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2 Trade and Structural Interdependence between the United States and the Newly Industrializing Countries

William H. Branson

2.1 Introduction and Summary

During the decade since 1973, the U.S. economy has become increasingly interdependent with the developing countries, and especially the newly industrializing countries (NICs) among them. (See table 2.2 for a list of identified NICs.) These countries have had high investment-to-GNP ratios, financed mainly by domestic saving but also partly by foreign borrowing. They have invested in manufacturing capacity, importing capital equipment. This increase in international demand for equipment has resulted in an increase of U.S. capital goods exports to over 50% of all U.S. manufactures; the twelve NICs enumerated in the tables in section 2 of this paper absorbed 22% of all U.S. capital goods exports in 1981.

In turn, exports of consumer manufactures by the NICs to the Organization for Economic Cooperation and Development (OECD) countries have expanded rapidly. The twelve NICs provided half of U.S. imports of consumer manufactures (non-food, non-auto) in 1981 and 40% of European imports. As the NICs grew during the 1970s, they imported capital goods from the United States and exported consumer manufactures to the United States.

This pattern of trade has strengthened the interdependence between the U.S. economy and the NICs. In section 2.3 below we show that U.S. exports of manufactures are less balanced across commodities than European or Japanese exports, with high shares in the United States for capital goods and chemicals. The NICs are a major market area for these U.S. exports.

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The geographical pattern of U.S. trade with the NICs also shows some interesting asymmetries. In overall trade in manufactures, the United States has a large surplus ($12.2 billion in 1980) in trade with the Latin American NICs (Argentina, Brazil, Colombia, Mexico), a small surplus ($2.5 billion) with the ASEAN (Association of South East Asian Nations) countries, and a large deficit ($11.3 billion) with the Far Eastern NICs (Hong Kong, South Korea, Taiwan). Thus the United States exports capital goods to the NICs and imports consumer goods from them, following broad lines of comparative advantage. But the exports are relatively focused on Latin America, mainly Mexico, and imports on the Far Eastern NICs. In the data of sections 2.3–2.5 a trade triangle appears, with the United States exporting manufactures, mainly capital goods, to the Latin American NICs; who in turn sell raw materials on the world market. The Far Eastern NICs buy raw materials and sell manufactures, mainly consumer goods, to the United States.

The data presented in the next sections support this view of interdependence between the U.S. economy and the NICs, which differs from the relations of Europe or Japan with those countries. In section 2.2 we begin by describing investment- and manufacturing-led growth in the NICs since 1970 or so. This is part of a broader pattern of growth in manufacturing in the developing countries that has left only the African primary producers dependent on a single primary export. Growth of manufacturing capacity, particularly in the NICs, has provided a market for exports of capital equipment.

In sections 2.3 and 2.4 we compare the evolution of the geographical and commodity composition of manufactures exports and imports of the United States, Europe, and Japan. The NICs take a high proportion of U.S. and Japanese exports relative to European exports, with the United States relatively concentrated on capital goods and Latin America. The United States is the biggest market for NIC exports of manufactures, particularly consumer goods.

The pattern of U.S. trade with the industrial NICs, disaggregated by commodity, is examined in the last section. There we see the geographical imbalances mentioned above, which make growth in the U.S. economy interdependent with growth both in Latin America and in the Asian NICs.

2.2 The Rise of the NICs

2.2.1 Introduction

During the 1970s the relative size of the manufacturing sector expanded in a broad range of developing countries. In a subset of these

countries in Latin America and Asia, this growth made them significant producers of manufactures on a world scale by the end of the decade. This group has been labeled the newly industrializing countries, or NICs. In this section we analyze some aspects of the rise of the NICs that are important for the later discussion of their trade interactions with the OECD countries.

Growth in manufacturing capacity and trade in the developing countries, which will be documented below, seems to have reduced their tight dependence on OECD growth. While there is still a strong correlation between growth rates of industrial countries and the average across all developing countries, the correlation is less tight when we look at groups of developing countries.

Growth rate data since 1973 are summarized in table 2.1 for areas of interest for the analysis below. The data for the industrial countries show the deepening stagnation in the OECD area, especially in Europe. For example, the West German economic institutes are forecasting a significant recovery in 1984, with real GDP growing at 2%–3% and *unemployment rising only slowly.* In Europe, recovery has been redefined to mean only a small increase in unemployment! The average growth pattern over all developing countries is roughly similar to that of the industrial countries, but there are important differences in timing. While the OECD countries, led by the United States, went deep into recession in 1982, growth was about the same as in 1981 in the developing countries.

The subgroups of developing countries in table 2.1 show a wide diversity of growth patterns relative to the industrial countries. The low-income and the Western Hemisphere countries show a rise in the

Table 2.1 Growth Rates of Real GDP of Selected Groups of Countries

	Average Annual Percentage Growth			
	1973–79	1980	1981	1982
Industrial countries[a]	2.8	1.3	1.0	−0.2
Developing countries	5.1	6.1	2.0	1.9
Low-income	5.1	6.1	3.7	3.7
Middle-income oil importers	5.5	4.2	1.1	1.1
East Asia and Pacific	8.5	3.6	6.9	4.2
Middle East and North Africa	2.9	4.7	0.1	2.7
Western Hemisphere	4.9	5.7	−2.4	−1.2
Major exporters of manufactures[b]	6.4	4.5	−0.2	0.2

Sources: World Bank 1983, table 2.1; IMF, *Annual Report, 1983,* table 2.

[a]All data are averages weighted by real GDP.

[b]International Monetary Fund (IMF) classification of major exporters of manufactures.

growth rate in 1980, and the East Asian and Pacific countries show a sharp rise in 1981. Middle East and North Africa and the major exporters of manufactures (the NICs) show an increase in the growth rate in 1982, when the OECD slump deepened. Thus the pattern of growth among the subgroups of table 2.1 does not mirror the movement in the industrial countries.

In the rest of this section of the paper, we will look in more detail at the structure of growth in the NICs, the development of the manufacturing sector in the NICs and in a broader sample of developing countries, and the financing of this growth. The facts to be presented are all well known by now; the point here is to present them in a way that will make clear the connection between these developments and the evolution of the structure of trade between the NICs and the OECD countries, especially the United States.

2.2.2 Growth in the NICs, 1970–81

There are about as many lists of which countries are NICs as there are authors on the topic of their emergence and growth. So we have an initial problem of identification of countries. There is also in the background of this literature a deeper question of whether the identification has not been done purely on an ex post basis by looking at a narrow set of indicators related to growth in manufacturing capacity. It is quite possible that the category "NICs" does not exist as measured by other characteristics of the economy. For example, on the "distortion index" of the World Bank, of the NICs listed in table 2.2, Thailand, Korea, Malaysia, the Philippines, and Colombia are in the low-distortion category; Indonesia, India, Brazil, and Mexico are middle-distortion countries; Argentina is the only high-distortion country (World Bank 1983, 60). Does this grouping imply that we can categorize NICs as relatively low distortion countries? The answer is not clear. An urgent topic for research in this area is an analysis using a clustering algorithm grouping countries by a wide range of economic indicators, such as the entire set of World Bank indicators, to see if a category "NICs" emerges statistically.

In the face of these reservations, we must proceed, so I have decided to adopt the list of NICs provided by Colin Bradford (1982), which includes countries which are on most lists. Bradford further introduces the subsets of existing NICs and potential NICs (or, as they are labeled in table 2.2, new NICs). The categories in table 2.2 are also broken down by the World Bank's groupings by income level. Taiwan is omitted because it no longer appears in the World Bank data; it is included later in the analysis of trade data.

The growth rates of real GDP, investment, and manufacturing output in the NICs are summarized in table 2.2 for the period of 1970–81.

Table 2.2 **Growth Rates of GDP, Investment, and Manufacturing Output, 1970–81** (percentage per year)

	GDP	Gross Domestic Investment	Manufacturing Output
NICs			
Low income (average)[a]	3.6	3.7	2.8
India	3.6	4.9	5.0
Upper-middle income (average)	5.6	7.2	6.3
South Korea	9.1	12.2	15.6
Hong Kong	9.9	14.1	10.1
Singapore	8.5	7.2	9.7
Brazil	8.4	7.9	8.7
Mexico	6.5	9.0	7.1
Argentina	1.9	2.5	0.7
New NICs			
Lower-middle income (average)	5.6	8.2	5.8
Indonesia	7.8	14.0	13.9
Thailand	7.2	7.5	10.3
Philippines	6.2	10.1	6.9
Colombia	5.7	10.8	5.7
Upper-middle income			
Malaysia	7.8	10.4	11.1

Source: World Bank 1983, tables 2 and 4.

[a]Average for low-income economies other than China and India.

Among the NICs identified there, the only countries with lower growth rates than their income-group average were Argentina in all three categories and Thailand in investment growth. Comparing growth rates across columns, only Singapore and Brazil show slower investment growth than GDP growth, and only Argentina shows slower growth of manufacturing output than GDP growth.

The impression left by the data of table 2.2 is of investment-led growth in the NICs, with manufacturing output growing faster than GDP. Next we see the effects on the structure of output and exports, and how this growth was financed.

2.2.3 The Shift toward Manufacturing

The increase in the manufacturing sector as a fraction of GDP and, even more strikingly, in exports among the NICs is shown in table 2.3. The increase in the share of manufacturing in GDP from 1960 to 1981 was greater than the average for the income group in all of the identified NICs except Brazil and Argentina (it actually decreased in the latter).

The last two columns of table 2.3 show the increase in the share of manufactures in exports. Here the numbers are striking. Even in countries where the manufacturing share of output did not rise significantly,

Table 2.3 **Manufacturing Output and Exports in the NICs**

	Manufacturing Output as % of GDP		Manufactures Exports as % of Goods Exports	
	1960	1981	1960	1980
NICs				
Low income (average)[a]	9	10	9	29
India	14	18	45	59
Upper-middle income (average)	23	24	16	45
South Korea	14	28	14	90
Hong Kong	27	—	80	93
Singapore	12	30	26	54
Brazil	26	27	3	39
Mexico	19	22	12	38
Argentina	32	25	4	23
New NICs				
Lower-middle income (average)	15	17	4	18
Indonesia	(0)	12	0	2
Thailand	13	20	2	29
Philippines	20	25	4	37
Colombia	8	14	2	20
Upper-middle income				
Malaysia	9	18	6	19

Source: World Bank 1983.

[a]Average for low-income economies other than China and India.

Table 2.4 **Structure of Developing-Country Exports** (percentages)

Export Category	1955	1960	1970	1978
Total nonfuel exports	100	100	100	100
Food	49	47	40	35
Agricultural raw materials	28	25	15	10
Minerals, ores	13	15	18	10
Manufactures	10	13	27	45

Source: Riedel 1984a, table 1 (taken from UN Conference on Trade and Development, *Handbook of International Trade and Development Statistics* [New York, 1972, 1979, 1980]).

the export share did. Indonesia, whose exports came to be dominated by oil, in a mild version of the "Dutch disease," is the only country with a small increase in the manufacturing share.

This shift toward manufactures exports is not limited to the NICs, as we see in table 2.4 and figures 2.1–2.4, taken from James Riedel 1984a. Table 2.4 shows the evolution of the distribution of nonfuel

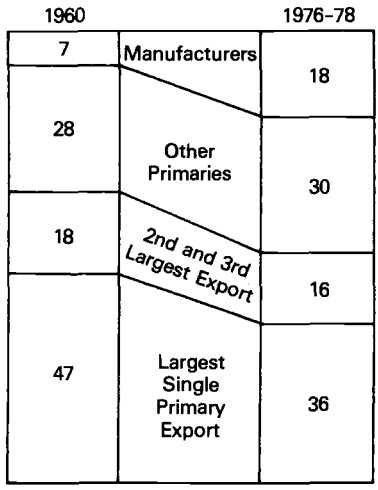

Fig. 2.1 Average export structure for total sample of LDCs (fifty-four countries). *Source:* World Bank.

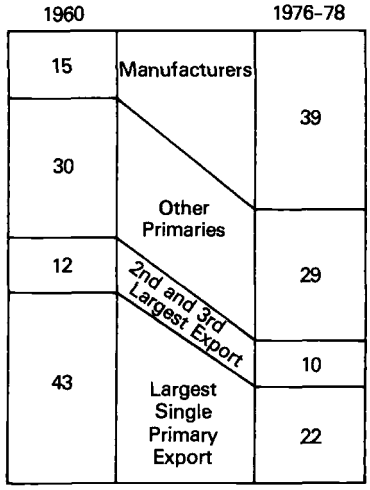

Fig. 2.2 Average export structure for balanced exporters (eleven countries). *Source:* World Bank.

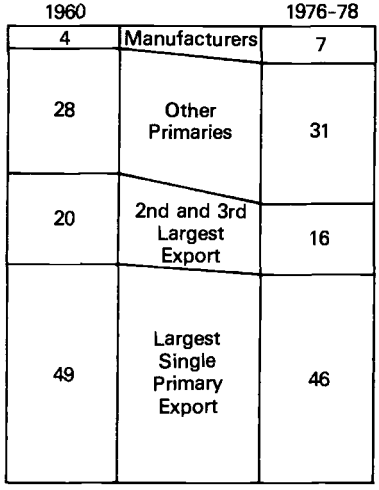

Fig. 2.3 Average export structure for African primary exports (twenty countries). *Source:* World Bank.

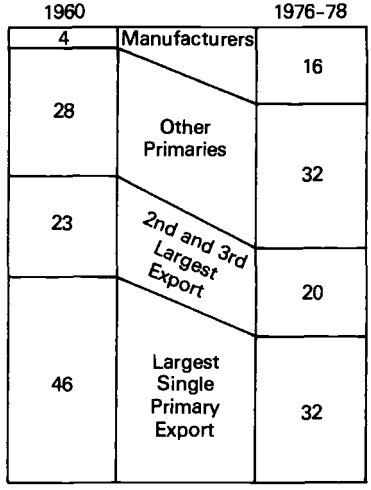

Fig. 2.4 Average export structure for non-African primary exporters (twenty-three countries). *Source:* World Bank.

exports of the developing countries from 1955 to 1978. Over that period, manufactures increased from 10% to 45% of developing-country exports. Noting that four Asian NICs—Hong Kong, South Korea, Singapore, and Taiwan—account for over 60% of developing-country manufactures exports, Riedel went on to study a 54-country sample that excludes those four. The sample was divided into 11 "balanced exporters," 23 non-African primary exporters, and 20 African primary exporters. The evolution of the average export structure of the entire sample is shown in figure 2.1. The increase in the share of manufactures from 7% in 1960 to 18% in 1976–78 is balanced by the decrease in the share of the largest single primary export from 47% to 36%. The experience of the "balanced exporters," which include Brazil, India, and Mexico from our list of NICs, is shown in figure 2.2. The share of manufactures rises from 15% to 39%, and the share of the largest single primary export falls from 43% to 22%. In figure 2.4 we see that the non-African primary producers, which include Argentina, Malaysia, Philippines, and Thailand from our list, increased their manufactures exports from 4% to 16% and reduced the largest single primary exports from 46% to 32%. Only the African primary producers, shown in figure 2.3, remain heavily dependent on the largest single primary export. These trends in the structure of developing-country exports continued to 1980, as is shown in Riedel 1984b.

The developing countries on average, and especially the NICs, grew rapidly in the 1970s, even in the face of stagnation in the OECD area. Investment and manufacturing output grew faster than GDP in the NICs, and the manufacturing share of output and exports increased substantially. In later sections of the paper we link this growth in manufacturing output to demand for capital goods exports from the OECD countries, particularly the United States.

2.2.4 Investment, Saving, and Foreign Borrowing

Rapid growth in investment in the NICs has been associated with relatively high shares of investment in GDP, financed partly by high domestic saving rates and partly by foreign borrowing. The data for 1981 are summarized in table 2.5. Among the identified NICs, only Brazil and Indonesia had investment rates lower than their group averages. The 25% investment share for middle-income developing countries is itself high by international standards.

The last two columns in table 2.5 show how investment in 1981 was financed. The upper-middle-income NICs, including Malaysia, have saving rates not much different from the group average of 24%. Singapore is higher and Brazil lower. So this group experienced a higher-than-average foreign capital inflow, as shown in the last column of table 2.5. On the other hand, the lower-income NICs, including India, all

Table 2.5 **Investment and Savings in NICs, 1981** (percentage of GDP)

	Gross Investment	Gross Domestic Saving	Foreign Borrowing or Transfer
NICs			
Low income (average)[a]	14	7	7
India	23	20	3
Upper-middle income (average)	25	24	1
South Korea	26	22	4
Hong Kong	30	24	6
Singapore	42	33	9
Brazil	20	19	1
Mexico	25	23	2
Argentina	26	23	3
New NICs			
Lower-middle income (average)	25	19	6
Indonesia	21	23	−2
Thailand	28	23	5
Philippines	30	25	5
Colombia	28	24	4
Upper-middle income			
Malaysia	32	26	6

Source: World Bank 1983.

[a]Average for low-income economies other than China and India.

have saving rates much higher than their group average and lower-than-average capital inflow.

The data of table 2.5 confirm the impression that the NICs have experienced high saving rates, around 23% or 24%, and even higher investment rates, grouped around 28% or so. The difference has been financed by foreign investment of around 5% of GDP. The main exceptions are Indonesia, which has on balance been investing abroad, and Brazil, with lower rates of investment and saving. Thus the NICs are good examples of international capital flowing toward countries with high investment rates, financed mainly by domestic saving.

The consequences of this pattern of investment-led growth partly financed by foreign borrowing are summarized in the debt and debt service data of table 2.6. The first two columns show external public and publicly guaranteed debt in billions of dollars in 1970 and 1981. The middle two columns show this debt as a fraction of GNP. The last two columns show the ratio of debt service to export earnings. Since the data cover public debt only, they seriously understate total national foreign debt in countries with extensive borrowing by the private sector, such as Brazil and Mexico.

Table 2.6 External Public Debt and Debt Service Ratios

	External Public Debt				Debt Service Ratio	
	Billions of $		% of GNP			
	1970	1981	1970	1981	1970	1981
NICs						
Low income (average)[a]	—	—	22.0	28.3	12.5	8.8
India	7.9	18.0	14.9	10.8	20.9	8.6
Upper-middle income (average)	—	—	12.4	17.8	10.1	15.4
South Korea	1.8	20.0	20.8	32.1	19.4	13.1
Hong Kong	(0)	0.3	0.1	1.2	(0)	0.7
Singapore	0.1	1.3	7.9	10.2	0.6	0.8
Brazil	3.2	43.8	7.1	16.0	12.5	31.9
Mexico	3.2	42.7	9.1	18.5	23.6	28.2
Argentina	1.9	10.5	8.2	8.7	21.5	18.2
New NICs						
Lower-middle income (average)	—	—	15.6	23.2	9.3	12.5
Indonesia	2.4	15.5	27.1	19.0	6.9	8.2
Thailand	0.3	5.2	4.9	14.4	3.4	6.7
Philippines	0.6	7.4	9.0	19.3	7.4	9.9
Colombia	0.5	3.2	38.2	38.0	17.5	13.9
Upper-middle income						
Malaysia	0.4	4.6	10.0	19.2	3.6	3.1

Source: World Bank 1983, table 16.

[a]Average for low-income economies other than China and India.

While Brazil, Mexico, and Argentina do not stand out in the columns showing debt-GNP ratios, they do stand out in the debt service data, reflecting their lower levels of exports relative to GNP. All of the upper-middle-income NICs show increases in the debt-GNP ratio from 1970 to 1981. Among them, Hong Kong and Singapore have markedly low debt-GNP and especially debt service ratios. Thailand and the Philippines also show increases in both ratios from 1970 to 1981. The exceptions are India (with a marked decrease in both ratios), Colombia (with debt and GNP growing at the same rate from 1970 to 1981 and the debt service ratio falling), and Indonesia (with a falling debt-GNP ratio and a rising debt service ratio).

It is clear from the data of table 2.6 that while in general the NICs have grown with foreign borrowing, their debt positions in the early 1980s varied significantly, from the low-exposure positions of Hong Kong, Singapore, and Malaysia, to the crisis conditions of Argentina, Brazil, and Mexico. As we see below, U.S. exports are relatively more oriented toward the Latin American NICs, and Japan's toward the

Asian NICs. Thus while the U.S. economy has become more interdependent with the NICs through trade, the Latin American orientation of its exports leaves it more sensitive than Europe or Japan to a Latin American debt squeeze.

2.3 The Structure of OECD Exports

2.3.1 Introduction

During the past two decades, the share of U.S. exports going to the NICs has increased substantially, while the NICs' share of Japanese exports has remained constant, and the NICs' share of European exports has decreased. In the U.S. case, the NICs' share of each one-digit SITC category of manufactures exports has risen. By 1981 the NICs absorbed 31% of U.S. exports of chemicals and 22% of U.S. exports of capital goods, the two biggest single U.S. export categories. Overall, by 1981 24% of Japan's manufactured exports went to NICs; comparative figures are 21% for the United States, 12% for OECD Europe, and 9% for the European Community (EC). These data reflect one aspect of the increasing interdependence of the U.S. and Japanese economies with the rapidly growing developing countries, especially as compared with Europe.

In this section we summarize the comparative data on U.S., Japanese, and European exports to the NICs, especially the Asian NICs. We begin by looking at the data disaggregated by one-digit SITC group and destination, and then we look at the distribution across commodity groups of the exports of manufactures of each of the three main OECD areas.

2.3.2 Distribution of Total Exports and Total Manufactures Exports by Destination

The evolution of exports and their fraction going to the NICs and the Asian NICs from 1964 to 1981 are shown for OECD Europe, the EC, the United States, and Japan in table 2.7 for total exports and table 2.8 for total manufactures exports. Intra-area trade has been excluded from the European data to make them comparable with the U.S. and Japanese data. Thus EC exports can be larger than OECD Europe exports because of the exclusion of EC exports to other European countries from the OECD Europe data. The EC here is the community of nine countries, before the accession of Greece.

In table 2.7 we see that U.S. total exports grew a little less rapidly than Europe's from 1964 to 1981. In 1964 the totals for the United States and OECD Europe are nearly equal, but in 1981 U.S. exports were 84% of OECD Europe's. The differential growth is the result of

Table 2.7 **Distribution of Total Exports**

	1964		1973		1981	
	Billions of $	%	Billions of $	%	Billions of $	%
OECD Europe						
World	25.0	100.0	81.0	100.0	268.3	100.0
NICs	3.3	13.4	9.6	11.8	32.6	12.1
Asian NICs	2.1	8.2	5.2	6.4	20.1	7.5
EC						
World	30.4	100.0	98.1	100.0	295.6	100.0
NICs	2.9	9.4	7.8	7.9	26.3	8.9
Asian NICs	1.9	6.1	4.4	4.5	16.8	5.7
United States						
World	26.1	100.0	70.2	100.0	225.8	100.0
NICs	4.0	15.2	11.1	15.9	46.6	20.7
Asian NICs	2.1	7.9	5.4	7.8	21.7	9.6
Japan						
World	6.7	100.0	36.8	100.0	151.9	100.0
NICs	1.5	23.0	9.6	26.1	37.0	24.4
Asian NICs	1.4	21.3	8.5	23.1	32.7	21.5

Source: OECD Foreign Trade Data Bank.

Note: Percentages are calculated on values in million dollars in all tables.

Table 2.8 **Distribution of Exports of Manufactures[a]**

	1964		1973		1981	
	Billions of $	%	Billions of $	%	Billions of $	%
OECD Europe						
World	21.0	100.0	69.5	100.0	219.5	100.0
NICs	3.1	14.6	8.8	12.7	30.2	13.8
Asian NICs	1.9	8.9	4.8	6.9	18.4	8.4
EC						
World	25.6	100.0	84.4	100.0	241.4	100.0
NICs	2.6	10.2	7.2	8.5	24.4	10.1
Asian NICs	1.7	6.5	4.0	4.8	15.4	6.4
United States						
World	17.2	100.0	46.5	100.0	160.1	100.0
NICs	2.6	15.0	7.5	16.1	34.8	21.7
Asian NICs	1.1	6.4	3.1	6.8	14.6	9.1
Japan						
World	5.9	100.0	33.9	100.0	144.9	100.0
NICs	1.4	23.6	8.8	26.1	35.0	24.1
Asian NICs	1.3	22.0	7.7	22.8	30.7	21.2

Source: OECD Foreign Trade Data Bank.

Note: Percentages are calculated on values in million dollars.

[a]SITC sections 5–9.

rapid European growth during 1964–73; the ratio of U.S. exports to European exports has stayed constant at about 85% since 1973. Japan's total exports have grown much faster than Europe's or those of the United States, as is well known. In 1964 Japan's exports were about 25% of the U.S. total; this ratio rose to 52% in 1973 and 67% in 1981. This growth of Japanese and European exports relative to the United States was a natural result of recovery and development in Europe and Japan, as discussed in Branson 1981.

More interesting here is the *distribution* of exports by destination. The NIC share of OECD Europe and EC exports fell from 1964 to 1973, and then rose a bit to 12.7% for OECD Europe and 9.3% for the EC by 1981. The NIC share of Japanese exports has remained at about 25% from 1964 to 1981. The NIC share of U.S. exports was about 16% in 1964 and 1973 but grew to 21% by 1981. Three initial observations can be made from the data of table 2.7. First, the shares of European and Japanese exports going to the NICs have remained roughly constant, low for Europe and high for Japan. Second, the NIC share of U.S. exports has increased markedly since 1973. Third, about half of the 21% of U.S. exports to the NICs go to Asia, and the other half go to Latin America.

The *distributional* pattern of total *manufactures* exports, shown in table 2.8, is similar to the pattern in table 2.7. Comparison of the two tables shows that in 1981 manufactures account for 95% of Japanese exports, 82% of OECD exports, and 71% of U.S. exports. Agriculture and raw materials account for a higher fraction of U.S. exports than they do in Europe or Japan.

The share of European and EC manufactures exports going to the NICs fell from 1964 to 1973 and then rose a bit by 1981. The NIC share of Japanese manufactures exports increased slightly from 24% to 26% from 1964 to 1973 and fell back to 24% in 1981. The NIC share of U.S. exports of manufactures increased a bit from 1964 to 1973 but then rose sharply to nearly 22% by 1981, with nearly half going to the Asian NICs.

The fraction of U.S. manufactures exports going to the incipient NICs in 1964 was the same as OECD Europe's. But as the NICs grew, the share of U.S. manufactures exports to them also grew. By 1981 this share was similar to the NIC share of Japanese manufactures exports, with the United States relatively more concentrated in Latin America and Japan in Asia.

2.3.3 Disaggregation of the Distribution of Manufactures Exports by Destination

The distribution of manufactures exports by (approximately) one-digit SITC code is shown in tables 2.9–2.14 for Europe, Japan, and the United States. The SITC codes are defined in the Appendix. Rather

Table 2.9 **Distribution of Exports of Chemicals and Related Products, N.E.S.[a]**

	1964		1973		1981	
	Billions of $	%	Billions of $	%	Billions of $	%
OECD Europe						
World	2.8	100.0	9.2	100.0	30.2	100.0
NICs	0.5	17.3	1.6	17.9	4.7	15.4
Asian NICs	0.3	9.1	0.8	8.8	3.0	9.9
EC						
World	3.3	100.0	11.3	100.0	34.4	100.0
NICs	0.4	12.9	1.4	12.3	3.9	11.3
Asian NICs	0.2	7.0	0.7	6.2	2.6	7.5
United States						
World	2.4	100.0	5.7	100.0	23.3	100.0
NICs	0.4	18.1	1.2	21.4	7.1	30.5
Asian NICs	0.2	6.9	0.5	7.9	4.1	17.5
Japan						
World	0.4	100.0	2.1	100.0	6.8	100.0
NICs	0.2	40.2	1.0	47.2	3.1	45.1
Asian NICs	0.1	38.1	0.9	44.2	2.9	42.9

Source: OECD Foreign Trade Data Bank.

Note: Percentages are calculated on values in million dollars.

[a]SITC section 5.

than discuss each table exhaustively, I will mention only the major points.

Beginning with *chemicals* in table 2.9, we see that the United States and Europe are major exporters, and Japan is not. The NIC share of U.S. chemicals exports is twice that of OECD Europe, at 30.5%, and Japanese exports are highly concentrated on the Asian NICs. In table 2.10 we see that Europe is the biggest exporter of *industrial materials,* with Japan second and the United States third. The NIC share of Japan's exports is high, and its share of Europe's is low, with both concentrated on the Asian NICs. The NIC share of U.S. exports is intermediate and is concentrated on Latin America.

The important category of *capital goods* is shown in table 2.11. As the NICs industrialize, they import capital goods. In 1981, U.S. and European exports of capital goods were about the same—$82.2 billion for the United States and $84.7 billion for Europe—and Japanese exports were $51.7 billion.

Both the growth since 1973 and the distribution of these exports are interesting. As we see in table 2.15, capital goods were 51.3% of U.S., 38.6% of European, and 35.7% of Japanese manufactures exports in 1981. First, let us compare OECD Europe and the United States. In 1973 European total capital goods exports were 13% greater than those

Table 2.10 **Distribution of Exports of Industrial Supplies and Materials other than Fuel[a]**

	1964		1973		1981	
	Billions of $	%	Billions of $	%	Billions of $	%
OECD Europe						
World	5.8	100.0	18.0	100.0	52.5	100.0
NICs	0.6	11.2	1.6	8.9	6.1	11.7
Asian NICs	0.4	7.1	0.9	5.0	3.9	7.5
EC						
World	6.9	100.0	21.7	100.0	55.0	100.0
NICs	0.5	7.8	1.3	6.0	4.8	8.8
Asian NICs	0.4	5.2	0.8	3.7	3.2	5.9
United States						
World	3.0	100.0	6.8	100.0	20.2	100.0
NICs	0.4	14.1	1.1	15.5	4.3	21.3
Asian NICs	0.3	8.7	0.5	7.2	1.4	6.9
Japan						
World	2.7	100.0	10.4	100.0	32.7	100.0
NICs	0.7	24.7	3.5	33.3	10.0	30.7
Asian NICs	0.6	23.0	3.0	29.1	9.1	27.8

Source: OECD Foreign Trade Data Bank.

Note: Percentages are calculated on values in million dollars.

[a]SITC section 6 minus SITC (Revision 1) groups 676, 692, and 695. See Appendix for code descriptions.

of the United States, and European exports to the NICs were slightly greater than U.S. exports to the NICs. By 1981 European exports were 3% greater than those of the United States, and the NIC share of U.S. exports was significantly larger than that of European exports, with more of the U.S. exports going to Latin America.

Now, let us compare Japan and the United States. In 1973 Japanese exports of capital goods were 53% of those of the United States; by 1981 this ratio rose to 63%. Japan's exports remained highly concentrated on the Asian NICs. The NIC share of U.S. capital goods exports grew faster than its share of Japan's capital goods exports, but the United States also grew more concentrated on Latin America.

Thus in capital goods exports, U.S. total growth from 1973 to 1981 was slower than Japan's but faster than Europe's. The growth of U.S. exports to the NICs was about the same as that of Japan but is significantly greater than that of Europe. This suggests that the United States was maintaining its competitive position vis-à-vis Japan, and both were improving relative to Europe in capital goods. But the concentration of the United States on the Latin American NICs, combined with the debt crisis of Argentina, Brazil, and especially Mexico, pro-

Table 2.11 **Distribution of Exports of Capital Goods[a]**

	1964		1973		1981	
	Billions of $	%	Billions of $	%	Billions of $	%
OECD Europe						
World	7.1	100.0	25.5	100.0	84.7	100.0
NICs	1.4	19.6	4.2	16.6	14.6	17.2
Asian NICs	0.8	11.8	2.2	8.5	8.5	10.1
EC						
World	8.7	100.0	30.1	100.0	89.9	100.0
NICs	1.2	14.2	3.5	11.6	12.0	13.3
Asian NICs	0.8	8.8	1.8	6.1	7.3	8.2
United States						
World	7.9	100.0	22.6	100.0	82.2	100.0
NICs	1.2	14.5	4.0	17.5	18.0	21.9
Asian NICs	0.5	6.5	1.8	8.2	7.8	9.5
Japan						
World	1.5	100.0	11.9	100.0	51.7	100.0
NICs	0.4	25.3	3.0	25.3	14.1	27.3
Asian NICs	0.3	23.1	2.5	21.3	11.8	22.8

Source: OECD Foreign Trade Data Bank.

Note: Percentages are calculated on values in million dollars.

[a]SITC section 7 minus the SITC (Revision 1) groups 7232, 7241, 7242, 725, 7292, 7294, 732, 733, and 7358 plus groups 676, 692, 695, 8121, and 861 (less 8612). See Appendix for code descriptions.

vides a serious short-run threat to this otherwise optimistic assessment of the U.S. position.

Exports of *autos* are shown in table 2.12. Here the rise of Japan as a major exporter is clear. What may be surprising is the maintenance of the U.S. position vis-à-vis OECD Europe. U.S. total exports were about 70% of Europe's in 1964 and in 1981. U.S. and Japanese automotive exports to the NICs are heavily concentrated in Latin America and Asia, respectively, while Europe's go half to each area.

Exports of *consumer goods* are shown in table 2.13. The United States was a major exporter after World War II but returned to its normal position of net importer as the economies of Europe and Japan grew. This restoration of the prewar pattern of trade is described in Branson 1981, 1983. By 1981 Europe was the largest exporter, Japan second, and the United States third. The NIC share of U.S. exports was close to its share of Japanese exports (and much higher than its share of European exports), with the United States concentrated on Latin American and Japan on Asia.

Finally, exports of other manufactured products are shown in table 2.14. These include *military equipment*. Here Europe is the largest

Table 2.12 Distribution of Exports of Autos[a]

	1964		1973		1981	
	Billions of $	%	Billions of $	%	Billions of $	%
OECD Europe						
World	2.4	100.0	7.9	100.0	22.5	100.0
NICs	0.3	10.4	0.6	8.2	1.9	8.3
Asian NICs	0.2	7.2	0.4	5.0	0.9	4.0
EC						
World	3.3	100.0	10.2	100.0	26.8	100.0
NICs	0.2	7.1	0.6	6.0	1.7	6.4
Asian NICs	0.2	5.0	0.4	3.8	0.8	3.1
United States						
World	1.7	100.0	6.0	100.0	15.9	100.0
NICs	0.3	20.1	0.5	8.5	2.3	14.3
Asian NICs	0.1	3.8	0.1	1.6	0.3	1.9
Japan						
World	0.3	100.0	4.9	100.0	33.2	100.0
NICs	0.1	29.1	0.6	11.7	3.6	11.0
Asian NICs	0.1	27.4	0.5	10.9	3.2	9.6

Source: OECD Foreign Trade Data Bank.

Note: Percentages are calculated on values in million dollars.

[a]SITC (Revision 1) group 732, road motor vehicles.

exporter, followed by the United States and Japan. The Asian NICs take 19% of Japanese exports, and the Latin American NICs take 11% of U.S. exports, about the same as the total NICs share of European exports.

2.3.4 Distribution of Manufactures Exports by Commodity Group

The evolution of the distribution of each area's exports of manufactures across commodity group is shown in table 2.15. This table gives the distribution of the totals from table 2.7 across the SITC one-digit categories of tables 2.9–2.14.

The main impression one gets from table 2.15 is the relatively static composition of OECD Europe's and the EC's manufactures exports from 1964 to 1981, compared especially with the large changes in this composition for Japan, with the United States in between. The share of industrial materials (SITC 6) in OECD exports fell from 27.5% in 1964 to 23.9% in 1981, while the share of capital goods (SITC 7) rose from 34.1% to 38.6%. The other categories remained roughly constant.

The composition of U.S. manufactures exports is dominated by a high and rising share of capital goods (SITC 7), from 46.1% in 1964 to 51.3% in 1981. The shares of industrial materials (SITC 6) and consumer goods (SITC 8) fell during this period, while the share of autos (SITC

Table 2.13 **Distribution of Exports of Consumer Goods** (except Autos)[a]

	1964		1973		1981	
	Billions of $	%	Billions of $	%	Billions of $	%
OECD Europe						
World	2.0	100.0	6.4	100.0	20.1	100.0
NICs	0.2	9.1	0.6	8.8	2.0	9.8
Asian NICs	0.1	5.4	0.4	5.7	1.3	6.7
EC						
World	2.3	100.0	7.7	100.0	23.5	100.0
NICs	0.1	4.2	0.3	3.7	1.2	4.9
Asian NICs	0.1	3.0	0.2	2.6	0.8	3.6
United States						
World	1.3	100.0	2.7	100.0	10.0	100.0
NICs	0.1	8.6	0.4	13.9	1.7	17.4
Asian NICs	0.0	3.5	0.1	5.2	0.6	6.1
Japan						
World	0.8	100.0	2.9	100.0	14.5	100.0
NICs	0.1	7.3	0.5	15.8	2.8	19.4
Asian NICs	0.1	6.8	0.4	13.6	2.6	17.7

Source: OECD Foreign Trade Data Bank.

Note: Percentages are calculated on values in million dollars.

[a]SITC section 8 minus SITC (Revision 1) groups 8121 and 861 (less 8612). See Appendix for code descriptions.

732) increased from 9.7% to 13.0% from 1964 to 1973 and then fell to 9.9% in 1981.

The structure of Japanese manufactures exports shows major changes in all categories from 1964 to 1981. The biggest changes are the continuous rise in the share of autos (SITC 732), the jump in the share of capital goods (SITC 7) from 25.5% in 1964 to 35.0% in 1973, with virtually no change after 1973, and the continuous decrease in the share of industrial materials, which dominated the distribution in 1964.

Comparison of the structure of manufactures exports in 1981 across the three major areas shows Japan with a significantly lower share in chemicals (SITC 5) and a higher share in autos (SITC 732) than the United States or Europe, and the United States with a significantly higher share in capital goods (SITC 7) than Europe or Japan. In a sense, relative to the other geographical areas, Japan seemed to be specializing in autos and the United States in capital goods, with no single commodity group standing out in OECD Europe or the EC.

2.3.5 Conclusion

In table 2.11 we saw that a high and rising share of U.S. capital goods exports goes to the NICs. This share reached 22% in 1981, with 9.5%

Table 2.14 Distribution of Exports of Other Manufactures[a]

	1964		1973		1981	
	Billions of $	%	Billions of $	%	Billions of $	%
OECD Europe						
World	0.8	100.0	2.6	100.0	9.6	100.0
NICs	0.1	10.5	0.2	6.1	1.0	10.7
Asian NICs	0.1	8.2	0.1	3.9	0.7	7.0
EC						
World	1.1	100.0	3.4	100.0	11.8	100.0
NICs	0.1	8.3	0.1	4.0	0.9	7.4
Asian NICs	0.1	6.7	0.1	2.5	0.3	2.8
United States						
World	0.9	100.0	2.6	100.0	8.5	100.0
NICs	0.1	14.5	0.4	13.6	1.3	15.8
Asian NICs	0.1	5.7	0.1	4.5	0.4	4.7
Japan						
World	0.2	100.0	1.7	100.0	5.9	100.0
NICs	0.0	23.3	0.3	20.0	1.3	21.7
Asian NICs	0.0	21.7	0.3	18.6	1.1	19.0

Source: OECD Foreign Trade Data Bank.

Note: Percentages are calculated on values in million dollars.

[a]SITC (Revision 1) section 9 plus groups 7232, 7241, 7242, 725, 7292, 7294, 7358, and 733. See Appendix for code descriptions.

going to the Asian NICs and 12.4% to Latin America. Then in table 2.15 we saw that U.S. exports of manufactures are dominated by capital goods exports to a degree that no one-digit commodity reaches in Europe or Japan. By 1981 over half of U.S. exports of manufactures were capital goods.

Thus rapid growth and high levels of investment in the NICs have been associated with rapid growth and concentration in U.S. exports of capital goods, and this association is strongest with the Latin American NICs. This has contributed to an increasing interdependence of the U.S. economy with the NICs, especially in Latin America.

2.4 The Structure of OECD Imports

2.4.1 Introduction

There have been two striking developments (aside from OPEC) in the structure of OECD imports from the leading developing countries in the two decades since 1964. The first has been the change in the structure of European and U.S. imports of manufactured goods, mainly away from industrial supplies and materials and toward consumer goods,

Table 2.15 Distribution of Manufactures Exports by Commodity Group[a]

	1964		1973		1981	
	Billions of $	%	Billions of $	%	Billions of $	%
OECD Europe						
Total	21.0	100.0	69.5	100.0	219.5	100.0
5	2.8	13.2	9.2	13.2	30.2	13.8
6	5.8	27.5	18.0	25.9	52.5	23.9
7	7.1	34.1	25.5	36.7	84.7	38.6
732	2.4	11.6	7.9	11.4	22.5	10.2
8	2.0	9.5	6.4	9.2	20.1	9.2
9	0.8	4.0	2.6	3.7	9.6	4.4
EC						
Total	25.6	100.0	84.4	100.0	241.4	100.0
5	3.3	12.8	11.3	13.4	34.4	14.2
6	6.9	26.9	21.7	25.7	55.0	22.8
7	8.7	34.0	30.1	35.6	89.9	37.2
732	3.3	12.8	10.2	12.0	26.8	11.1
8	2.3	9.1	7.7	9.1	23.5	9.8
9	1.1	4.4	3.4	4.1	11.8	4.9
United States						
Total	17.2	100.0	46.5	100.0	160.1	100.0
5	2.4	13.8	5.7	12.4	23.3	14.6
6	3.0	17.6	6.8	14.6	20.2	12.6
7	7.9	46.1	22.6	48.6	82.2	51.3
732	1.7	9.7	6.0	13.0	15.9	9.9
8	1.3	7.6	2.7	5.9	10.0	6.3
9	0.9	5.2	2.7	5.7	8.5	5.3
Japan						
Total	5.9	100.0	33.8	100.0	144.9	100.0
5	0.4	6.5	2.1	6.3	6.8	4.7
6	2.7	45.7	10.4	30.7	32.7	22.6
7	1.5	25.5	11.9	35.0	51.7	35.7
732	0.3	5.1	4.9	14.4	33.2	22.9
8	0.8	13.9	2.9	8.7	14.5	10.0
9	0.2	3.2	1.7	4.9	5.9	4.1

Source: OECD Foreign Trade Data Bank.

Note: Percentages may not total to 100, because of rounding error. Percentages are calculated on values in million dollars.

[a]*Commodity groupings have been made as follows:*

5 = SITC section 5.
6 = SITC section 6 minus the following SITC (Revision 1) groups: 676, 692, and 695.
7 = SITC section 7 minus the following SITC (Revision 1) groups: 7232, 7241, 7242, 725, 7292, 7294, 732, 733, and 7358; plus the following SITC (Revision 1) groups: 676, 692, 695, 8121, and 861-8612.
732 = SITC (Revision 1) commodity group 732.
8 = SITC section 8 minus SITC (Revision 1) 8121 and 861 (less 8612).
9 = SITC section 9 plus 7232, 7241, 7242, 725, 7292, 7294, 733, and 7358.

See Appendix for descriptions of SITC codes.

capital goods, and automotive products. The other has been the rise of the NICs, especially since 1970, as the source of manufactured imports to Europe and the United States. This has been most striking in consumer goods, where the NICs provided nearly 40% of European imports and 50% of U.S. imports by 1980.

As is well known, the level of Japanese manufactures imports remain low relative to the United States and Europe. Basically, the Japanese economy exports manufactures and imports nonmanufactures, because of its relatively poor resource base. Fully 95% of Japanese exports are manufactures, but only 21% of Japanese imports are. Comparable numbers for the United States are 70% on the export side and 55% on the import side. However, the fraction of Japanese and U.S. total manufactures imports coming from the NICs are almost the same, a bit over 20%. As on the export side, the proportion of European manufactures imports coming from the NICs is smaller, under 15% in 1980.

The evolution of total imports, total imports less fuel, and total manufactures imports and their distribution by source are shown in tables 2.16–2.18 for OECD Europe, the EC, the United States and Japan. The date on total imports are sufficiently influenced by oil prices since 1973 that we will begin by focusing on table 2.17, which gives total imports less fuel.

In table 2.17, we see that U.S. and Japanese imports grew much faster than European imports from 1964 to 1973. Then from 1973 to

Table 2.16 **Distribution of Total Imports**

	1964		1973		1981	
	Billions of $	%	Billions of $	%	Billions of $	%
OECD Europe						
World	35.4	100.0	98.2	100.0	331.8	100.0
NICs	4.0	11.4	11.7	11.9	38.4	11.6
Asian NICs	1.9	3.5	5.8	6.0	22.8	6.9
EC						
World	37.4	100.0	104.5	100.0	332.8	100.0
NICs	3.5	9.4	9.8	9.4	31.0	9.3
Asian NICs	1.8	4.7	5.2	5.0	19.7	5.9
United States						
World	18.6	100.0	69.5	100.0	271.2	100.0
NICs	2.9	15.8	11.0	15.8	56.1	20.7
Asian NICs	1.4	7.6	6.8	9.8	35.2	13.0
Japan						
World	7.9	100.0	38.1	100.0	140.8	100.0
NICs	1.4	17.1	8.6	22.5	32.0	22.7
Asian NICs	1.1	14.1	7.6	20.0	28.6	20.3

Source: OECD Foreign Trade Data Bank.

Note: Percentages are calculated on values in million dollars.

Table 2.17 **Distribution of Total Imports less Fuels[a]**

	1964		1973		1981	
	Billions of $	%	Billions of $	%	Billions of $	%
OECD Europe						
World	28.7	100.0	75.2	100.0	189.0	100.0
NICs	4.0	13.9	11.7	15.6	34.3	18.1
Asian NICs	1.9	6.7	5.8	7.8	22.5	11.9
EC						
World	31.6	100.0	84.6	100.0	212.5	100.0
NICs	3.5	11.0	9.8	11.6	28.8	13.5
Asian NICs	1.7	5.4	5.2	6.1	19.5	9.2
United States						
World	16.6	100.0	61.3	100.0	187.0	100.0
NICs	2.8	17.0	10.7	17.4	42.5	22.7
Asian NICs	1.3	8.2	6.6	10.7	29.2	15.6
Japan						
World	6.5	100.0	29.8	100.0	68.2	100.0
NICs	1.2	19.1	6.7	22.5	16.4	24.0
Asian NICs	1.0	15.5	5.8	19.4	13.9	20.4

Source: OECD Foreign Trade Data Bank.

Note: Percentages are calculated on values in million dollars.

[a]SITC section 3 (mineral fuels, lubricants, and related materials) was subtracted from total imports.

1981 growth rates were much more equal, with U.S. imports growing fastest and the Japanese slowest. The fraction of European nonfuel imports coming from the identified NICs rose slowly throughout the period to 18% in 1981. The share of the NICs in U.S. imports was constant for 1964 to 1973 and then increased significantly to 23% by 1981. The share of the NICs in Japanese nonfuel imports increased gradually over the entire period, reaching 24% by 1981.

The data on total manufacturing imports are summarized in table 2.18. There we see the difference between the levels of imports of Europe, the United States, and Japan. However, from 1964 to 1981, Japanese manufactures imports grew at the same rate as those of the United States; in 1964 and in 1981 their ratio was 0.21. European manufactures imports grew more slowly, however. The ratio of European to U.S. manufactures imports fell from 1.09 in 1964 to 0.84 in 1973 and then to 0.78 in 1981.

The proportion of manufactures imports coming from the NICs has increased over time in all three areas, with the biggest increase in Japan, especially from 1964 to 1973, and the smallest in Europe. By 1981 roughly 21% of U.S. and Japanese manufactured imports came from the NICs, as compared with 15% of European imports. In contrast to

Table 2.18 Distribution of Imports of Manufactures[a]

	1964		1973		1981	
	Billions of $	%	Billions of $	%	Billions of $	%
OECD Europe						
World	10.5	100.0	38.8	100.0	119.8	100.0
NICs	0.7	6.9	3.9	10.1	18.3	15.3
Asian NICs	0.6	5.9	3.3	8.5	16.0	13.4
EC						
World	12.6	100.0	47.3	100.0	144.6	100.0
NICs	0.7	5.2	3.4	7.3	15.7	10.9
Asian NICs	0.6	4.5	2.9	6.1	13.8	9.6
United States						
World	9.6	100.0	46.0	100.0	153.1	100.0
NICs	0.8	8.7	6.8	14.8	32.6	21.3
Asian NICs	0.6	6.7	5.0	10.8	25.0	16.3
Japan						
World	2.0	100.0	11.6	100.0	32.2	100.0
NICs	0.1	3.8	2.2	18.9	6.7	20.8
Asian NICs	0.1	3.5	2.0	16.9	6.0	18.7

Source: OECD Foreign Trade Data Bank.

Note: Percentages are calculated on values in million dollars.

[a]Sum of SITC sections 5–9.

the export pattern, all three areas' imports of manufactures from the NICs are concentrated in Asia rather than Latin America.

2.4.2 Disaggregation of the Distribution of Manufactures Imports by Origin

The distributions of manufactures imports for the one-digit SITC categories are shown in tables 2.19–2.24. The categories are the same as for exports; details are given in the Appendix.

Chemical imports (table 2.19) are small; the largest total is $14.2 billion for Europe in 1981. Relative to the other areas, the United States has a higher proportion coming from the Latin American NICs, and Japan from the Asian NICs, but the numbers are small. Imports of industrial supplies are summarized in table 2.20. There we see low numbers for Japan relative to the other areas, with a high concentration on the Asian NICs. By 1981 the United States was a bigger importer than Europe, but they had similar imports from the NICs. Table 2.21 summarizes the distribution of imports of capital goods. OECD Europe imports in 1981 were $43.6 billion, compared with $40.2 billion for the United States, and $9.4 billion for Japan. There is a significant difference in the distribution by source however. In 1981, 23% of U.S. imports of capital goods came from the NICs, 16% from Asia. The

Table 2.19 **Distribution of Total Exports**

	1964		1973		1981	
	Billions of $	%	Billions of $	%	Billions of $	%
OECD Europe						
World	1.4	100.0	4.2	100.0	14.2	100.0
NICs	0.0	2.8	0.1	3.3	0.5	3.6
Asian NICs	0.0	0.9	0.0	1.0	0.2	1.2
EC						
World	1.5	100.0	4.7	100.0	10.7	100.0
NICs	0.0	2.3	0.1	2.6	0.4	2.3
Asian NICs	0.0	1.6	0.0	0.7	0.1	0.8
United States						
World	0.7	100.0	2.5	100.0	10.7	100.0
NICs	0.0	5.5	0.1	4.5	0.8	7.2
Asian NICs	0.0	0.6	0.0	1.2	0.2	2.1
Japan						
World	0.5	100.0	1.9	100.0	6.5	100.0
NICs	—	1.5	0.1	5.4	0.8	11.8
Asian NICs	—	1.1	0.1	4.5	0.6	9.4

Source: OECD Foreign Trade Data Bank.

Note: Percentages are calculated on values in million dollars.

[a]SITC section 5.

proportions for Europe and Japan are much smaller. The United States is a much bigger importer of capital goods from the NICs, especially those in Asia, than are Europe or Japan.

The distribution of imports of autos is shown in table 2.22. The obvious fact that stands out is the emergence of the United States as a major importer in the period from 1973 to 1981. The NICs still had very small shares of the auto market of the OECD countries by 1981; mainly Japan exported to the United States and, to a lesser extent, Europe.

There is less importation of consumer goods (table 2.23) than industrial supplies or capital goods, but the concentration on the NICs, especially in Asia, is much stronger. Out of roughly equal total consumer goods imports of $24–$27 billion in 1981, over half of U.S. imports and just under 40% of European imports come from the NICs, mostly from Asia. The U.S. share has risen much more rapidly over time than the European share. U.S. and European imports of consumer goods from the NICs are greater than the imports of any of the other one-digit categories as a result of this concentration. Japan also has a relatively high share of consumer goods imports from the Asian NICs, but out of a very small total.

Imports of other manufactured products, including arms, are summarized in table 2.24. Here the numbers are small, with relatively low

Table 2.20 **Distribution of Imports of Industrial Supplies and Materials other than Fuel[a]**

	1964		1973		1981	
	Billions of $	%	Billions of $	%	Billions of $	%
OECD Europe						
World	4.3	100.0	14.1	100.0	24.9	100.0
NICs	0.4	8.8	1.6	11.0	4.8	19.3
Asian NICs	0.3	7.4	1.2	8.3	3.9	15.6
EC						
World	5.6	100.0	18.6	100.0	39.5	100.0
NICs	0.3	6.2	1.4	7.4	4.2	10.6
Asian NICs	0.3	5.3	1.1	5.7	3.4	8.7
United States						
World	4.5	100.0	13.0	100.0	38.6	100.0
NICs	0.5	10.9	1.8	13.7	6.4	16.7
Asian NICs	0.4	8.3	1.2	9.5	4.7	12.2
Japan						
World	0.6	100.0	4.5	100.0	10.0	100.0
NICs	0.1	11.4	1.2	27.7	2.6	25.5
Asian NICs	0.1	10.8	1.1	23.8	2.2	21.9

Source: OECD Foreign Trade Data Bank.

Note: Percentages are calculated on values in million dollars.

[a]SITC section 6 minus SITC (Revision 1) groups 676, 692, and 695.

concentration on imports from the NICs in Europe. As usual, U.S. imports from the NICs are mostly from Latin America and Japan's from Asia. NIC exports of manufactures to the OECD countries are concentrated in industrial supplies, capital goods, and especially consumer goods, with very small NIC export participation in chemicals, autos, and arms.

2.4.3 Distribution of Manufactures Imports by Commodity Group

The distributions across commodity groups are given in table 2.25. Here one impression is of change in the structure of manufactures imports over time in Europe and stability in the United States and Japan, at least since 1973. By 1981 the U.S. structure was more "balanced" than that of Europe or Japan. The distributional peaks are 36% for European capital goods imports, and 31% for industrial supplies and 29% for capital goods in Japan. (Remember that in all cases the Japanese totals are relatively small.)

In Europe, the major movement has been away from imports of industrial supplies, with a share falling from 40.8% in 1964 to 20.8% in 1981, and toward consumer goods, with a share rising from 8.8% in 1964 to 20.2% in 1981. Smaller but significant increases came in their shares of capital goods and auto imports.

Table 2.21 **Distribution of Imports of Capital Goods[a]**

	1964		1973		1981	
	Billions of $	%	Billions of $	%	Billions of $	%
OECD Europe						
World	3.1	100.0	12.4	100.0	43.6	100.0
NICs	—	0.9	0.4	3.0	2.8	6.3
Asian NICs	—	0.6	0.3	2.5	2.3	5.2
EC						
World	3.5	100.0	13.9	100.0	45.9	100.0
NICs	0.0	0.7	0.3	2.5	2.4	5.3
Asian NICs	0.0	0.5	0.3	2.1	2.0	4.3
United States						
World	1.4	100.0	9.7	100.0	40.2	100.0
NICs	—	0.9	1.4	14.9	9.3	23.0
Asian NICs	—	0.7	0.9	9.1	6.5	16.1
Japan						
World	0.8	100.0	3.1	100.0	9.4	100.0
NICs	—	—	0.2	6.0	1.0	10.9
Asian NICs	—	—	0.2	5.2	0.9	9.4

Source: OECD Foreign Trade Data Bank.

Note: Percentages are calculated on values in million dollars.

[a]See table 2.15, note a (SITC section 7), for description of this group.

In the United States, the main shifts in the structure of manufactures imports came between 1964 and 1973. In this period the share of industrial supplies fell from 46.9% to 28.3%, while the share of capital goods rose from 14.3% to 21.0%, and that of autos rose from 8.2% to 21.8%. Since 1973 the composition of U.S. manufactured imports has been relatively stable and more balanced across categories than in Europe or Japan.

2.4.4 Conclusion

Among the OECD areas, Europe and the United States are the major importers of manufactured goods and thus are the principal potential markets for the NICs. U.S. imports from both Latin American and Asian NICs—$7.6 and $25.0 billion respectively—are greater than those of Europe (table 2.18). The United States is the largest importer of manufactures from the NICs, especially those in Asia, of the three main OECD areas.

Despite the relatively balanced structure of U.S. imports across commodities, there is a concentration on the NICs as a source, especially in consumer goods but also in capital goods. In 1981 U.S. and European consumer goods imports were 17.5% and 20.2%, respectively, of their total manufactures imports. But the U.S. concentration on the NICs,

Table 2.22 Distribution of Imports of Autos[a]

	1964		1973		1981	
	Billions of $	%	Billions of $	%	Billions of $	%
OECD Europe						
World	0.3	100.0	1.5	100.0	7.9	100.0
NICs	—	—	0.0	0.9	0.3	3.9
Asian NICs	—	—	—	—	0.1	0.9
EC						
World	0.2	100.0	1.8	100.0	9.5	100.0
NICs	—	—	0.0	0.7	0.3	3.1
Asian NICs	—	—	—	—	0.1	0.7
United States						
World	0.8	100.0	10.0	100.0	29.3	100.0
NICs	0.0	0.0	0.1	0.6	0.4	1.3
Asian NICs	0.0	0.0	0.0	0.1	0.1	0.2
Japan						
World	—	—	0.2	100.0	0.5	100.0
NICs	—	—	0.0	0.5	0.0	3.1
Asian NICs	—	—	—	—	0.0	2.9

Source: OECD Foreign Trade Data Bank.

Note: Percentages are calculated on values in million dollars.

[a]SITC (Revision 1) group 732, road motor vehicles.

who had a 51.2% share of the U.S. market, compared with 38.2% in Europe, resulted in U.S. imports from the NICs of $13.7 billion in consumer goods. This was the largest single NIC export category to an OECD area in 1981. The $12.0 billion of Asian NIC consumer goods exports to the United States was the largest single category for that subgroup in 1980.

The imbalance in U.S. imports in favor of the NICs as a source adds to the impression of a growing interdependence of the U.S. economy with the NICs, as an exporter of capital goods, mainly to Latin America, and as an importer of consumer goods, mainly from Asia.

2.5 U.S. Trade with the NICs

The previous sections of this paper have compared the trade patterns of the United States, Japan, and Europe with the NICs, both Asian and Latin American. Here we focus in more detail on the structure of U.S. trade, by one-digit SITC category, with the individual NICs.

First, in table 2.26, we show the evolution of total U.S. manufactures trade by commodity group from 1973 to 1981. The data in nominal terms can be seen in tables 2.15 and 2.25. In 1973 U.S. manufactures exports were $46.5 billion and imports were $46.0 billion—almost ex-

Table 2.23 **Distribution of Imports of Consumer Goods** (less Autos)[a]

	1964		1973		1981	
	Billions of $	%	Billions of $	%	Billions of $	%
OECD Europe						
World	0.9	100.0	5.3	100.0	24.2	100.0
NICs	0.3	29.4	1.8	33.9	9.3	38.2
Asian NICs	0.3	29.1	1.7	32.4	9.0	37.3
EC						
World	1.1	100.0	6.3	100.0	26.0	100.0
NICs	0.2	20.8	1.5	24.2	7.8	30.2
Asian NICs	0.2	20.8	1.5	23.2	7.7	29.5
United States						
World	1.5	100.0	7.6	100.0	26.7	100.0
NICs	0.2	15.7	2.7	35.8	13.7	51.2
Asian NICs	0.2	15.2	2.3	30.6	12.0	45.1
Japan						
World	0.1	100.0	1.8	100.0	4.7	100.0
NICs	0.0	3.4	0.6	34.4	2.0	43.9
Asian NICs	0.0	3.4	0.6	34.2	2.0	43.8

Source: OECD Foreign Trade Data Bank.

Note: Percentages are calculated on values in million dollars.

[a]SITC section 8 minus SITC (Revision 1) groups 8121 and 861 (less 8612).

actly balanced. In 1981 exports had increased to $160.1 billion and imports to $153.1 billion, for a surplus of $7.0 billion. But much of that increase was inflation, so in table 2.26 we show the data deflated to 1973 prices. The surplus on overall manufactures exports, in real terms, went from $0.5 to $2.8 billion (1973 prices) by 1981. Over a period when the U.S. economy grew by about 2.5% per year (on average) in real terms, manufactures exports grew by 8.4% a year, and manufactures imports grew by 8.2% per year. This is hardly a picture of a "deindustrializing" economy; rather it reflects a rapid change in the structure of U.S. industrial production, with export sectors drawing resources from shrinking, import-competing sectors.

The structure of U.S. trade in manufactures with the NICs in 1981 is shown in table 2.27. There the countries are separated between the Asian and Latin American NICs, and within each group, the NICs and the "new NICs." At the bottom we present an ASEAN aggregate—Singapore, Indonesia, Malaysia, the Philippines, and Thailand. Data are given for each of the one-digit SITC categories, and for the total. The balance on the upper-right-hand corner of the table is the $7.0 billion surplus for 1981 already mentioned. The first row shows the structure of U.S. world trade in manufactures: surpluses in chemicals and capital goods, deficits in industrial materials, consumer goods, and autos, and approximate balance in "other."

Table 2.24 Distribution of Imports of Other Manufactures[a]

	1964		1973		1981	
	Billions of $	%	Billions of $	%	Billions of $	%
OECD Europe						
World	0.6	100.0	1.4	100.0	5.1	100.0
NICs	0.0	2.0	0.1	4.1	0.7	13.2
Asian NICs	0.0	1.0	0.0	3.3	0.6	12.1
EC						
World	0.7	100.0	1.9	100.0	7.4	100.0
NICs	0.0	1.7	0.1	2.7	0.6	8.5
Asian NICs	0.0	0.8	0.0	2.1	0.6	7.7
United States						
World	0.7	100.0	3.2	100.0	7.6	100.0
NICs	0.1	8.3	0.7	20.6	2.0	26.7
Asian NICs	0.0	3.7	0.5	15.1	1.4	18.8
Japan						
World	0.0	—	0.2	100.0	1.2	100.0
NICs	—	—	0.1	23.5	0.3	24.7
Asian NICs	—	—	0.1	22.3	0.3	23.8

Source: OECD Foreign Trade Data Bank.

Note: Percentages are calculated on values in million dollars.

[a]SITC section 9 plus SITC (Revision 1) groups 7232, 7241, 7242, 725, 7292, 733, 7294, and 7358.

Let us focus first on the differences in trade patterns with the Latin American and Asian NICs. In aggregate, U.S. trade with the Asian NICs follows the broad pattern of U.S. world trade, except for balance in autos, with little trade either way. But with the Latin American NICs, the United States has a surplus in every category except consumer goods, where trade was roughly balanced. Overall, the United States had a deficit in manufactures trade of $10.3 billion with the Asian NICs and a surplus of $12.6 billion with the Latin Americans in 1981. Mexico alone provided an $8.8 billion surplus to the United States in 1981, the largest component being capital goods. This highlights the exposure of U.S. trade to the debt situation in Latin America.

Another interesting distinction appears when we separate the Asian NICs into ASEAN and the Far Eastern countries of Hong Kong, South Korea, and Taiwan. In 1981 the Far Eastern NICs had an aggregate surplus of $11.8 billion in trade in manufactures with the U.S., while ASEAN had a $1.3 billion deficit, compared with the Latin American deficit of $12.6 billion. On balance, the U.S. exports manufactures to Latin America, the Latin American NICs sell nonmanufactures (especially Mexican oil) in the world market, the Far Eastern NICs buy nonmanufactures in the world market and sell manufactures to the United States. A similar triangle could be drawn between the United States, ASEAN, and the Far Eastern NICs, with Indonesian oil re-

Table 2.25 **Distribution of Manufactures Imports by Commodity Group[a]**

	1964		1973		1981	
	Billions of $	%	Billions of $	%	Billions of $	%
OECD Europe						
Total	10.5	100.0	38.8	100.0	119.8	100.0
5	1.4	12.8	4.1	10.6	14.2	11.8
6	4.3	40.8	14.1	36.4	24.9	20.8
7	3.1	29.3	12.4	32.1	43.6	36.4
732	0.3	2.5	1.5	3.8	7.9	6.6
8	0.9	8.8	5.3	13.6	24.2	20.2
9	0.6	5.8	1.4	3.6	5.1	4.2
EC						
Total	12.6	100.0	47.3	100.0	144.6	100.0
5	1.5	11.7	4.7	9.9	16.3	11.3
6	5.6	44.1	18.6	39.4	39.5	27.3
7	3.5	27.7	13.9	29.4	45.9	31.8
732	0.2	1.9	1.8	3.8	9.5	6.6
8	1.1	9.0	6.3	13.4	26.0	18.0
9	0.7	5.7	1.9	4.0	7.4	5.1
United States						
Total	9.6	100.0	46.0	100.0	153.1	100.0
5	0.7	7.4	2.5	5.4	10.7	7.0
6	4.5	46.9	13.0	28.3	38.6	25.2
7	1.4	14.3	9.7	21.0	40.2	26.2
732	0.8	8.2	10.0	21.8	29.3	19.1
8	1.5	15.8	7.6	16.6	26.7	17.5
9	0.7	7.4	3.2	6.9	7.6	4.9
Japan						
Total	2.0	100.0	11.6	100.0	32.2	100.0
5	0.5	22.4	1.9	16.0	6.5	20.1
6	0.6	28.7	4.5	38.3	10.0	31.1
7	0.8	40.5	3.1	26.7	9.4	29.0
732	0.0	1.5	0.2	1.6	0.5	1.5
8	0.1	5.7	1.8	15.5	4.7	14.4
9	0.0	1.1	0.2	2.0	1.2	3.8

Source: OECD Foreign Trade Data Bank.

Note: Percentages may not total to 100, because of rounding error. Percentages are calculated on values in million dollars.

[a]See table 2.15, note a, for definitions of categories of goods.

placing Mexican. These trade patterns highlight the importance of Latin America and ASEAN as U.S. export markets and the U.S. as an export market for the Far Eastern NICs.

The data of table 2.27 thus show interesting patterns of imbalance in U.S. manufactures trade across both commodities and geography. Following its lines of comparative advantage, the United States is a major exporter of capital goods, chemicals, and military equipment,

Table 2.26 **U.S. Trade in Manufactures in Constant 1973 Dollars** (Billions)

	1973		1981	
Commodity[a]	Exports	Imports	Exports	Imports
Chemicals	5.7	2.5	13.2	6.0
Industrial supplies	6.8	13.0	11.4	21.8
Capital goods	22.6	9.7	46.5	22.8
Autos	6.0	10.0	9.5	17.5
Consumer goods	2.7	7.6	6.1	16.2
Other	2.7	3.2	4.7	4.3
Total	46.5	46.0	91.4	88.6

Sources: See OECD Foreign Trade Data Bank and the OECD foreign trade publication *Trade by Commodities, Series C,* for trade data in current dollars. See Council of Economic Advisers, *Annual Report, 1983,* for price indexes as follows: chemicals and industrial materials and "other," see Total Goods Deflator, tables B-6 and B-7; capital goods, see Deflator for Producers' Durable Equipment, table B-3; autos, see Auto Product Deflator, tables B-6 and B-7; consumer goods, see Deflator for Consumer Expenditure on Durables, table B-3.

[a]See table 2.15, note a, for detailed descriptions of individual categories.

and is an importer of industrial materials, consumer goods, and autos. Net exports to the NICs alone provide half the U.S. surplus on chemicals and one-quarter on capital goods; the Asian NICs, mainly in the Far East, supply three-quarters of the U.S. deficit on consumer goods. U.S. trade in manufactures has become increasingly interdependent with the three groups of NICs—Latin America, ASEAN (plus India), and the Far East. The patterns of interdependence are complicated and will require increasing attention from U.S. foreign economic policy.

Table 2.27 **U.S. Trade in Manufactures with the NICs, 1981** (in billions of dollars)

	Chemicals (5)[a]			Industrial Materials (6)			Capital Goods (7)		
	E	I	E − I	E	I	E − I	E	I	E − I
World	23.3	10.7	12.6	20.2	38.6	−18.4	82.2	40.2	42.0
Asian NICs	4.1	0.2	3.9	1.4	4.7	−3.3	7.8	6.5	1.4
Hong Kong	0.4	—	0.4	0.4	0.4	−0.0	0.8	1.0	−0.1
India	0.4	—	0.3	0.1	0.6	−0.5	0.6	0.1	0.5
Singapore	0.6	—	0.6	0.2	0.1	0.1	1.6	1.2	0.4
South Korea	0.5	—	0.5	0.2	1.5	−1.2	1.4	0.6	0.8
Taiwan	0.5	0.1	0.4	0.2	1.2	−1.0	1.6	1.9	−0.3
Asian new NICs									
Indonesia	0.2	—	0.2	—	0.2	−0.1	0.4	0.1	0.4
Malaysia	0.6	—	0.6	—	0.2	−0.2	0.6	1.0	−0.4
Philippines	0.5	—	0.5	0.1	0.2	−0.1	0.6	0.5	—
Thailand	0.3	—	0.3	0.1	0.3	−0.3	0.3	0.1	0.2
Latin American									
NICs	3.0	0.5	2.5	2.9	1.7	1.2	10.2	2.8	7.4
Argentina	0.3	0.1	0.2	0.2	0.2	—	1.1	—	1.1
Brazil	0.7	0.2	0.6	0.2	0.7	−0.5	1.6	0.4	1.3
Mexico	1.7	0.2	1.4	2.3	0.8	1.6	6.7	2.4	4.3
Latin American new NIC	0.3	—	0.3	0.2	0.1	0.1	0.7	—	0.7
ASEAN[b]	2.3	—	2.3	0.5	1.0	−0.5	3.4	3.0	0.4

Source: OECD Foreign Trade Data Bank. (See the OECD foreign trade publication, *Trade by Commodities, Series C.*)

[a]See table 2.15, note a, for definitions of categories of goods.

[b]Singapore, Indonesia, Malaysia, Philippines, Thailand.

Appendix

Standard International Trade Classification Revision 1; Product Classifications

3 Mineral fuels, lubricants, and related materials

5 Chemicals

6 Manufactured goods classified chiefly by material
- 676 Rails and railway track construction material or iron or steel
- 692 Metal containers for storage or transport
- 695 Tools for use in the hand or in machines

7 Machinery and transport equipment
- 7232 Electrical insulating equipment
- 7241 Television broadcast receivers, whether or not combined with gramophone or radio
- 7242 Radio broadcast receivers, whether or not combined with gramophone or radio

Consumer Goods (8)			Road Motor Vehicles (732)			Other (9)			Total		
E	I	E − I	E	I	E − I	E	I	E − I	E	I	E − I
10.0	26.7	−16.7	15.9	29.3	−13.4	8.5	7.6	0.9	160.1	153.1	7.0
0.6	12.0	−11.4	0.3	0.1	0.2	0.4	1.4	−1.0	14.6	25.0	−10.3
0.2	3.7	−3.5	—	—	—	0.1	0.3	−0.2	1.9	5.4	−3.5
—	0.3	−0.2	—	—	—	—	—	—	1.1	1.0	0.1
0.1	0.3	−0.2	0.1	—	0.1	0.1	0.2	−0.1	2.5	1.8	0.7
—	2.6	−2.6	—	—	—	—	0.3	−0.3	2.3	5.1	−2.8
0.1	4.3	−4.2	—	—	−0.0	0.1	0.5	−0.4	2.5	8.0	−5.5
—	—	−0.0	—	—	—	—	—	—	0.8	0.3	0.5
—	0.1	−0.1	—	—	—	—	—	−0.0	1.3	1.4	−0.1
0.1	0.6	−0.5	—	—	—	—	—	—	1.4	1.3	—
—	0.1	−0.1	—	—	—	—	—	—	0.8	0.6	0.1
1.1	1.6	−0.5	2.0	0.3	1.6	0.9	0.6	0.3	20.2	7.6	12.6
0.1	—	0.1	0.1	—	0.1	0.1	—	—	2.0	0.4	1.5
0.1	0.5	−0.4	0.1	0.1	−0.0	—	0.1	−0.0	2.8	1.9	0.9
0.8	1.1	−0.3	1.7	0.2	1.5	0.8	0.5	0.3	14.0	5.1	8.8
0.1	0.1	—	0.1	—	0.1	0.1	—	—	1.5	0.2	1.3
0.2	1.1	−0.9	0.2	—	0.2	0.2	0.3	−0.1	6.8	5.4	1.3

725 Domestic electrical equipment
7292 Electric lamps
7294 Automotive electrical equipment
732 Road motor vehicles
733 Road vehicles other than motor vehicles
7358 Ships, boats, and other vessels for breaking up

8 Miscellaneous manufactured articles
8121 Central heating apparatus
861 Scientific, medical, optical, measuring, and controlling instruments and apparatus
8612 Spectacles and spectacle frames

9 Commodities and transactions not classified according to kind

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