

Interdependence: Myth or Reality

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Abstract:

Some authors contend that interdependence is low or declining, others that interdependence is high or increasing. The present essay, offering new data on trade, investment, financial, and political sectors, seeks to draw a trial balance between such views and to show that: (1) some significant forms of economic interdependence have grown since 1913; (2) the political importance of economic interdependence has increased greatly since World War I; (3) further increases in positive interdependence among nations can be no means be taken for granted. Present uncertainty and instability is caused by the disproportion between the highly intricate and complex operation of the international economic and financial sector and the relatively rudimentary and inchoate apparatus of intergovernmental cooperation.

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INTERDEPENDENCE: MYTH OR REALITY?

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ONE of the uncertainties of modern international relations is the degree of interdependence among states. Some theorists have asserted that interdependence is high and/or growing, and others have maintained that it is low and/or declining. Essentially, the debate about interdependence has proceeded in three separate phases. (1) In the aftermath of World War II, technology was heralded as the stimulus to an interrelationship among states: The world was shrinking; technological, military, and economic factors would produce interdependence even among erstwhile enemies.¹ (2) Later this conventional wisdom was challenged by Karl Deutsch and his associates, who purported to show that various economic indicators of external reference were declining.² International transactions were lessening relative to intranational transactions. More and more, citizens were turning to the nation-state for the satisfaction of their needs, and national economies were taking precedence over the previous international economy of the nineteenth century. This theme has recently been powerfully reinforced by Kenneth Waltz.³ (3) In reaction to the claims of the Deutsch group, which initially predicted stalemate in European unification efforts and a greater autarchy for industrial states, new presentations of the argument in favor of interdependence have been made.⁴ According to this view, interdependence among states is certainly increasing. A symposium on the international corporation partly reinforces Deutsch's view, while one on transnational processes argues

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¹ See *inter alia*, Emery Reves, *The Anatomy of Peace* (New York 1946), 268.

² See particularly, Karl W. Deutsch, Lewis J. Edinger, Roy C. Macridis, and Richard L. Merritt, *France, Germany and the Western Alliance* (New York 1967), chap. 13.

³ Kenneth N. Waltz, "The Myth of Interdependence," in Charles P. Kindleberger, ed., *The International Corporation* (Cambridge, Mass. 1970).

⁴ See Edward L. Morse, "Transnational Economic Processes," in Robert O. Keohane and Joseph S. Nye, Jr., eds., *Transnational Relations and World Politics* (Cambridge, Mass. 1972); Morse, "The Politics of Interdependence," *International Organization*, xxiii (Spring 1969); Oran R. Young, "Interdependencies in World Politics," *International Journal*, xxiv (Autumn 1969); and Richard N. Cooper, *The Economics of Interdependence* (New York 1968).

against it.⁵ The resultant of these theoretical vectors remains uncertain. In this essay we hope to offer new data and to provide a modest reconciliation of the contending claims, drawing a trial balance between them.

One of the problems in unravelling disagreements about interdependence is the absence of an agreed definition of the term. At least three different notions have been employed. In its most general sense, interdependence suggests a relationship of interests such that if one nation's position changes, other states will be affected by that change.⁶ A second meaning, derived from economics, suggests that interdependence is present when there is an increased national "sensitivity" to external economic developments.⁷ This "sensitivity" presumably can either be perceived or unperceived.⁸ The most stringent definition comes from Kenneth Waltz, who argues that interdependence entails a relationship that would be costly to break.⁹ This definition is different from the others in two senses: (1) It presumes a positive relationship between the interdependent units, such that each will suffer if the relationship is harmed; (2) relationships in which one party is affected by what another does would not necessarily be interdependent by Waltz's definition, because the effect might not be "costly." Since observers use such different definitions of the central term, it is easy to understand why they draw different conclusions about the presence or absence of interdependence in the contemporary world.

At the same time, Waltz's conclusion that interdependence is low or declining can be disputed even on the basis of the stringent definition he employs. The Waltz contentions run approximately as follows: Interdependence exists where there is a division of labor or a specialization of functions. Unlike units perform different functions or offer specialized services; they become interdependent when they perform these services for each other and when units come to rely on such specialization. On the other hand, if units are alike, they cannot offer different commodities or services; interdependence declines. Waltz

⁵ See Keohane and Nye (fn. 4); Kindleberger (fn. 3).

⁶ This meaning is close to that suggested by Morse and Young. Morse writes: "Interdependent behavior may be understood in terms of the outcome of specified actions of two or more parties (individuals, governments, corporations, etc.) when such actions are mutually contingent." Morse, "Transnational Economic Processes" (fn. 4), 29. See also Young (fn. 4), 726.

⁷ See Cooper (fn. 4), 59.

⁸ See also Robert D. Tollison and Thomas D. Willett, "International Integration and the Interdependence of Economic Variables," *International Organization*, xxvii (Spring 1973), 255-71.

⁹ See Waltz (fn. 3), 205-7.

also asserts that interdependence is lowest where like units have unequal capacities: Then, powers either cannot or do not have to take each other into account. As juridically like units, therefore, states can have little interdependence at any time and place. Since differences in *de facto* capacities among states have grown since World War II, interdependence is now at a nadir. This is not dismaying, however, for it is contended to be a "mistaken conclusion" that "a growing closeness of interdependence would improve the chances of peace."¹⁰ To summarize this argument, interdependence is high where there are (1) unlike units; and (2) where the units are relatively equal in capacity.

A number of comments can be offered in rejoinder. First, if interdependence is taken entirely in the positive sense (where interests of states vary directly, not inversely), it is difficult to understand how a high degree of interdependence could be a cause for conflict. If relationships really were costly to break on all sides, this would be a factor for general international cooperation. Second, while it is true that interdependence may be high where there are unlike units involved in the relationship, it is by no means clear that such differentiation is the *necessary condition* of high interdependence. A most important form of interdependence, that of military alliance, arises when states offer the same defense resources to each other. By pooling their resources, they gain a joint security that each could not attain in isolation, and yet there is no necessary division of labor. Clearly such defense ties might be very costly to break.¹¹

If military allies have relationships that are positively interdependent, enemies or adversaries manifest a high degree of negative interdependence in their relationships. Their interests are crucially linked in that it is assumed that if one improves his position, the other suffers. Yet, where such a high degree of interdependence (albeit negative) exists, there is no necessary differentiation of functions or division of labor. Rather, the interdependence of antagonists arises in part because rivals are alike: they compete for the same goals, utilize similar techniques, and seek to win over the same allies or to acquire the same real estate. The very continuance of competition over time, moreover, is likely to make them even more alike. Eventually, rivals may even develop certain positively interdependent goals. If they reside at the top of a hierarchy of nations, it may be a common interest to prevent any in-

¹⁰ *Ibid.*, 205.

¹¹ Mancur Olson, Jr., and Richard Zeckhauser, "An Economic Theory of Alliances," in Bruce M. Russett, ed., *Economic Theories of International Politics* (Chicago 1968).

roads on their joint position by other states. If war is likely to result in widespread mutual devastation, they may have a common interest in mutual accommodation and coexistence.

It may also be argued that the greatest interdependency in contemporary world politics subsists among the most highly developed powers, powers whose economic systems bear the greatest similarity to each other. In military terms, these powers could hurt each other grievously; in economic terms, they have the capacity to help or harm each other. At this juncture, the error of following the comparative-advantage, product-specialization argument too far is clearly portrayed. The basis for international trade today is not only marked product differentiation, but also the capacity of the domestic market. Europeans, Americans, and Japanese sell the bulk of their goods in each other's markets, even though typical approaches to comparative advantage would have them import raw materials from and sell industrial goods to the less developed countries.¹² The products which major industrial countries offer are not highly differentiated in the Ricardian sense; they all offer automobiles, consumer electronics, and industrial equipment. Differences exist, however, in marketing, pricing, quality, and sophistication. As we shall see later, the exchange of manufactured goods for manufactured goods is becoming *more* typical in international trade, not less so. It therefore does not follow that interdependence is low today, even if Waltz's strict definition of the term is employed.

At the same time, Waltz correctly points to the fact that nationalism and national interests are not secondary or obsolete phenomena in the contemporary world. Indeed, nationalism is a far more prominent factor in economic and political arrangements today than it was in the halcyon days of the nineteenth century. Prior to 1914, economic internationalism was the order of the day. Passports were unnecessary. Tariffs had only been recently reintroduced. National secrecy in military plans and the demand for patriotic loyalty on the part of citizens were surely less stringent than they are now. Nationalism was in fact strengthened by the reformist orientation of modern politics: Franklin Roosevelt, a domestic reformer who tried to put the United States on the road to economic recovery after the Depression, did so at the expense of the international economic and, to some extent, political system. When governments are expected to regulate the economy to

¹² This approach is that of the Heckscher-Ohlin theorem emphasizing factor proportions.

obtain maximum welfare for their citizens, they must often slight the interests of economic and political partners. Citizens may also reflect such attitudes. They do not look to the international system for economic and political benefits, but to their national government. Socialism, nationalization, and domestic economic planning interpose national criteria on international economic forces. By almost any definition of the terms, economic and political nationalism have grown since the last decades of the nineteenth century. What effect has this development had upon interdependence?

By all three definitions, nationalism might have been expected to reduce interdependence. It might be argued that, if nations seek only to achieve their own goals without any reference to the rest of the system, the linkage between units must decline. If nationalistic goals depend on supportive actions by other members of the international community, however, nationalism cannot be achieved in isolation. Not only does interdependence not decline in such circumstances, aggressive nationalism may lead to higher negative interdependence. The greater nationalism of the twentieth century therefore need not entail a reduction of interdependence. We still do not know whether interdependence will rise or fall, whether it will be positive or negative. The rest of this paper will be devoted to an answer to these questions in economic and political terms, considering data and developments of the past century.¹³

THE TRADE SECTOR

If we are to gain a greater understanding of present-day interdependence, the trade sector is critical. One of the long-standing contentions of those who assert that interdependence is low or declining is that national industrialization, at least in its later stages, involves a decreasing reliance upon foreign trade. As manufacturing economies develop, states rely more upon themselves for necessary goods and less upon imports from other countries. Karl Deutsch and Alexander Eckstein, in a pioneering study, tried to measure this phenomenon by

¹³ Interdependence may also increase due to scientific and technological developments. See Eugene B. Skolnikoff, *The International Imperatives of Technology* (Berkeley, Institute of International Studies, No. 16, 1972); see also his "The International Functional Implications of Future Technology," prepared for delivery at the 66th Annual Meeting, American Political Science Association, Los Angeles, September 8-12, 1970; John Gerard Ruggie, "Collective Goods and Future International Collaboration," *American Political Science Review*, LXVI (September 1972), 874-93; John H. Dunning, "Technology, United States Investment, and European Economic Growth," in Kindleberger (fn. 3).

the ratio of foreign trade to GNP over time.¹⁴ They concluded that the ratio of foreign trade to GNP increased during the early stages of economic development, but decreased in the later stages of national industrialization.

It is not certain, however, that Deutsch's and Eckstein's data support their conclusions. Ratios for the 1950's, as given by the two investigators, are sometimes quite close to the highest of the series for several countries.¹⁵ Moreover, the Deutsch-Eckstein study is based on current dollar figures.¹⁶ Over the last century, domestic rates of inflation have tended to inflate GNP figures while, due to revolutionary advances in transportation, export and import prices have not risen as sharply.¹⁷ Robert E. Lipsey, therefore, recalculated the ratio of American exports to GNP in constant 1913 dollars. As Table 1 shows, there is no secular trend of a decline in foreign-trade ratios.

Calculations on other bases support the same conclusion. Table 2 shows that data to 1970 may even portray a slight increase in the ratio of American exports to GNP.

The conclusion that ratios have not fallen and may even recently have increased is strengthened by the knowledge that the ratio for the nineteenth century is inflated because of the downward bias in GNP calculations. Deutsch and Eckstein admit that their national-product

¹⁴ Karl W. Deutsch and Alexander Eckstein, "National Industrialization and the Declining Share of the International Economic Sector, 1890-1959," *World Politics*, XIII (January 1961), 267-99.

¹⁵ See also Robert E. Lipsey, *Price and Quantity Trends in the Foreign Trade of the United States* (Princeton 1963), 39-44.

¹⁶ There are no criteria by which to decide which ratio of foreign trade to GNP is more valid, the one based on current dollars or the one based on constant dollars. In its limiting case, the ratio based on current dollars would go to zero, and it would be irrelevant to point out that in constant dollars there was still some foreign trade of consequence. (We are indebted to Richard N. Cooper for this point.) However, in the Deutsch-Eckstein case, where even in current dollars the ratio for the 1950's was relatively high, it is more illuminating to look at ratios based on constant dollars.

¹⁷ The following table gives an indication of this phenomenon for the last decade:

EXPORT, IMPORT, AND CONSUMER PRICES FOR SELECTED COUNTRIES, 1970
(EXPRESSED IN U.S. DOLLARS; 1963 = 100)

	<i>Export</i>	<i>Import</i>	<i>Consumer</i>
Japan	110	106	149.5
West Germany	114	110	120.4
France	112	107	130.9
United Kingdom	112	110	139.3
United States	121	120	128.9

Source: *International Financial Statistics* xxiv (December 1971), 32, 33, 35.

TABLE 1
RATIO OF EXPORTS TO GNP AVERAGED BY DECADES,
IN CONSTANT 1913 DOLLARS¹⁸

<i>Ratio of Exports to GNP</i>	
1880-89	6.25
1890-99	7.24
1900-09	6.64
1910-19	7.69
1920-29	6.35
1930-39	5.06
1940-49	7.93
1950-59	6.65

TABLE 2
RATIO OF EXPORTS TO GNP AVERAGED BY DECADES,
IN CONSTANT 1958 DOLLARS¹⁹

<i>Ratio of Exports to GNP</i>	
1930-39	4.91
1940-49	4.34
1950-59	4.93
1960-69	6.06

estimates "tend to understate the subsistence sector of the economy."²⁰ They accurately point out that much of the growth in GNP in industrialized states is due to the growth of the service sector, and that that very sector was substantially underestimated in GNP calculations for the previous century. It is therefore very difficult to square the available data with the conclusion that foreign trade as a share of GNP has declined as a consequence of higher industrialization.

Changes in the structure of trade, however, may lead to lower interdependence even though the foreign stake of many developed countries is high or increasing. If interdependence existed only when the relationship would be costly to break, it might be contended that trade at the turn of the century was more truly interdependent than it is

¹⁸ See Lipsey (fn. 15), 430-31. This table is constructed using Kuznets' estimate of the U.S. Gross National Product. Because the Kuznets estimates deflate GNP, official statistics cannot be used to extend the Kuznets series.

¹⁹ Source: United States Government, *Economic Report of the President (1972)*. The lower ratios in this table are due to the use of official (undeflated) GNP indices.

²⁰ Deutsch and Eckstein (fn. 14), 271.

today. Before World War I, a typical trade transaction probably involved an exchange of manufactured goods for raw materials; today, much of world trade consists of the exchange of manufactured goods among developed countries. Since these countries could theoretically adopt programs of import replacement, it is contended that interdependence has decreased.²¹

It is indeed true that trade in manufactured goods has greatly increased with time. Table 3 shows the trend in world exports of primary products, petroleum, and manufactured goods since 1950. While primary exports have almost doubled and petroleum exports nearly trebled, manufacturing exports have grown by a factor of seven.

TABLE 3
TREND IN WORLD EXPORTS OF MANUFACTURES, PETROLEUM, AND
PRIMARY COMMODITIES, 1950-1969
(IN BILLIONS OF DOLLARS)²²

	<i>Primary Commodities</i>	<i>Petroleum</i>	<i>Manufactures</i>
1950	30.28	—	22.97
1955	31.13	8.59	33.77
1960	36.71	10.63	57.74
1965	46.02	15.05	92.45
1969	56.02	21.54	149.73

These trends are reinforced by Table 4, which shows that raw materials have dropped and manufactured goods have risen as a percentage of imports and exports among developed countries since 1954. The increasing trade in manufactured goods, not surprisingly, is linked with an increase in the trade among developed countries. Table 5 shows that trade among industrial states has increased most dramatically in the last three decades.

These trends are consistent with the conclusion that interdependence has not increased, however; industrial countries, with flexible economies, should be able to reduce their dependence upon each other without great cost. But this argument must take account of yet another

²¹ See Waltz (fn. 3), 210.

²² Source: International Bank for Reconstruction and Development, *Trends in Developing Countries* (Washington, D.C. 1971). Beginning in 1955, petroleum is included as Section 3 of the Standard International Trade Categories. Data exclude trade among Communist countries. It is interesting to compare these results with those offered by Albert O. Hirschman, *National Power and the Structure of Foreign Trade* (Berkeley 1945), 141-45: He found either no percentage increase in manufacturing trade as a proportion of the total, or a slight decline for major powers from 1913 to 1937. Longer-term figures, however, point to secular increases since 1954.

TABLE 4

RAW MATERIAL AND MANUFACTURED IMPORTS AND EXPORTS AS A PERCENTAGE OF TOTAL TRADE FOR SELECTED INDUSTRIAL COUNTRIES²³

		<i>Imports</i>		<i>Exports</i>	
		Raw/ Total	Manu./ Total	Raw/ Total	Manu./ Total
Germany	1954	71	27	15	84
	1968	43	53	9	90
Japan	1954	86	14	14	85
	1968	72	27	5	94
France	1954	70	24	28	65
	1968	39	60	22	74
Italy	1954	65	34	40	58
	1968	54	45	16	82
United Kingdom	1954	76	20	13	81
	1968	48	48	8	85
United States	1954	63	32	28	68
	1968	32	62	26	70

TABLE 5

VALUE INDEX OF DIRECTION OF EXPORTS,
DEVELOPING COUNTRIES AND DEVELOPED COUNTRIES
(1950 = 100)²⁴

	<i>From Developed to Developed</i>	<i>From Developed to Developing</i>	<i>From Developing to Developed</i>	<i>From Developing to Developing</i>
1938	42.1	31.0	31.3	28.3
1948	95.5	100.0	85.8	108.7
1950	100.0	100.0	100.0	100.0
1954	143.7	134.5	119.4	117.4
1959	213.8	176.1	140.3	126.1
1964	352.2	223.9	185.8	158.7
1969	598.7	331.6	271.7	223.3

point. Not only do developed countries trade with one another mainly in manufactured goods: There is also, in trade among developed nations, an increasing dependence upon particular countries and particular commodities. Albert Hirschman has used an index running

²³ United Nations, *Yearbook of International Trade Statistics 1954 and 1968* (New York 1955 and 1970).

²⁴ Source: *Trends in Developing Countries* (fn. 22).

from 100 (when a country's exports go solely to one trading partner) to very low numbers (when a country's trade is evenly divided among a large number of countries).²⁵ This measure is known as the Gini coefficient, which is the square root of the sum of the squares of the fractions of trade with each country, multiplied by 100. Its upper limit is 100; the lower limit, assuming trade is evenly divided among 100 countries, would be 10. In 1945 Hirschman used it to calculate the dependence of one nation upon the trade of another. Thirteen years later, Michael Michaely furnished an estimate of the dependence of countries on trade in particular commodities.²⁶ We have updated these estimates with figures for 1961 and 1968. The evidence is incontrovertible: the recent growth of trade in manufactures among developed societies has not freed economies from the thrall of a few suppliers, nor has it reduced their dependence on imports of particular commodities. Perhaps surprisingly, industrial countries have become more dependent on particular countries for their trade, and are generally more dependent on the supply of particular commodities. Less developed countries may have increased their independence within the system. Table 6 shows the change in Gini coefficients for selected

TABLE 6

CHANGE IN GINI COEFFICIENTS IN THE GEOGRAPHIC CONCENTRATION
OF TRADE FOR SELECTED DEVELOPED AND DEVELOPING COUNTRIES
(CHANGE FROM 1954 TO 1968)²⁷

	<i>Exports</i>	<i>Imports</i>
Germany	3.5	4.2
Japan	9.9	- 7.3
France	4.4	8.8
Italy	6.2	2.2
United Kingdom	1.9	1.0
United States	5	4.9
Brazil	- 4.7	- 1.2
Mexico	- 15.1	- 17.1
Ghana	- 10.8	- 19.4
Turkey	- 1.6	+ 3.2

²⁵ See Hirschman (fn. 22), 98-100.

²⁶ Michael Michaely, "Concentration of Exports and Imports," *Economic Journal* LXVIII (December 1958), 722-36.

²⁷ 1954 data based on Michaely, *ibid.*; 1968 data computed using D.o.T. totals from International Monetary Fund and International Bank for Reconstruction and Development, *The Direction of Trade Annual 1966-70* (Washington 1971).

industrial and developing countries in dependence upon trade with particular states. Separate indices are given for imports and exports, indicating the degree to which trade has become geographically dependent.

It is noteworthy that among developed countries (with the exception of imports to Japan) the changes are all in a positive direction, indicating that trade has become more geographically concentrated among suppliers and markets with time. For the developing countries shown, with the exception of Turkey, trade has become less concentrated geographically, and therefore it reflects a smaller degree of dependence. Table 7 gives similar evidence of the dependence on trade in particular commodities.

TABLE 7

CHANGE IN GINI COEFFICIENTS IN THE COMMODITY CONCENTRATION
OF TRADE FOR SELECTED DEVELOPED AND DEVELOPING COUNTRIES
(CHANGE FROM 1961 TO 1968)²⁸

	<i>Exports</i>	<i>Imports</i>
Germany	1.21	.53
Japan	2.98	.93
France	1.18	— .95
Italy	.03	3.27
United Kingdom	.04	— .81
United States	2.86	3.86
Brazil	— .19	— 1.49
Mexico	— 21.14	— 2.92
Ghana	— 1.38	— 3.68
Turkey	+ 8.98	— 6.77

With the exception of changes in imports for France and the United Kingdom, commodity concentration for the major developed countries has increased in the past decade: Developed countries are now more dependent upon the import and export of particular commodities than they were previously. Developing countries show no such pattern, and Mexico's reduction of dependence on particular commodity imports and exports is striking. These findings modify conclusions about a reduction in interdependence among industrial countries. The concentration in trade among developed countries is growing. Diversification of suppliers and markets is harder to accomplish. To this degree,

²⁸ Source: *Yearbook of International Trade Statistics 1961 and 1968* (fn. 23).

dependence and a mutual interdependence of all industrial countries has increased.²⁹

There is a further point. The most satisfactory measure of interdependence is not the cost of breaking the relationship, but the degree to which economic interests are direct functions of one another. If the economic position of state *A* changes, will state *B* be affected? In the nineteenth century, there was a *de facto* interdependence of economic units, but political governors did not act in such a way as to maximize the economic interests of their unit. They therefore neglected external economic changes that had a great effect upon the domestic economic system. During the past half-century, political changes within society have made it impossible for political leaders to ignore the domestic impact of external economic forces. Today, therefore, they respond vigorously to external economic changes. Economic effects are now fully comprehended within the political realm. Thus, politically significant interdependence is much higher today than it was during the nineteenth century.

THE INVESTMENT SECTOR

The investment sector reveals similar patterns. Those who argue that interdependence is decreasing can point to the change in the pattern of overseas investment over the past century.³⁰ Those who assert that it is rising can center their attention on the tremendous recent growth in foreign investment and on changing patterns of investment.³¹ Much of the growth in foreign investment since World War II has been in direct investment (investment which results in an im-

²⁹ On balance, the foreign-trade sector does not appear to be quite as useful for the measurement of relative interdependence as previous analysts have maintained. Although foreign trade is increasing relatively and absolutely among developed countries, that trade represents an exchange of manufactured goods. As a number of economists have pointed out, if governments can find substitutes for import or export markets among a few industrial countries, the growing effects of concentration do not necessarily increase interdependence. But even if substitutability exists economically, the problems of the political costs of switching from one market to the other and of the circumscription of political latitude involved in the process remain. For the latest review of the literature on trade as a measure of integration, and an excellent bibliography, see Cal Clark and Susan Welch, "Western European Trade as a Measure of Integration: Untangling the Interpretations," *Journal of Conflict Resolution*, xvi (September 1972), 363-82. Integration theorists might find it useful to examine other transnational economic sectors as well as trade, including those discussed below. One such attempt is outlined in Tollison and Willett (fn. 8).

³⁰ Kenneth Waltz notes, for example, that "in 1910, the value of total British investment abroad was 1½ times larger than her national income"; for the United States today, however, it is a meager 18%. Waltz (fn. 3), 215.

³¹ See Cooper (fn. 4), chaps. 3, 4, and 5; Morse, "Transnational Economic Processes" (fn. 4), 36-37.

portant share of ownership or control of a foreign corporation). By contrast, the leading authority on capital flows in the late nineteenth century observes that "portfolio investment was a far more important component of long-term capital movements before 1914 than direct investment; and it consisted much more of transactions in bonds and other debt instruments than in equities."³² What direct investment there was in the nineteenth century tended to proceed from capital-abundant to capital-deficient areas.³³ While one-third of British long-term investments were in Europe, much of this was in capital-deficient areas such as Russia. Even when direct investment in other developed countries increased after World War I, investment in capital-deficient areas remained a large fraction of the total. In this period, American direct investment abroad typically flowed to Latin America.

The recent growth in overseas long-term investment has not only taken the form of direct investment, it has also increasingly gone to other developed countries. Tables B and C of the Appendix demonstrate this change. In 1936 and 1950, American investments were evenly divided between developed and less developed countries; in 1968, two-thirds of the book value of direct American investments were in developed countries. American direct investments in manufacturing have risen from 25.6 per cent of the total in 1936 to 40.6 per cent in 1968. These changes are revealed even more dramatically by an analysis of capital flows. In 1957, 55.5 per cent of the net capital flows from the United States went to less developed countries, with 46.9 per cent going to Latin America. In 1968, 58.4 per cent of American capital flowed to developed countries, with 31.2 per cent going to Europe—an increase of 11.6 per cent since 1957.³⁴

With these changes, American investments have become more concentrated geographically and in terms of specific industries. Table 8 indicates this concentration.

TABLE 8
GEOGRAPHIC CONCENTRATION OF U.S. INVESTMENT, 1929-1959³⁵

	1929	1936	1943	1950	1959
Gini Coefficient	33.02	34.41	34.20	34.68	37.60

³² Arthur Bloomfield, *Patterns of Fluctuation in International Investment before 1914* (Princeton Studies in International Finance, No. 21, 1968), 3-4.

³³ *Ibid.*, 2-3.

³⁴ See Tables D and E of the Appendix.

³⁵ Source: U.S. Department of Commerce, *U.S. Business Investments in Foreign Countries* (Washington, D.C. 1960), 92. Figures since 1959 would probably indicate

The conclusion to be drawn from these trends is that the stake of the developed countries, and particularly of the United States, in the international economic system has risen as it has become more concentrated.³⁶ Direct investments imply a higher stake in a foreign country than portfolio investments. Investments in manufacturing enterprises and in other developed countries have narrowed the focus of American investor activity and concern. More is at stake in specific markets, and in specific kinds of enterprises; there is more to lose than there was formerly.

The absolute increase in American direct foreign investment is matched by its relative growth as compared to other GNP indicators. Measured against domestic GNP, in current or constant dollars, the foreign-investment sector has grown rapidly. Table 9 makes this clear.

TABLE 9

INDEX OF GROWTH OF FOREIGN DIRECT INVESTMENT AND U.S. GNP, 1968³⁷
(1959 = 100)

GNP in current dollars	179
GNP in constant dollars	148
Direct foreign investment	219

These comparative growth rates are even more remarkable if 1950 is taken as the base year.

TABLE 10

INDEX OF GROWTH OF FOREIGN DIRECT INVESTMENT AND U.S. GNP, 1968³⁸
(1950 = 100)

GNP in current dollars	303
GNP in constant dollars	199
Direct foreign investment	551

an even higher degree of concentration, but Department of Commerce statistics no longer give country-by-country breakdowns of investment figures.

³⁶ It could of course be argued that a reduction in the number of suppliers or buyers does not necessarily raise the costs of such transactions to the United States. A few sources may be cheaper than many sources. But the circumscription does diminish U.S. political initiative; it narrows America's political latitude and thus links her interests more closely with the remaining sources of supply or markets.

³⁷ Sources: *U.S. Business Investments in Foreign Countries* (fn. 35), 92; *Survey of Current Business*, L (October 1970), 28; *Economic Report of the President, 1972* (fn. 19), 195-96.

³⁸ *Ibid.*

This tremendous growth in the book value of American direct investment has been paralleled by a growth in the volume of operations of foreign affiliates compared with U.S. domestic concerns.³⁹ Domestic sales did not double between 1957 and 1968; however, the sales of foreign manufacturing affiliates rose by more than a factor of three. In 1968, the volume of sales abroad in manufacturing amounted to 10 per cent of domestic sales in manufacturing.

Foreign earnings on direct investments of American corporations have also increased more rapidly than domestic earnings. Since 1950, domestic profits of corporations have risen by about 50 per cent. But earnings on direct foreign investments have increased by more than 450 per cent.⁴⁰ By 1969, foreign earnings on direct investments had risen to 28 per cent of domestic earnings.⁴¹

This increased preoccupation with the foreign economic sector, moreover, was not confined to the United States. The growth of the multinational corporation has been so spectacular that today, "of the 50 largest economic entities (in the world), 37 are countries and 13 are corporations. Of the top 100, 51 are corporations."⁴² It has been estimated that about one-quarter of the gross national product of the non-Communist world is earned by the business of such enterprises outside their home countries.⁴³

It is of course true that foreign investment as a percentage of national income has decreased since 1913, but the type of investment which has occurred is such as to give its owner a substantial stake in the foreign sector. In contrast to the experience of the nineteenth century, current foreign investment is not simply credit, it is partial ownership. Control of productive facilities is involved. Today, transfers of technology are an exceedingly important part of direct investment. Since they are so important, it would be foolhardy for host countries to threaten them. But if the cost of breaking the relationship is so high, interdependence must also be high.

The political significance of interdependence is low when its salience is low. In 1913, economic interdependence had very low political salience; governments were not supposed to be responsive to or control external economic influences. Thus, the absolute high value of invest-

³⁹ See Table F of the Appendix.

⁴⁰ See Table G of the Appendix.

⁴¹ This figure of 28% would be even higher if income from other (non-direct) foreign private assets had been included.

⁴² Lester R. Brown, "The Nation State, the Multi-National Corporation and the Changing World Order," mimeo (U.S. Department of Agriculture, 1968), quoted in John McHale, *The Transnational World* (Austin 1969), 8.

⁴³ Raymond Vernon, *Sovereignty at Bay* (New York 1971), 383.

ment in 1913 had little political significance. Today the rate of increase of the foreign-investment sector and the increasing political responsiveness of governments have given high salience and significance to foreign investment.

THE FINANCIAL SECTOR

The financial operation of the international economic system has changed greatly since World War I. Under the gold standard of 1880–1913, short-term capital movements were neither as extensive nor as disruptive as they have been in recent years.⁴⁴ The amount of funds available for “hot money” flows has now reached an all-time high. Table H of the Appendix shows that \$71 billion is available in various currencies (mainly dollars) for short-term transactions. This huge pool of assets, sloshing from country to country, can easily undermine domestic monetary policy and strength. In 1968, an inflow of foreign funds into West Germany amounted to as much as 8.9 per cent of the domestic money supply, greatly circumscribing attempts at an anti-inflationary policy. In the same year, France suffered an outflow of 22 per cent of her international reserves, forcing her central bank to put a brake on expansionist policies.⁴⁵ In July 1972, speculation against the dollar was so intense that in just one day European central banks bought \$1.5 billion to prevent the dollar from going beneath the level fixed by the Smithsonian Agreement of December 18, 1971.⁴⁶ Less than 14 months later, speculation forced a further 10 per cent devaluation of the dollar, and in one day Germany took in \$2.7 billion in exchange for marks. The Smithsonian Agreement, which once appeared to be a long-term solution, has now been abandoned.

If the sudden speculative movements of this vast pool of currencies are not to undermine domestic monetary stability and economic progress, and perhaps to cause a collapse of the whole Western trading system, governments will have to concert their countermeasures. Increasing recognition of the problem in the past fifteen years has led to the General Agreement to Borrow (GAB), various currency-swap arrangements, an enlargement of IMF quotas, and the creation of Special Drawing Rights (SDR's). Yet it is by no means certain that these and various pending arrangements will fully control the short-term flow of funds among Western and developed nations. The inter-

⁴⁴ See Bloomfield (fn. 32), 87.

⁴⁵ See Lawrence Krause, “Private International Finance,” in Keohane and Nye (fn. 4), 181–83.

⁴⁶ *New York Times*, July 19, 1972.

dependence of the financial structure of trade is growing, but still higher cooperation among governments is necessary to ensure that it will not become a negative interdependence.⁴⁷

Other changes have transformed the system since World War I. The old gold standard was based (not surprisingly) on gold as a medium of exchange. Minimum use was made of foreign currencies as reserves. At the end of 1913, the nations of the world held only \$963 million in foreign-exchange reserves, and over half of these were possessed by Russia, India, and Japan.⁴⁸ Official gold holdings, in contrast, were more than five times as much.⁴⁹ With the move to a gold-exchange standard, the percentage of national reserves accounted for by foreign-exchange holdings has gone up dramatically. Table I of the Appendix makes it clear that in 1945 gold accounted for 70 per cent of international reserves, while foreign exchange totaled 30 per cent. By the end of 1971, on the other hand, gold amounted to only 30 per cent of world reserves, while foreign exchange represented 60 per cent, and a new category of international reserves (SDR's and gold *tranche*) represented 10 per cent.

These figures are even more instructive when analyzed in conjunction with the growth of world trade in the same years. In 1945, world exports in the non-Communist world totaled \$34.2 billion. By the end of 1971, world exports were estimated at \$334 billion, 977 per cent of the previous figure. This means that since 1945, the value of world exports has more than doubled every eight years. This growth is more than double the growth rate of foreign-exchange holdings, more than four times that of total international reserves, and almost eight times the growth rate of gold holdings. In 1945, total international reserves were 39 per cent greater than the value of world exports; by the end of 1971, total international reserves were only 40 per cent of the total value of exports in one year. Thus, while the holdings of international reserves have not kept pace with the growth in trade, the degree to which they have kept up is due to vast increases in the holdings of foreign exchange.

⁴⁷ See Susan Strange, "The Dollar Crisis: 1971," *International Affairs*, XLVIII (April 1972), 194.

⁴⁸ See Bloomfield (fn. 32), 7.

⁴⁹ *Ibid.*, 7. Peter Lindert disputes the traditional wisdom (and Arthur Bloomfield) by claiming that foreign currencies were used fairly extensively. However, even Lindert's data for 1913 show that only \$1132 million were held in foreign-exchange reserves, which is 15.9% of the total world reserves. He also concurs that more than half of these official foreign balances were held in Russia, India, and Japan. See Peter H. Lindert, *Key Currencies and Gold, 1900-1913* (Princeton Studies in International Finance, No. 24, 1969), 12, 13, 76, 77.

This change also represents an increase in international interdependence. Gold was an undifferentiated asset; it could be earned from any sector, and spent in any sector. A nation had to discipline its trade overall, but not with specific countries. Today, bilateral trading relationships are far more important, and among those trading countries interdependence has increased. What is more important, while the countries whose currencies are media of exchange have some responsibility for disciplining their own financial policies, other countries also have a direct financial stake in their solvency. These other countries have an interest in not allowing reserve currencies to sink too low on international exchanges. Hence the rescue operations for the British pound and the U.S. dollar. Now that Swiss francs, German marks, and Japanese yen are being held as reserves, other nations also have a stake in maintaining the value of such reserves. These currencies may be able to benefit from rescue operations at a later stage. Gold holdings in the nineteenth century did not produce this same stake, this same interdependence. Governments, recognizing this dependence upon currencies, have now gone so far as to create a new reserve unit, the SDR, the use and further extension of which will be entirely dependent upon international agreement. The interdependence of the financial system has now become formal.

THE POLITICAL SECTOR

The development of political relations among states since 1913 has witnessed two major trends. Between 1919 and 1939, an essentially autarchic trend held sway, with nations striving to reduce their dependence upon others, first in political and later in economic terms. Because of the role of prewar alliances, World War I strengthened the tendency for nations to rely on themselves. The peacetime alignments which emerged in the thirties had little significance in time of crisis or war. Indeed, the only major powers which stood by their alliance commitments were Germany and Japan. The Soviet Union, France, Britain, and Italy all vacillated, and the United States remained out of the bargaining.

After World War II, however, nations came to believe that they could not ensure their own defense without help. National self-sufficiency would no longer provide security. In the wake of Hiroshima, many nations also concluded that major wars would be so horrendous that they could not be tolerated at all. Henceforth, minimal cooperation would be necessary even among adversaries. Arrangements were made for crisis communication and management.

In recent years, however, intergovernmental cooperation and interdependence have grown apart from military stimuli. It can even be argued that the alienation of publics from their governors has strengthened such trends. Contemporary government depends upon such a wealth of information and specialized expertise that the man in the street cannot keep up with what is happening, to say nothing of being able to make informed judgments. Under these circumstances, elections have come to be symbolic processes, largely devoid of intellectual content. Since people do not fully understand their governments, they tend to distrust them and to become resentful toward those in authority. But distrust of those in power nationally does not lead to any new foci of international loyalty and support. If national bureaucracies are immobile, international or supranational institutions are either weak or unresponsive to popular demands. Even in Europe there has been no marked substitution of international for national loyalties.

The difficulties of domestic governance have, paradoxically, forced governmental elites together. Although the masses cannot fully communicate with elites, and elites cannot talk to the masses except in the simplest terms, elites *can* talk to each other. National leaders are coming to recognize that, with individual variations, they are all in the same boat. Among developed societies at least, they face similar problems: the problem of remaining in power as the electorate becomes sullen and resentful; the problems of economic progress and of making their way in international politics while avoiding major war. Leader-to-leader diplomacy has been a way of learning from each other.

The failure of ideology to cope with real governmental problems has also brought leaders together. The barrage of information and the communications revolution have today either destroyed or rendered irrelevant most ideological systems of belief.⁵⁰ Rigid doctrinal approaches are discredited by new information. Rulership requires so much expertise and detailed adjustment that ideological systems offer few guidelines. Elites learn from each other, perhaps more than they do from their own publics; in one sense they help each other solve the problem of domestic governance.

. . .

Increased communication among leaders has not, however, put an end to nationalism. It is true, as Kenneth Waltz argues, that "the progress of internal integration and the increased intervention of governments in their domestic economies means that for most states the

⁵⁰ See Zbigniew Brzezinski, *Between Two Ages* (New York 1970), Parts II-III.

internal sector now looms larger than it once did.”⁵¹ While elites are looking outward, publics are turning to their national governments for the solution of social and economic problems. What Karl Kaiser calls “vertical interaction” (between government and society) has grown greatly in recent decades. Kaiser argues that “a high degree of horizontal interaction [between units of world politics] . . . does not lead to transnational politics unless there is vertical interaction.” He goes on: “The higher the degree of interventionism on the part of national governments, the more vulnerable governmental policies become to processes on the level of transnational society which might thwart these policies. A democratic structure intensifies this relationship since it forces governments to be more responsive to disturbances.”⁵² He then concludes that a nation-state’s participation in transnational politics is a function of the product of horizontal and vertical interaction:

$$tp = hi \cdot vi^{53}$$

This equation suggests that, if vertical interaction increased and horizontal interaction remained the same, transnational politics would increase. But if transnational politics is any measure of the amount of interdependence among states, this conclusion can scarcely be accepted. If vertical integration and interaction were to increase greatly, as for example with the establishment of a totalitarian state, transnational politics would almost certainly decline rather than increase. Such an increase in vertical interaction would probably stimulate a decline in horizontal interaction with other states and societies, again preventing any increase in transnationalism. It is also not an accident that states convulsed by revolutionary impulses have been the least amenable to horizontal interaction with other states and societies. The domestic preoccupation of the vertical revolutionary process tends to cut links with other units. It is also not surprising that the Communist countries, with the highest degree of vertical integration, where “the permanent intervention of governmental institutions in the social and economic life of society” has gone farthest, evince the fewest horizontal ties with other states and societies. There can be no conclusion, therefore, that vertical interaction *always* increases transnational politics and interdependence.

⁵¹ Waltz (fn. 3), 208.

⁵² Karl Kaiser, “Transnational Politics: Toward a Theory of Multinational Politics,” *International Organization*, xxv (Autumn 1971), 812.

⁵³ *Ibid.*

CONCLUSION

The earth is today poised between a world of nationalism and a world of transnationalism. The vertical interaction of nationalist processes has moved to a new peak. The horizontal interaction of transnational processes is higher than at any point since World War I. Moreover, it is growing rapidly. As both Kaiser and Morse have pointed out,⁵⁴ vertical interaction has made horizontal interaction relevant for political and governmental purposes. If vertical interaction were not so great, the world would be witnessing a return to the *apolitical* interdependence of 1913. However, a rapid further increase in domestic social change and vertical interaction, far from increasing transnational politics, could put an end to them.

Domestic governments lie at the nexus of vertical and horizontal interaction. They are impelled in one direction by the desire to satisfy the electorate and to build domestic support. They are impelled in another by the high degree of horizontal integration of the system. If they are to cope with the great transnational phenomena of the current age—the multinational corporation, the unrivaled impact of private financial transfers, and continuing trade problems—they must cooperate with one another. In some measure the two influences are complementary: If governments are to satisfy the demands of the electorate in economic and financial policies, they may have to cooperate more fully with other nations. Under the stimulus of economic nationalism, however, nations may also occasionally act *against* the multilateral cooperative framework.

Intergovernmental cooperation has slowly increased since World War II to provide for a steadily increasing level of international trade and financial stability. The gold pool, GAB, and swap arrangements were the achievements of the early sixties. SDR's and last-minute rescue operations for the dollar or the pound are the remedies of today. Yet, given the huge pool of Eurodollars and other currencies which can spill in or out of the domestic economic reservoirs of Western states, it is by no means assured that intergovernmental cooperation will be great enough to meet the need. Devaluation has often been the practical recourse, even though it represents national action against an agreed set of currency values.

American economic nationalism stimulated the U.S. moves of August 15, 1971 and February 12, 1973. The first eventually led to the

⁵⁴ *Ibid.*, 811-12; Morse, "Transnational Economic Processes" (fn. 4), 44-45.

Smithsonian Agreement of December 1971, but that agreement could not be maintained under the continued pressure of monetary speculation. A further 10 per cent devaluation of the dollar, on February 12, 1973, led to the float of European and Japanese currencies. Even after the second American devaluation, however, the dollar and a number of other currencies remained vulnerable to speculative assault. After each autarchic move, the damage to the Western trading mechanism has been patched or repaired. But it is not certain that intergovernmental cooperation will be great enough to meet all crises in the future. It is, for example, uncertain that the Common Market countries will be able to keep their currencies in fixed alignment under current pressures. Neither is it certain that the Europeans will be able to avoid import surcharges if their currencies float too high for domestic political acceptability. In this sense, the American precedent of August 1971 may now be employed by European states. The problem of speculative flows of hot money has by no means been solved.⁵⁵

Today, therefore, whether interdependence will emerge as positive or negative will depend largely on old-fashioned cooperation among governments. Governments can heed nationalistic, autarchic, or reformist demands of the citizenry. Even if they do not do so, however, the onrush of economic transnationalism is so rapid that it is not certain that governments can keep abreast of it. When antiquated forms of cooperation fail, nationalistic alternatives may be substituted.

In the international system today there is a phenomenon akin to Ernst Haas's "spill-over" in the Common Market. Nations that strive to carry out existing functions required by the exigencies of transnational flows and domestic demands must move to a higher level of cooperation. Horizontal interaction is increasing so rapidly, however, that the past apparatus of intergovernmental institutions and policy is no longer adequate. Haas presumed that, within an already partially integrated structure, this would lead to further integration of policies and institutions. Whatever the mandates of functional cooperation within customs unions, however, the international system as a whole does not prescribe

⁵⁵ See Susan Strange (fn. 47), 215; Edward L. Morse, "Crisis Diplomacy, Interdependence, and the Politics of International Economic Relations," *World Politics*, xxiv (Spring 1972 Supplement), 123-50. As many have noted, one response to the failure of agreed currency values could be to move to freely floating exchange rates. So far, however, there is little evidence that nations would not try to extract the maximum national leverage from such a situation. After August 15, 1971 and after the failure of the Smithsonian Agreement, many nations engaged in "dirty floating," supporting the dollar and preventing their own currencies from rising to market level.

such results. The failure to meet the challenge of higher necessary cooperation could mean a higher possibility of conflict. The objectives at stake are much greater than heretofore, but it is not certain that the current structure of interdependence will permit them to be achieved.

APPENDIX

TABLE A*

PERCENTAGE DISTRIBUTION OF TRADE FOR SELECTED DEVELOPED
AND LESS DEVELOPED COUNTRIES IN ACCORDANCE WITH THE
VARIOUS TYPES OF INTERCHANGE: 1954 AND 1968

		<i>Raw-Raw</i>	<i>Man-Man</i>	<i>Inv</i>	<i>Raw-Man</i>	<i>Total</i>
West Germany	1954	16	25	8	51	100
	1968	9	47	14	30	100
Japan	1954	12	16	20	53	100
	1968	5	27	1	67	100
France	1954	28	24	7	41	100
	1968	21	63	7	9	100
Italy	1954	32	41	20	7	100
	1968	16	45	2	37	100
United Kingdom	1954	11	22	16	50	100
	1968	7	54	17	22	100
United States	1954	34	26	23	17	100
	1968	26	61	7	6	100
Brazil	1954	37	1	13	49	100
	1968	37	8	7	48	100
Mexico	1954	2	28	27	44	100
	1968	16	22	22	40	100
Nigeria	1954	15	1	15	70	100
	1968	17	8	6	69	100
Panama	1954	38	1	65	-3	100
	1968	45	1	48	6	100

Raw-Raw: Exchange of foodstuffs and raw materials against foodstuffs and raw materials.

Man-Man: Exchange of manufactures against manufactures.

Inv: Exchange of commodities against "invisible items."

Raw-Man: Exchange of manufactures against foodstuffs and raw materials.

* Computed using Albert O. Hirschman's method, *National Power and the Structure of Foreign Trade* (Berkeley 1945), chap. VII. Data from *Yearbook of International Trade Statistics, 1954 and 1968* (fn. 23).

TABLE B*

PERCENTAGE OF U.S. BOOK VALUE OF DIRECT INVESTMENT
BY GEOGRAPHIC AREA: 1936, 1950, 1959, AND 1968

	1936	1950	1959	1968
Developed Countries	51.2	48.3	56.5	66.9
Canada	29.2	30.4	34.2	30.1
Western Europe	18.8	14.7	17.8	29.9
Less Developed Countries	48.4	48.6	39.1	28.8
Latin America	41.9	37.7	27.6	20.2

* The percentage not accounted for is due to a category called international, unallocated.

TABLE C

PERCENTAGE OF U.S. BOOK VALUE OF DIRECT INVESTMENT
BY CATEGORY: 1936, 1950, 1959, AND 1968

	1936	1950	1959	1968
Mining and Smelting	15.4	9.6	9.6	8.4
Petroleum	16.1	28.8	35.1	29.1
Manufacturing	25.6	32.5	32.6	40.6
Public Utilities	24.5	12.1	8.1	4.1
Trade	5.8	6.5	6.9	8.1
Agriculture	7.2	5.0	2.2	—*
Other	5.4	5.6	5.5	9.7

* No separate category

Sources for Tables B and C: *Survey of Current Business* (October 1970), 28; U.S. Department of Commerce, *U.S. Business Investments in Foreign Countries* (Washington, D.C. 1960), 92-93.

TABLE D

PERCENTAGE OF U.S. NET CAPITAL FLOWS
BY AREA: 1957 AND 1968

	1957	1968
Developed Countries	40.1	58.4
Less Developed Countries	55.5	35.7
Canada	28.9	19.5
Western Europe	11.6	31.2
Latin America	46.9	21.1

TABLE E
 PERCENTAGE OF U.S. NET CAPITAL FLOWS
 BY CATEGORY: 1957 AND 1968

	1957	1968 (preliminary)
Mining and Smelting	8.0	1.7
Petroleum	56.7	33.3
Manufacturing	17.4	36.5
Public Utilities	7.7	*
Trade	1.7	*
Finance and Insurance	7.8	*
Miscellaneous	.6	28.4

* No separate category

Sources for Tables D and E: *Survey of Current Business* (October 1970), 29; U.S. Department of Commerce, *U.S. Business Investments in Foreign Countries* (Washington, D.C. 1960), 137.

TABLE F
 INDEX OF U.S. FOREIGN AND DOMESTIC SECTOR
 IN MANUFACTURING IN 1968
 (1957 = 100)

Manufacturing Exports	189	
Sales by Direct Manuf. Affiliates	326	
Total Foreign Sales		262
U.S. Value Added by Manuf.	193	
U.S. Manuf. Sales	175	

Sources:

Domestic Sales: United States Government, *Economic Report of the President* (1972), 244;

Value Added: 1957: U.S. Bureau of the Census, *Annual Survey of Manufactures 1966* (Washington, D.C. 1969), 11; 1968: *Annual Survey of Manufactures 1968* (Washington, D.C. 1971), Press Release #M68 (AS-6), 1 & 2;

Manuf. Exports: *U.S. Statistical Abstract* (1970), 480; *U.S. Statistical Abstract* (1963), 875;

Sales by Affiliates: *Survey of Current Business* (October 1970); U.S. Department of Commerce, *U.S. Business Investments in Foreign Countries* (Washington, D.C. 1960), 110.

TABLE G

EARNINGS ON DISTRICT FOREIGN INVESTMENTS AND FOREIGN EARNINGS
AS PERCENTAGE OF DOMESTIC CORPORATE PROFITS

	<i>Earnings on Direct Foreign Investments*</i>		<i>Foreign Earnings as Percentage of Domestic Profits</i>
	<i>Million \$</i>	<i>Index (1950 = 100)</i>	
1950	1,892	100	9
1951	2,365	125	13
1952	2,457	130	15
1953	2,386	126	15
1954	2,534	134	16
1955	3,036	160	14
1956	3,527	186	16
1957	3,799	201	18
1958	3,260	172	19
1959	3,589	190	16
1960	3,969	210	19
1961	4,278	226	21
1962	4,815	254	20
1963	5,247	277	20
1964	5,827	308	19
1965	6,384	337	17
1966	6,732	356	16
1967	7,170	379	19
1968	8,268	437	22
1969	9,497	502	28

* Earnings category was obtained by adding (1) earnings of U.S. direct investment abroad, and (2) direct investment receipts of royalties and fees. Income from other (non-direct) private assets has *not* been included.

Sources:

Profits: 1950-1962: *Survey of Current Business*, September 1965, 53; 1962-1963: *ibid.*, July 1966, 5; 1964: *ibid.*, July 1968, 24; 1965-1966: *ibid.*, July 1969, 22; 1967-1970: *ibid.*, July 1971, 18.

Royalties and fees: *ibid.*, June 1970, 34-35.

Earnings of U.S. direct investments abroad: 1950-1959: *Balance of Payments Statistical Supplement*, rev. ed. (Washington, D.C.: U.S. Department of Commerce, Office of Business Economics, 1963), 184; 1960: *Survey of Current Business*, August 1962, 22-23; 1961: *ibid.*, August 1963, 18-19; 1962: *ibid.*, August 1964, 10-11; 1963-1970: *ibid.*, October 1971, 28-29.

TABLE H
NET* ESTIMATED SIZE OF EUROCURRENCY MARKET
(IN BILLIONS OF DOLLARS)

	<i>Eurodollar Market</i>	<i>All Eurocurrencies</i>
1964	9.0	**
1965	11.5	**
1966	14.5	**
1967	17.5	**
1968	25.0	**
1969	37.5	44.0
1970	46.0	57.0
1971	54.0	71.0

* Net of interbank deposits within Europe. However, net includes banks' assets and liabilities vis-à-vis their own countries (foreign currency position vis-à-vis residents).

** Not estimated by B.I.S.

Source: *Bank for International Settlements*

1964-68 Eurodollar: *Thirty-Ninth Annual Report* (Basle 1969), 149;

1969-70 Eurodollar: *Forty-First Annual Report* (Basle 1971), 164;

1969-71 Eurocurrency: *Forty-Second Annual Report* (Basle 1972), 155;

1971 Eurodollar: *Forty-Second Annual Report* (Basle 1972), 148.

TABLE I
INTERNATIONAL RESERVES
(BILLIONS OF DOLLARS, END OF YEAR)

	1945	1955	1965	1971
Gold	33.3	35.8	41.4	39.2
of which: U.S.	(20.1)	(21.8)	(14.1)	(11.1)
Foreign Exchange	14.3	17.0	23.0	79.5
of which: U.S. \$	(4.2)	(8.3)	(15.9)	(51.1)
£ Sterling	(10.1)	(7.6)	(6.7)	(7.8)
Gold <i>Tranche</i> position at the IMF	—	1.9	5.4	6.9
SDR's	—	—	—	6.4
Total	47.6	54.7	69.8	132.0
Addendum:				
World Exports	34.2	84.0	165.4	334.0*

* Estimated quarterly data expressed as annual rate.

Sources: For 1945, 1955, and 1965, Richard N. Cooper, *The Economics of Interdependence* (New York 1968), 51; for 1971, *International Financial Statistics* (September 1972).