

CHAPTER Ee

International Trade and Exchange Rates

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INTERNATIONAL TRANSACTIONS AND FOREIGN COMMERCE

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Throughout the history of the United States, the balance of trade, the overall balance of payments, the foreign purchase of American assets, the American purchase of foreign assets, and the exchange value of the dollar have been major political concerns. The statistics presented in this chapter describe the international economic relations of the United States and help to provide a context for evaluating these historical and modern controversies. These statistics are presented in three separate sections. The first section presents summary information on U.S. international transactions (Tables Ee1–361). Included are data on the balance of international payments, the international investment position of the United States, and the U.S. government foreign grants and credits. The second section offers detailed statistics on the type and location of U.S. trade in goods and services (Tables Ee362–611). Exchange rate data are presented in the final section (Tables Ee612–683).

Colonial Era

From its first years as a region of European exploration, settlement, and colonization, the Atlantic coastal area of the North American continent engaged in a relatively high level of trade in goods and services. Although not the source of the gold, silver, and spices that filled the imaginations of the early European explorers, the region's tobacco, shipping services, bread and flour, rice, fish, ships, and other exports proved highly salable in Great Britain and the West Indies (Walton and Shepherd 1998, pp. 101, 194–5), placing the thirteen British colonies among the world's leading exporters, more than twice as trade-oriented as Europe itself (Lipsey 2000, p. 685). As a rough estimate, exports were 15–20 percent of colonial gross national product (GNP) in 1770. Colonial exports reflected the relative abundance of natural resources of the region's land, forests, and seas. Imports, on the other hand, were largely manufactured goods from Great Britain. On average, the overall balance on current account of the thirteen colonies from 1768 to 1772 produced a small deficit, perhaps 0.15–0.20 percent of GNP (Walton and Shepherd 1998, p. 87). The substantial goods deficit, made larger by payments for indentured servants and slaves, was almost offset

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by colonial ship sales, shipping and mercantile service earnings, and British military and civil expenditures.

The Republic's First Century

With the American revolution and independence, the new nation lost its special place in the British empire. Trading volumes and partners were further disordered from 1791 to 1815 by trade embargoes and other disruptions associated with the French revolution and the long European war. Yet, even before the Napoleonic Wars ended in 1815, the structure of U.S. international transactions for most of the nineteenth century had emerged.

Trade as a share of the American economy in the nineteenth century was lower than in the colonial era. Table Ee-A presents the trends in annual U.S. international transactions, averaged by decade. As in the standard international accounting framework, the net balances on goods, services, investment income, and unilateral transfers are summed into the overall balance on current account. The balance on current account is conceptually very similar to the net export component of GNP. When the balance on current account is positive, it represents American savings flowing into the purchase of foreign assets; when it is negative, it represents foreign savings flowing into the purchase of American assets. Figure Ee-B displays the annual balance on current account as a percentage of GDP from 1840 to the present. Longer-term trends in the balance on current account as a percentage of GDP are indicated with decadal averages in Table Ee-A.

From the 1810s to the 1870s, the average decadal share of goods exports in GNP varied from 5.3 percent to 6.3 percent, while the average decadal share of goods imports ranged a bit higher, 5.6 percent to 6.7 percent. Through the 1870s, the United States tended to import goods more than it exported goods, thus producing a deficit on the net goods account. The net service account was positive, dominated by earnings from American shipping services, sometimes nearly covering the net deficit on the goods trade. The early negative balance on investment income was the consequence of the new federal government's decision to pay the debts of its thirteen states from the revolutionary period and the willingness of foreign investors to buy a portion of the new nation's debt instruments.

Summing the net goods, net service, net investment income, and infrequent unilateral transfers accounts, the current account for the first seven decades of the republic showed an average tendency to deficit. The deficit tended to grow larger from the 1820s onward as the trade in goods began to rely on foreign shippers more heavily. In addition, from the 1830s onward, interest payments to foreign lenders began to rise as American state governments and private enterprises raised a portion of their finance for financial and social overhead capital formation abroad. The annual rate of

TABLE Ee-A U.S. international transactions – annual averages by decade: 1790–1998

Decade	Balance on goods account Million dollars	Balance on service account Million dollars	Balance on investment income account Million dollars	Unilateral transfers Million dollars	Balance on current account	
					Amount	As a percentage of GDP
					Million dollars	Percent
1790–1799	–10	12	–5	—	–2	—
1800–1809	–19	24	–5	—	–1	—
1810–1819	–23	18	–5	—	–10	—
1820–1829	–4	8	–5	—	0	—
1830–1839	–25	7	–7	5	–21	—
1840–1849	2	8	–9	8	8	0.4
1850–1859	–9	–5	–17	13	–19	–0.5
1860–1869	–19	–16	–43	2	–77	–1.0
1870–1879	93	–29	–89	–5	–30	–0.4
1880–1889	103	–59	–93	–23	–71	–0.5
1890–1899	263	–71	–129	–50	13	0.0
1900–1909	569	–178	–74	–139	177	0.8
1910–1919	1,952	–390	104	–283	1,382	2.6
1920–1929	1,117	–339	656	–415	1,019	1.2
1930–1939	449	–263	395	–226	355	0.4
1940–1949	6,658	75	645	–5,838	1,540	0.7
1950–1959	2,934	202	2,547	–5,081	602	0.1
1960–1969	4,082	–897	4,877	–4,729	3,333	0.5
1970–1979	–10,383	2,170	14,762	–6,863	–315	0.0
1980–1989	–93,862	9,066	26,280	–20,051	–78,567	–1.7
1990–1998	–154,065	66,771	15,709	–32,806	–104,392	–1.4

Sources

Balance on goods account: series Ee3. Balance on service account: series Ee7 minus series Ee3. Balance on investment income account: series Ee10. Unilateral transfers: series Ee11. Balance on current account: series Ee12. Gross domestic product: series Ca10.

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The balance on current account equals the sum of the first four columns shown in this table – that is, the sum of series Ee7 and Ee10–11.

U.S. borrowing was not very large in these decades. Robert Lipsey found that net foreign claims as a percentage of the domestic capital stock fell from 12.9 percent in 1774 to 6.2 percent in 1840, dropping further in the 1840s and 1850s but rising with the Civil War to 6.9 percent (Lipsey 2000, p. 695).

Late Nineteenth Century to the Mid-Twentieth Century

A somewhat different configuration of U.S. international transactions began to emerge in the 1870s, which eventually shifted the nation to a net surplus on current account in the 1890s, a circumstance that lasted until the 1970s. Starting in the 1870s, the United States exhibited an increasingly positive net goods account, driven most strongly by the manufactured products of America's industrialization (see Tables Ee416–417 and Ee446–457). Semi-manufactured and manufactured goods were around 15 percent of U.S. exports in 1860; by 1910, they were around 50 percent. In 1860, almost 60 percent of imported goods were in the semimanufactured and manufactured categories; by 1920, such imports had fallen to around 30 percent.

At first in the 1870s and 1880s, the positive balance on the merchandise account was offset by increased deficits in the net service and net investment income accounts. The net service account deficit grew with the larger trade volumes carried by foreign ships and as American tourism became significant. The net investment income account also moved more strongly into deficit as, first, the federal government borrowed abroad during the Civil War, and then, after the Civil War, American railroad companies utilized European capital markets to finance a portion of their renewed capital formation.

However, by the late 1890s, the rising tide of American exports produced substantial overall surpluses on current account. This, in turn, meant that in most years through 1913 the United States lent more abroad than foreign investors lent to the United States. The United States's investment strategy was unique among the nations that invested abroad in the late nineteenth century in that the bulk of U.S. investment abroad took the form of direct investment rather than portfolio investment. Cleona Lewis estimates that in 1897, when the stock of U.S. investment abroad totaled \$684.5 million, \$634.4 million were direct investments; by 1914, of the \$3,513.8 million invested abroad, \$2,562.3 million were

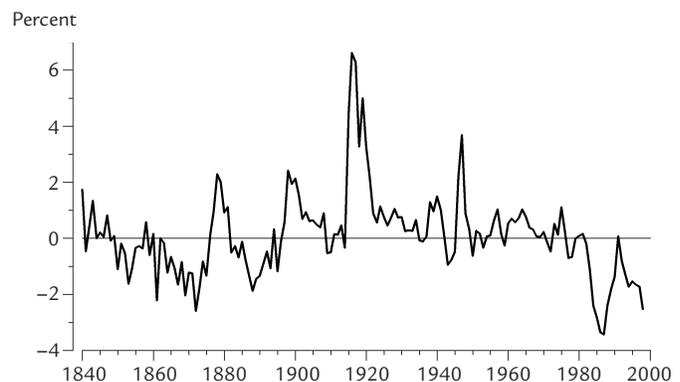


FIGURE Ee-B U.S. balance on current account as a percentage of gross domestic product: 1840–1998

Sources

Balance on current account: series Ee12. Gross domestic product: series Ca10.

direct investments (Lewis 1938, p. 605). Soon after the Civil War, certain American businesses began to launch overseas subsidiaries or branches. Often these firms had first established national markets in the United States, selling unique products that were produced with the “American system of manufacturing” (Wilkins 1970, p. 35; Lewis 1938, pp. 300–1).

Yet, as of 1914, the United States remained a net debtor – that is, the accumulated stock of foreign-owed American assets, \$7,200 million, still exceeded the accumulated stock of U.S.-owned foreign assets, \$3,513.8 million (Table Ee23–36). Then, the huge cost of World War I to the European belligerents catapulted the United States into net creditor status. The goods demands of the European belligerents drove up American net exports immediately. The net surplus was covered by American stocks and bonds commandeered by European governments and sold to U.S. residents, by new borrowing in U.S. capital markets, and, after 1917 when the United States entered the war, with loans from the U.S. government. Lewis estimates that by the close of 1919, the negative \$3,686 million net investment position of 1914 had become a positive net investment position of \$12,562 million, \$9,591 million of which was the net owed to the U.S. government (Lewis 1938, p. 447). Coinciding with the turn of the United States from net debtor to net creditor, the annual net investment income account also turned positive in the 1910s.

For the next five decades through 1970, the annual overall balance on current account was typically positive. At first the net goods account provided the dominant weight. As in the period from 1860 to World War I, the strength of American manufacturing exports sales was the major force determining the goods account surplus (Table Ee416–417). Then, in the 1950s and 1960s, the surplus on the net goods account was joined by a large jump in the net surplus in investment income account. Moving in the opposite direction, however, was a very substantial negative net annual outward flow in unilateral transfers, which first appeared during World War II, dominated by military and civilian aid (Table Ee166–361).

The overall surplus on current account took the form of a strong net outward movement of American capital. In the 1920s, both direct and portfolio American investment abroad expanded, moving most heavily to Europe, Canada, and the Americas. The Great Depression in the 1930s saw a sharp reversal of these trends, with a substantial fraction of the overseas portfolio investment of the 1920s liquidated or defaulted by 1935. Indeed, in the late 1930s, the United States saw a surge of flight capital from a riskier and more uncertain Europe.

After World War II, the overall surplus on current account reemerged, which meant the dominant movement of the capital account was again toward net investment abroad. Yet, it is also the case that the *gross* movements of both American investment abroad and foreign investment in the United States were large. From 1945 to 1970, U.S. residents acquired an additional \$130 billion in assets abroad, 54 percent in direct investments, 17 percent in long-term securities, 11 percent in private short-term assets, and the rest in U.S. government-owned assets. Over the same period, foreign residents acquired an additional \$80 billion in U.S. assets: 13.4 percent in direct investments, 37 percent in long-term securities, 28 percent in private short-term assets, and the rest in foreign government-owned assets. Clearly, Americans tended to own longer-term investments, particularly direct investments, while foreigners tended to hold long- and short-term paper assets (Branson 1980, pp. 236–48).

1970s to the 1990s

The 1970s were a turbulent decade for U.S. international transactions. The average annual balance on current account for the decade was negative, but this average is based on years of both negative (1971–1972, 1976–1979) and positive (1970, 1973–1976) overall balances. Again the overall balance was briefly positive (1980–1981), but thereafter to the present, excepting only 1991, the annual balance on current account was in deficit. The exceptional surplus in 1991 was partly the result of a large spike in unilateral transfers from the Gulf States and others for American military services and equipment during the Gulf War.

The tendency toward overall deficit in the 1970s had its origins in the net goods account. The net goods deficit, in turn, was dominated by a sharp rise in goods imports, largely a result of the rising cost of petroleum imports (Tables Ee418–423 and Ee590–611). Total goods exports contracted sharply in the 1980s, dropping from 8.1 percent of GDP in 1980 to 5.1 percent in 1986, and then rebounded slowly in the late 1980s and 1990s (series Ca10 and Ee419). U.S. manufacturing exports were a significant element in both the contraction and the slow rebound. Nevertheless, in the 1990s, the net goods account deficit increased, the dominant movement stemming from a broad-based increase in manufactured goods imports (Table Ee418–423).

In the 1970s, economists became less certain that the U.S. Department of Commerce distinction between short-term and long-term financial assets in the U.S. balance of payments accounting was meaningful. With the increasing globalization of financial markets, it was no longer clear that long-term financial assets (for example, bonds of one or more year’s maturity) were being held for long periods. Indeed, the Commerce Department began a reform of its accounts that ended the distinction between short-term and long-term financial assets and focused more on which types of institutions held foreign assets.

The Commerce Department also began to invest considerably more resources in improving the evaluation of both U.S.-owned assets abroad and foreign-owned assets in the United States. Through 1924, the Commerce Department’s estimates of foreign-owned U.S. assets and U.S.-owned foreign assets relied on Lewis, who evaluated equity shares at market value and direct investments and bonds at book or par value (Lewis 1938). For the data after 1924, the Commerce Department itself evaluated financial assets at market value but direct investment at book value (Eichengreen 2000). The reforms and revisions beginning in the mid-1970s led to a more comprehensive and rigorous accounting of the nation’s net investment position for the years 1976 to the present, with separate market and current-cost estimates of the investment position (Table Ee72–131).

The movement to annual overall deficits on current account that started in the 1970s meant that foreign residents were annually acquiring more U.S. assets than American residents were annually purchasing abroad. By 1986 on a current-cost basis, or by 1989 on a market-cost basis, the stock of foreign-owned U.S. assets exceeded the stock of U.S.-owned foreign assets, making the United States a debtor in its net investment position. Another consequence was that by the late 1990s, the net balance on investment income turned negative for the first time since 1914.

The period since 1970 has also seen shifts in the types of international investment, both inflows and outflows (Table Ee37–71). From more than 50 percent of U.S. overseas assets in 1970,

direct investment fell to around a quarter by the end of the 1990s, with foreign security holdings and deposits in overseas branches of U.S. banks rising sharply. Foreign-owned investments in the United States also altered in character, acquiring relatively less direct investments and private U.S. securities and more U.S. government obligations, currency, and bank deposits.

In the first decades of the post-World War II era, U.S. direct investment abroad focused on petroleum and manufacturing facilities, amounting to almost 70 percent of U.S. total direct investments abroad (Table Ee72–131) (see also Lipsey 1988). Thereafter, both declined so that by 1998 these two sectors represented around 50 percent of U.S. direct investments abroad while finance and banking accounted for 39 percent. Foreign direct investment in the United States shifted in similar directions, in the period up to 1970 toward petroleum and manufacturing and afterward away from these sectors and toward finance and insurance (Table Ee132–165) (see also Lipsey 1993).

Throughout the 1950s and 1960s, Canada remained a target for around 30 percent of U.S. direct investment, while Europe rose from around 15 percent in 1950 to 34 percent in 1970. In the same years, Latin America dropped from 39 percent to 17 percent, while the Middle East rose from 6 percent to 12 percent. Since 1970, Canada has become a much smaller recipient of U.S. direct investment, falling to 11 percent of the total in 1998. Europe is now the host of 50 percent of U.S. direct investment. With shifts in the ownership of petroleum resources in the 1970s, the Middle East and Africa have dropped to 3 percent, their place taken by a significant increase to 17 percent in the share of Asia and the Pacific.

The countries dominating direct investment in the United States in the 1950s and 1960s were the United Kingdom, Canada, Switzerland, and the Netherlands, making up 80–85 percent of all foreign direct investment in the United States. In the decades since 1970, however, these countries' combined share fell to 46 percent in 1998. The major new direct investors in the United States in 1998 were Germany (12 percent) and Japan (16 percent).

For most of the nineteenth century, the value of the U.S. dollar was fixed in terms of gold, as were the currencies of its major trading and investing partners (Tables Ee612–620). The terms of trade of goods and services, of course, fluctuated owing to changes in productivity, factor prices, tariffs, and the like (Table Ee431–445). Only in the “greenback era” (1862–1879) did the U.S. dollar float freely against the currencies of its major trading and investment partners. From 1879 to 1971, the U.S. dollar operated under a gold standard in some form (except for the paper standards, yielding floating exchange rates, during 1917–1922 and 1933–1934), the only change in its gold value occurring in 1934. Still, the currency disruptions for many countries stemming from World War I and its aftermath, the Great Depression of the 1930s, and World War II meant that bilateral exchange rates with major and minor trading and investment partners were subject to substantial fluctuations and shifts (Table Ee621–636). In separate steps in 1971 and 1973, the United States moved to a floating exchange regime with major consequences for its bilateral exchange values (Tables Ee621–678) and its overall average trading values (Table Ee679–683). Broad indexes of the foreign exchange value of the dollar show a fairly steady appreciation trend since the beginning of the floating exchange era in 1973.

The switch from fixed to floating exchange rates in the early 1970s meant that the overall balance on current account conveys different kinds of information about the state of the nation's international transactions. Under the fixed exchange rate regime that

widely prevailed before the early 1970s, changes in the international economy were reflected in the overall balance on current account and its subcomponents, that is, in the dollar balances. With the move to flexible exchange rates in the early 1970s, changes in the international economy became reflected in shifts in exchange rates as well as shifts in the dollar balances of the international accounts. For example, under fixed exchange rates, the extent of an overall surplus or deficit balance of payments can signal whether the currency is “undervalued” or “overvalued.” Under a relatively unmanaged floating exchange rate regime, a deficit may not communicate anything about competitiveness of U.S. trade and the like, particularly because the dollar has been highly valued as a world currency since the late twentieth century. When a currency becomes more rigidly managed by a government or monetary authority (that is, floats less freely), the definition and interpretation of the overall balance of payments becomes more difficult (Eichengreen 2000). What is clear is that study of the patterns of international economic problems and the pressures under the current flexible exchange rate regime should combine examination and analysis of the patterns of both international transactions and exchange rates.

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INTERNATIONAL TRADE IN GOODS AND SERVICES

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Statistics on U.S. international trade in goods and services are presented in Tables Ee362–611. Separate tables show the value of U.S. trade (exports and imports) in goods and services, the value of that trade in relation to gross domestic product, different breakdowns of that trade in terms of class of good being exchanged, price and quantity indicators of trade, and the primary trading partners of the United States.

The character of U.S. international trade has changed considerably over the course of the nation's history. For most of the nineteenth century, America's exports consisted largely of