# Appendix IV

### An Overview of World Goods and Services Trade

An overview of the size and composition of U.S. and world trade is useful to provide perspective for the large U.S. trade and current account deficits and to identify the large and vital role of U.S. trade in world trade and economic growth.

World trade involves the exchange of both goods and commercial services among nations. Goods (merchandise) trade is the movement of tangible goods (agricultural products, mining products, and manufactures) across national borders. Services trade includes a wide variety of international receipts and payments (sometimes referred to as "invisibles") resulting from transportation services, travel services, professional services, and a number of other private commercial services.

In dollar value terms, goods exports account for about four-fifths of total world trade; services for about one-fifth. International trade deficits and surpluses are the imbalance that result when a nation's exports and imports of goods and services are not equal. In addition to trade in goods and services, international transactions reported in a nation's current account include payments and receipts that are international investment income (such as interest and dividends on cross- border investments), as well as unilateral transfers (such as foreign aid, pensions, and charitable contributions). International current account deficits and surpluses are the imbalances that result when a nation's receipts from exports of goods and services, investment income, and unilateral transfers do not equal its payments for imports of goods and services, investment income, and unilateral transfers.

According to World Trade Organization data, total world exports of goods and services in 1998 totaled \$6.74 trillion, up by 95 percent from the 1988 total of \$3.46 trillion. Merchandise (goods) exports of \$5.42 trillion were 80 percent of the 1998 goods and services total, down modestly from the 83 percent 1988 share, indicating a slightly more rapid growth of services exports.

The division of trade between goods and services varies among countries. In 1998, services were 23.6 percent of U.S. exports, a relatively high portion compared to other major trading nations and above the world average of 19.6 percent. On the import side, services were 15.3 percent of total U.S. imports, compared to the world average of 19.7 percent. Tourism (travel) is a major services export for a number of countries. For some small countries that are major international tourist destinations, travel receipts make services a large portion of their total exports. Examples include Greece, services, 63.1 percent of goods and services exports; Turkey, 42.6 percent; and Austria, 34.1 percent.

Growth in the exchanges of both goods and services has consistently exceeded the growth of world production in recent decades. Turning first to goods trade, WTO data indicate that from 1990 to 1998 the volume of merchandise (goods) exports increased at an annual 6.5 percent rate, more than treble the 2.0 percent annual gain in world goods production, demonstrating the increasing importance of international trade to the world economy.

WTO data divide goods exports and imports into three broad categories: agricultural products, mining products, and manufactures. The data show rapid growth of world goods (merchandise) trade and expanding dominance of the manufactures portion. In dollar value terms, WTO data show that world merchandise trade grew by 6.0 percent annually over the 1990 to 1998 period; agricultural products by 4 percent, mining products by 5 percent, and manufactures by 7 percent. On a geographic basis, merchandise export growth rates for the period were highest for two key U.S. trading partners; Mexico (14.1 percent) and China (14.5 percent).

The growth of world services trade has also been rapid. Dollar value exports of commercial services grew over the 1990-98 period at a 7 percent annual rate, slightly faster than the 6 percent total goods rate but equivalent to the 7 percent manufactures growth rate.

The key components of world services trade are transportation, travel, and other commercial services. In 1998, at \$310 billion, exports of transportation services were 23 percent of the total world services exports; at \$430 billion, travel services exports were 33 percent of the total. "Other commercial services" was the largest component, \$580 billion, or 44 percent of total. These "other commercial services" include construction, communication, insurance, financial, computer and information services, and a wide variety of other business, professional, and technical services and royalties, as well as receipts from license fees.

## Key players in world trade

WTO data show that the United States, with a 12.6 percent share, was the world's largest merchandise exporter in 1998, followed by Germany (10.0 percent) and Japan (7.2 percent). The United States (16.8 percent) and Germany (8.3 percent) were also the top 1998 importers. The 3.6 percent difference in the share of U.S. imports over exports reflects the large U.S. merchandise trade deficit. Japan, although the world's second largest economy, ranked only fifth (5.0 percent of the world total) in imports, behind the United Kingdom (5.6 percent) and France (5.1 percent). Japan's 1.2 percentage difference in the share of exports over imports results from large merchandise trade surpluses.

The bulk of international trade involves only a few countries. WTO data indicate that the top ten countries accounted for 59 percent of 1998 goods exports and 59 percent of imports. The top twenty countries accounted for 79.2 percent of exports and 77.1 percent of imports.

<sup>&</sup>lt;sup>1</sup> World Trade Organization, 1999 Annual Report (Geneva, Switzerland: World Trade Organization).

Noteworthy are the changing merchandise trade export and import shares of some countries and regions. Asia's share of world goods exports increased from 21.8 percent in 1990 to 24.5 percent in 1998, notwithstanding a decline in Japan's share from 8.5 to 7.4 percent. China's share of world exports rose from 1.8 percent to 3.5 percent. The Asian share of world imports declined over the same period, from 20.3 percent to 19.9 percent, with Japan's share declining from 6.8 percent to 5.1 percent.

World services trade is also dominated by a relatively few countries. The United States is the world's largest exporter and importer of commercial services, with 1998 shares of 18.2 percent and 12.7 percent, respectively. The United Kingdom is the second-ranking services exporter, 7.6 percent of the 1998 world total. The top ten services trading countries made 61 percent of 1998 world services exports and 58 percent of services imports.

### Importance of trade to individual countries

International trade has been increasingly important to the overall economic performance of most nations. U.S. goods and services exports as a percent of GDP rose from 9.9 percent in 1992 to 11.6 percent in 1997, and declined to 11.0 percent in 1998. (see Table IV.1). Imports increased from 10.5 percent of GDP in 1992 to 12.9 percent in 1997 and 1998 (see Table IV.2).

Table IV.1: Exports of Goods and Services, 1992-1998

Exports of Goods & Services (Percent of GDP)

|                                     | 1992      | 1993      | 1994  | 1995      | 1996  | 1997  | 1998  |  |
|-------------------------------------|-----------|-----------|-------|-----------|-------|-------|-------|--|
| United States                       | 9.9       | 9.8       | 10.1  | 10.9      | 11.1  | 11.6  | 11.0  |  |
| Canada                              | 27.3      | 30.7      | 34.8  | 38.8      | 40.0  | 39.3  | 41.1  |  |
| Japan                               | 10.3      | 9.5       | 9.5   | 9.6       | 10.2  | 11.4  | 11.5  |  |
| France                              | 24.1      | 22.8      | 25.4  | 23.4      | 23.5  | 25.9  | 26.7  |  |
| Germany                             | 25.2      | 23.4      | 24.3  | 25.1      | 25.5  | 28.0  | 29.0  |  |
| Ireland                             | 60.2      | 64.9      | 69.6  | 75.2      | 75.9  | 78.3  | 84.5  |  |
| Italy                               | 19.4      | 22.5      | 24.1  | 27.2      | 26.2  | 26.8  | 26.5  |  |
| Netherlands                         | 54.7 53.5 |           | 55.2  | 56.1      | 57.4  | 60.7  | 59.2  |  |
| Switzerland                         | 41.5 40.9 |           | 40.3  | 40.3 40.1 |       | 47.0  | 46.0  |  |
| United Kingdom                      | 23.7      | 25.4      | 26.5  | 28.4      | 29.2  | 28.5  | 26.5  |  |
| Australia                           | 17.7      | 18.3      | 18.1  | 19.0      | 19.3  | 20.5  | 19.8  |  |
| China                               | 16.8      | 20.1      | 22.0  | 21.0      | 20.9  | 22.9  | 21.5  |  |
| India                               | 9.2       | 9.4       | 9.5   | 10.1      | 10.3  | 10.4  | n.a.  |  |
| Korea                               | 27.6      | 27.6 27.5 |       | 30.1      | 29.5  | 34.6  | 48.9  |  |
| Malaysia                            | 76.9      | 82.0      | 91.3  | 95.5      | 92.2  | 94.9  | n.a.  |  |
| Singapore                           | 168.6     | 167.4     | 173.2 | 177.2     | 170.4 | 168.9 | 152.4 |  |
| Thailand                            | 37.1      | 37.8      | 38.8  | 41.8      | 38.6  | 48.6  | 59.2  |  |
| Argentina                           | 6.7       | 7.0       | 7.5   | 9.7       | 10.5  | 10.6  | 10.4  |  |
| Brazil                              | 10.2      | 9.9       | 9.0   | 7.5       | 6.8   | 7.4   | 7.6   |  |
| Mexico                              | 15.3      | 15.2      | 16.9  | 31.2      | 32.4  | 30.3  | 31.2  |  |
| Source: International Monetary Fund |           |           |       |           |       |       |       |  |

Appendix IV - Overview of world goods and services trade

Total trade, relative to GDP, is larger for most of our trading partners than it is for the United States. In 1998, Canada's exports were 41.1 percent of its GDP, up from 27.3 percent in 1992; imports were 39.8 percent of GDP, up from 27.5 percent in 1992. Over the same period, Mexican exports grew from 15.3 percent of GDP to 31.2 percent; imports from 20.4 percent to 33.4 percent. These large increases may reflect in part the effects of the North American Free Trade Agreement.

Japan's 1998 exports were 11.5 percent of GDP, only slightly above the 11.0 percent U.S. figure. Japan's imports in 1998, however, were only 9.0 percent of GDP.

Table IV.2: Imports of Goods and Services, 1992-1998

|               | (Percent of GDP) |       |       |       |       |       |       |
|---------------|------------------|-------|-------|-------|-------|-------|-------|
|               | 1992             | 1993  | 1994  | 1995  | 1996  | 1997  | 1998  |
| United States | 10.5             | 10.9  | 11.5  | 12,3  | 12.5  | 12.9  | 12.9  |
| Canada        | 27.5             | 30.2  | 32.9  | 34.2  | 34.4  | 37.6  | 39.8  |
| Japan         | 8.1              | 7.2   | 7.4   | 8.2   | 9.7   | 10.3  | 9.6   |
| France        | 22.5             | 20.9  | 21.1  | 21.5  | 21.5  | 22.7  | 23.6  |
| Germany       | 25.5             | 23.0  | 23.7  | 24.3  | 24.4  | 26.6  | 27.3  |
| Ireland       | 52.7             | 54.5  | 60.0  | 64.1  | 64.8  | 66.0  | 72.7  |
| Italy         | 19.4             | 19.2  | 20.5  | 23.0  | 21.1  | 22.7  | 23.1  |
| Netherlands   | 50.8             | 47.8  | 49.2  | 50.0  | 51.2  | 53.8  | 53.0  |
| Switzerland   | 37.8             | 36.1  | 35.3  | 35.5  | 36.9  | 41.6  | 41.3  |
| Australia     | 18.0             | 18.8  | 19.5  | 20.5  | 19.5  | 20.1  | 21.6  |
| China         | 15.7             | 22.8  | 20.6  | 19.8  | 18.8  | 18.5  | 17.2  |
| India         | 10.9             | 10.6  | 11.4  | 12.8  | 13.8  | 13.5  | n.a.  |
| Korea         | 29.1             | 27.4  | 28.4  | 31.7  | 33.5  | 36.0  | 35.7  |
| Malaysia      | 75.5             | 88.1  | 92.9  | 99.5  | 91.1  | 93.5  | n.a.  |
| Singapore     | 158.7            | 159.5 | 158.2 | 161.6 | 156.8 | 150.1 | 134.6 |
| Thailand      | 41.8             | 42.3  | 44.0  | 48.8  | 45.1  | 48.6  | 48.6  |
| Argentina     | 8.4              | 9.3   | 10.6  | 10.1  | 11.0  | 12.7  | 12.9  |
| Brazil        | 7.2              | 8.0   | 8.0   | 9.0   | 8.5   | 9.4   | 9.6   |
| Mexico        | 20.4             | 19.2  | 22.0  | 28.7  | 30.4  | 30.5  | 33.4  |

Source: International Monetary Fund

European export trade-to-GDP percentages are typically considerably higher, indicating their dependence on imports of fuels, raw materials, and semi-finished goods for further processing and reexport, as well as high volumes of intra-European trade. If intra-EU trade is counted as domestic trade, rather than international trade, EU-member countries' trade-to-GDP ratios drop to a range close to the U.S. ratio.

Trade-to-GDP ratios are still higher, however, in some small, rapidly developing countries whose economic fate is even more dependent on trade. Malaysian exports in 1997 were equivalent to 94.9 percent of its GDP; Singapore's were 152.4 percent of GDP. These data reflect the high levels of exports that are produced by processing imported parts and components.

Rising trade-to-GDP portions often accompany fast economic growth in developing nations. China's exports-to-GDP ratio reached 21.5 percent in 1998, up from 16.8 percent in 1992. India's increased from 9.2 percent in 1992 to 10.4 percent in 1997.

#### The current account

The current account is the broadest measure of a nation's international flows. It provides an annual measurement of a nation's exports and imports of goods and services, plus a nation's receipts (income) from investments abroad and payments to its foreign investors, as well as unilateral international receipts and transfers. The major components of the 1999 U.S. current account are shown in Table IV.3. Goods comprise the largest component, 55.1 percent of receipts (exports) and 67.9 percent of payments (imports). The United States consistently runs large deficits in goods trade and substantial surpluses in services trade. Deficits on income payments and receipts began in 1998 and will continue and enlarge as current account deficits persist. The growth of these income deficits has been mitigated by the substantial excess of receipts from U.S. direct investments abroad over payments to foreign direct investments in the United States. Unilateral transfers, which includes grants to foreign governments and payments to pensioners and others living abroad, has no offsetting receipt account and is always a net payment.

Table IV.3: Major Components of the 1999 U.S. Current Account

|  | Billions of Dollars<br>(Rounded to the<br>Nearest Billion) | Percent of Total<br>(Rounded to the<br>Nearest Percent) |  |  |  |  |
|--|--|---|--|--|--|--|
| International Receipts                             |  |   |  |  |  |  |
| Exports of goods                                   | 684  | 56  |  |  |  |  |
| Exports of services                                | 272  | 22  |  |  |  |  |
| Income receipts                                    | 276  | 22  |  |  |  |  |
| Income received from U.S. direct investment        |  |   |  |  |  |  |
| that is included in the above                      | 119  | 10  |  |  |  |  |
| Total  | 1,232  | 100   |  |  |  |  |
| International Payments                             |  |   |  |  |  |  |
| Imports of goods                                   | 1,030  | 68  |  |  |  |  |
| Imports of services                                | <sup>,</sup> 191   | 13  |  |  |  |  |
| Income payments                                    | 295  | 17  |  |  |  |  |
| Income payments from U.S. direct investment abroad |  |   |  |  |  |  |
| that is included above                             | 56   | 4   |  |  |  |  |
| Unilateral transfers                               | 48   | 3   |  |  |  |  |
| Total payments                                     | 1,516  | 100   |  |  |  |  |
| Balance on Goods                                   | - 346  |   |  |  |  |  |
| Balance on services                                | 81   |   |  |  |  |  |
| Balance on goods & services                        | -265   |   |  |  |  |  |
| Balance on income                                  | -18  |   |  |  |  |  |
| Unilateral transfers                               | -48  |   |  |  |  |  |
| Balance on current account                         | -332   |   |  |  |  |  |
| Source: U.S. Department of Commerce, Survey of     | Current Business, July 2000.                               |   |  |  |  |  |

When a country's total exports of goods and services exceed its total goods and services imports, it is producing more goods and services than it is consuming and is exporting the balance. Conversely, a country importing more goods and services than it is exporting is producing less goods and services than it is consuming and importing the shortfall. Countries with current account surpluses, including the balances on international investment income and payments and unilateral transfers, are lending abroad. Countries with current account deficits are borrowing abroad. Table IV.4 presents the current account balances for selected nations from 1992 to 1998.

The balance of goods and services exports and imports, international investment income and payments, and unilateral transfers indicated by a nation's annual current account alters its international investment position – the net of its external assets and liabilities. However, periodic calculations of the dollar value of net international investment positions are also affected by other factors. These include exchange rate changes, changes in the market prices of a country's assets abroad, and changes in the prices of in-country assets owned by foreigners. Other things being equal, however, current account surpluses act to increase a net creditor position or decrease a net debtor position. Current account deficits decrease a net creditor position or increase a net debtor position.

Theoretically, if measurements standards and accuracy were perfect in all reporting countries, the sum of annual country current account surpluses would match the sum of deficits accrued by other countries in the same year. In fact, however, there are difficult measurement problems, and measurement standards and proficiencies are evolving and vary among individual countries. Nevertheless, the current account balances of a few major trading countries can be helpful in understanding the changing debtor/creditor roles of individual nations in the world economy.

Table IV.4: Current Account Balances, 1992-98

|                                     | Billions of U.S. Dollars |       |        |        |        |        | Change |       |
|-------------------------------------|--------------------------|-------|--------|--------|--------|--------|--------|-------|
|                                     | 1992                     | 1993  | 1994   | 1995   | 1996   | 1997   | 1998   | 92-98 |
|                                     |                          |       |        |        |        |        |        |       |
| United States                       | -50.6                    | -85.3 | -121.7 | -113.6 | -129.3 | -129.3 | -143.9 | -93.3 |
| Japan                               | 112.6                    | 131.6 | 130.2  | 111.0  | 65.9   | 94.4   | 120.7  | 8.1   |
| Canada                              | -21.2                    | -21.8 | -13.0  | -4.3   | 3.3    | -10.3  | -11.2  | 10.0  |
| Australia                           | -11.2                    | -9.8  | -17.3  | -19.6  | -15.8  | -12.6  | -17.5  | -5.3  |
| France                              | 3.9                      | 9.0   | 7.4    | 10.8   | 20.6   | 39.5   | 40.2   | 36,3  |
| Germany                             | -19.1                    | -13.9 | -20.9  | -18.9  | -5.6   | -15.2  | -3.4   | 15.7  |
| Italy                               | -29.2                    | 7.8   | 13.2   | 25.1   | 40.0   | 32.4   | 20.0   | 49.2  |
| Netherlands                         | 7.4                      | 13.6  | 17.9   | 24.2   | 22.0   | 27.7   | 19.9   | 12.5  |
| Switzerland                         | 14.2                     | 17.9  | 17.4   | 21.6   | 21.2   | 27.0   | 24.5   | 10.3  |
| United Kingdom                      | -18.2                    | -16.0 | -2.0   | -6.0   | 7      | 10.8   | .2     | 20.0  |
| China                               | 6.4                      | -11.6 | 6.9    | 1.6    | 7.2    | 29.7   | 29.3   | 22.9  |
| Korea                               | -3.9                     | 1.0   | -3.9   | -8.5   | -23.0  | -8.2   | 40.6   | 44.5  |
| Argentina                           | -5.5                     | -8.0  | -10.9  | -4.9   | -6.5   | -12.0  | -14.7  | -9.2  |
| Brazil                              | 6.1                      | 0.0   | -1.2   | -18.1  | -23.2  | -30.5  | -33.8  | -39.4 |
| Mexico                              | -24.4                    | -23.4 | -29.7  | -1.6   | -2.3   | -7.5   | -16.0  | 8.4   |
| Source: International Monetary Fund |                          |       |        |        |        |        |        |       |

Table IV.5 shows changes in the International Investment positions of the United States and several key trading nations. Notwithstanding large current account deficits in 1993 and 1994, the U.S. net debtor position shrank in those years, largely the result of a Treasury Department survey and re-benchmarking of portfolio investment values. Nevertheless, current account deficits over the period since 1981 have acted to move the United States from a positive net international investment position of \$153 billion in 1984 to that of the largest debtor nation, with a negative net international investment position of \$1.54 trillion in 1998. This is estimated to surpass \$2 trillion in 2000. As a consequence of this accumulating debt, the Investment Income component of the current account has moved from a long history of net receipts (inflows) to net payments (outflows) beginning in 1998.

Table IV.5: International Investment Positions, 1991-98

|               | Billions of U.S. Dollars |      |      |      |      |      |        |        |  |
|---------------|--------------------------|------|------|------|------|------|--------|--------|--|
|               | 1991                     | 1992 | 1993 | 1994 | 1995 | 1996 | 1997   | 1998   |  |
|               |                          |      |      |      |      |      |        |        |  |
| United States | -263                     | -455 | -180 | -174 | -423 | -548 | -1,066 | -1,537 |  |
| Japan         | 384                      | 515  | 612  | 690  | 818  | 891  | 959    | 1,153  |  |
| France        | -59                      | -36  | -50  | -8.  | -16  | -8   | 34     | 26     |  |
| Germany       | 312                      | 263  | 205  | 195  | 119  | 79   | 65     | n/a    |  |
| Italy         | -106                     | -110 | -84  | -71  | -52  | -34  | 2      | -20    |  |
| Netherlands   | 66                       | 55   | 59   | 58   | 60   | 39   | 21     | n/a    |  |
| Switzerland   | 236                      | 235  | 243  | 273  | 304  | 336  | 304    | n/a    |  |
| United Kingdo | m 6                      | 34   | 54   | 35   | 12   | -3   | -137   | -112   |  |
| Australia     | -150                     | -145 | -164 | -188 | -201 | -237 | -201   | -209   |  |
| Korea         | -3                       | -3   | -7   | -9   | N/a  | N/a  | N/a    | N/a    |  |
| Malaysia      | -17                      | - 13 | -9   | -6   | N/s  | N/a  | N/a    | N/a    |  |

Source: International Monetary Fund

Conversely, consistent large surplus positions over recent decades have transformed Japan from a debtor nation in the years after World War II to the world's largest creditor nation. At end-year 1998, the U.S. debtor position of \$1.537 trillion contrasted with Japan's \$1.15 trillion creditor position. Japan's 1998 creditor position was equivalent to about 23.3 percent of its GDP, compared to a U.S. debtor position then equivalent to about 18.1 percent of its GDP. At \$209 billion, however, Australia's debtor position was equivalent to about 57 percent of its GDP.