the foreign enterprise, the investment is considered a portfolio investment. Portfolio investment is defined as the purchase of host country bonds or stocks by foreigners, without managerial control.

The IMF Balance-of-Payments Manual defines direct investment as one that is made to acquire a lasting interest in an enterprise other than that of the investor, with the purpose of having an effective voice in the management of the enterprise. The IMF collects FDI flows on the basis of reports submitted by developing countries for the Fund's annual BOP Statistics Yearbook. Because of the different sources and methods used for estimating FDI changes, the data are not fully comparable from country to country (IMF 1964).

The OECD Benchmark Definition of Foreign Direct Investment (1983) states that a direct investment enterprise is an incorporated or an unincorporated enterprise in which a single foreign investor either:

- (1) controls 10 percent or more of the ordinary shares or voting power of an incorporated enterprise or the equivalent of an unincorporated enterprise unless it can be established that this

- does not allow the investor an effective voice in the management of the enterprise; or
- (2) controls less than 10 percent of the ordinary voting shares or voting power of the enterprise but has an effective voice in the management of the enterprise.

An effective voice implies that the direct investor is able to influence or participate in the management of the enterprise and does not imply absolute control. The OECD collects FDI flows from the principal capital-exporting industrial countries (DAC members) to developing countries. In principle, the flows include reinvested earnings, but in practice these are partly estimated and cannot always be reallocated to individual recipient countries. FDI flows from the major oil exporting countries or between other developing countries are not included (Brewer 1991).

SOME ISSUES AND CAVEATS IN USING THE CURRENTLY AVAILABLE FOREIGN DIRECT INVESTMENT DATA

A number of difficulties arise in attempting to measure foreign direct investment in the Philippines. National statistics are inadequate, some data are absent, and under-reporting is widespread. The FDI flows reported by different government agencies are incomparable and suffer from discrepancies owing to differences in their definition, coverage, and collection methodology.

There are currently three local sources of data on foreign direct investment flows. These are the: (1) Board of Investments (BOI), (2) Securities and Exchange Commission (SEC), and (3) Central Bank (CB now *Bangko Sentral ng Pilipinas* [BSP]). The three agencies regard foreign direct investment as the acquisition of equity as well as control and managerial involvement in the operations of a direct investment enterprise. The BOI and the SEC define foreign as nonresidents as well as nonresident nationals (non-Philippine citizens resident in the Philippines) and foreign-owned Philippine companies investing in the Philippines. The CB includes only those investments by resident firms that can be ascribed to nonresident owners.

Board of Investments (BOI)

Column 3 of Appendix Table 1 shows foreign equity investments approved by the BOI under various investment incentive laws from 1968 to May 1992. These approved foreign direct investments are computed on the basis of the proposed amount of foreign equity investments of new and existing projects submitted to the BOI by new and existing corporations and partnerships. The following are considered by BOI as foreign direct equity investments:

- cash participation of foreign investors;
- capital equipment converted into equity;
- debts converted into equity;
- internally generated funds/retained earnings (dividends, royalties, or fees) converted to equity.

The BOI uses the month of approval of the project as reference period. Note that the BOI data set is based on approved foreign investments rather than on investments actually implemented. It does not include foreign investments arising from financial institutions as well as from the Export Processing Zone Authority (EPZA).

Securities and Exchange Commission (SEC)

Column 4 of Appendix Table 1 shows foreign equity investments in the initial paid-up capital of newly registered corporations and partnerships as well as the increases and decreases of foreign equity of existing corporations and partnerships. The SEC data set is available only from 1972 onward. The following are considered by SEC as foreign equity investments:

- cash participation of foreign investors;
- stocks of foreign investors;
- dividends converted into equity;
- foreign and local loans converted into equity;
- capital equipment converted into equity;

Appendix Table 1

Alternative Data Sources for the FDI Flows to the Philippines
(in million US\$)

Year	IMF	OECD	BOI	SEC	CB FEOID	CB DER
1968			24			
1969			36			
1970			15			-28
1971			23			-4
1972		32	46	4		-22
1973	55		80	5	146	64
1974	4	114	210	23	123	28
1975	98		57	8	122	125
1976	126	154	83	10	122	144
1977	209	111	46	5	183	216
1978	101	144	79	7	156	100
1979	8	330	103	116	199	20
1980	-107	128	236	64	230	-102
1981	172	107	252	36	307	175
1982	15	126	255	70	344	17
1983	105	-168	267	90	275	112
1984	9	167	234	31	147	17
1985	12	-250	131	80	247	17
1986	127	60	78	45	108	140
1987	307	85	167	77	96	326
1988	936	215	474	158	71	986
1989	563	332	805	225	203	643
1990	530		961	254	196	480
1991			771	256	415	654

- foreign owned fixed assets such as real estate, buildings, machines, and others.

The SEC computes foreign equity investments as the sum of the following:

- (a) initial capital of new domestic corporations and partnerships;
- (b) increases in capital of existing domestic corporations and partnerships;
- (c) initial capital of new foreign corporations and regional headquarters of multinational corporations;
- (d) additional capital remitted by existing foreign corporations and regional headquarters of multinational corporations.

This complete set of data is available only from 1989 onward. From 1979 to 1988, the SEC figures refer only to foreign investment in new and existing domestic corporations and partnerships, (a) and (b) above, plus (c), initial capital of new foreign corporations and regional headquarters of multinational corporations. Prior to 1979, the SEC data referred only to (a), foreign equity investment in the initial paid-up capital of newly registered domestic corporations and partnerships. In view of these limitations in the scope and coverage of foreign direct investment statistics, the SEC data become understated. It was only in 1989 that SEC adopted a comprehensive coverage of foreign direct investment. Like the BOI, the SEC does not cover financial institutions.

Central Bank

Foreign Exchange Operations and Investments Department (FEOID). All corporations and partnerships with foreign equity require CB registration. The FEOID monitors all registered foreign equity investment flows of corporations and partnerships including those which are not monitored by the BOI and the SEC. Column 5 of Appendix Table 1 shows FEOID data which represent CB-registered foreign equity investments of corporations and partnerships. These are

based on the actual inward remittances made by foreign investors. The following are considered by FEOID as foreign equity investments:

- investments in cash;
- investments in kind: machinery, equipments, raw materials and supplies;
- reinvestments: stocks, dividends, and royalties converted into equity;
- debt to equity conversions (the computation was transferred to the Debt Restructuring Office since 1986).

Department of Economic Research - International (DER-I). The DER-I computes foreign investment statistics which are included in the BOP account. Foreign investment data are based on the transaction reports of inward remittances by commercial banks. Reinvested earnings, technical fees converted into equity, and imports converted into investments are obtained from the FEOID. Debt converted into equity are derived from the DRO. The DER-I data include portfolio investments and foreign exchange holdings. The following are considered as foreign direct investment inflows:

- withdrawal of Philippine investments abroad: proceeds of sale of assets abroad, retirement of foreign bank holdings, stocks and other securities and repatriation of equity investments in enterprises abroad;
- new foreign investments in the Philippines: receipts for investments to create or expand capital in a local firm including additional capital contribution of foreign firms to their local branches and subsidiaries;
- reinvested earnings of multinationals;
- debt converted into equity;
- technical fees converted into equity;
- imports converted into investments;
- foreign investment in issues of Philippine stocks, bonds, and other securities;
- bank inter-branch operations.

The following are considered as foreign direct investment outflows:

- withdrawal of foreign investments from the Philippines: proceeds of sale of non-resident stocks/bond holdings in domestic corporations remitted outward;
- capital for direct investment abroad: remittances of residents for investment in a foreign firm;
- remittances of residents for investment in a foreign firm;
- remittances of residents for investment in stocks and bonds of foreign enterprises;
- bank inter-branch operations: remittances of local branches of foreign banks to head offices as well as remittances of Philippine banks to overseas branches.

Net direct investment flow, difference between inflows and outflows, represents the net increase in foreign equity and non-equity investments and the net increase in foreign exchange holdings of domestic corporations and partnerships due to other financial transactions.

Appendix Table 2

Distribution of CB-Registered Foreign Direct Equity Investments by Sector Cumulative Flows (In US\$ million)

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
Banks and Other											
Financial Institutions	66.37	121.22	137.29	138.81	170.76	191.84	220.88	240.98	269.92	288.72	301.60
Banks	58.96	92.46	104.98	103.32	120.48	127.19	147.73	146.95	154.30	164.34	180.76
Other financial institutions	7.41	28.76	32.31	35.49	50.28	64.65	73.15	94.03	115.62	124.38	120.84
Manufacturing	57.23	92.38	175.16	249.63	383.38	474.00	561.31	645.82	781.14	912.33	1057.56
Chemicals and chemical products	5.33	14.57	20.25	38.18	86.43	138.87	167.97	188.36	230.66	268.10	294.56
Food	3.52	13.26	21.01	23.01	49.03	57.79	82.29	88.38	133.61	141.63	196.19
Metal and metal products	2.03	2.02	48.47	75.81	84.77	85.87	92.41	102.02	107.98	150.06	161.73
Textiles and garments	7.27	10.19	14.29	16.88	20.90	28.12	72.05	36.23	40.52	49.95	51.20
Transport equipment	3.40	3.63	5.31	8.07	17.54	26.68	33.41	54.79	63.06	67.44	68.25
Petroleum and coal	23.91	23.90	24.22	28.24	28.24	28.69	28.69	29.71	36.00	36.00	76.74
Machinery, apparatus, appliances and supplies	1.52	4.03	5.41	9.59	19.93	23.14	28.09	38.90	45.40	61.29	64.25
Non-metallic mineral products	1.81	1.80	2.50	4.42	6.48	9.09	10.54	13.51	16.49	25.24	25.44
Others	8.44	18.98	33.70	45.43	70.06	75.75	85.86	93.92	107.42	112.62	119.21
Mining	4.74	22.23	30.52	57.56	58.97	79.55	142.05	225.03	311.20	474.10	574.31
Petroleum and gas	0.14	0.39	0.81	20.71	22.03	41.27	103.33	183.30	269.22	419.08	519.29
Copper	3.43	12.86	19.22	26.05	26.09	27.31	27.32	30.32	30.32	43.32	43.32
Iron ore	0.32	7.66	8.66	8.79	8.84	8.88	9.30	9.30	9.32	9.32	9.32
Nickel	0.85	1.32	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36
Others	0.00	0.00	0.47	0.65	0.65	0.73	0.74	0.75	0.98	1.02	1.02

1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
304.62	318.55	349.34	355.11	356.80	373.42	397.94	428.58	465.01	513.93
181.89	188.30	217.84	222.94	224.00	229.59	237.54	249.47	260.41	260.98
122.73	130.25	131.50	132.17	132.80	143.83	160.40	179.11	204.60	252.95
1138.02	1276.82	1301.50	1349.20	1376.45	1484.38	1593.44	1892.35	2074.17	2330.53
311.22	338.52	366.88	385.67	394.43	414.51	430.87	475.64	504.16	538.92
221.25	282.17	282.44	287.64	289.25	296.78	312.39	321.25	343.33	361.02
167.40	167.71	169.22	169.28	169.35	170.07	171.58	185.86	193.04	197.05
52.84	55.76	57.51	59.48	63.19	71.46	80.85	95.47	112.29	118.61
76.89	100.49	100.15	103.63	103.63	109.01	116.35	138.32	178.32	191.76
76.74	78.96	81.23	82.31	82.31	82.31	82.31	94.87	94.87	223.97
67.98	72.46	73.81	78.96	81.32	129.89	155.48	324.41	378.94	404.74
33.04	33.50	34.49	34.49	34.49	35.75	49.08	50.30	51.88	67.27
130.66	147.25	135.77	147.74	158.48	174.60	194.53	206.23	217.35	227.21
627.12	687.53	735.82	770.37	780.66	822.94	853.20	883.74	895.97	897.94
572.07	631.51	679.80	685.98	697.38	728.27	741.25	742.73	742.73	742.73
43.32	43.32	43.32	43.32	43.32	43.32	43.32	43.32	43.32	43.32
9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32
1.36	1.36	1.36	1.36	1.36	1.36	2.19	2.19	2.82	2.82
1.05	2.02	2.02	20.39	29.28	40.67	57.12	86.18	97.78	99.75

Appendix Table 2 *continued*

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
Commerce	3.72	17.00	22.51	31.00	39.07	50.71	62.38	83.12	93.58	103.15	105.2
Wholesale	2.30	6.74	10.91	19.12	26.34	35.24	44.76	64.92	71.10	74.79	76.3
Real estate	1.32	8.98	9.17	9.44	10.23	10.63	11.33	11.85	16.13	22.01	22.8
Others	0.10	1.28	2.43	2.44	2.50	4.84	6.29	6.35	6.35	6.35	6.0
Services	0.26	0.84	6.63	15.20	20.45	23.59	28.01	32.70	65.58	76.20	89.3
Business	0.24	0.72	3.26	10.74	13.19	15.77	20.15	24.64	55.54	59.25	64.1
Others	0.02	0.12	3.37	4.46	7.26	7.82	7.86	8.06	10.04	16.95	25.2
Public Utility	9.86	10.03	12.52	13.42	13.89	14.55	17.10	19.32	26.82	30.77	31.7
Communication	9.91	0.91	2.64	2.64	2.87	2.87	3.78	3.78	8.41	10.46	10.4
Land transport	8.94	9.09	9.09	9.09	9.09	9.09	9.09	9.09	9.10	10.43	10.4
Others	0.03	0.03	0.79	1.69	1.93	2.59	4.23	6.45	9.31	9.88	10.8
Agriculture, Fishery and Forestry	3.64	4.86	5.62	6.45	7.93	9.03	10.46	16.22	20.53	24.77	25.8
Agriculture	0.20	0.66	0.88	1.17	2.36	2.36	3.78	4.40	6.98	10.56	11.5
Others	3.44	4.20	4.74	5.28	5.57	6.67	6.68	11.82	13.55	14.21	14.3
Construction	0.12	0.16	0.19	0.39	0.84	8.35	8.72	17.19	18.42	21.05	20.87
Transport facilities	0.00	0.00	0.00	0.16	0.23	6.89	6.89	7.48	7.48	7.48	7.4
Infrastructure	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.18	7.18	7.18	7.1
Others	0.12	0.16	0.19	0.23	0.61	1.46	1.83	2.5	3.76	6.39	6.21
Others	0.11	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Total Foreign Equity Investments	146.07	269.22	390.94	512.96	695.79	852.12	1051.41	1280.88	1587.69	1931.59	2207.20

Source: Central Bank of the Philippines.

1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
109.99	113.38	113.41	115.53	125.26	153.53	173.20	195.44	213.44	224.10
79.38	84.13	83.85	84.36	91.35	95.81	107.90	113.36	119.55	125.61
24.55	25.07	25.38	25.82	26.56	37.66	45.23	62.01	73.83	78.43
6.06	4.18	4.18	4.75	7.35	20.06	20.07	20.07	20.06	20.06
90.72	103.07	106.41	109.08	129.33	135.13	140.08	169.74	239.31	249.61
65.08	68.26	70.23	72.29	73.16	76.42	80.61	82.99	91.56	95.17
25.64	34.81	36.18	36.79	56.17	58.71	59.47	86.75	147.75	154.44
32.41	34.15	35.19	38.17	38.48	40.04	41.29	42.68	47.23	95.78
10.82	12.50	13.47	16.37	16.37	17.60	18.49	19.07	22.19	56.48
10.43	10.43	10.43	10.43	10.43	10.48	10.50	10.50	10.50	10.51
11.16	11.22	11.29	11.37	11.68	11.96	12.30	13.11	14.54	28.79
29.15	45.16	45.22	45.75	46.87	47.20	53.24	53.76	54.01	54.28
14.18	29.64	38.27	38.80	39.50	39.50	43.17	43.69	43.82	44.01
14.97	15.52	6.95	6.95	7.37	7.70	10.07	10.07	10.19	10.27
21.22	21.49	21.51	21.57	21.57	21.58	21.70	23.20	28.26	28.97
7.48	10.43	10.43	10.43	10.43	10.48	10.50	10.50	10.50	10.50
7.27	15.53	15.55	15.59	15.59	15.59	15.59	16.86	17.44	17.47
6.47	4.47	-4.47	-4.45	-4.45	-4.49	-4.39	-4.16	0.32	1.01
0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
2353.75	2600.65	2708.90	2805.28	2875.92	3078.72	3274.59	3689.99	4017.90	4395.64

Appendix Table 3

Distribution of CB-Registered Foreign Direct Equity Investments by Country
Cumulative Flows (In US\$ million)

Country	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
U.S.A.	93.85	148.37	189.10	245.87	343.64	450.80	578.90	699.37	855.61	1020.17	1216.00
Japan	14.11	39.82	92.02	124.23	151.12	164.20	186.00	215.11	234.10	294.96	311.00
Hongkong	1.94	3.89	8.38	14.25	20.84	34.61	39.90	55.28	94.43	106.39	120.00
Netherlands	0.24	1.72	1.72	9.50	12.39	14.14	16.07	21.22	33.83	92.07	104.00
U.K.	24.03	24.63	28.67	29.69	32.83	34.87	38.00	43.09	67.47	80.27	78.00
Switzerland	1.13	3.29	6.41	9.09	14.94	20.20	25.54	32.73	39.81	46.41	47.00
Australia	0.46	5.76	9.49	12.86	17.23	19.74	24.25	31.41	35.77	39.20	43.00
Canada	0.50	23.16	33.84	40.12	48.47	48.76	50.34	50.51	44.74	45.82	45.00
France	1.12	1.12	1.16	1.23	1.52	1.58	7.77	17.85	36.04	38.08	41.00
Republic of Nauru	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.07	16.07	10.00
West Germany	0.27	0.87	0.91	1.68	4.55	7.85	9.59	13.40	18.16	21.09	24.00
Sweden	0.00	0.00	0.51	2.33	3.66	4.37	11.10	11.60	12.76	13.73	23.00
Panama	0.27	0.27	1.26	2.04	9.11	10.38	11.69	12.42	14.14	18.31	19.00
Austria	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.01	3.80	8.42	15.00
Singapore	0.00	0.10	0.50	1.43	1.96	2.64	4.91	5.22	11.50	12.37	12.00
Denmark	0.32	0.44	0.73	0.84	2.41	3.22	5.62	7.39	7.75	13.63	14.00
Luxembourg	0.00	9.05	9.30	9.32	10.77	10.77	10.95	11.15	11.24	12.62	12.00
Malaysia	0.00	0.00	0.01	0.01	0.29	0.31	0.34	0.35	0.38	0.61	5.00
Bahamas	0.85	0.85	0.10	0.10	0.10	0.18	0.18	0.18	0.18	0.20	0.00
New Hebrides	0.00	0.00	0.00	0.02	2.61	3.29	3.29	16.35	16.37	16.37	16.00
Bermuda	0.22	0.40	0.57	0.78	2.41	2.66	3.80	5.90	6.50	6.55	6.00
South Korea	0.00	0.00	0.00	0.04	0.13	4.88	5.88	5.94	6.14	6.44	6.00
Taiwan	0.00	0.00	0.00	0.00	1.21	2.05	2.35	2.65	2.65	2.73	3.00
Other countries	6.76	5.48	6.26	7.53	7.60	10.62	14.94	18.76	24.25	25.08	27.00
Total Foreign Equity Investment	146.07	269.22	390.94	512.96	695.79	852.12	1051.41	1280.88	1587.69	1931.59	2207.20

Source: Central Bank of the Philippines.

1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
1305.82	1460.72	1551.78	1619.95	1649.12	1717.92	1770.68	1845.75	1901.82	1937.41
333.64	361.64	371.62	377.34	394.57	446.53	500.74	689.59	843.92	890.13
131.40	159.53	144.26	155.55	169.25	185.01	200.26	255.37	270.78	292.43
108.74	119.03	125.71	130.22	131.28	148.17	151.54	155.18	160.36	173.87
82.81	88.42	100.64	101.67	102.72	106.03	114.63	129.80	131.86	285.09
55.39	60.02	62.88	62.91	63.32	68.42	75.59	83.98	92.05	107.06
43.71	43.84	44.60	46.08	46.19	59.09	66.77	66.43	71.39	71.95
45.82	46.47	46.97	47.56	47.56	48.57	51.86	52.82	53.81	53.82
41.69	41.99	41.99	42.01	42.09	42.18	43.23	44.22	49.64	50.18
10.07	10.07	10.07	10.07	10.07	10.07	10.07	10.07	11.75	11.75
26.91	27.81	29.00	29.38	30.46	30.90	32.57	38.45	45.97	54.15
25.47	26.60	26.94	26.94	27.02	27.04	33.55	38.60	39.80	40.64
19.04	19.94	20.04	20.18	20.18	21.21	23.46	23.49	23.49	24.73
17.20	18.04	18.04	18.04	18.04	18.04	18.04	27.53	27.62	27.62
13.10	15.11	10.59	10.69	11.51	15.13	21.38	30.81	38.35	47.75
14.20	14.22	15.21	15.21	16.74	18.00	18.83	19.40	19.40	21.50
12.81	13.10	13.70	13.86	13.92	13.92	13.92	14.77	15.35	23.36
7.74	9.39	9.50	9.52	10.60	10.67	11.10	11.42	11.80	13.86
8.36	8.36	8.36	8.36	8.36	8.36	8.46	8.46	8.56	8.61
8.21	8.21	8.21	8.21	8.21	8.21	8.21	8.21	8.21	8.21
6.64	6.70	6.71	6.73	8.38	8.67	8.92	9.89	9.96	13.43
6.44	6.66	6.74	6.75	6.97	8.27	15.96	51.59	64.73	68.36
3.55	3.85	4.03	4.19	4.88	19.62	27.20	33.33	36.18	40.31
27.99	30.93	31.31	33.86	34.48	38.69	47.22	40.83	81.10	129.41
2353.75	2600.65	2708.90	2805.28	2875.92	3078.72	3274.59	3689.99	4017.90	4395.64



Appendix Table 4
Foreign Equity Investment
(In thousand pesos)

	1981	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Agriculture, Forestry and Fishery	112,470	60,176	32,806	37,897	82,986	307,752	720,456	645,706	316,088	631,405	138,030	25,121
Mining	127,655	224,848	69,807	22,824	75	44,952	38,154	794,084	941,309	309,412	168,441	200,599
Manufacturing	927,547	1,811,975	3,184,331	1,854,714	949,198	1,968,330	7,627,364	12,194,568	12,433,291	13,021,076	3,961,632	8,834,363
Processed food	125,125	45,297	833,568	228,951	11,702	245,229	204,265	208,107	338,481	538,563	18,620	199,782
Textile and garments	57,505	14,436	49,656	22,438	83,660	394,431	486,575	2,601,128	3,157,332	515,806	177,085	215,893
Chemicals	428,945	56	474,658	119,621	481,514	272,652	2,260,255	572,702	816,855	1,243,779	97,771	82,676
Petroleum products	3,227	0	69,231	26,501	0	75,229	800	1,075,600	200	5,801,600	0	27,275
Non-metallic mineral products	0	0	5,685	28,325	0	11,138	16,770	33,000	117,620	171,231	0	0
Basic metal products and fabricated metal products	61,097	0	541,408	30,194	27,249	14,877	240,056	424,058	141,336	200,904	113,543	995,209
Machinery and equipment and electrical products	59,769	780,293	769,849	825,721	182,503	431,577	2,463,599	4,272,236	3,347,581	1,583,931	1,201,858	4,087,871

Appendix Table 4 *continued*

	1981	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Transport	7,200	6,502	112,985	416,523	88,816	67,170	457,453	308,071	2,319,273	760,740	733,328	353,605
Others	184,679	965,291	327,291	156,440	73,754	456,027	1,497,591	2,700,066	2,194,613	2,204,522	1,619,427	2,872,052
Public Utilities	—	—	—	—	—	—	—	10,888	37,572	33,248	64,976	18,933
Commerce, Export Traders, Real Estate	165,676	62,008	268,598	102,431	321,095	327,386	490,094	1,263,632	607,314	842,158	5,696	12,929
Service, Service Exporters, Agricultural Farm Services	561,289	758,752	223,379	407,034	189,426	620,757	745,747	933,926	1,547,549	1,441,463	0	120,240
Financial Institutions	7,385	12,456	—	15,700	—	4,696	—	750	60,029	29,870	0	0
Construction and Infrastructure	12,618	6,656	36,645	400	20,209	23,234	3,606	6,455	1,194,420	604,099	21,977	0
Others	74,400	41,038	84,954	8,618	30,761	130,235	357,128	1,629,957	6,232,263	4,481,252	2,889,634	5,202,393
Total	1,989,041	2,977,809	3,900,520	2,449,608	1,593,750	3,427,342	9,982,549	17,480,366	23,369,835	21,393,983	7,250,396	14,414,578

Source: Board of Investments (BOI).