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The authors find, first, that the degree to which enhanced trade and financial linkages might be expected to increase the co-movement, or correlation, of economic growth among countries is far from clear. Then, examining the period from 1970 to the first quarter of 2002, the authors find that, indeed, the estimated correlation of growth across the G-7 has been higher in the current downturn than during the expansion of the 1990s. Rather than signaling a future of permanently higher synchronization, however, the rise is shown to be typical of business cycles over the past thirty years. Furthermore, estimates of correlation have not yet reached the peaks attained after earlier recessions. Overall, despite many changes in the international economy, the evidence does not reveal the arrival of a permanently higher correlation of growth rates among the G-7.

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An Investigation of Co-movements among the Growth Rates of the G-7 Countries

Brian M. Doyle and Jon Faust, of the Board's Division of International Finance, prepared this article. Jonathan R. Halket provided research assistance.

Early in 2000, after a decade of economic expansion, growth began to slow in the United States. Over the ensuing months, the growth rates of gross domestic product began to decline simultaneously in many countries, including each of the large, advanced economies that constitute what is known as the Group of Seven (G-7)—Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States. The general slide in real (inflation adjusted) GDP growth seemed striking to many, and it fueled speculation that a period was emerging in which broad movements in the economies of the industrialized countries would be more closely linked.¹ Proponents of this view argued that the increasing economic integration of the industrial economies brought about by greater trade in goods and financial markets was leading to a greater synchronization of national economies.

If correct, the view that international growth rates are now more closely tied would have important implications for the making of national economic policies. With greater co-movement of GDP, for example, governments would need to take closer account of forecasts for conditions abroad in formulating forecasts for their domestic economies.

This article examines whether the links between U.S. growth and growth of the other G-7 countries have fundamentally changed. We first document the view that economic integration has increased markedly in terms of international trade and the globali-

zation of financial markets. The degree to which these factors might be expected to increase the co-movement, or correlation, of economic growth among countries is, however, subject to debate. We turn next to characterizing the historical patterns in this correlation. Our analysis finds, indeed, that the estimated correlation of growth across the G-7 has been higher in the current downturn than during the expansion of the 1990s. However, rather than signaling a future of permanently higher synchronization, this rise is typical of business cycles over the past thirty years. Estimated correlation fluctuates widely over time and has historically risen through U.S. recessions and fallen during expansions. Furthermore, estimates of correlation have not yet reached the peaks attained after earlier recessions.

Although the correlation of growth rates among the G-7 economies does not appear dramatically different now than it was in earlier years, the variability of their growth rates over this period does seem to have generally declined.² All else equal, a fall in variability would imply increased correlation among national growth rates. We discuss the offsetting changes that have left correlation largely unchanged. Overall, despite many changes in the international economy, the evidence does not reveal the arrival of a permanently higher correlation of growth rates among the G-7.

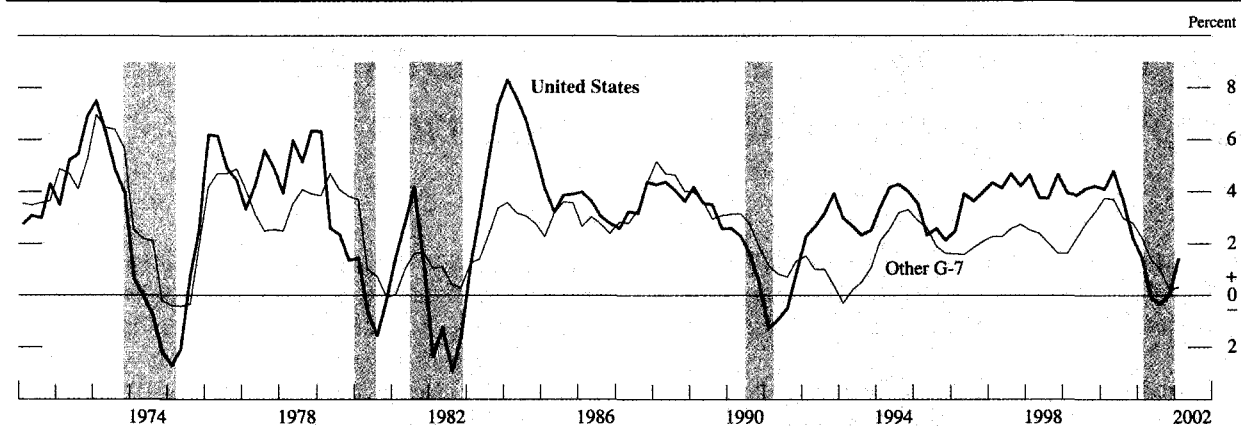
WHY CORRELATION MAY HAVE CHANGED

The growth rates of national economies fluctuate through time, and the growth rates of the G-7 economies often move similarly to each other but not in lockstep (chart 1). Fluctuations in growth in any economy may arise because of changes in factors such as the productivity of labor and capital, economic policy, business investment spending, and consumption and savings decisions. These changes are called shocks to economic growth. Shocks can give rise to co-movements in growth among countries in

1. Discussions of this view appeared in the *Washington Post*, July 18, 2001, p. A1; the *New York Times*, August 20, 2001, p. A1, and November 25, 2001, p. A12; and the *Economist*, August 23, 2001, pp. 22–24. Also see Thomas Daalgaard, Jorgen Elmeskov, and Cyn-Young Park, "Ongoing Changes in the Business Cycle—Evidence and Causes," Organisation for Economic Co-operation and Development (OECD), Economics Department Working Paper 315 (2002); International Monetary Fund, "Business Cycle Linkages Among Major Advanced Economies," in *World Economic Outlook* (October 2001), pp. 65–79; International Monetary Fund, "Recessions and Recoveries," *World Economic Outlook* (April 2002), pp. 104–37; OECD, *OECD Economic Outlook*, no. 70 (December 2001), pp. 4–5, and no. 71 (June 2002), pp. 141–58.

2. Japan, which had a protracted period of slow growth during the 1990s, is an exception to this conclusion.

1. Change in real GDP in the United States, and the average change in the other G-7 countries, 1971–2002:Q1



NOTE. The data are quarterly and change is for four quarters. The Group of Seven (G-7) countries are Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States. Shaded bars are periods of recession in the United States as defined by the National Bureau of Economic Research (NBER). Although the shaded bar for the most recent recession ends at

December 2001, the NBER has not, as of this writing, chosen an end-date for that recession.

SOURCE. Here and in the following charts, GDP data are from Haver Analytics.

two basic ways: through linkages among economies and through simultaneous incidence of the shocks. First, a shock arising in one country can be transmitted through various economic and financial linkages to another country. Second, a shock may directly affect several countries at once; a widespread drought, for example, might cause a simultaneous fall in agricultural output in many countries, even in the absence of any linkages across borders.

The reasons that the correlation of economic growth across nations could increase can also be grouped into two types concerning linkages and simultaneous incidence. First, the structure of the world economy could change so that shocks affecting one or more economies are transmitted more strongly to other economies. The proponents of the view that rising economic integration has increased correlation have this reason in mind. A second possibility is that, although the cross-border transmission of shocks is unchanged, the frequency of global shocks has increased or the sensitivity of national economies to those shocks has risen. In this section, we review the reasoning behind each of these two sources of change in correlation.

Increased Cross-Border Transmission of Shocks

The links among the economies of the G-7 grew steadily over the final decades of the twentieth century. Each G-7 country except Japan has shown an increase in merchandise trade with its G-7 partners over the period since 1970 (chart 2). As a percentage of its own GDP, Canada's trade with its G-7 partners

more than doubled, from about 30 percent to more than 60 percent, with much of the rise coming after the U.S.–Canada Free Trade Agreement in 1989. Although G-7 trade as a share of GDP is lower in the other countries than in Canada, trade shares have nonetheless generally risen. The U.S. share rose from about 5 percent to about 9 percent over the period, and each of the European G-7 nations have now reached shares of about 20 percent.

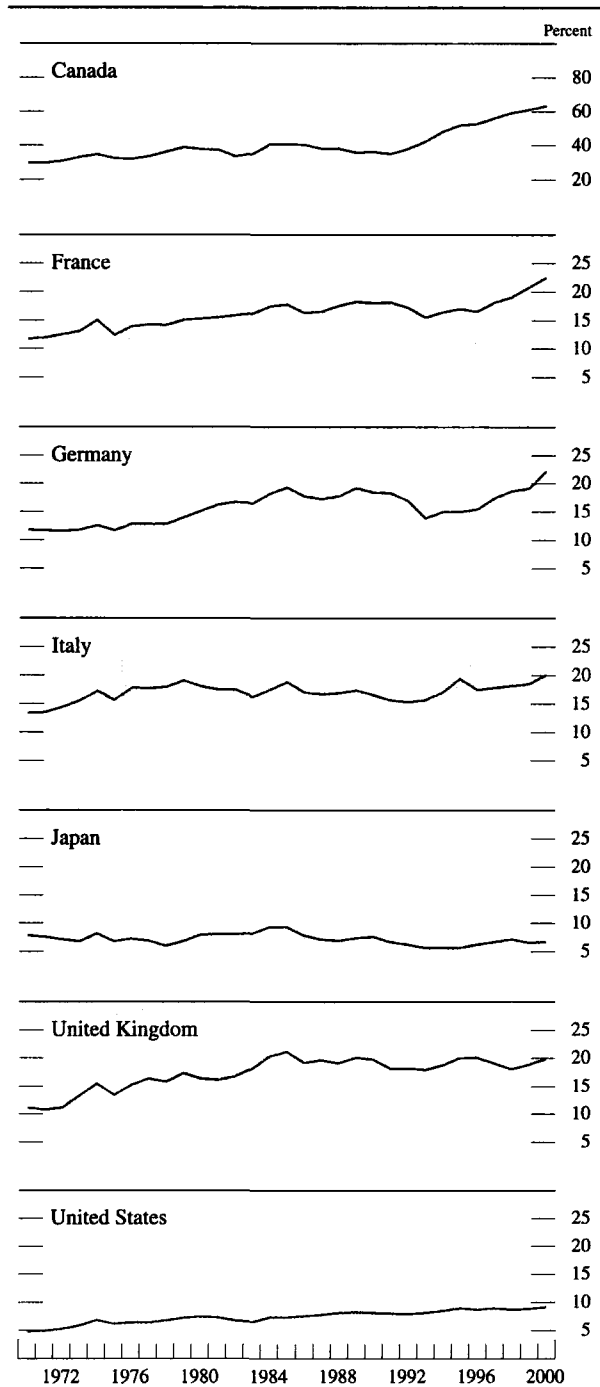
Financial integration has also increased. For example, the share of foreign equities in U.S. equity portfolios rose from less than 2 percent in the early 1980s to almost 12 percent in 2001 (chart 3). The share of U.S. equities in foreign equity portfolios has also risen a great deal over the period. Other measures of international financial market integration show a similar pattern of increase.³

A common presumption is that as trade and financial market integration increases among nations, their economic growth will become more synchronized. One standard argument about why a rise in goods trade would increase correlation is straightforward: When a surge in demand raises the growth rate in one country, some of the increase in demand will be for imported goods and thereby tend to raise the growth rate of that country's trading partners.

Openness to trade brings other changes that could decrease correlation, however. For example, one of the primary benefits of trade according to economic theory is that it allows each country to specialize

3. International Monetary Fund, "Business Cycle Linkages Among Major Advanced Economies," in *World Economic Outlook* (October 2001), pp. 65–79; International Monetary Fund, "Recessions and Recoveries," *World Economic Outlook* (April 2002), pp. 104–37.

2. Trade (exports plus imports) of each G-7 country with the rest of the G-7 as a share of its own GDP. 1970–2000

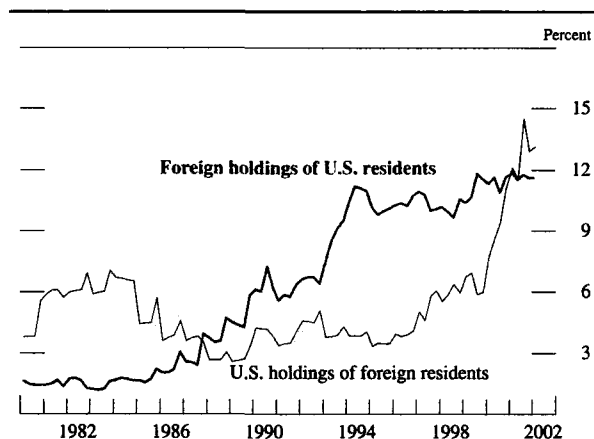


NOTE. The data are annual. Imports, exports, and GDP are in current U.S. dollars at current exchange rates.

SOURCE. International Monetary Fund, *Direction of Trade Statistics* (various issues); Organisation for Economic Co-operation and Development.

in areas of production in which it has a comparative advantage relative to its trading partners. With increased trade, therefore, nations could come to specialize in certain types of production, relying on

3. Share of foreign equities in equity holdings of U.S. residents and share of U.S. equities in equity holdings of residents of foreign countries, 1980–2002:Q1



SOURCE. International Finance Corporation; International Federation of Stock Exchanges; Federal Reserve Board.

imports to meet demand for other products. If different types of production are subject to different kinds of shocks, then trade-related specialization could decrease growth correlations.⁴ Trade in goods could decrease output correlations for other reasons as well.⁵

Similarly, increases in financial integration have an ambiguous implication, at least theoretically, for the international correlation of growth rates. On the one hand, if equities of a given country are widely held around the world, a fall in the country's stock market will simultaneously decrease the wealth of consumers in many nations, potentially increasing the correlation in consumer demand and investment, and hence, GDP growth around the world. On the other hand, international diversification of investment portfolios, like increased trade in goods, could contribute to the specialization in production among national economies, which, as noted above, could decrease output correlations.⁶

4. Paul Krugman develops this argument in his "Lessons of Massachusetts for EMU," in Francisco Torres and Francesco Giavazzi, eds., *The Transition to Economic and Monetary Union* (Cambridge University Press, 1993), pp. 241–69.

5. One such reason is that, if countries experience different productivity shocks, increased trade in investment goods can help shift productive capital to more productive countries, magnifying the effects of different shocks. Regarding this effect and also the role that vertical integration can play in raising correlation, see M. Ayhan Kose and Kei-Mu Yi, "International Trade and Business Cycles: Is Vertical Specialization the Missing Link?" *American Economic Review*, vol. 91 (May 2001), pp. 371–75.

6. For example, production specialization involves risks both to the owners and the employees of the firms. To the extent that these risks can be reduced through diversification in asset markets, one might expect greater specialization. For other examples of ambiguous effects

While trade in goods and assets are the main ways that economic integration is measured, some analysts have also speculated about less tangible forms of integration that could affect output correlation. For example, some have argued that consumer and investor sentiment in nations across the globe may be more linked now than in the past because of, say, advances in global telecommunications. Because sentiment and its effect on the economy are notoriously hard to measure, this factor is highly speculative.

Some empirical studies provide clearer guidance, however, regarding the net effect of integration on the correlation of growth rates. These studies compare the correlation of GDP growth of regions within a country with similarly situated regions across national boundaries. Because regions within a country are usually quite highly integrated, these comparisons shed light on how integration affects correlation. Such comparisons consistently show that regions within countries have more highly correlated output growth than do national economies or similarly situated regions across national boundaries.⁷

Despite the ambiguities of theory, these empirical results have led most observers to conclude that increasing economic integration to the level found within national borders generally has a net positive effect on output growth correlation. But a separate question is whether the economic integration of the United States and the other G-7 nations has changed enough in, say, the past ten to fifteen years to generate a pronounced increase in correlation. We know of no clear evidence that changes of the magnitude we have observed would significantly raise the correlation of U.S. economic growth with that of the rest of the G-7.⁸

related to increased capital mobility, see Jeffrey Frankel, "Ambiguous Policy Multipliers in Theory and in Empirical Models," in Ralph Bryant, Dale Henderson, Gerald Holtham, Peter Hooper, and Steven Symansky, eds., *Empirical Macroeconomics for Interdependent Economies* (Brookings Institution, 1988), pp. 17–26.

7. This result seems to hold when controlling for factors such as size of the economies, distance between the areas compared, and policy differences. See, for example, Tamim Bayoumi and Barry Eichengreen, "Shocking Aspects of European Monetary Integration," in Francisco Torres and Francesco Giavazzi, eds., *Adjustment and Growth in the European Monetary Union* (Cambridge University Press, 1993); and Todd Clark and Eric van Wincoop, "Borders and Business Cycles," *Journal of International Economics*, vol. 55 (October 2001), pp. 59–85.

8. Most estimates of the effect of small increases in trade intensity on output correlation are similarly small. See Jeffrey Frankel and Andrew Rose, "The Endogeneity of the Optimum Currency Area Criteria," *Economic Journal*, vol. 108 (July 1998), pp. 1009–25; Fabio Canova and Harris Dellas, "Trade Interdependence and the International Business Cycle," *Journal of International Economics*, vol. 34 (February 1993), pp. 23–47; and Clark and van Wincoop, "Borders and Business Cycles."

A Change in the Nature of Shocks

Even without increased integration, the correlation of economic growth across nations would rise if the type of shock that leads to common movements ("common shock") becomes more prominent or if country-specific shocks become less prominent. Common shocks could become more "prominent" in either or both of two ways: (1) if the size or frequency of the shocks increases and (2) if the sensitivity of national economies to the shocks increases.

A textbook example of a common shock is a rise in the world price of oil, which might be expected to cause a synchronized decline in output growth around the world. The synchronized decline in output growth in the United States and the other G-7 countries in the mid-1970s (see chart 1) is often attributed to the sharp rise in world oil prices at that time. Similarly, oil price increases may have played a role in the recent downturn—for example, the spot price of oil as measured by the price of a barrel of West Texas intermediate crude rose from just under \$11 in December 1998 to more than \$34 in March 2000.⁹ The global decline in the value of information technology stocks beginning in early 2000 has also been cited as a common shock contributing to the current recession.

As explanations for high correlation, more complete economic integration and increased prominence of common shocks differ in an important way. Because increased integration is probably here to stay, we would expect any of its effects on correlation to be long lasting. But if correlation is currently high because of common shocks, we would expect the high degree of correlation to persist only as long as the common shocks continue. A brief period in which common shocks are more prominent might lead to temporarily high correlation with few implications for the future. Sharp increases in the world price of oil, for example, played an important role in the economics of the 1970s and early 1980s but have been less prominent since then.

A less obvious source of increased correlation is a decrease in the prominence of idiosyncratic shocks—shocks affecting only one country. This source can be understood by looking at the formal definition of the correlation of growth rates, which is the covariance of the growth rates divided by the

9. For an argument that oil shocks are central in explaining recessions, see James Hamilton, "What is an Oil Shock?" University of California at San Diego (2000). A contrary view is provided by Robert B. Barsky and Lutz Kilian, "Do We Really Know that Oil Caused the Great Stagflation? A Monetary Alternative," *NBER Macroeconomics Annual 2001* (MIT Press, 2002).

Correlation as a Measure of Co-movement

$$\text{Correlation of growth of A and B} = \frac{\text{Covariance of A and B}}{\text{Standard deviation of A} \times \text{Standard deviation of B}}$$

Covariance in growth of countries A and B is a measure of the common variability in growth of A and B.

Standard deviation of growth of country A is a measure of the variability of growth of country A.

Correlation can be viewed as the ratio of total common variation (covariance) in the two growth rates to a measure of total variation (the product of the standard deviations). The correlation between two variables is a number between -1 and 1. A positive correlation between growth in coun-

tries A and B means that when growth is strong in country A it also tends to be strong in country B. A negative correlation means that when growth is strong in country A, growth tends to be weak in B. The magnitude of correlation is one measure of the degree of association between the growth of A and B. A correlation of 1 between A and B means that the growth rates of the countries move entirely in lockstep. A correlation of zero means that growth in the two countries is unrelated; correlation of $\frac{1}{2}$ implies moderate association.

product of the standard deviations of each of the two growth rates (see box "Correlation as a Measure of Co-movement"). The standard deviation of a growth rate is a measure of its total variation. A decline in the prominence of idiosyncratic shocks in a country lowers the standard deviation of the country's economic growth. If, at the same time, common variation as measured by covariance is unchanged, then correlation rises.

The case of reduced prominence of idiosyncratic shocks is important to emphasize for two reasons. First, although an increase in correlation is commonly interpreted as an increase in the amount of *common* variation in the economies, an increase in correlation can also come, as just noted, from a decrease in *idiosyncratic* variation. To take an example, the growth rate of a country that follows erratic fiscal and monetary policies will become more correlated with the growth of other nations if it moves to a more stable policy. The rise in correlation in this case does not come from greater transmission of shocks or more prominent common shocks; rather, sources of common variation are unchanged, but idiosyncratic variation has been reduced. A rise in the correlation of economic growth rates due to an increase in common shocks and a rise due to a decrease in idiosyncratic shocks have different implications for public policy: A rise in correlation because of a greater prominence of adverse common shocks would be a matter for concern, but a rise in correlation because of a reduction in adverse idiosyncratic shocks would be beneficial.

The second reason to emphasize the case of idiosyncratic shocks is that it highlights the importance of a change in standard deviation for the measure of correlation (recall that a decline in idiosyncratic

shocks reduces standard deviation). A consensus is growing that the standard deviation of economic growth in the United States has been falling in recent years.¹⁰ Indeed, evidence suggests that the standard deviation of U.S. growth has fallen one-third or more since the early 1980s. The source of this reduction is not evident, but some of its implications for correlation are clear. If the covariance of U.S. growth with other nations is unchanged, the one-third reduction in the standard deviation of U.S. growth would imply that the correlation of U.S. growth with that of every other nation would be 50 percent greater than its earlier value.¹¹ If correlation has not risen so dramati-

10. See, for example, Margaret McConnell and Gabriel Perez-Quiros, "Output Fluctuations in the United States: What Has Changed Since the Early 1980's?" *American Economic Review*, vol. 90 (December 2000), pp. 1464-76; James Kahn, Margaret McConnell, and Gabriel Perez-Quiros, "The Reduced Volatility of the U.S. Economy: Policy or Progress?" Federal Reserve Bank of New York (2001); James Stock and Mark Watson, "Has the Business Cycle Changed and Why?" *NBER Macroeconomics Annual 2002* (MIT Press, forthcoming); Shaghil Ahmed, Andrew Levin, and Beth Anne Wilson, "Recent U.S. Macroeconomic Stability: Good Policies, Good Practices, or Good Luck?" International Finance Discussion Paper 730 (Board of Governors of the Federal Reserve System, July 2002); Chang-Jin Kim, Charles Nelson, and Jeremy Piger, "The Less Volatile U.S. Economy: A Bayesian Investigation of Timing, Breadth, and Potential Explanations." International Finance Discussion Paper 707 (Board of Governors of the Federal Reserve System, August 2001); M. V. Caedac Warnock and Francis E. Warnock, "The Declining Volatility of U.S. Employment: Was Arthur Burns Right?" International Finance Discussion Paper 677 (Board of Governors of the Federal Reserve System, August 2000); Olivier Blanchard and John Simon, "The Long and Large Decline in U.S. Output Volatility," *Brookings Papers on Economic Activity*, 1:2001, pp. 135-64; Thomas Helbling and Tamim Bayoumi, "G-7 Business Cycle Linkages Revisited," International Monetary Fund (2002).

11. Multiplying a standard deviation in the denominator of the correlation definition by $\frac{2}{3}$ implies that correlation is $\frac{3}{2}$ of, or is 50 percent greater than, its former level.

cally, then either the covariance between the United States and other countries has decreased, or the standard deviation of growth abroad has increased, or both.

Summary

The most obvious explanation for an increase in the correlation of growth would probably be that linkages among economies have increased and, thus, ups and downs in one economy are now transmitted more to other economies. However, two other explanations—an increased prominence of common shocks or a decreased prominence of idiosyncratic shocks—may be at least as important in explaining changes in correlation.

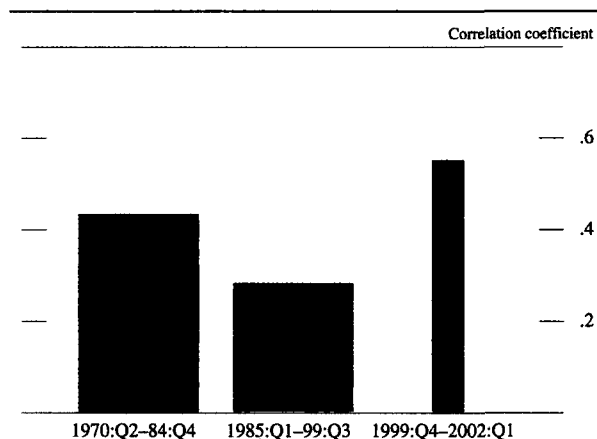
THE CORRELATION OF U.S. AND FOREIGN G-7 GROWTH

In this section, we analyze estimates of correlation of U.S. economic growth with that of the other G-7 nations. The behavior of the average foreign G-7 growth rate is representative of the behavior of the data for each of the six countries, but it masks some important differences. After considering the average, we turn to the correlation of U.S. growth with each other country individually.

Using standard formulas, an estimate of correlation can be computed over any time period. An analysis that compares average correlations over selected time periods supports the view that correlation has increased recently. This analysis estimates the correlation between U.S. quarterly growth in GDP and the average of quarterly growth for the other G-7 countries over three subperiods between 1970 and 2002: the most recent 2½ years for which data are available (1999:Q4 to 2002:Q1) and each half of the earlier part of the sample period (chart 4).¹² For the entire period from 1970:Q2 to 2002:Q1, the correlation in growth rates is 0.44 (value not shown in chart). The estimated correlation is considerably higher in the recent 2½ years (0.55) than in the first or second halves of the earlier sample (0.43 and 0.28 respectively). However, comparing the recent correlation estimate calculated over a brief period to earlier estimates calculated over much long periods may give a false impression that the recent rise is unique. The possibility that the recent level may merely reflect a historically normal fluctuation could be hid-

12. The first quarterly GDP level used is for 1970:Q1, and hence the first quarterly growth value is for 1970:Q2.

4. Correlation of change in real GDP in the United States with the average change in the other G-7 countries, selected periods, 1970–2002



NOTE. The data are quarterly and change is quarterly.

den in the earlier estimates formed over longer periods.¹³

The Historical Pattern of Estimated Correlation

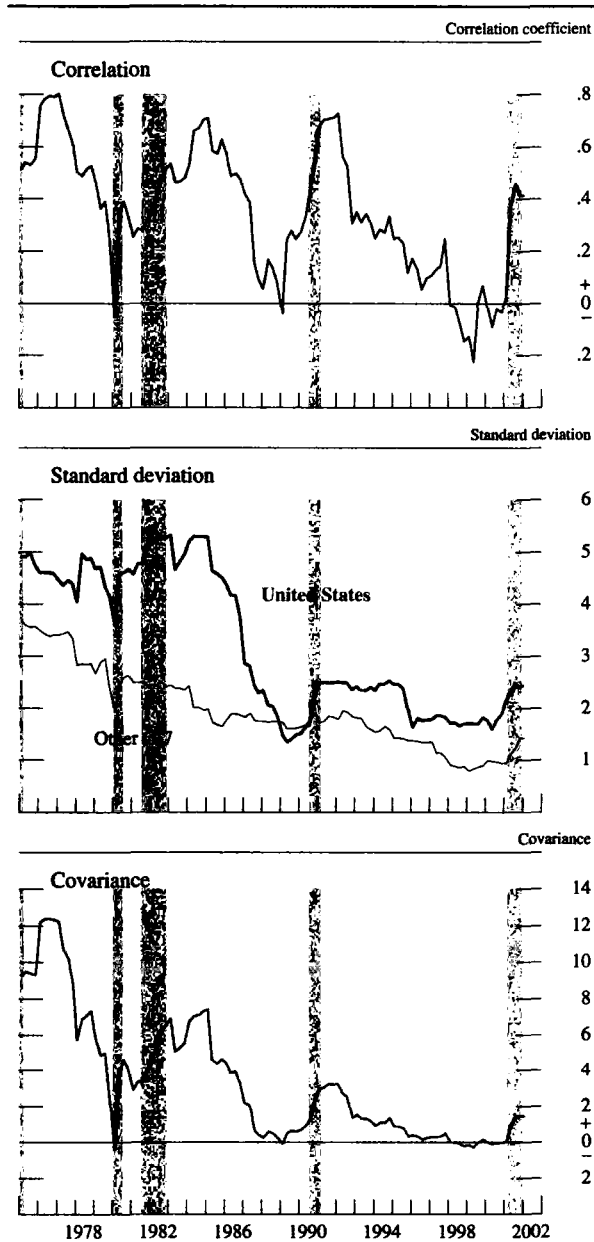
One way to show a more reliable picture is to plot the correlation estimated for overlapping (or “rolling”) five-year periods that start in 1970:Q2 and roll forward one quarter at a time. Thus, the correlation estimated for 1975:Q1 is calculated over the five years (twenty quarters) beginning in 1970:Q2 and ending in 1975:Q1.

Measuring correlation over a series of rolling five-year periods (chart 5, upper panel) gives a more detailed depiction of correlation over the past thirty years—and one that is much different from that in chart 4. Estimated correlation fluctuates a great deal over the period, ranging from a high of 0.80 to a low of –0.23. In the mid-1970s, mid-1980s, and early 1990s, the estimated correlation consistently rises and reaches a local maximum within the five years of the end of a recession, so that the five-year period of data used in calculating the correlation contains the recession period.¹⁴ These local maximums are quite

13. These data include the 2002 annual August revision to GDP for the United States. Data for the most recent recession in the United States as well as in the rest of the G-7 are subject to still further revision.

14. The National Bureau of Economic Research (NBER) is a nonpartisan research institution that determines the beginnings (business cycle peaks) and ends (business cycle troughs) of recessions—periods when economic activity actually declines. More information about how the NBER chooses business cycle dates is available on its web site at www.nber.org. See also general note to chart 1.

5. Summary measures of change in real GDP in the United States and the average change in the other G-7 countries, rolling five-year periods, 1975–2002:Q1



NOTE. The data are quarterly and change is quarterly. Values for each quarter are calculated over the five years ending in that quarter. For description of shaded bars, see general note to chart 1.

high (above 0.70). Between each of the periods of high correlation have been brief periods in which estimated correlation is negative.

Although the recent correlations shown in both chart 4 and chart 5 are relatively high, chart 5 shows that, earlier in the period, correlation reached even higher levels than it has of late. The recent pattern of increase around the time of a U.S. recession seems

roughly in line with historical experience. Indeed, if any change in correlation is evident, it is a slight downward trend over the whole period. Hence, we see little evidence of a period of permanently higher correlation in these data.

The Recent Record on Standard Deviations and Covariance in G-7 Growth

In contrast to the correlation data, the standard deviations of U.S. growth and average foreign G-7 growth show a clear pattern of change (chart 5, middle panel). As noted earlier, the standard deviation of U.S. GDP growth seems to have fallen sharply in the mid-1980s and has since fluctuated at less than $\frac{2}{3}$ of its former level. The standard deviation of foreign G-7 growth also appears to have fallen over this period. All else equal, the decline in the standard deviations of U.S. and foreign G-7 growth would imply a steady rise in correlation over the period, which we have not observed. Given the definition of correlation, the only other possibility is that covariance also fell (chart 5, bottom panel). The decline in the U.S. standard deviation has been widely reported, but the reduction in the standard deviations of growth in the other G-7 nations and the contemporaneous fall in covariance with U.S. growth have received less notice.

No consensus has emerged as to the source of these changes in standard deviation and covariance. Generally, the standard deviation in growth of a country will fall if some source of variation is removed; covariance between the growth rates of two countries will fall at the same time if some of the variation that is being removed is common variation. Correlation will be roughly unchanged if the decrease in standard deviation is attributable in roughly even proportions to declines in common and idiosyncratic variation, so that the share of variation that is common is unchanged.

Three explanations have been advanced as possible causes of the recent reductions in standard deviation and covariance. The first is a decreased prominence of common shocks. A reduction in the frequency of oil price shocks or in the G-7 economies' response to those shocks, for example, would remove a common source of variation in G-7 economies and thereby potentially reduce both the standard deviations and covariance. But because this change falls mainly on common variation, it would tend to lower correlation.

The second development is improvements in inventory management. If businesses worldwide are using advances in information technology to better

manage inventories, they may thereby ameliorate one source of variability in output growth. Better inventory management might be expected to reduce the effects both of common shocks and of idiosyncratic shocks and hence might be expected to have neutral implications for correlation.

The third commonly discussed possibility is that improved government policy since the early 1980s has facilitated more steady growth. Proponents of this view note, for example, that inflation in the G-7 economies has generally been lower and less variable recently than it was in the 1970s and early 1980s. As with better inventory management, improved management of national economies might tend to have neutral implications for correlation because it could moderate growth variability due both to common and to idiosyncratic shocks.

The importance of these factors in explaining the fall in the standard deviations and covariances of growth in the G-7 is unresolved. The search for additional explanations continues.¹⁵

Although the causes remain uncertain, the fall in the standard deviations and covariances of growth rates complicates the task of detecting other influences on correlation. A small and gradual change in correlation due to ongoing gradual changes in integration, for example, could easily be hidden by other effects that are changing the numerator and denominator of correlation.

Overall, we reach the following conclusions from our analysis. Over the period since 1970, estimated correlation of GDP growth between the United States and the other G-7 countries has fluctuated, reaching peaks after recessions in the United States. Recent high levels of correlation are consistent with this overall pattern. Nonetheless, drawing conclusions about correlation is complicated by the fact that the standard deviations of growth in the United States and in the foreign G-7 seem to have declined. The effect of the decline of standard deviations on the correlation of growth has been roughly offset by a decrease in the covariance of U.S. growth with that of the other G-7 economies. In light of these facts, the evidence does not provide support for the view that increasing integration has fundamentally raised the correlation of U.S. growth with growth in the other G-7 economies. In the following sections, we subject these basic conclusions to various challenges.

Comparing the United States with Each of the Other G-7 Countries

Again using a five-year rolling interval and quarterly data for the past thirty years, we examined the correlation of growth in real GDP in the United States with the growth of each of the other G-7 economies.¹⁶ The analysis shows that the correlation with five of the six other countries is generally positive (chart 6) and has neither a clear upward nor downward trend over the whole sample period. Japan is the exception, having had a persistently negative correlation with the United States since the early 1990s as Japanese economic growth slumped and the U.S. economy boomed. The correlation of each economy with the United States generally rises around the time of U.S. recessions.

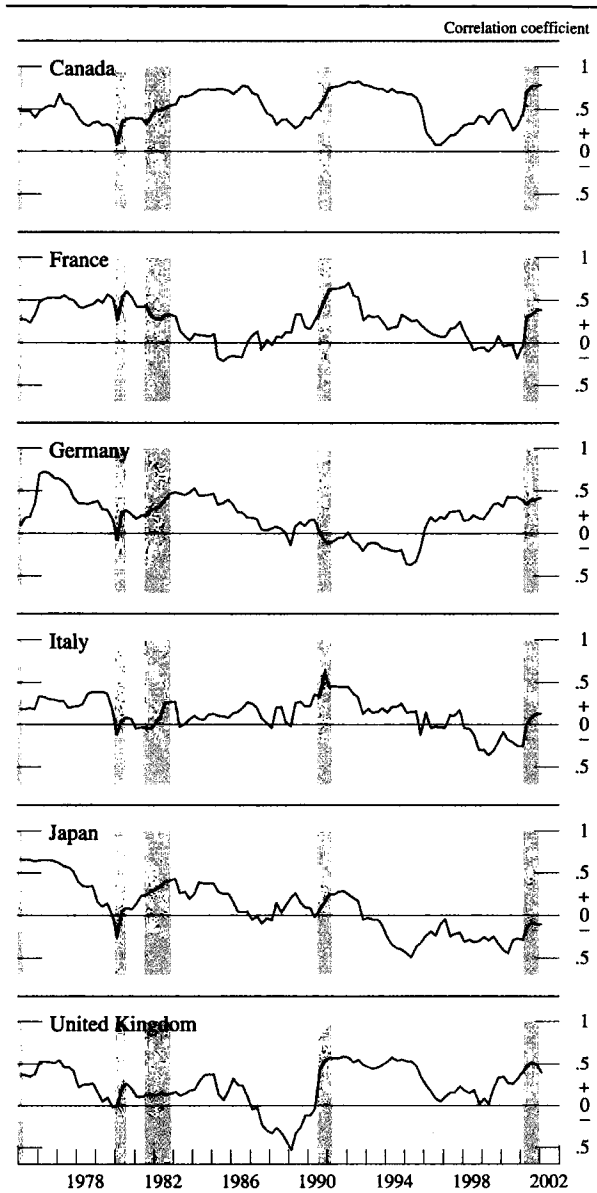
Although the most recent estimated correlations are higher than in the mid-1990s, none surpasses the peaks attained around the time of earlier recessions. In short, over the past thirty years, the U.S. economy has had a history of moving somewhat in tandem with those of the other G-7 countries, whether the six are viewed collectively or individually; the recent rise in co-movement is largely in line with that history and does not provide a basis for concluding that the recent rise in correlation signals a new period of permanently higher correlation.

As noted, the correlation between the growth rates of two economies is the ratio of the covariance of the growth rates in the two countries divided by the product of their standard deviations. The standard deviation of quarterly growth in real GDP, not only for the United States but also for each foreign G-7 economy except Japan, generally fell over the period (chart 7). While the decline in the U.S. standard deviation appears to have come mainly in a sharp drop in the early 1980s, the decline in much of the foreign G-7 seems to have been more gradual. Especially in the case of France, the decline is also smaller in magnitude. All else equal, this fall in standard deviation at home and abroad would raise the correlation of U.S. growth with that of the foreign G-7. The estimated correlation between growth rates in the United States and the rest of the G-7 shows no sharp increase as standard deviations fell because the estimated covariance between the U.S. and foreign G-7 growth rates has also fallen (chart 8). Once again,

15. One further example of an alternative explanation is that a reduction in capital market imperfections might have lessened the effects of shocks on the economy. For a discussion of these and other explanations, see the articles cited in note 10.

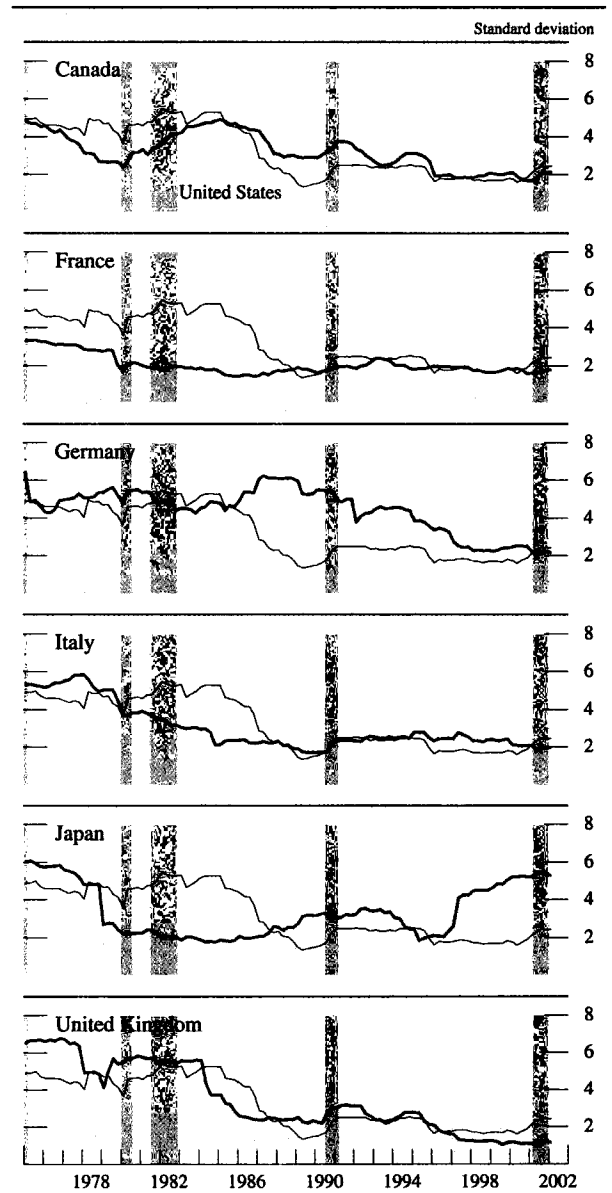
16. The conclusions regarding Germany must be viewed with caution because of the GDP measurement issues surrounding German unification. Our growth rate data for Germany are for the former West German area through 1991 and for unified Germany thereafter.

6. Correlation of change in real GDP in the United States with the change in each of the other G-7 countries, rolling five-year periods, 1975–2002:Q1



NOTE. See note to chart 5.

7. Standard deviations of change in real GDP in each of the G-7 countries, rolling five-year periods, 1975–2002:Q1



NOTE. See note to chart 5.

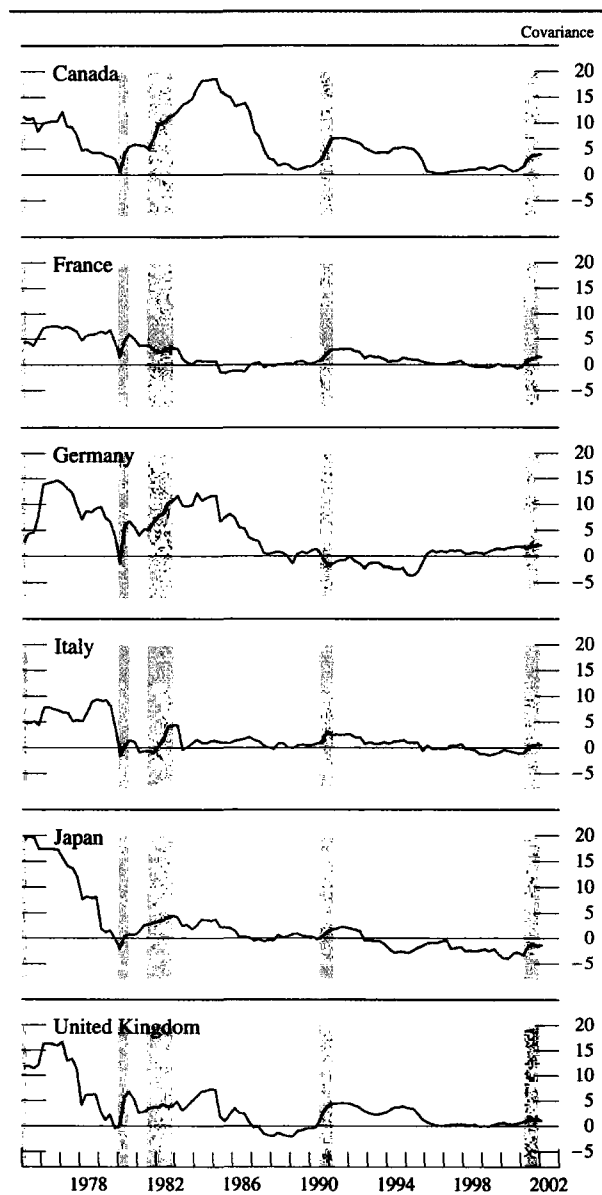
the estimated covariance of growth rates with those in the United States are considerably lower from the mid-1980s onward when compared with the earlier period.

Extensions and Limitations of the Central Conclusions

The evidence just presented on correlation was for a single measure of economic activity (GDP), one

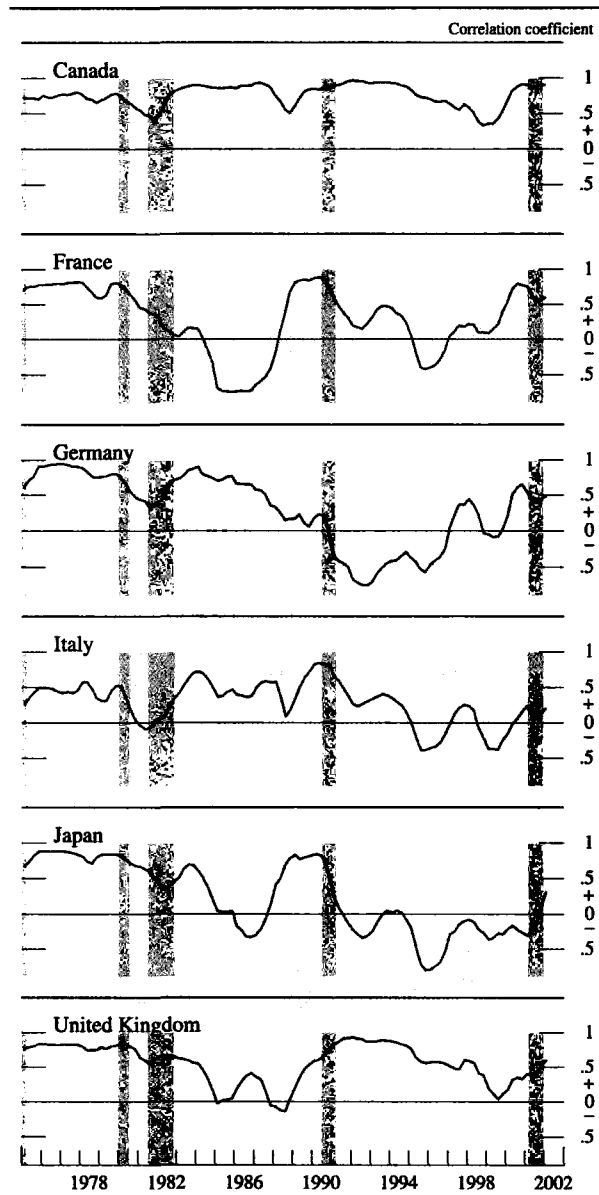
growth interval (quarterly), and one type of period for measuring correlation (five-year periods that roll forward one quarter at a time). Different conclusions might arise if one were to consider other ways of measuring the correlation of economic activity. To test the robustness of our basic conclusions, we examined thirty-six measures of correlation in activity by applying nine correlation measures (correlations in quarterly growth, four-quarter growth, and a gap measure over two-and-one-half-year, five-year, and ten-year rolling periods) to four real economic

8. Covariance of change in real GDP in the United States with the change in each of the other G-7 countries, rolling five-year periods, 1975–2002:Q1



NOTE. See note to chart 5.

9. Correlation of output gaps in the United States with the output gaps in each of the other G-7 countries, rolling five-year periods, 1975–2002:Q1



NOTE. For method of calculating the output gaps, see text note 17. See also note to chart 5.

aggregates: GDP, consumption, investment, and industrial production.¹⁷

These alternative measures offer several potential insights. Both the output gap measure and the four-quarter growth rate will capture longer-term movements better than does the quarterly growth rate of GDP. By focusing on the correlation of output gaps,

rather than the correlation of GDP growth, we may also better capture business cycle variation in these economies. Consumption and investment are of interest because these broad components of GDP may be more subject to international linkages than is, say, the government spending component of GDP. Industrial production is more volatile than other components of output such as services. Further, industrial output is generally tradeable across borders. Thus, an increase in correlation due to economic integration might show up first in industrial production.

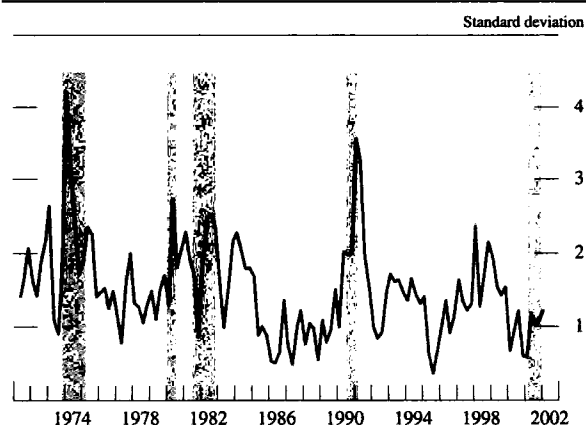
17. For any variable, the associated gap measure is defined as the logarithm of the variable minus the trend in the logarithm of the variable calculated using the Hodrick-Prescott filter. The trend calculated in this way fluctuates through time.

With almost all of the thirty-six measures, we found that estimated correlation in the recent period has not exceeded the levels attained earlier in the sample. For example, the pattern of fluctuation of output gap correlations (chart 9) is somewhat different from that of correlation in quarterly GDP growth. In particular, the correlation in output gaps does not rise as consistently during U.S. recessions. Still, the overall conclusion remains the same: Estimated correlation fluctuates and has not recently exceeded earlier peaks. We can summarize the results of all the measures in the following way: In only a few cases has correlation recently surpassed earlier peaks, usually by only a slight amount, and no clear or consistent pattern of increased correlation emerges across countries or measures of correlation.

Some analysts have cited a slight trend decline in the cross-sectional standard deviation of GDP growth in the G-7 economies over the period since the 1970s as evidence of a rise in the correlation of GDP growth (chart 10).¹⁸ This trend decline in cross-sectional standard deviation could come from a rise in correlation—if growth were more correlated across countries, the individual growth rates should be less dispersed at any point in time. However, the cross-sectional standard deviation will also fall if correlation is constant and the individual standard deviations fall. Thus, the fall in the cross-sectional standard deviation is consistent with our basic conclusion that standard deviations have fallen while correlation has been roughly unchanged.

18. For any calendar quarter, the cross-sectional standard deviation of growth is the standard deviation of the growth rates of the seven G-7 countries in that quarter.

10. Cross-sectional standard deviation of change in real GDP of the G-7, 1971–2002:Q1



NOTE. The data are quarterly and change is for four quarters. The cross-sectional standard deviation in any quarter is the standard deviation of the four-quarter change in all of the G-7 countries in that quarter.

Finally, we highlight two limitations of our results. Our many different measures of correlation of economic activity among the G-7 countries produce basically consistent results, but those conclusions may or may not apply to the linkages between the United States and, say, emerging-market economies. Second, and more broadly, a change in the correlation of national economic growth rates is not likely to be visible unless the change is very large or has been in place for a decade or more. For example, if a modest permanent increase in correlation occurred in the late 1990s, our tools would not discover it until the higher estimated correlation during the recent recession persisted well into the future.

SUMMARY

Various linkages among economies are becoming stronger. Trade-to-GDP ratios are rising, financial markets are becoming increasingly integrated, and advances in global telecommunications might cause less tangible factors, such as consumer and business confidence, to become more closely linked. No consensus exists, however, as to how large an effect these factors should have on the correlation between GDP growth in the United States and in the other G-7 nations. Furthermore, any effect of these factors on correlation would very likely be gradual.

At this time, any changes in correlation due to increased integration do not show clearly in the data. The correlation of U.S. GDP growth with that of the foreign G-7 economies in the recent U.S. recession has been roughly in line with the experience around the time of earlier recessions. Estimated correlation has risen from its level during the previous expansion, but not in a way that clearly distinguishes this recession from earlier ones. Overall, we find no evidence to indicate that the recent rise in correlation signals a future of permanently higher synchronization of national growth rates.

The most dramatic change over the period since the early 1980s seems to have been a fall in both the standard deviation of growth in most G-7 economies and a contemporaneous fall in the covariance of U.S. and foreign G-7 growth. The source of this change is the subject of ongoing debate. Possible explanations include a decrease in the prominence of common shocks to the global economy, improved management techniques by firms, and a better macroeconomic policy environment. It remains to be seen how these factors, combined with continuing increases in economic integration, may affect the co-movement of U.S. economic growth with that of the other G-7 economies in the future. □

Announcements

GOVERNORS BERNANKE AND KOHN SWORN IN AS BOARD MEMBERS

Donald L. Kohn and Ben S. Bernanke took on August 5, 2002, the oath of office as members of the Board of Governors of the Federal Reserve System. The oath was administered by Chairman Alan Greenspan in the Board Room.

President Bush announced his intention to nominate Dr. Kohn and Dr. Bernanke on May 8. The Senate confirmed them on July 31.

Dr. Kohn was nominated to a vacant seat last held by Laurence H. Meyer, whose term expired January 31, 2002. Dr. Kohn's term expires January 31, 2016.

Dr. Bernanke was nominated to the seat vacated by the resignation of Edward W. Kelley, Jr., on December 31, 2001. The term expires January 31, 2004.

FOMC DIRECTIVE

The Federal Open Market Committee decided on August 13, 2002, to keep its target for the federal funds rate unchanged at 1¾ percent.

The softening in the growth of aggregate demand that emerged this spring has been prolonged in large measure by weakness in financial markets and heightened uncertainty related to problems in corporate reporting and governance.

The current accommodative stance of monetary policy, coupled with still-robust underlying growth in productivity, should be sufficient to foster an improving business climate over time.

Nonetheless, the Committee recognizes that, for the foreseeable future, against the background of its long-run goals of price stability and sustainable economic growth and of the information currently available, the risks are weighted mainly toward conditions that may generate economic weakness.

Voting for the FOMC monetary policy action were Alan Greenspan, Chairman; William J. McDonough, Vice Chairman; Ben S. Bernanke; Susan S. Bies; Roger W. Ferguson, Jr.; Edward M. Gramlich; Jerry L. Jordan; Donald L. Kohn; Robert D. McTeer, Jr.; Mark W. Olson; Anthony M. Santomero; and Gary H. Stern.

BOARD STATEMENT ON PAYMENTS SYSTEM RISK POLICY

The Federal Reserve Board announced on August 20, 2002, that it would not, over the near term, incorporate two policy options into its longer-term Payments System Risk (PSR) policy plan. The Board will, however, continue to analyze the benefits and potential drawbacks of a two-tiered pricing regime for daylight overdrafts.

For the foreseeable future, the Board will not pursue a policy that (1) lowers self-assessed net debit caps and eliminates two-week average caps or (2) rejects all payments with settlement-day finality that would cause an institution to exceed its daylight overdraft capacity level.

A daylight overdraft occurs when a depository institution's Federal Reserve account is in a negative position at any time during the business day. An institution's net debit cap refers to the maximum dollar amount of uncollateralized daylight overdrafts that it may incur in its Federal Reserve account.

The Board will continue to study a two-tiered pricing regime for daylight overdrafts in which institutions that pledge collateral to the Reserve Banks would pay a lower fee on their collateralized daylight overdrafts than on their uncollateralized daylight overdrafts.

The Board requested comment on these proposed modifications in June 2001 after a broad review of its PSR policy. At the conclusion of the comment period, the Board made several changes to the policy, including allowing depository institutions to pledge collateral to the Federal Reserve to access additional daylight overdraft capacity above their net debit cap levels and modifying the criteria used to determine a foreign banking organization's U.S. capital equivalency measure. The Board is now focusing on the potential longer-term direction for the PSR policy.

INTERAGENCY WHITE PAPER ON PRACTICES TO STRENGTHEN U.S. FINANCIAL SYSTEM

Four financial services regulatory agencies issued on August 30, 2002, the "Draft White Paper on Sound

Practices to Strengthen the Resilience of the U.S. Financial System.”

The sound practices identified reflect the preliminary conclusions of the Board of Governors of the Federal Reserve System, the Office of the Comptroller of the Currency, the Securities and Exchange Commission, and the New York State Banking Department regarding the factors necessary to strengthen the resilience of critical U.S. financial markets in the face of a wide-scale regional disaster. The conclusions are based on recent interviews with industry participants and market utilities about actions being taken to strengthen their ability to recover and resume critical business activities in the event of future wide-scale regional disruptions. The paper also discusses appropriate timetables for completing reviews and revisions of business continuity plans and implementation of the sound practices.

The sound practices apply most directly to “core clearing and settlement organizations” and “financial institutions that play significant roles in critical markets.” Critical markets are defined as the markets for federal funds, foreign exchange, commercial paper, and government, corporate, and mortgage-backed securities.

The agencies request comment on the appropriate scope and application of the sound practices and related issues. After consideration of the comments received, the agencies intend to issue a final version of the white paper. Comments are requested by October 21, 2002.

EXTENSION OF COMMENT PERIOD ON DRAFT OF CREDIT CARD GUIDANCE

The federal regulatory agencies for financial institutions announced on August 8, 2002, that they were extending the deadline, to September 23, for comment on their draft guidance on account management and loss allowances for credit card lending.

On July 22, under the auspices of the Federal Financial Institutions Examination Council, the Office of the Comptroller of the Currency, the Board of Governors of the Federal Reserve System, the Federal Deposit Insurance Corporation, and the Office of Thrift Supervision asked for comment by August 9 from affected institutions and other interested parties as to whether the draft provides clear guidance concerning their expectations in the areas of credit card account management, risk management, and loss allowance practices or, instead, has “fatal flaws” in these areas.

The agencies plan to issue further comments elaborating on the importance of this guidance soon.

Institutions and other parties that chose to respond were to provide their views electronically no later than 5:00 p.m. on September 23, 2002. Responses to the agencies were to be submitted electronically to the web site of the Federal Financial Institutions Examination Council: www.FFIEC.gov (click on the option ffiec-suggest@frb.gov).

STATEMENT REGARDING GOVERNOR GRAMLICH

The Federal Reserve Board announced on August 16, 2002, that Board member Edward M. Gramlich would begin treatment the following Monday for chronic lymphocytic leukemia (CLL)—a form of leukemia that can be treated successfully. Governor Gramlich will be treated with chemotherapy on an outpatient basis at Georgetown University Medical Center. While he will take time off for each treatment, he will continue to fulfill his duties as a Board member. His doctors believe that his prognosis is good. Of the four common forms of leukemia, CLL is the most treatable.

MINUTES OF BOARD DISCOUNT RATE MEETINGS

The Federal Reserve Board released on August 23, 2002, the minutes of its discount rate meetings from May 20 to June 24, 2002.

BOARD STAFF CHANGES

The Board of Governors approved on August 19, 2002, the appointment of Mary West to Assistant Director and a change in the responsibilities for William L. Wascher, Assistant Director.

Mary West will have oversight responsibilities for the Financial Reports Section. The section is responsible for activities supporting the Federal Reserve System’s reports and statistical functions, including administering the Federal Reserve’s report review and clearance program for all data series collected for policy, regulatory, and supervisory purposes; developing reporting systems, forms, instructions, and procedures; and coordinating report clearance and implementation throughout the System and with other agencies. Ms. West joined the Board’s staff in 1976 and was promoted to chief of the Financial Reports Section in 1992. Ms. West holds a bachelor’s degree from Brown University and a master’s degree in

business management from Central Michigan University.

William L. Wascher will move from his current position as Assistant Director and Chief of the Macroeconomic Analysis Section to a position of Assistant Director. The Macroeconomic Analysis Section handles a broad range of current analysis, forecast-

ing, and research assignments for the Division of Research and Statistics in the area of macroeconomics, labor economics, business and household behavior, and energy and agricultural markets. Mr. Wascher will continue to have oversight responsibility for the Macroeconomic Analysis Section and will handle more division-wide project assignments. □

*INDEX OF ORDERS ISSUED OR ACTIONS TAKEN BY THE BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM
(APRIL 1, 2002 - JUNE 30, 2002)*

Applicant	Merged or Acquired Bank of Activity	Date of Approval	Bulletin Volume and Page
Banca Comerciala Romana S.A., Bucharest, Romania	To establish a representative office in New York, New York	May 21, 2002	88, 326
Charter One Financial, Inc., Cleveland, Ohio	Charter One Bank, F.S.B., Cleveland, Ohio	April 22, 2002	88, 297
Chinatrust Financial Holding Company, Ltd., Taipei, Taiwan	Chinatrust Bank, Torrance, California Chinatrust Commercial Bank, Ltd., Taipei, Taiwan	April 19, 2002	88, 303
Hamburgische Landesbank Girozentrale, Hamburg, Germany	To establish a representative office in New York, New York	June 21, 2002	88, 397
JPMorgan Chase Bank, New York, New York	To establish a branch at the Newport Center, Jersey City, New Jersey	May 30, 2002	88, 325
Landesbank Schleswig-Holstein Girozentrale, Kiel, Germany	To establish a branch in New York, New York	June 21, 2002	88, 399
Royal Bank of Canada, Montreal, Canada	Eagle Bancshares, Inc., Tucker, Georgia	June 24, 2002	88, 385
RBC Centura Banks, Inc., Rocky Mount, North Carolina	Tucker Federal Bank, Tucker, Georgia		
SinoPac Holdings, Taipei, Taiwan	Far East National Bank, Los Angeles, California Bank SinoPac, Taipei, Taiwan	April 11, 2002	88, 307
Westamerica Bank, San Rafael, California	Kerman State Bank, Kerman, California	June 4, 2002	88, 392

*APPLICATIONS APPROVED UNDER BANK HOLDING COMPANY ACT
By the Secretary of the Board*

Recent applications have been approved by the Secretary of the Board as listed below. Copies are available upon request to the Freedom of Information Office, Office of the Secretary, Board of Governors of the Federal Reserve System, Washington, D.C. 20551.

Section 4

Applicant(s)	Bank(s)	Effective Date
The Royal Bank of Scotland Group PLC, Edinburgh, Scotland	Identrus LLC, New York, New York	August 14, 2002

*APPLICATIONS APPROVED UNDER BANK HOLDING COMPANY ACT**By Federal Reserve Banks*

Recent applications have been approved by the Federal Reserve Banks as listed below. Copies are available upon request to the Reserve Banks.

Section 3

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
Aviston Financial Corporation, Trenton, Illinois	Aviston Bancorp, Inc., Aviston, Illinois State Bank of Aviston, Aviston, Illinois	St. Louis	August 7, 2002
BOK Financial Corporation, Tulsa, Oklahoma	TW Interim National Bank, N.A., Houston, Texas Bank of Tanglewood, N.A., Houston, Texas	Kansas City	August 15, 2002
Cera Stichting VZW, Belgium	LBS Bank, New York, New York	New York	August 22, 2002
Cera Beheersmaatschappij N.V., Belgium	Nova Ljubljanska Banka d.d., Ljubljana, Slovenia		
Cera Holding CVBA, Belgium			
Almancora CVA, Belgium			
Almanij N.V., Belgium			
KBC Bankverzekerings holding N.V., Belgium			
KBC Bank N.V., Belgium			
The Colonial BancGroup, Inc., Montgomery, Alabama	Palm Beach National Holding Company, Palm Beach, Florida Palm Beach National Bank and Trust Company, Palm Beach, Florida	Atlanta	August 2, 2002
Commerce Financial Corporation, Marysville, Kansas	Commerce Bank, N.A., Marysville, Kansas	Kansas City	August 5, 2002
Community First Financial Corporation, Lynchburg, Virginia	Highlands Community Bank, Covington, Virginia	Richmond	August 13, 2002
First Delta Bankshares, Inc., Blytheville, Arkansas	Bank of Trumann, Trumann, Arkansas	St. Louis	July 31, 2002
First York BanCorp, York, Nebraska	NebraskaLand Financial Services, Inc., York, Nebraska	Kansas City	August 15, 2002
North Fork Bancorporation, Melville, New York	North Fork NJ Interim Bank, Jersey City, New Jersey North Fork Bank, Melville, New York	New York	August 8, 2002
Randolph Bancorp, Stoughton, Massachusetts	Randolph Savings Bank, Randolph, Massachusetts	Boston	August 19, 2002
Sterling Bancshares, Inc., Houston, Texas	ENB Bankshares, Inc., Dallas, Texas	Dallas	July 5, 2002
Sterling Bancorporation, Inc., Wilmington, Delaware			

Section 3—Continued

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
United Community Bankshares of Florida, Orlando, Florida	United Heritage Bank, Orlando, Florida Community National Bank of Mid-Florida, Lake Mary, Florida	Atlanta	August 8, 2002
United Financial, Inc., Graham, North Carolina	Alamance National Bank, Graham, North Carolina	Richmond	August 13, 2002

Section 4

Applicant(s)	Nonbanking Activity/Company	Reserve Bank	Effective Date
Allied Irish Banks, p.l.c., Dublin, Ireland	Clarity Incentive Systems, Inc., New York, New York	Richmond	August 6, 2002
Allfirst Financial Inc., Baltimore, Maryland			
Goodenow Bancorporation, Okoboji, Iowa	To engage <i>de novo</i> in extending credit and servicing loans	Chicago	August 12, 2002
Marshall & Ilsley Corporation, Milwaukee, Wisconsin	Spectrum EBP, LLC, Atlanta, Georgia Metavante Corporation, Brown Deer, Wisconsin	Chicago	August 21, 2002

Sections 3 and 4

Applicant(s)	Nonbanking Activity/Company	Reserve Bank	Effective Date
Marshall & Ilsley Corporation, Milwaukee, Wisconsin	Mississippi Valley Bancshares, Inc., St. Louis, Missouri Southwest Bank, Belleville, Illinois Southwest Bank of St. Louis, St. Louis, Missouri Southwest Bank of Phoenix, Phoenix, Arizona Mississippi Valley Capital Company, St. Louis, Missouri Eagle Fund, L.L.C., St. Louis, Missouri Eagle Fund I, L.P., St. Louis, Missouri	Chicago	August 13, 2002

APPLICATIONS APPROVED UNDER BANK MERGER ACT

By Federal Reserve Banks

Recent applications have been approved by the Federal Reserve Banks as listed below. Copies are available upon request to the Reserve Banks.

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
Colonial Bank, Montgomery, Alabama	Palm Beach National Bank and Trust Company, Palm Beach, Florida	Atlanta	August 2, 2002
Midwest Bank and Trust Company, Elmwood Park, Illinois	Midwest Bank of Hinsdale, Hinsdale, Illinois Midwest Bank of McHenry County, Union, Illinois	Chicago	July 15, 2002

PENDING CASES INVOLVING THE BOARD OF GOVERNORS

This list of pending cases does not include suits against the Federal Reserve Banks in which the Board of Governors is not named a party.

- Sedgwick v. United States*, No. 02-1083 (ESH) (D.D.C., filed June 4, 2002). Complaint for declaratory judgment under the Federal Tort Claims Act and the constitution.
- Caesar v. United States*, No. 02-0612 (EGS) (D.D.C.), removed on April 1, 2002, from No. 02-1502 (D.C. Superior Court, originally filed March 1, 2002). Action seeking damages for personal injury.
- Community Bank & Trust v. United States*, No. 01-571C (Ct. Fed. Cl., filed October 3, 2001). Action challenging on constitutional grounds the failure to pay interest on reserve accounts held at Federal Reserve Banks.
- Laredo National Bancshares, Inc. v. Whalen v. Board of Governors*, No. 01-CV-134 (S.D. Tex.), removed on September 5, 2001, from No. 99CVQ00940-D3 (District Court, 341st Judicial District, Webb County, Texas, originally filed July 26, 2001). Third-party petition seeking indemnification or contribution from the Board in connection with a claim asserted against defendant Whalen alleging tortious interference with a contract.
- Radfar v. United States*, No. 1:01CV1292 (PLF) (D.D.C., complaint filed June 11, 2001). Action under the Federal Tort Claims Act for injury on Board premises.
- Artis v. Greenspan*, No. 01-CV-0400(ESG) (D.D.C., complaint filed February 22, 2001). Employment discrimination action. On August 15, 2001, the district court consolidated the action with *Artis v. Greenspan*, No. 99-CV-2073 (EGS) (D.D.C., filed August 3, 1999), also an employment discrimination action.
- Trans Union LLC v. Federal Trade Commission, et al.*, No. 01-5202 (D.C. Cir., filed June 4, 2001). Appeal of district court order entered April 30, 2001, upholding challenged provisions of an interagency rule regarding Privacy of Consumer Finance Information. On July 16, 2002, the Court of Appeals affirmed the district court decision upholding the regulation.
- Albrecht v. Board of Governors*, No. 00-CV-317 (CKK) (D.D.C., filed February 18, 2000). Action challenging the method of funding of the retirement plan for certain Board employees. On March 30, 2001, the district court granted in part and denied in part the Board's motion to dismiss.
- Fraternal Order of Police v. Board of Governors*, No. 1:98CV03116 (WBB)(D.D.C., filed December 22, 1998). Declaratory judgment action challenging Board labor practices.

Financial and Business Statistics

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A58 INDEX TO STATISTICAL TABLES

Discontinuation of Certain Statistical Tables in the *Federal Reserve Bulletin*

The following ten tables have been discontinued in the Financial and Business Statistics section of the *Federal Reserve Bulletin*. Information on the sources of data in these tables appears in the Announcements section of the June 2002 issue of the *Bulletin*, page 290.

Discontinued tables:

1.38	1.39	1.48	2.10	2.11
2.14	2.15	2.16	2.17	3.11

Page numbers of the tables in the Financial and Business Statistics section have been revised.

Guide to Tables

SYMBOLS AND ABBREVIATIONS

c	Corrected	G-10	Group of Ten
e	Estimated	GDP	Gross domestic product
n.a.	Not available	GNMA	Government National Mortgage Association
n.e.c.	Not elsewhere classified	GSE	Government-sponsored enterprise
p	Preliminary	HUD	Department of Housing and Urban Development
r	Revised (Notation appears in column heading when about half the figures in the column have been revised from the most recently published table.)	IMF	International Monetary Fund
*	Amount insignificant in terms of the last decimal place shown in the table (for example, less than 500,000 when the smallest unit given is in millions)	IOs	Interest only, stripped, mortgage-backed securities
0	Calculated to be zero	IPCs	Individuals, partnerships, and corporations
. . .	Cell not applicable	IRA	Individual retirement account
ABS	Asset-backed security	MMDA	Money market deposit account
ATS	Automatic transfer service	MSA	Metropolitan statistical area
BIF	Bank insurance fund	NAICS	North American Industry Classification System
CD	Certificate of deposit	NOW	Negotiable order of withdrawal
CMO	Collateralized mortgage obligation	OCDs	Other checkable deposits
CRA	Community Reinvestment Act of 1977	OPEC	Organization of Petroleum Exporting Countries
FAMC	Federal Agriculture Mortgage Corporation	OTS	Office of Thrift Supervision
FFB	Federal Financing Bank	PMI	Private mortgage insurance
FHA	Federal Housing Administration	POs	Principal only, stripped, mortgage-backed securities
FHLBB	Federal Home Loan Bank Board	REIT	Real estate investment trust
FHLMC	Federal Home Loan Mortgage Corporation	REMICs	Real estate mortgage investment conduits
FmHA	Farmers Home Administration	RHS	Rural Housing Service
FNMA	Federal National Mortgage Association	RP	Repurchase agreement
FSA	Farm Service Agency	RTC	Resolution Trust Corporation
FSLIC	Federal Savings and Loan Insurance Corporation	SCO	Securitized credit obligation
G-7	Group of Seven	SDR	Special drawing right
		SIC	Standard Industrial Classification
		THIS	Treasury inflation-indexed securities
		VA	Department of Veterans Affairs

GENERAL INFORMATION

In many of the tables, components do not sum to totals because of rounding.

Minus signs are used to indicate (1) a decrease, (2) a negative figure, or (3) an outflow.

“U.S. government securities” may include guaranteed issues of U.S. government agencies (the flow of funds figures also

include not fully guaranteed issues) as well as direct obligations of the U.S. Treasury.

“State and local government” also includes municipalities, special districts, and other political subdivisions.

1.10 RESERVES AND MONEY STOCK MEASURES

Percent annual rate of change, seasonally adjusted¹

Monetary or credit aggregate	2001		2002		2002				
	Q3	Q4	Q1	Q2	Mar.	Apr.	May	June ^c	July
<i>Reserves of depository institutions²</i>									
1 Total	76.3	-31.2	-9.7	-16.3	-12.7	-7.4	-48.4	4.6	11.9
2 Required	14.8	22.1	-9.3	-15.4	-14.5	-1.4	-51.9	5.7	8.1
3 Nonborrowed	65.0	-21.4	-9.4	-16.9	-14.1	-7.2	-49.8	3.7	10.4
4 Monetary base ³	14.8	6.4	9.1	8.1	6.5	7.9	7.3	11.3	8.5
<i>Concepts of money⁴</i>									
5 M1	16.0	2.1	5.8	-6 ^c	2.9 ^c	-11.2 ^c	6.6	7.1	8.0
6 M2	11.0	9.4	5.8	3.4	-7	-3.6	14.1	7.4	12.8
7 M3	10.1	12.3 ^c	5.0 ^c	3.2	.0 ^c	-2.1 ^c	11.6 ^c	5.9	7.5
<i>Nontransaction components</i>									
8 In M2 ⁵	9.6	11.5	5.8	4.5	-1.8	-1.5	16.1	7.5	14.1
9 In M3 only ⁶	8.3 ^c	18.4 ^c	3.4 ^c	2.9 ^c	1.4 ^c	1.1 ^c	6.3 ^c	2.8	-4.0
<i>Time and savings deposits</i>									
<i>Commercial banks</i>									
10 Savings, including MMDAs	19.7	23.2	20.4	13.3	5.2	7.0	25.6 ^c	13.5	17.0
11 Small time ⁷	-10.3	-12.1	-15.3	-3.5	-11.2	-7.0	11.5	1.9	-7.0
12 Large time ^{8,9}	-7.4	-9.2	4.9	8.4 ^c	2.5 ^c	17.2 ^c	13.3 ^c	-5.3	-1.0
<i>Thrift institutions</i>									
13 Savings, including MMDAs	25.2	27.2	25.6 ^c	21.1 ^c	27.7 ^c	17.5	13.3	14.5	22.8
14 Small time ⁷	-5.1	-11.2	-15.3	-14.8	-9.6	-10.4	-29.7	-11.2	-4.7
15 Large time ⁸	14.9	2.5	-8	-9.0	-7.3	6.3	-30.4	-17.2	1.1
<i>Money market mutual funds</i>									
16 Retail	5.0	7.9	-9.4	-10.1	-24.1	-23.3	18.4	9	22.6
17 Institution-only	27.5	49.2	-5	2.4	-2	-2.0	10.1	10.0	-5.2
<i>Repurchase agreements and eurodollars</i>									
18 Repurchase agreements ¹⁰	-7.8 ^c	.7 ^c	9.6 ^c	-5.6 ^c	-6.3 ^c	-19.1 ^c	.0 ^c	5.8	-3.5
19 Eurodollars ¹⁰	-3.7	-4.8	12.0	9.2 ^c	24.2	1.1 ^c	-5.9 ^c	-4.9	-10.3

1. Unless otherwise noted, rates of change are calculated from average amounts outstanding during preceding month or quarter.

2. Figures incorporate adjustments for discontinuities, or "breaks," associated with regulatory changes in reserve requirements (See also table 1.20.)

3. The seasonally adjusted, break-adjusted monetary base consists of (1) seasonally adjusted, break-adjusted total reserves (line 1), plus (2) the seasonally adjusted currency component of the money stock, plus (3) (for all quarterly reporters on the "Report of Transaction Accounts, Other Deposits and Vault Cash" and for all weekly reporters whose vault cash exceeds their required reserves) the seasonally adjusted, break-adjusted difference between current vault cash and the amount applied to satisfy current reserve requirements.

4. Composition of the money stock measures is as follows:

M1: (1) currency outside the U.S. Treasury, Federal Reserve Banks, and the vaults of depository institutions, (2) travelers checks of nonbank issuers, (3) demand deposits at all commercial banks other than those owed to depository institutions, the U.S. government, and foreign banks and official institutions, less cash items in the process of collection and Federal Reserve float, and (4) other checkable deposits (OCDs), consisting of negotiable order of withdrawal (NOW) and automatic transfer service (ATS) accounts at depository institutions, credit union share draft accounts, and demand deposits at thrift institutions. Seasonally adjusted M1 is computed by summing currency, travelers checks, demand deposits, and OCDs, each seasonally adjusted separately.

M2: M1 plus (1) savings (including MMDAs), (2) small-denomination time deposits (time deposits—including retail RPs—in amounts of less than \$100,000), and (3) balances in retail money market mutual funds. Excludes individual retirement accounts (IRAs) and Keogh balances at depository institutions and money market funds.

Seasonally adjusted M2 is calculated by summing savings deposits, small-denomination

time deposits, and retail money fund balances, each seasonally adjusted separately, and adding this result to seasonally adjusted M1.

M3: M2 plus (1) large-denomination time deposits (in amounts of \$100,000 or more), (2) balances in institutional money funds, (3) RP liabilities (overnight and term) issued by all depository institutions, and (4) eurodollars (overnight and term) held by U.S. residents at foreign branches of U.S. banks worldwide and at all banking offices in the United Kingdom and Canada. Excludes amounts held by depository institutions, the U.S. government, money market funds, and foreign banks and official institutions. Seasonally adjusted M3 is calculated by summing large time deposits, institutional money fund balances, RP liabilities, and eurodollars, each seasonally adjusted separately, and adding this result to seasonally adjusted M2.

5. Sum of (1) savings deposits (including MMDAs), (2) small time deposits, and (3) retail money fund balances, each seasonally adjusted separately.

6. Sum of (1) large time deposits, (2) institutional money fund balances, (3) RP liabilities (overnight and term) issued by depository institutions, and (4) eurodollars (overnight and term) of U.S. addressees, each seasonally adjusted separately.

7. Small time deposits—including retail RPs—are those issued in amounts of less than \$100,000. All IRA and Keogh account balances at commercial banks and thrift institutions are subtracted from small time deposits.

8. Large time deposits are those issued in amounts of \$100,000 or more, excluding those booked at international banking facilities.

9. Large time deposits at commercial banks less those held by money market funds, depository institutions, the U.S. government, and foreign banks and official institutions.

10. Includes both overnight and term.

1.11 RESERVES OF DEPOSITORY INSTITUTIONS AND RESERVE BANK CREDIT¹

Millions of dollars

Factor	Average of daily figures			Average of daily figures for week ending on date indicated						
	2002			2002						
	May	June	July	June 19	June 26	July 3	July 10	July 17	July 24	July 31
SUPPLYING RESERVE FUNDS										
1 Reserve Bank credit outstanding	647,403	653,265	657,336	650,779	656,055	659,779	658,141	656,752	658,663	655,495
U.S. government securities ²										
2 Bought outright—System account ³	584,747	590,187	595,271	591,354	591,688	590,854	592,626	592,513	597,616	600,142
3 Held under repurchase agreements	0	0	0	0	0	0	0	0	0	0
Federal agency obligations										
4 Bought outright	10	10	10	10	10	10	10	10	10	10
5 Held under repurchase agreements	0	0	0	0	0	0	0	0	0	0
6 Repurchase agreements—triparty ⁴	24,845	25,285	22,363	22,036	25,821	30,000	25,857	24,571	21,107	15,429
7 Acceptances	0	0	0	0	0	0	0	0	0	0
Loans to depository institutions										
8 Adjustment credit	7	5	19	3	5	9	42	2	15	23
9 Seasonal credit	107	135	176	131	162	168	167	177	183	180
10 Special Liquidity Facility credit	0	0	0	0	0	0	0	0	0	0
11 Extended credit	0	0	0	0	0	0	0	0	0	0
12 Float	-237	-245	-171	-505	-150	-231	484	-310	-407	-489
13 Other Federal Reserve assets	37,925	37,888	39,668	37,750	38,518	38,968	38,954	39,789	40,138	40,200
14 Gold stock	11,044	11,044	11,044	11,044	11,044	11,044	11,044	11,044	11,044	11,044
15 Special drawing rights certificate account	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200
16 Treasury currency outstanding	33,793	33,931 ^r	34,027	33,933 ^r	33,964 ^r	33,995	34,009	34,023	34,037	34,051
ABSORBING RESERVE FUNDS										
17 Currency in circulation	649,546	655,201 ^r	661,387	654,820 ^r	655,436 ^r	659,984	664,112	661,468	659,727	659,646
18 Reverse repurchase agreements—triparty ⁴	0	0	0	0	0	0	0	0	0	0
19 Treasury cash holdings	407	405	385	407	397	394	388	392	378	381
Deposits, other than reserve balances, with Federal Reserve Banks										
20 Treasury	5,056	6,126	5,279	5,894	6,963	6,148	4,985	5,495	5,311	5,779
21 Foreign	93	101	91	124	104	83	99	98	77	94
22 Service-related balances and adjustments	10,098	10,114	10,172	10,248	10,303	10,135	10,123	10,120	10,239	10,222
23 Other	223	238	229	255	237	231	228	244	218	216
24 Other Federal Reserve liabilities and capital	19,343	19,921	19,645	19,819	20,253	20,106	19,575	19,910	19,765	19,201
25 Reserve balances with Federal Reserve Banks ⁵	9,675	8,333	7,418	6,389	9,571 ^r	9,936	5,883	6,292	10,228	7,251
End-of-month figures										
Wednesday figures										
SUPPLYING RESERVE FUNDS										
1 Reserve Bank credit outstanding	651,329	661,834	659,024	649,869	665,851	656,482	661,688	653,900	667,744	659,024
U.S. government securities ²										
2 Bought outright—System account ³	587,189	590,683	600,455	592,187	592,390	591,256	594,531	594,411	600,510	600,455
3 Held under repurchase agreements	0	0	0	0	0	0	0	0	0	0
Federal agency obligations										
4 Bought outright	10	10	10	10	10	10	10	10	10	10
5 Held under repurchase agreements	0	0	0	0	0	0	0	0	0	0
6 Repurchase agreements—triparty ⁴	28,000	32,000	19,500	20,750	34,250	26,500	27,000	19,750	26,750	19,500
7 Acceptances	0	0	0	0	0	0	0	0	0	0
Loans to depository institutions										
8 Adjustment credit	0	17	4	0	1	1	24	3	104	4
9 Seasonal credit	124	166	182	150	179	163	173	184	184	182
10 Special Liquidity Facility credit	0	0	0	0	0	0	0	0	0	0
11 Extended credit	0	0	0	0	0	0	0	0	0	0
12 Float	-666	-238	-953	-1,206	110	-203	312	-266	-151	-953
13 Other Federal Reserve assets	36,672	39,196	39,826	37,978	38,911	38,755	39,637	39,808	40,337	39,826
14 Gold stock	11,044	11,044	11,042	11,044	11,044	11,044	11,044	11,044	11,044	11,042
15 Special drawing rights certificate account	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200
16 Treasury currency outstanding	33,871	33,995 ^r	34,051	33,933 ^r	33,964 ^r	33,995	34,009	34,023	34,037	34,051
ABSORBING RESERVE FUNDS										
17 Currency in circulation	653,796	657,900 ^r	661,199	656,114 ^r	658,033 ^r	664,374	664,107	661,354	660,672	661,199
18 Reverse repurchase agreements—triparty ⁴	0	0	0	0	0	0	0	0	0	0
19 Treasury cash holdings	416	395	377	397	395	387	394	377	381	377
Deposits, other than reserve balances, with Federal Reserve Banks										
20 Treasury	5,883	8,116	6,242	6,899	7,620	5,174	5,194	5,000	5,085	6,242
21 Foreign	128	90	164	113	74	79	84	156	78	164
22 Service-related balances and adjustments	9,799	10,135 ^r	10,222	10,248	10,303	10,135	10,123	10,120	10,239	10,222
23 Other	207	212	236	251	239	243	221	230	227	236
24 Other Federal Reserve liabilities and capital	19,504	20,186	18,940	19,708	20,129	19,354	19,559	19,578	19,226	18,940
25 Reserve balances with Federal Reserve Banks ⁵	8,712	12,038 ^r	8,938	3,316	16,266	3,976	9,258	4,351	19,117	8,938

1. Amounts of cash held as reserves are shown in table 1.12, line 2.
 2. Includes securities loaned—fully guaranteed by U.S. government securities pledged with Federal Reserve Banks—and excludes securities sold and scheduled to be bought back under matched sale—purchase transactions.
 3. Includes compensation that adjusts for the effects of inflation on the principal of inflation-indexed securities.
 4. Cash value of agreements arranged through third-party custodial banks. These agreements are collateralized by U.S. government and federal agency securities.
 5. Excludes required clearing balances and adjustments to compensate for float.

A6 Domestic Financial Statistics □ October 2002

1.12 RESERVES AND BORROWINGS Depository Institutions¹

Millions of dollars

Reserve classification	Prorated monthly averages of biweekly averages										
	1999	2000	2001	2002							
	Dec.	Dec.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	
1 Reserve balances with Reserve Banks ²	5,262	7,022	9,054	9,995	9,273	9,146	9,740	9,209	7,929 ⁹	8,096	
2 Total vault cash ³	60,620	45,245	43,935	45,728 ⁴	45,693 ³	42,630 ⁴	42,012 ⁴	41,819	41,662	42,723	
3 Applied vault cash ³	36,392	31,451	32,024	33,730	33,218	31,151	31,156	31,033	30,642 ⁴	31,291	
4 Surplus vault cash ³	24,228	13,794	11,911	11,998 ⁴	12,475 ⁴	11,479 ⁴	10,856 ⁴	10,786	11,021 ⁴	11,432	
5 Total reserves ⁵	41,654	38,473	41,077	43,725	42,491	40,297	40,896	40,242	38,571 ⁴	39,386	
6 Required reserves	40,357	37,046	39,433	42,339	41,124	38,883	39,688	38,969	37,329	38,013	
7 Excess reserve balances at Reserve Banks ⁷	1,297	1,427	1,645	1,387	1,367	1,414	1,208	1,273	1,242 ⁴	1,373	
8 Total borrowing at Reserve Banks	320	210	67	50	30	79	71	112	142	191	
9 Adjustment	179	99	34	33	12	59	21	7	6	16	
10 Seasonal	67	111	33	17	17	20	50	105	136	176	
11 Special Liquidity Facility ⁸	74	0	0	0	0	0	0	0	0	0	
12 Extended credit ⁹	0	0	0	0	0	0	0	0	0	0	

Reserve classification	Biweekly averages of daily figures for two-week periods ending on dates indicated									
	2002									
	Apr. 3	Apr. 17	May 1	May 15	May 29	June 12	June 26 ⁴	July 10	July 24	Aug. 7
1 Reserve balances with Reserve Banks ²	9,493	9,325	10,243	8,524	10,011	7,878	7,979	7,909 ⁹	8,266	8,022
2 Total vault cash ³	43,066 ⁴	41,727 ⁴	42,077	41,828	41,954	40,682	42,130	42,968	42,170	43,479
3 Applied vault cash ³	31,497	30,301	31,999	30,366	31,858	29,441	31,444	31,438 ⁴	30,731	32,201
4 Surplus vault cash ³	11,569 ⁴	11,426 ⁴	10,079	11,462	10,096	11,241	10,686	11,531 ⁴	11,439	11,278
5 Total reserves ⁵	40,990	39,626	42,242	38,890	41,869	37,319	39,423	39,347 ⁴	38,997	40,222
6 Required reserves	39,340	38,501	41,046	37,699	40,491	36,174	38,177	37,828	37,700	38,903
7 Excess reserve balances at Reserve Banks ⁷	1,650	1,124	1,195	1,191	1,378	1,145	1,246	1,518 ⁴	1,296	1,319
8 Total borrowing at Reserve Banks	180	47	71	100	127	116	151	194	189	194
9 Adjustment	157	2	10	6	10	3	4	27	9	14
10 Seasonal	23	45	62	95	117	113	147	168	180	180
11 Special Liquidity Facility ⁸	0	0	0	0	0	0	0	0	0	0
12 Extended credit ⁹	0	0	0	0	0	0	0	0	0	0

1. Data in this table also appear in the Board's H.3 (502) weekly statistical release. For ordering address, see inside front cover. Data are not break-adjusted or seasonally adjusted.
 2. Excludes required clearing balances and adjustments to compensate for float and includes other off-balance-sheet "as-of" adjustments.
 3. Vault cash eligible to satisfy reserve requirements. It includes only vault cash held by those banks and thrift institutions that are not exempt from reserve requirements. Dates refer to the maintenance periods in which the vault cash can be used to satisfy reserve requirements.
 4. All vault cash held during the lagged computation period by "bound" institutions (that is, those whose required reserves exceed their vault cash) plus the amount of vault cash applied during the maintenance period by "nonbound" institutions (that is, those whose vault cash exceeds their required reserves) to satisfy current reserve requirements.

5. Total vault cash (line 2) less applied vault cash (line 3).
 6. Reserve balances with Federal Reserve Banks (line 1) plus applied vault cash (line 3).
 7. Total reserves (line 5) less required reserves (line 6).
 8. Borrowing at the discount window under the terms and conditions established for the Century Date Change Special Liquidity Facility in effect from October 1, 1999, through April 7, 2000.
 9. Consists of borrowing at the discount window under the terms and conditions established for the extended credit program to help depository institutions deal with sustained liquidity pressures. Because there is not the same need to repay such borrowing promptly as with traditional short-term adjustment credit, the money market effect of extended credit is similar to that of nonborrowed reserves.

1.14 FEDERAL RESERVE BANK INTEREST RATES

Percent per year

Federal Reserve Bank	Current and previous levels								
	Adjustment credit ¹			Seasonal credit ²			Extended credit ³		
	On 9/13/02	Effective date	Previous rate	On 9/13/02	Effective date	Previous rate	On 9/13/02	Effective date	Previous rate
Boston	↑	12/11/01	↑	↑	↑	↑	↑	↑	↑
New York		12/11/01							
Philadelphia		12/11/01							
Cleveland		12/13/01							
Richmond		12/13/01							
Atlanta		12/13/01							
Chicago	↓	12/11/01	↓	↓	↓	↓	↓	↓	↓
St. Louis		12/12/01							
Minneapolis		12/13/01							
Kansas City		12/13/01							
Dallas		12/13/01							
San Francisco		12/11/01							

Range of rates for adjustment credit in recent years⁴

Effective date	Range (or level)—All F.R. Banks	F.R. Bank of N.Y.	Effective date	Range (or level)—All F.R. Banks	F.R. Bank of N.Y.	Effective date	Range (or level)—All F.R. Banks	F.R. Bank of N.Y.
In effect Dec. 31, 1981	12	12	1991—Sept. 13	5-5.5	5	2001—May 15	3.50-4.00	3.50
1982—July 20	11.5-12	11.5	17	5	17	17	3.50	3.50
23	11.5	11.5	Nov. 6	4.5-5	4.5	June 27	3.25-3.50	3.25
Aug. 2	11-11.5	11	7	4.5	4.5	29	3.25	3.25
3	11	11	Dec. 20	3.5-4.5	3.5	Aug. 21	3.00-3.25	3.00
16	10.5	10.5	24	3.5	3.5	23	3.00	3.00
27	10-10.5	10	1992—July 2	3-3.5	3	Sept. 17	2.50-3.00	2.50
30	10	10	7	3	3	18	2.50	2.50
Oct. 12	9.5-10	9.5	1994—May 17	3-3.5	3.5	Oct. 2	2.00-2.50	2.00
13	9.5	9.5	18	3.5	3.5	4	2.00	2.00
Nov. 22	9-9.5	9	Aug. 16	3.5-4	4	Nov. 6	1.50-2.00	1.50
26	9	9	18	4	4	8	1.50	1.50
Dec. 14	8.5-9	9	Nov. 15	4-4.75	4.75	Dec. 11	1.25-1.50	1.25
15	8.5-9	8.5	17	4.75	4.75	13	1.25	1.25
17	8.5	8.5	1995—Feb. 1	4.75-5.25	5.25	In effect Sept. 13, 2002	1.25	1.25
1984—Apr. 9	8.5-9	9	9	5.25	5.25			
13	9	9	1996—Jan. 31	5.00-5.25	5.00			
Nov. 21	8.5-9	8.5	Feb. 3	5.00	5.00			
26	8.5	8.5	1998—Oct. 15	4.75-5.00	4.75			
Dec. 24	8	8	16	4.75	4.75			
1985—May 20	7.5-8	7.5	Nov. 17	4.50-4.75	4.50			
24	7.5	7.5	19	4.50	4.50			
1986—Mar. 7	7-7.5	7	1999—Aug. 24	4.50-4.75	4.75			
10	7	7	26	4.75	4.75			
Apr. 21	6.5-7	6.5	Nov. 16	4.75-5.00	4.75			
23	6.5	6.5	18	5.00	5.00			
July 11	6	6	2000—Feb. 2	5.00-5.25	5.25			
Aug. 21	5.5-6	5.5	4	5.25	5.25			
22	5.5	5.5	Mar. 21	5.25-5.50	5.50			
1987—Sept. 4	5.5-6	6	23	5.50	5.50			
11	6	6	May 16	5.50-6.00	5.50			
1988—Aug. 9	6-6.5	6.5	19	6.00	6.00			
11	6.5	6.5	2001—Jan. 3	5.75-6.00	5.75			
1989—Feb. 24	6.5-7	7	4	5.50-5.75	5.50			
27	7	7	5	5.50	5.50			
1990—Dec. 19	6.5	6.5	31	5.00-5.50	5.00			
1991—Feb. 1	6-6.5	6	Feb. 1	5.00	5.00			
4	6	6	Mar. 20	4.50-5.00	4.50			
Apr. 30	5.5-6	5.5	21	4.50	4.50			
May 2	5.5	5.5	Apr. 18	4.00-4.50	4.00			
			20	4.00	4.00			

1. Available on a short-term basis to help depository institutions meet temporary needs for funds that cannot be met through reasonable alternative sources. The highest rate established for loans to depository institutions may be charged on adjustment credit loans of unusual size that result from a major operating problem at the borrower's facility.

2. Available to help relatively small depository institutions meet regular seasonal needs for funds that arise from a clear pattern of intrayear movements in their deposits and loans and that cannot be met through special industry lenders. The discount rate on seasonal credit takes into account rates charged by market sources of funds and ordinarily is reestablished on the first business day of each two-week reserve maintenance period; however, it is never less than the discount rate applicable to adjustment credit.

3. May be made available to depository institutions when similar assistance is not reasonably available from other sources, including special industry lenders. Such credit may be provided when exceptional circumstances (including sustained deposit drains, impaired access to money market funds, or sudden deterioration in loan repayment performance) or

practices involve only a particular institution, or to meet the needs of institutions experiencing difficulties adjusting to changing market conditions over a longer period (particularly at times of deposit disintermediation). The discount rate applicable to adjustment credit ordinarily is charged on extended-credit loans outstanding less than thirty days; however, at the discretion of the Federal Reserve Bank, this time period may be shortened. Beyond this initial period, a flexible rate somewhat above rates charged on market sources of funds is charged. The rate ordinarily is reestablished on the first business day of each two-week reserve maintenance period, but it is never less than the discount rate applicable to adjustment credit plus 50 basis points.

4. For earlier data, see the following publications of the Board of Governors: *Banking and Monetary Statistics, 1914-1941*, and *1941-1970*; and the *Annual Statistical Digest, 1970-1979*, and *1980-1989*; and *Statistical Digest, 1996-2000*. See also the Board's Statistics: Releases and Historical Data web pages (<http://www.federalreserve.gov/releases/H15/data.htm>).

1.15 RESERVE REQUIREMENTS OF DEPOSITORY INSTITUTIONS¹

Type of deposit	Requirement	
	Percentage of deposits	Effective date
<i>Net transaction accounts</i> ²		
1 \$0 million–\$41.3 million ³	3	12/27/01
2 More than \$41.3 million ⁴	10	12/27/01
3 Nonpersonal time deposits ⁵	0	12/27/90
4 Eurocurrency liabilities ⁶	0	12/27/90

1. Required reserves must be held in the form of deposits with Federal Reserve Banks or vault cash. Nonmember institutions may maintain reserve balances with a Federal Reserve Bank indirectly, on a pass-through basis, with certain approved institutions. For previous reserve requirements, see earlier editions of the *Annual Report* or the *Federal Reserve Bulletin*. Under the Monetary Control Act of 1980, depository institutions include commercial banks, savings banks, savings and loan associations, credit unions, agencies and branches of foreign banks, and Edge Act corporations.

2. Transaction accounts include all deposits against which the account holder is permitted to make withdrawals by negotiable or transferable instruments, payment orders of withdrawal, or telephone or preauthorized transfers for the purpose of making payments to third persons or others. However, accounts subject to the rules that permit no more than six preauthorized, automatic, or other transfers per month (of which no more than three may be by check, draft, debit card, or similar order payable directly to third parties) are savings deposits, not transaction accounts.

3. The Monetary Control Act of 1980 requires that the amount of transaction accounts against which the 3 percent reserve requirement applies be modified annually by 80 percent of the percentage change in transaction accounts held by all depository institutions, determined as of June 30 of each year. Effective with the reserve maintenance period beginning December 27, 2001, for depository institutions that report weekly, and with the period beginning January 17, 2002, for institutions that report quarterly, the amount was decreased from \$42.8 million to \$41.3 million.

Under the Garn–St Germain Depository Institutions Act of 1982, the Board adjusts the amount of reservable liabilities subject to a zero percent reserve requirement each year for the

succeeding calendar year by 80 percent of the percentage increase in the total reservable liabilities of all depository institutions, measured on an annual basis as of June 30. No corresponding adjustment is made in the event of a decrease. The exemption applies only to accounts that would be subject to a 3 percent reserve requirement. Effective with the reserve maintenance period beginning December 27, 2001, for depository institutions that report weekly, and with the period beginning January 17, 2002, for institutions that report quarterly, the exemption was raised from \$5.5 million to \$5.7 million.

4. The reserve requirement was reduced from 12 percent to 10 percent on April 2, 1992, for institutions that report weekly, and on April 16, 1992, for institutions that report quarterly.

5. For institutions that report weekly, the reserve requirement on nonpersonal time deposits with an original maturity of less than 1.5 years was reduced from 3 percent to 1.5 percent for the maintenance period that began December 13, 1990, and to zero for the maintenance period that began December 27, 1990. For institutions that report quarterly, the reserve requirement on nonpersonal time deposits with an original maturity of less than 1.5 years was reduced from 3 percent to zero on January 17, 1991.

The reserve requirement on nonpersonal time deposits with an original maturity of 1.5 years or more has been zero since October 6, 1983.

6. The reserve requirement on eurocurrency liabilities was reduced from 3 percent to zero in the same manner and on the same dates as the reserve requirement on nonpersonal time deposits with an original maturity of less than 1.5 years (see note 5).

1.17 FEDERAL RESERVE OPEN MARKET TRANSACTIONS¹

Millions of dollars

Type of transaction and maturity	1999	2000	2001	2002						
				Dec.	Jan.	Feb.	Mar.	Apr.	May	June
U.S. TREASURY SECURITIES²										
<i>Outright transactions (excluding matched transactions)</i>										
Treasury bills										
1 Gross purchases	0	8,676	15,503	812	2,772	1,042	3,013	1,047	3,524	3,656
2 Gross sales	0	0	0	0	0	0	0	0	0	0
3 Exchanges	464,218	477,904	542,736	43,771	55,521	54,619	48,483	45,376	70,978	53,015
4 For new bills	464,218	477,904	542,736	43,771	55,521	54,619	48,483	45,376	70,978	53,015
5 Redemptions	0	24,522	10,095	0	0	0	0	0	0	0
Others within one year										
6 Gross purchases	11,895	8,809	15,663	2,942	0	2,894	1,455	2,709	2,826	0
7 Gross sales	0	0	0	0	0	0	0	0	0	0
8 Maturity shifts	50,590	62,025	70,336	5,235	5,850	7,537	0	14,515	6,714	0
9 Exchanges	-53,315	-34,656	-72,004	-6,666	-5,766	-8,432	0	-15,522	-9,031	0
10 Redemptions	1,429	3,779	16,802	0	0	0	0	0	0	0
One to five years										
11 Gross purchases	19,731	14,482	22,814	634	2,872	1,101	2,181	1,142	1,439	0
12 Gross sales	0	0	0	0	0	0	0	0	0	0
13 Maturity shifts	-44,032	-52,068	-45,211	-5,235	-5,850	-6,283	0	-14,515	-1,620	0
14 Exchanges	42,604	46,177	64,519	6,666	5,766	7,679	0	15,522	8,639	0
Five to ten years										
15 Gross purchases	4,303	5,871	6,003	101	0	334	637	1,670	259	542
16 Gross sales	0	0	0	0	0	0	0	0	0	0
17 Maturity shifts	-5,841	-6,801	-21,063	0	0	-501	0	0	-5,094	0
18 Exchanges	7,578	6,585	6,063	0	0	753	0	0	391	0
More than ten years										
19 Gross purchases	9,428	5,833	8,531	448	582	1,054	291	210	0	0
20 Gross sales	0	0	0	0	0	0	0	0	0	0
21 Maturity shifts	-717	-3,155	-4,062	0	0	-753	0	0	0	0
22 Exchanges	3,133	1,894	1,423	0	0	0	0	0	0	0
All maturities										
23 Gross purchases	45,357	43,670	68,513	4,937	6,226	6,425	7,577	6,777	8,048	4,198
24 Gross sales	0	0	0	0	0	0	0	0	0	0
25 Redemptions	1,429	28,301	26,897	0	0	0	0	0	0	0
<i>Matched transactions</i>										
26 Gross purchases	4,413,430	4,415,905	4,722,667	387,033	407,791	367,906	393,273	436,936	466,807	447,555
27 Gross sales	4,431,685	4,397,835	4,724,743	390,617	404,296	368,060	393,151	437,881	469,046	448,330
<i>Repurchase agreements</i>										
28 Gross purchases	281,599	0	0	0	0	0	0	0	0	0
29 Gross sales	301,273	0	0	0	0	0	0	0	0	0
30 Net change in U.S. Treasury securities	5,999	33,439	39,540	1,354	9,720	6,271	7,699	5,833	5,810	3,423
FEDERAL AGENCY OBLIGATIONS										
<i>Outright transactions</i>										
31 Gross purchases	0	0	0	0	0	0	0	0	0	0
32 Gross sales	0	0	0	0	0	0	0	0	0	0
33 Redemptions	157	51	120	0	0	0	0	0	0	0
<i>Repurchase agreements</i>										
34 Gross purchases	360,069	0	0	0	0	0	0	0	0	0
35 Gross sales	370,772	0	0	0	0	0	0	0	0	0
36 Net change in federal agency obligations	-10,859	-51	-120	0	0	0	0	0	0	0
<i>Reverse repurchase agreements</i>										
37 Gross purchases	0	0	0	0	0	0	0	0	0	0
38 Gross sales	0	0	0	0	0	0	0	0	0	0
<i>Repurchase agreements</i>										
39 Gross purchases	304,989	890,236	1,497,713	117,650	118,550	101,749	70,850	102,200	106,426	98,850
40 Gross sales	164,349	987,501	1,490,838	103,900	131,300	104,750	75,849	100,200	109,926	94,850
41 Net change in triparty obligations	140,640	-97,265	6,875	13,750	-12,750	-3,001	-4,999	2,000	-3,500	4,000
42 Total net change in System Open Market Account	135,780	-63,877	46,295	15,104	-3,030	3,270	2,700	7,833	2,310	7,423

1. Sales, redemptions, and negative figures reduce holdings of the System Open Market Account; all other figures increase such holdings.

2. Transactions exclude changes in compensation for the effects of inflation on the principal of inflation-indexed securities. Transactions include the rollover of inflation compensation into new securities.

A10 Domestic Financial Statistics □ October 2002

1.18 FEDERAL RESERVE BANKS Condition and Federal Reserve Note Statements¹

Millions of dollars

Account	Wednesday					End of month		
	2002					2002		
	July 3	July 10	July 17	July 24	July 31	May	June	July
Consolidated condition statement								
ASSETS								
1 Gold certificate account	11,044	11,039	11,039	11,039	11,038	11,044	11,044	11,038
2 Special drawing rights certificate account	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200
3 Coin	905	885	897	922	947	947	948	947
<i>Loans</i>								
4 To depository institutions	164	198	187	288	186	124	184	186
5 Other	0	0	0	0	0	0	0	0
6 Acceptances held under repurchase agreements	0	0	0	0	0	0	0	0
<i>Triparty obligations</i>								
7 Repurchase agreements—triparty ²	26,500	27,000	19,750	26,750	19,500	28,000	32,000	19,500
<i>Federal agency obligations³</i>								
8 Bought outright	10	10	10	10	10	10	10	10
9 Held under repurchase agreements	0	0	0	0	0	0	0	0
10 Total U.S. Treasury securities ³	591,256	594,531	594,411	600,510	600,455	587,189	590,683	600,455
11 Bought outright ⁴	591,256	594,531	594,411	600,510	600,455	587,189	590,683	600,455
12 Bills	196,164	198,724	198,604	203,024	202,969	193,752	196,633	202,969
13 Notes	289,505	290,167	290,167	291,777	291,777	288,027	288,610	291,777
14 Bonds	105,586	105,640	105,640	105,709	105,709	105,410	105,440	105,709
15 Held under repurchase agreements	0	0	0	0	0	0	0	0
16 Total loans and securities	617,930	621,739	614,358	627,559	620,151	615,323	622,877	620,151
17 Items in process of collection	8,953	7,802	7,207	6,891	6,498	5,059	5,299	6,498
18 Bank premises	1,518	1,519	1,520	1,522	1,519	1,514	1,516	1,519
<i>Other assets</i>								
19 Denominated in foreign currencies ⁵	16,136	16,325	16,606	16,493	16,140	15,432	16,161	16,140
20 All other ⁶	21,093	21,614	21,681	22,226	22,053	19,728	21,512	22,053
21 Total assets	679,779	683,124	675,508	688,852	680,546	671,247	681,555	680,546
LIABILITIES								
22 Federal Reserve notes	631,671	631,373	628,601	627,934	628,468	621,288	625,248	628,468
23 Reverse repurchase agreements—triparty ²	0	0	0	0	0	0	0	0
24 Total deposits	20,108	24,660	19,643	34,739	25,825	24,779	30,743	25,825
25 Depository institutions	14,613	19,161	14,257	29,349	19,183	18,561	22,324	19,183
26 U.S. Treasury—General account	5,174	5,194	5,000	5,085	6,242	5,883	8,116	6,242
27 Foreign—Official accounts	79	84	156	78	164	128	90	164
28 Other	243	221	230	227	236	207	212	236
29 Deferred credit items	8,646	7,532	7,685	6,952	7,313	5,677	5,378	7,313
30 Other liabilities and accrued dividends ⁷	2,317	2,382	2,365	2,391	2,363	2,556	2,354	2,363
31 Total liabilities	662,742	665,947	658,295	672,017	663,969	654,299	663,723	663,969
CAPITAL ACCOUNTS								
32 Capital paid in	8,334	8,268	8,261	8,265	8,266	8,268	8,330	8,266
33 Surplus	7,312	7,312	7,312	7,312	7,312	7,312	7,312	7,312
34 Other capital accounts	1,391	1,598	1,641	1,258	999	1,368	2,191	999
35 Total liabilities and capital accounts	679,779	683,124	675,508	688,852	680,546	671,247	681,555	680,546
MEMO								
36 Marketable U.S. Treasury securities held in custody for foreign and international accounts	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Federal Reserve note statement								
37 Federal Reserve notes outstanding (issued to Banks)	751,185	750,562	750,142	749,488	748,243	751,591	752,137	748,243
38 Less: Held by Federal Reserve Banks	119,514	119,189	121,540	121,554	119,775	130,303	126,890	119,775
39 Federal Reserve notes, net	631,671	631,373	628,601	627,934	628,468	621,288	625,248	628,468
<i>Collateral held against notes, net</i>								
40 Gold certificate account	11,044	11,039	11,039	11,039	11,038	11,044	11,044	11,038
41 Special drawing rights certificate account	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200
42 Other eligible assets	662	0	1,191	0	0	0	0	0
43 U.S. Treasury and agency securities	617,766	618,134	614,171	614,695	615,230	608,044	612,004	615,230
44 Total collateral	631,671	631,373	628,601	627,934	628,468	621,288	625,248	628,468

1. Some of the data in this table also appear in the Board's H.4.1 (503) weekly statistical release. For ordering address, see inside front cover.

2. Cash value of agreements arranged through third-party custodial banks.

3. Face value of the securities.

4. Includes securities loaned—fully guaranteed by U.S. Treasury securities pledged with Federal Reserve Banks—and includes compensation that adjusts for the effects of inflation on the principal of inflation-indexed securities. Excludes securities sold and scheduled to be bought back under matched sale-purchase transactions.

5. Valued monthly at market exchange rates.

6. Includes special investment account at the Federal Reserve Bank of Chicago in Treasury bills maturing within ninety days.

7. Includes exchange-translation account reflecting the monthly revaluation at market exchange rates of foreign exchange commitments.

1.19 FEDERAL RESERVE BANKS Maturity Distribution of Loan and Security Holding

Millions of dollars

Type of holding and maturity	Wednesday					End of month		
	2002					2002		
	July 3	July 10	July 17	July 24	July 31	May	June	July
1 Total loans	164	198	187	288	186	124	184	186
2 Within fifteen days ¹	46	75	170	272	151	101	144	151
3 Sixteen days to ninety days	118	122	17	16	35	23	39	35
4 91 days to 1 year	0	0	0	0	0	0	0	0
5 Total U.S. Treasury securities²	591,256	594,531	594,411	600,510	600,455	587,189	590,683	600,455
6 Within fifteen days ¹	18,619	16,069	20,434	22,480	21,605	3,941	8,675	21,605
7 Sixteen days to ninety days	134,956	138,640	131,640	130,686	124,250	143,242	144,837	124,250
8 Ninety-one days to one year	134,401	135,826	137,332	141,763	147,388	139,075	135,633	147,388
9 One year to five years	169,228	169,944	169,944	169,944	171,575	167,479	167,488	171,575
10 Five years to ten years	52,489	52,489	53,499	54,005	54,005	51,920	52,486	54,005
11 More than ten years	81,563	81,563	81,563	81,632	81,632	81,531	81,560	81,632
12 Total federal agency obligations	10	10	10	10	10	10	10	10
13 Within fifteen days ¹	0	0	0	0	0	0	0	0
14 Sixteen days to ninety days	0	0	0	0	0	0	0	0
15 Ninety-one days to one year	0	0	0	0	0	0	0	0
16 One year to five years	10	10	10	10	10	10	10	10
17 Five years to ten years	0	0	0	0	0	0	0	0
18 More than ten years	0	0	0	0	0	0	0	0

1. Holdings under repurchase agreements are classified as maturing within fifteen days in accordance with maximum maturity of the agreements.

2. Includes compensation that adjusts for the effects of inflation on the principal of inflation-indexed securities.

1.20 AGGREGATE RESERVES OF DEPOSITORY INSTITUTIONS AND MONETARY BASE¹

Billions of dollars, averages of daily figures

Item	1998 Dec.	1999 Dec.	2000 Dec.	2001 Dec.	2001		2002						
					Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	
Seasonally adjusted													
ADJUSTED FOR CHANGES IN RESERVE REQUIREMENTS ²													
1 Total reserves ¹	45.14	41.82	38.54	41.22	41.22	41.75	41.45	41.01	40.76	39.12	39.27	39.65	
2 Nonborrowed reserves ⁴	45.02	41.50	38.33	41.15	41.15	41.70	41.42	40.94	40.69	39.00	39.12 ⁷	39.46	
3 Nonborrowed reserves plus extended credit ⁵	45.02	41.50	38.33	41.15	41.15	41.70	41.42	40.94	40.69	39.00	39.12 ⁷	39.46	
4 Required reserves	43.62	40.53	37.11	39.58	39.58	40.36	40.08	39.60	39.55	37.84	38.02 ⁷	38.28	
5 Monetary base ⁶	513.55	593.12	584.04	634.41	634.41	640.86	646.18	649.65	653.94	657.89	664.07 ⁷	668.79	
Not seasonally adjusted													
6 Total reserves ⁷	45.31	41.89	38.53	41.20	41.20	43.71	42.47	40.27	40.85	40.18	38.49 ⁹	39.29	
7 Nonborrowed reserves	45.19	41.57	38.32	41.13	41.13	43.66	42.44	40.19	40.78	40.06	38.35	39.10	
8 Nonborrowed reserves plus extended credit ⁵	45.19	41.57	38.32	41.13	41.13	43.66	42.44	40.19	40.78	40.06	38.35	39.10	
9 Required reserves ⁸	43.80	40.59	37.10	39.55	39.55	42.33	41.11	38.85	39.64	38.90	37.25	37.92	
10 Monetary base ⁹	518.27	600.72	590.06	639.91	639.91	644.27	645.71	649.23	653.29	658.00	662.84 ⁹	668.78	
NOT ADJUSTED FOR CHANGES IN RESERVE REQUIREMENTS ¹⁰													
11 Total reserves ¹¹	45.21	41.65	38.47	41.08	41.08	43.73	42.49	40.30	40.90	40.24	38.57	39.39	
12 Nonborrowed reserves	45.09	41.33	38.26	41.01	41.01	43.68	42.46	40.22	40.83	40.13	38.43	39.20	
13 Nonborrowed reserves plus extended credit ⁵	45.09	41.33	38.26	41.01	41.01	43.68	42.46	40.22	40.83	40.13	38.43	39.20	
14 Required reserves	43.70	40.36	37.05	39.43	39.43	42.34	41.12	38.88	39.69	38.97	37.33	38.01	
15 Monetary base ¹²	525.06	608.02	596.98	648.74	648.74	653.28	654.93	658.78	663.37	668.14	672.98 ⁸	679.00	
16 Excess reserves ¹³	1.51	1.30	1.43	1.65	1.65	1.39	1.37	1.41	1.21	1.27	1.24	1.37	
17 Borrowings from the Federal Reserve .....	.12	.32	.21	.07	.07	.05	.03	.08	.07	.11	.14	.19

1. Latest monthly and biweekly figures are available from the Board's H.3 (502) weekly statistical release. Historical data starting in 1959 and estimates of the effect on required reserves of changes in reserve requirements are available from the Money and Reserves Projections Section, Division of Monetary Affairs, Board of Governors of the Federal Reserve System, Washington, DC 20551.

2. Figures reflect adjustments for discontinuities, or "breaks," associated with regulatory changes in reserve requirements. (See also table 1.10.)

3. Seasonally adjusted, break-adjusted total reserves equal seasonally adjusted, break-adjusted required reserves (line 4) plus excess reserves (line 16).

4. Seasonally adjusted, break-adjusted nonborrowed reserves equal seasonally adjusted, break-adjusted total reserves (line 1) less total borrowings of depository institutions from the Federal Reserve (line 17).

5. Extended credit consists of borrowing at the discount window under the terms and conditions established for the extended credit program to help depository institutions deal with sustained liquidity pressures. Because there is not the same need to repay such borrowing promptly as with traditional short-term adjustment credit, the money market effect of extended credit is similar to that of nonborrowed reserves.

6. The seasonally adjusted, break-adjusted monetary base consists of (1) seasonally adjusted, break-adjusted total reserves (line 1), plus (2) the seasonally adjusted currency component of the money stock, plus (3) (for all quarterly reporters on the "Report of Transaction Accounts, Other Deposits and Vault Cash" and for all those weekly reporters whose vault cash exceeds their required reserves) the seasonally adjusted, break-adjusted difference between current vault cash and the amount applied to satisfy current reserve requirements.

7. Break-adjusted total reserves equal break-adjusted required reserves (line 9) plus excess reserves (line 16).

8. To adjust required reserves for discontinuities that are due to regulatory changes in reserve requirements, a multiplicative procedure is used to estimate what required reserves would have been in past periods had current reserve requirements been in effect. Break-adjusted required reserves include required reserves against transactions deposits and nonpersonal time and savings deposits (but not reservable nondeposit liabilities).

9. The break-adjusted monetary base equals (1) break-adjusted total reserves (line 6), plus (2) the (unadjusted) currency component of the money stock, plus (3) (for all quarterly reporters on the "Report of Transaction Accounts, Other Deposits and Vault Cash" and for all those weekly reporters whose vault cash exceeds their required reserves) the break-adjusted difference between current vault cash and the amount applied to satisfy current reserve requirements.

10. Reflects actual reserve requirements, including those on nondeposit liabilities, with no adjustments to eliminate the effects of discontinuities associated with regulatory changes in reserve requirements.

11. Reserve balances with Federal Reserve Banks plus vault cash used to satisfy reserve requirements.

12. The monetary base, not break-adjusted and not seasonally adjusted, consists of (1) total reserves (line 11), plus (2) required clearing balances and adjustments to compensate for float at Federal Reserve Banks, plus (3) the currency component of the money stock, plus (4) (for all quarterly reporters on the "Report of Transaction Accounts, Other Deposits and Vault Cash" and for all those weekly reporters whose vault cash exceeds their required reserves) the difference between current vault cash and the amount applied to satisfy current reserve requirements. Since February 1984, currency and vault cash figures have been measured over the computation periods ending on Mondays.

13. Unadjusted total reserves (line 11) less unadjusted required reserves (line 14).

1.21 MONEY STOCK MEASURES¹

Billions of dollars, averages of daily figures

Item	1998 Dec.	1999 Dec.	2000 Dec.	2001 Dec.	2002			
					Apr.	May	June	July
Seasonally adjusted								
<i>Measures²</i>								
1 M1	1,096.5	1,124.4	1,088.9	1,179.3	1,176.2	1,182.7	1,189.7 ^r	1,197.6
2 M2	4,380.5	4,650.3	4,936.0	5,454.8	5,480.8	5,545.1	5,579.3	5,639.0
3 M3	6,041.0	6,541.3	7,115.0	8,031.0 ^r	8,053.2 ^r	8,131.1 ^r	8,171.4 ^r	8,222.3
<i>M1 components</i>								
4 Currency ³	459.3	516.9	530.1	579.9	599.5	605.3	611.5	615.6
5 Travelers checks ⁴	8.2	8.3	8.0	7.8	7.7	7.8	8.2	8.6
6 Demand deposits ⁵	378.4	354.5	309.9	330.4	309.4	305.9	305.1 ^r	303.8
7 Other checkable deposits ⁶	250.5	244.7	240.9	261.2	259.6	263.8	264.9	269.7
<i>Nontransaction components</i>								
8 In M2 ⁷	3,284.0	3,525.9	3,847.1	4,275.5	4,304.6 ^r	4,362.4	4,389.6 ^r	4,441.3
9 In M3 only ⁸	1,660.5	1,891.0	2,179.0	2,576.2 ^r	2,572.4 ^r	2,586.0 ^r	2,592.0 ^r	2,583.3
<i>Commercial banks</i>								
10 Savings deposits, including MMDAs	1,187.5	1,289.1	1,423.7	1,745.8	1,824.7	1,863.6 ^r	1,884.5 ^r	1,911.2
11 Small time deposits ⁹	626.1	635.0	699.1	638.9	614.0	619.9	620.9 ^r	617.3
12 Large time deposits ^{10,11}	582.9	651.6	717.2	670.4	688.3	695.9 ^r	692.8 ^r	692.2
<i>Thrift institutions</i>								
13 Savings deposits, including MMDAs	414.7	449.7	452.1	561.5	612.6	619.4	626.9	638.8
14 Small time deposits ⁹	325.6	320.4	344.5	334.2	319.3	311.4	308.5	307.3
15 Large time deposits ¹⁰	88.6	91.1	102.9	113.9	114.4	111.5	109.9	110.0
<i>Money market mutual funds</i>								
16 Retail	730.2	831.8	927.6	995.1	933.9	948.2	948.9	966.8
17 Institution-only	543.1	639.0	799.1	1,207.2	1,175.2	1,185.1	1,195.0	1,189.8
<i>Repurchase agreements and eurodollars</i>								
18 Repurchase agreements ¹²	293.4	335.9 ^r	364.0	375.7 ^r	371.9 ^r	371.9 ^r	373.7 ^r	372.6
19 Eurodollars ¹²	152.5	173.4	195.9	209.0	222.6 ^r	221.5 ^r	220.6 ^r	218.7
Not seasonally adjusted								
<i>Measures²</i>								
20 M1	1,120.4	1,148.3	1,112.3	1,203.5	1,188.6	1,178.0	1,187.3 ^r	1,195.2
21 M2	4,400.6	4,671.1	4,959.7	5,479.8	5,558.1	5,528.4	5,568.2 ^r	5,612.7
22 M3	6,069.8	6,573.0	7,150.2 ^r	8,069.3 ^r	8,144.5 ^r	8,125.8 ^r	8,157.1 ^r	8,172.7
<i>M1 components</i>								
23 Currency ³	463.3	521.5	535.2	584.9	599.7	605.4	610.8 ^r	615.8
24 Travelers checks ⁴	8.4	8.4	8.1	7.9	7.9	7.9	8.0	8.2
25 Demand deposits ⁵	395.9	371.8	326.5	348.2	309.9	300.2	302.2 ^r	304.0
26 Other checkable deposits ⁶	252.8	246.6	242.5	262.5	271.1	264.6	266.4	267.3
<i>Nontransaction components</i>								
27 In M2 ⁷	3,280.2	3,522.8	3,847.4	4,276.3	4,369.5	4,350.4 ^r	4,380.9	4,417.5
28 In M3 only ⁸	1,669.2	1,901.9	2,190.6	2,589.5 ^r	2,586.4 ^r	2,597.4 ^r	2,588.8 ^r	2,560.0
<i>Commercial banks</i>								
29 Savings deposits, including MMDAs	1,186.0	1,288.8	1,426.9	1,750.2	1,851.3	1,861.8	1,889.4	1,907.3
30 Small time deposits ⁹	626.5	635.7	700.0	639.6	613.4	617.7	617.9	615.3
31 Large time deposits ^{10,11}	583.2	652.0	717.6	670.5	689.6	701.9 ^r	697.9 ^r	691.9
<i>Thrift institutions</i>								
32 Savings deposits, including MMDAs	414.2	449.6	453.1	562.9	621.6	618.8	628.5	637.5
33 Small time deposits ⁹	325.8	320.8	345.0	334.6 ^r	319.0	310.4	307.0	306.3
34 Large time deposits ¹⁰	88.6	91.2	103.0	114.0	114.7	112.4	110.7	109.9
<i>Money market mutual funds</i>								
35 Retail	727.7	828.1	922.4	989.0	964.1	941.6	938.1	951.1
36 Institution-only	552.6	648.6	808.1	1,218.5	1,185.1	1,182.2	1,180.8	1,167.3
<i>Repurchase agreements and eurodollars</i>								
37 Repurchase agreements ¹²	290.4	334.7	364.2	376.5 ^r	371.8 ^r	376.9 ^r	378.8 ^r	373.8
38 Eurodollars ¹²	154.5	175.4	197.6	210.2	225.2	223.9 ^r	220.6 ^r	217.0

Footnotes appear on following page.

NOTES TO TABLE 1.21

1. Latest monthly and weekly figures are available from the Board's H.6 (508) weekly statistical release. Historical data starting in 1959 are available from the Money and Reserves Projections Section, Division of Monetary Affairs, Board of Governors of the Federal Reserve System, Washington, DC 20551.

2. Composition of the money stock measures is as follows:

M1: (1) currency outside the U.S. Treasury, Federal Reserve Banks, and the vaults of depository institutions, (2) travelers checks of nonbank issuers, (3) demand deposits at all commercial banks other than those owed to depository institutions, the U.S. government, and foreign banks and official institutions, less cash items in the process of collection and Federal Reserve float, and (4) other checkable deposits (OCDs), consisting of negotiable order of withdrawal (NOW) and automatic transfer service (ATS) accounts at depository institutions, credit union share draft accounts, and demand deposits at thrift institutions. Seasonally adjusted M1 is computed by summing currency, travelers checks, demand deposits, and OCDs, each seasonally adjusted separately.

M2: M1 plus (1) savings deposits (including MMDAs), (2) small-denomination time deposits (time deposits—including retail RPs—in amounts of less than \$100,000), and (3) balances in retail money market mutual funds. Excludes individual retirement accounts (IRAs) and Keogh balances at depository institutions and money market funds. Seasonally adjusted M2 is calculated by summing savings deposits, small-denomination time deposits, and retail money fund balances, each seasonally adjusted separately, and adding this result to seasonally adjusted M1.

M3: M2 plus (1) large-denomination time deposits (in amounts of \$100,000 or more) issued by all depository institutions, (2) balances in institutional money funds, (3) RP liabilities (overnight and term) issued by all depository institutions, and (4) eurodollars (overnight and term) held by U.S. residents at foreign branches of U.S. banks worldwide and at all banking offices in the United Kingdom and Canada. Excludes amounts held by deposit-

ory institutions, the U.S. government, money market funds, and foreign banks and official institutions. Seasonally adjusted M3 is calculated by summing large time deposits, institutional money fund balances, RP liabilities, and eurodollars, each seasonally adjusted separately, and adding this result to seasonally adjusted M2.

3. Currency outside the U.S. Treasury, Federal Reserve Banks, and vaults of depository institutions.

4. Outstanding amount of U.S. dollar-denominated travelers checks of nonbank issuers. Travelers checks issued by depository institutions are included in demand deposits.

5. Demand deposits at commercial banks and foreign-related institutions other than those owed to depository institutions, the U.S. government, and foreign banks and official institutions, less cash items in the process of collection and Federal Reserve float.

6. Consists of NOW and ATS account balances at all depository institutions, credit union share draft account balances, and demand deposits at thrift institutions.

7. Sum of (1) savings deposits (including MMDAs), (2) small time deposits, and (3) retail money fund balances.

8. Sum of (1) large time deposits, (2) institutional money fund balances, (3) RP liabilities (overnight and term) issued by depository institutions, and (4) eurodollars (overnight and term) of U.S. addressees.

9. Small time deposits—including retail RPs—are those issued in amounts of less than \$100,000. All IRAs and Keogh accounts at commercial banks and thrift institutions are subtracted from small time deposits.

10. Large time deposits are those issued in amounts of \$100,000 or more, excluding those booked at international banking facilities.

11. Large time deposits at commercial banks less those held by money market funds, depository institutions, the U.S. government, and foreign banks and official institutions.

12. Includes both overnight and term.

1.26 COMMERCIAL BANKS IN THE UNITED STATES Assets and Liabilities¹—Continued

C. Large domestically chartered commercial banks

Billions of dollars

Account	Monthly averages								Wednesday figures			
	2001	2002							2002			
	July	Jan.	Feb.	Mar.	Apr.	May	June	July	July 10	July 17	July 24	July 31
	Seasonally adjusted											
Assets												
1 Bank credit	2,629.6	2,576.4	2,574.0	2,554.4 ^r	2,558.7 ^r	2,575.3 ^r	2,595.0 ^r	2,628.2	2,621.8	2,614.9	2,647.9	2,642.3
2 Securities in bank credit	611.3	635.1	630.2	628.3	646.7	665.7	685.1	714.2	714.6	692.6	733.9	724.8
3 U.S. government securities	359.6	367.4	360.1	367.9	384.0	391.3	400.7	411.1	405.1	397.1	422.0	423.9
4 Trading account	38.5	32.6	33.6	32.7	38.1	43.0	42.4	43.1	46.0	43.7	41.6	42.0
5 Investment account	321.2	334.8	326.5	335.2	345.9	348.3	358.4	368.0	359.1	353.4	380.4	381.9
6 Other securities	251.7	267.7	270.1	260.4	262.7	274.5	284.3	303.1	309.5	295.5	311.9	300.8
7 Trading account	140.8	128.4	130.0	122.5	128.2	140.5	148.3	168.7	174.9	160.9	177.2	166.9
8 Investment account	110.9	139.3	140.1	137.9	134.5	134.0	136.1	134.4	134.7	134.6	134.7	133.9
9 State and local government	27.7	27.3	27.8	27.7	27.2	26.9	27.3	28.3	28.0	28.2	28.4	28.6
10 Other	83.2	112.0	112.3	110.2	107.3	107.0	108.7	106.1	106.7	106.4	106.2	105.3
11 Loans and leases in bank credit ²	2,018.2	1,941.3	1,943.8	1,926.1 ^r	1,912.0 ^r	1,909.5 ^r	1,909.9 ^r	1,914.0	1,907.2	1,922.3	1,914.0	1,917.6
12 Commercial and industrial	565.9	527.4	527.5	521.3	510.1 ^r	503.1 ^r	498.9 ^r	487.6	486.8	488.3	488.1	486.7
13 Bankers acceptances	.0	.0	.0	.0	.0	.0	.0	.0	.0	n.a.	n.a.	n.a.
14 Other	565.9	527.4	527.5	521.3	510.1 ^r	503.1 ^r	498.9 ^r	487.6	486.8	488.3	488.1	486.7
15 Real estate	855.1	849.5	851.6	846.0	843.9	845.5	859.5	879.3	878.8	877.3	879.5	885.0
16 Revolving home equity	88.2	99.6	101.4	105.1	108.3	111.8	116.3	121.1	120.0	120.6	121.5	123.0
17 Other	766.9	749.9	750.3	740.8	735.6	733.7	743.1	758.3	758.8	756.7	758.0	762.0
18 Consumer	255.0	239.0	247.8	246.3	244.7	244.5	240.4	241.0	240.5	240.5	241.2	242.3
19 Security ³	71.5	68.2	69.9	73.7	75.6	81.4	76.4	78.6	74.8	88.8	76.8	76.5
20 Federal funds sold to and repurchase agreements with broker-dealers	56.7	54.9	57.4	61.2	63.3	69.1	64.5	66.2	63.0	76.7	64.1	63.0
21 Other	14.8	13.3	12.5	12.5	12.3	12.2	12.0	12.4	11.9	12.1	12.7	13.4
22 State and local government	14.3	14.3	13.8	13.3	13.1	13.0	13.0	12.8	12.8	12.8	12.8	12.7
23 Agricultural	10.5	9.6	9.5	9.3	9.2	9.1	9.0	8.9	8.9	8.9	8.9	8.9
24 Federal funds sold to and repurchase agreements with others	32.8	26.3	22.7	21.0	22.0	18.7	17.2	13.4	13.3	12.9	13.9	14.0
25 All other loans	81.8	75.0	69.7	64.9	64.0	65.8	67.7	64.8	63.7	65.2	65.1	63.9
26 Lease-financing receivables	131.3	131.9	131.3	130.4	129.4	128.4	127.9	127.6	127.6	127.6	127.6	127.6
27 Interbank loans	137.8	169.8	154.8	148.3	157.6 ^r	167.7 ^r	160.0 ^r	161.8	155.2	163.1	159.8	174.3
28 Federal funds sold to and repurchase agreements with commercial banks	72.7	93.5	81.4	77.1	84.4	83.5	73.9	74.1	68.3	75.4	69.4	86.7
29 Other	65.1	76.3	73.5	71.3 ^r	73.3 ^r	84.2 ^r	86.2 ^r	87.7	86.9	87.6	90.4	87.6
30 Cash assets ⁴	146.5	145.9	142.5	141.9	138.8	140.2	142.1	141.4	138.1	132.4	151.9	146.5
31 Other assets ⁵	285.2	318.6	313.3	292.8	299.7	302.9	296.0 ^r	302.0	294.0	292.0	305.8	321.3
32 Total assets⁶	3,160.8	3,167.3	3,140.9	3,093.4	3,111.8	3,143.1	3,150.2^r	3,190.6	3,166.2	3,159.5	3,222.5	3,241.9
Liabilities												
33 Deposits	1,760.0	1,797.3	1,795.3	1,806.5	1,810.9	1,806.2	1,809.0	1,837.9	1,816.2	1,833.2	1,839.7	1,864.0
34 Transaction	308.7	317.5	309.6	304.9	288.2	289.7	285.4	290.7	272.0	290.4	308.1	301.4
35 Nontransaction	1,451.3	1,479.7	1,485.8	1,501.6	1,522.7	1,516.5	1,523.6	1,547.2	1,544.2	1,542.8	1,531.5	1,562.6
36 Large time	271.8	242.8	250.6	249.6	246.1	247.5	242.6	259.9	250.1	259.6	263.3	268.9
37 Other	1,179.5	1,236.9	1,235.2	1,252.0	1,276.6	1,269.0	1,281.0	1,287.2	1,294.1	1,283.2	1,268.2	1,293.8
38 Borrowings	685.7	654.1	654.4	635.8	645.5	664.3	654.5	641.1	634.3	629.3	649.3	660.6
39 From banks in the U.S.	214.7	201.6	197.0	191.1	192.3	193.3	187.2	190.4	192.2	188.4	191.7	193.5
40 From others	471.0	452.5	457.4	444.7	453.2	471.0	467.3	450.7	442.1	440.9	457.6	467.1
41 Net due to related foreign offices	195.2	172.3	160.0	164.4	167.6 ^r	168.1 ^r	163.9 ^r	171.7	175.6	174.0	179.2	162.2
42 Other liabilities	202.3	193.9	187.8	168.9 ^r	180.0 ^r	186.5 ^r	206.3 ^r	228.4	227.4	212.2	237.9	245.6
43 Total liabilities	2,843.2	2,817.5	2,797.5	2,775.7	2,804.0	2,825.1	2,833.7	2,879.0	2,853.5	2,848.6	2,906.2	2,932.4
44 Residual (assets less liabilities) ⁷	317.6	349.8	343.4	317.7	307.8	318.0	316.6	311.6	312.7	310.8	316.3	309.4

Footnotes appear on p. A21.

1.26 COMMERCIAL BANKS IN THE UNITED STATES Assets and Liabilities¹—Continued

C. Large domestically chartered commercial banks—Continued

Billions of dollars

Account	Monthly averages								Wednesday figures			
	2001	2002							2002			
	July	Jan.	Feb.	Mar.	Apr.	May	June	July	July 10	July 17	July 24	July 31
Not seasonally adjusted												
<i>Assets</i>												
45 Bank credit	2,614.4	2,586.1	2,578.9	2,553.4	2,558.3 ^r	2,575.2 ^r	2,595.2 ^r	2,612.9	2,609.1	2,598.8	2,623.0	2,628.3
46 Securities in bank credit	601.2	642.0	636.0	631.7	644.8	663.7	681.4	702.1	703.1	679.3	718.1	715.5
47 U.S. government securities	354.3	371.5	365.4	371.9	384.5	389.7	398.5	404.9	400.0	390.0	413.4	419.3
48 Trading account	37.9	32.9	34.1	33.1	38.2	42.8	42.2	42.4	45.4	42.9	40.7	41.5
49 Investment account	316.4	338.5	331.3	338.8	346.4	346.9	356.3	362.5	354.6	347.1	372.7	377.7
50 Mortgage-backed securities	232.5	274.5	259.3	263.9	271.7	275.8	280.7	288.2	281.6	272.6	297.0	303.4
51 Other	83.9	64.0	72.0	74.9	74.7	71.1	75.6	74.2	73.1	74.4	75.7	74.4
52 One year or less	21.1	13.8	16.7	19.6	18.4	16.1	14.9	18.6	18.9	19.7	18.9	17.3
53 One to five years	34.6	36.8	43.2	43.0	43.6	42.4	47.7	43.1	41.9	42.1	44.3	44.2
54 More than five years	28.2	13.4	12.1	12.3	12.8	12.7	13.0	12.5	12.3	12.7	12.4	12.9
55 Other securities	246.9	270.6	270.5	259.8	260.2	274.0	282.9	297.3	303.1	289.4	304.7	296.2
56 Trading account	138.1	129.8	130.2	122.2	127.0	140.2	147.5	165.5	171.2	157.5	173.1	164.3
57 Investment account	108.8	140.8	140.4	137.6	133.3	133.8	135.4	131.8	131.9	131.8	131.5	131.9
58 State and local government	27.2	27.6	27.8	27.6	27.0	26.9	27.2	27.7	27.4	27.6	27.8	28.2
59 Other	81.6	113.2	112.5	110.0	106.3	106.9	108.2	104.1	104.5	104.2	103.8	103.7
60 Loans and leases in bank credit ²	2,013.2	1,944.1	1,942.9	1,921.7	1,913.5 ^r	1,911.5 ^r	1,913.7 ^r	1,910.7	1,906.0	1,919.5	1,904.9	1,912.8
61 Commercial and industrial	565.5	523.2	526.3	521.7	513.5 ^r	506.5 ^r	500.2 ^r	487.3	487.1	488.0	486.2	485.6
62 Bankers acceptances	0	0	0	0	0	0	0	0	n.a.	n.a.	n.a.	n.a.
63 Other	565.5	523.2	526.3	521.7	513.5 ^r	506.5 ^r	500.2 ^r	487.3	487.1	488.0	486.2	485.6
64 Real estate	855.3	849.1	848.4	841.3	842.7	849.0	861.3	879.5	880.4	878.3	878.1	884.2
65 Revolving home equity	88.4	99.2	101.5	104.2	107.9	112.3	116.7	121.3	120.2	120.9	121.7	123.2
66 Other	465.1	441.2	438.5	429.5	426.4	426.9	435.9	449.4	452.4	448.7	446.9	451.4
67 Commercial	301.8	308.7	308.4	307.7	308.4	309.7	308.7	308.8	307.9	308.8	309.5	309.6
68 Consumer	253.1	242.9	250.2	246.4	245.1	245.2	240.2	239.1	238.6	238.6	239.3	240.3
69 Credit cards and related plans	87.5	71.6	76.7	74.8	72.9	72.9	70.5	69.3	68.6	68.6	69.3	70.2
70 Other	165.6	171.3	173.5	171.6	172.2	172.3	169.7	169.8	169.3	169.9	170.1	170.1
71 Security ³	70.5	68.2	69.2	73.4	73.9	76.3	77.1	77.5	73.0	87.7	75.2	76.4
72 Federal funds sold to and repurchase agreements with broker-dealers	56.0	55.0	56.9	60.9	61.9	64.8	65.1	65.3	61.4	75.7	62.8	63.0
73 Other	14.6	13.3	12.4	12.4	12.0	11.5	12.1	12.3	11.6	12.0	12.4	13.4
74 State and local government	14.3	14.3	13.8	13.3	13.1	13.0	13.0	12.8	12.8	12.8	12.8	12.7
75 Agricultural	10.7	9.6	9.4	9.2	9.1	9.2	9.2	9.1	9.1	9.1	9.1	9.0
76 Federal funds sold to and repurchase agreements with others	31.2	28.0	24.1	21.0	22.0	18.7	17.2	13.4	13.3	12.9	13.9	14.0
77 All other loans	82.1	74.7	68.6	64.1	64.1	65.2	68.1	65.1	64.5	65.3	63.6	63.9
78 Lease-financing receivables	130.5	134.1	132.8	131.3	130.0	128.4	127.4	126.8	127.1	126.9	126.6	126.6
79 Interbank loans	136.9	169.2	153.1	148.5	161.5 ^r	168.9 ^r	165.1 ^r	160.8	154.1	162.3	153.2	173.2
80 Federal funds sold to and repurchase agreements with commercial banks	72.3	93.2	80.4	77.1	86.5	84.1	76.1	73.7	67.8	75.1	66.5	86.2
81 Other	64.6	76.0	72.6	71.3	75.0 ^r	84.8 ^r	88.9 ^r	87.2	86.2	87.2	86.6	87.1
82 Cash assets ⁴	141.0	154.1	143.2	137.0	141.4	139.7	138.0	136.0	132.1	129.5	136.8	142.6
83 Other assets ⁵	285.2	319.4	311.8	291.3	300.3	302.6	295.5 ^r	301.8	295.8	292.5	301.5	320.1
84 Total assets ⁶	3,139.3	3,185.7	3,142.9	3,086.2	3,118.8 ^r	3,143.4 ^r	3,150.8 ^r	3,168.9	3,148.3	3,140.5	3,171.8	3,221.8
<i>Liabilities</i>												
85 Deposits	1,752.0	1,802.2	1,801.8	1,805.1	1,818.3	1,800.8	1,807.5	1,829.8	1,817.4	1,827.1	1,809.2	1,854.6
86 Transaction	303.5	326.2	306.2	301.9	295.5	286.9	283.8	285.7	267.2	286.0	289.9	299.1
87 Nontransaction	1,448.5	1,476.0	1,495.7	1,503.2	1,522.9	1,513.9	1,523.7	1,544.1	1,550.1	1,541.2	1,519.3	1,555.5
88 Large time	269.6	245.3	252.5	248.2	244.4	245.7	241.8	257.8	249.1	257.5	260.5	266.6
89 Other	1,178.8	1,230.7	1,243.2	1,255.1	1,278.5	1,268.2	1,281.8	1,286.3	1,301.1	1,283.7	1,258.9	1,288.9
90 Borrowings	674.9	667.5	657.3	633.9	651.7	670.7	653.5	631.0	626.3	621.8	636.4	645.8
91 From banks in the U.S.	210.2	206.6	201.9	195.3	197.2	194.5	184.6	186.4	189.1	184.8	185.9	189.1
92 From nonbanks in the U.S.	464.7	460.9	455.4	438.5	454.4	476.2	468.9	444.6	437.3	437.0	450.4	456.7
93 Net due to related foreign offices	189.4	176.5	163.8	163.0	160.8 ^r	167.8 ^r	162.6 ^r	166.4	167.4	167.4	174.7	159.1
94 Other liabilities	196.7	198.4	191.7	167.5 ^r	173.3 ^r	186.0 ^r	204.8 ^r	222.1	218.2	204.9	232.3	241.3
95 Total liabilities	2,813.0	2,844.6	2,814.7	2,769.5	2,804.2	2,825.3 ^r	2,828.4 ^r	2,849.2	2,829.6	2,821.3	2,852.6	2,900.8
96 Residual (assets less liabilities) ⁷	326.3	341.1	328.2	316.7	314.6	318.1	322.3	319.7	318.7	319.1	319.2	321.0

Footnotes appear on p. A21.

1.26 COMMERCIAL BANKS IN THE UNITED STATES Assets and Liabilities¹—Continued

E. Foreign-related institutions

Billions of dollars

Account	Monthly averages								Wednesday figures			
	2001	2002							2002			
	July	Jan.	Feb.	Mar.	Apr. [†]	May [†]	June [†]	July	July 10	July 17	July 24	July 31
Seasonally adjusted												
Assets												
1 Bank credit	599.4 [†]	584.7 [†]	584.1 [†]	591.9 [†]	597.9	598.2	608.1	610.7	603.8	609.4	612.1	620.2
2 Securities in bank credit	223.7 [†]	229.7 [†]	224.6 [†]	223.5 [†]	223.9	227.0	233.1	231.7	230.4	232.1	230.1	234.8
3 U.S. government securities	44.2 [†]	67.4 [†]	61.1 [†]	64.1 [†]	65.7	65.9	65.9	62.9	62.2	61.6	62.6	66.1
4 Other securities	179.5 [†]	162.4 [†]	163.5 [†]	159.4 [†]	158.2	161.1	167.2	168.7	168.2	170.5	167.5	168.6
5 Loans and leases in bank credit ²	375.8	355.0	359.5	368.4	374.0	371.1	375.0	379.1	373.4	377.3	382.0	385.4
6 Commercial and industrial	204.0	193.7	197.1	200.2	198.2	198.8	195.4	192.6	193.2	193.2	191.8	192.6
7 Real estate	18.1	18.8	18.4	18.9	19.4	19.4	19.8	20.1	20.0	20.2	19.9	20.1
8 Security ³	86.7	74.8	73.9	78.5	84.5	81.1	87.0	91.9	86.9	89.9	94.4	97.3
9 Other loans and leases	66.9	67.8	70.1	70.8	71.9	71.7	72.8	74.5	73.2	73.9	75.9	75.5
10 Interbank loans	21.1	25.2	19.9	20.5	22.1	23.7	20.8	18.0	19.7	16.6	20.2	15.1
11 Cash assets ⁴	35.8	40.2	41.8	43.9	46.2	44.2	43.8	43.3	42.6	44.3	42.9	43.4
12 Other assets ⁵	30.3	31.0	31.7	29.9	31.3	31.8	34.9	36.5	36.2	34.5	40.5	35.6
13 Total assets⁶	686.3[†]	680.7[†]	677.2[†]	685.8[†]	697.0	697.5	707.1	708.2	701.9	704.4	715.4	713.8
Liabilities												
14 Deposits	410.8	468.1	476.5	490.6	507.1	508.4	509.7	505.2	507.0	510.7	504.5	494.4
15 Transaction	9.4	11.1	10.3	10.1	10.5	10.9	10.9	10.6	9.8	10.6	10.6	11.6
16 Nontransaction	401.5	457.0	466.2	480.5	496.6	497.5	498.7	494.6	497.2	500.1	493.9	482.7
17 Borrowings	210.5	185.2	191.1	187.5	191.4	192.7	197.9	208.2	200.6	202.4	202.6	229.3
18 From banks in the U.S.	22.2	22.3	23.1	21.8	23.2	22.2	22.9	22.4	20.6	21.2	18.9	28.1
19 From others	188.3	163.0	168.0	165.7	168.3	170.4	175.1	185.8	180.0	181.2	183.7	201.3
20 Net due to related foreign offices	-14.5	-65.4	-73.1	-71.5	-73.6	-87.6	-84.7	-90.7	-88.5	-91.6	-83.1	-98.8
21 Other liabilities	79.6	80.1	77.5	69.0	67.4	70.9	79.1	85.4	83.3	85.6	86.7	88.2
22 Total liabilities	686.4	668.1	672.0	675.6	692.3	684.3	701.9	708.1	702.4	707.1	710.7	713.1
23 Residual (assets less liabilities) ⁷	-1 [†]	12.6 [†]	5.2 [†]	10.3 [†]	4.8	13.1	5.2	.1	-5	-2.7	4.7	.8
Not seasonally adjusted												
Assets												
24 Bank credit	593.5 [†]	590.4 [†]	588.1 [†]	591.8 [†]	597.9	594.2	605.0	604.5	595.7	605.0	603.8	614.8
25 Securities in bank credit	223.7 [†]	229.7 [†]	224.6 [†]	223.5 [†]	223.9	227.0	233.1	231.7	230.4	232.1	230.1	234.8
26 U.S. government securities	44.2 [†]	67.4 [†]	61.1 [†]	64.1 [†]	65.7	65.9	65.9	62.9	62.2	61.6	62.6	66.1
27 Trading account	10.7 [†]	9.5 [†]	9.1 [†]	9.0 [†]	9.5	10.2	10.6	10.7	10.3	10.5	10.2	12.1
28 Investment account	33.5 [†]	57.9 [†]	52.0 [†]	55.1 [†]	56.2	55.7	55.4	52.2	51.9	51.1	52.4	54.0
29 Other securities	179.5 [†]	162.4 [†]	163.5 [†]	159.4 [†]	158.2	161.1	167.2	168.7	168.2	170.5	167.5	168.6
30 Trading account	109.3 [†]	102.4 [†]	100.9 [†]	96.9 [†]	96.4	98.6	103.1	106.8	104.8	107.8	106.8	108.8
31 Investment account	70.1 [†]	59.9 [†]	62.6 [†]	62.5 [†]	61.8	62.5	64.0	61.9	63.5	62.7	60.7	59.8
32 Loans and leases in bank credit ²	369.8	360.6	363.5	368.3	374.0	367.1	371.9	372.9	365.3	372.8	373.7	380.0
33 Commercial and industrial	202.6	194.4	198.6	201.6	196.9	196.5	194.3	191.7	191.7	192.3	190.0	190.9
34 Real estate	18.1	18.8	18.4	18.9	19.4	19.4	19.8	20.1	20.0	20.2	19.9	20.1
35 Security ³	83.4	78.9	76.3	76.2	85.2	79.9	85.4	88.4	81.4	87.5	90.0	95.4
36 Other loans and leases	65.7	68.6	70.2	71.7	72.5	71.3	72.4	73.1	72.3	72.9	73.7	73.7
37 Interbank loans	21.1	25.2	19.9	20.5	22.1	23.7	20.8	18.0	19.7	16.6	20.2	15.1
38 Cash assets ⁴	34.3	42.3	42.7	42.8	44.3	42.7	41.8	41.5	40.6	42.3	41.0	42.1
39 Other assets ⁵	29.2	31.8	32.3	30.7	31.1	31.8	33.3	35.2	34.8	33.5	38.8	34.6
40 Total assets⁶	677.7[†]	689.3[†]	682.7[†]	685.5[†]	695.0	692.0	700.6	698.9	690.4	697.0	703.4	706.2
Liabilities												
41 Deposits	403.4	478.8	482.0	492.8	510.9	513.5	507.8	496.1	496.1	501.7	496.3	486.4
42 Transaction	9.3	11.3	10.5	9.9	10.0	10.5	10.6	10.6	9.8	10.6	10.4	11.6
43 Nontransaction	394.1	467.5	471.5	482.9	500.9	503.0	497.2	485.5	486.2	491.1	485.9	474.8
44 Borrowings	210.5	185.2	191.1	187.5	191.4	192.7	197.9	208.2	200.6	202.4	202.6	229.3
45 From banks in the U.S.	22.2	22.3	23.1	21.8	23.2	22.2	22.9	22.4	20.6	21.2	18.9	28.1
46 From others	188.3	163.0	168.0	165.7	168.3	170.4	175.1	185.8	180.0	181.2	183.7	201.3
47 Net due to related foreign offices	-18.8	-62.3	-70.4	-68.5	-75.5	-87.7	-87.3	-94.4	-92.8	-95.8	-86.2	-102.0
48 Other liabilities	77.7	81.5	78.6	70.2	66.7	70.8	77.8	83.3	81.0	83.3	85.0	86.3
49 Total liabilities	672.8	683.3	681.3	682.0	693.6	689.3	696.2	693.2	684.8	691.5	697.6	700.0
50 Residual (assets less liabilities) ⁷	4.9 [†]	6.0 [†]	1.3 [†]	3.5 [†]	1.4	2.7	4.4	5.7	5.7	5.4	5.8	6.1

Footnotes appear on p. A21.

1.26 COMMERCIAL BANKS IN THE UNITED STATES Assets and Liabilities¹—Continued

F. Memo items

Billions of dollars

Account	Monthly averages								Wednesday figures			
	2001	2002							2002			
	July	Jan.	Feb.	Mar.	Apr.	May	June	July	July 10	July 17	July 24	July 31
	Not seasonally adjusted											
MEMO												
<i>Large domestically chartered banks, adjusted for mergers</i>												
1 Revaluation gains on off-balance-sheet items ⁸	80.0	86.3	81.7	73.2	73.3	80.8	92.9	105.8	109.1	99.1	114.5	104.1
2 Revaluation losses on off-balance-sheet items ⁸	71.8	66.5	59.4	52.5	57.5	61.7	75.2	89.2	90.7	83.4	98.8	87.3
3 Mortgage-backed securities ⁹	254.7	315.2	298.8	300.7	307.3	311.5	316.9	321.3	314.0	306.0	330.5	336.6
4 Pass-through	192.4	218.1	203.8	203.6	206.8	214.2	227.9	237.3	229.9	223.2	247.0	251.1
5 CMO, REMIC, and other	62.3	97.0	95.0	97.2	100.4	97.3	89.0	84.0	84.1	82.8	83.5	85.5
6 Net unrealized gains (losses) on available-for-sale securities ¹⁰	2.6	2.3	3.5	3.3	2.3	5.0	7.1	8.8	8.6	8.4	8.8	9.4
7 Off-shore credit to U.S. residents ¹¹	20.2	19.4	19.7	19.6	19.7 ^f	19.6 ^f	19.6 ^f	19.1	19.7	18.9	19.0	19.0
8 Securitized consumer loans ¹²	96.5	94.7	92.8	94.2	94.6	94.7	98.5	102.3	102.4	103.3	103.2	101.7
9 Credit cards and related plans	86.3 ^f	83.9 ^f	82.2 ^f	82.0 ^f	82.7	83.2	86.4	87.2	86.9	87.8	87.8	86.4
10 Other	10.2 ^f	10.8 ^f	10.7 ^f	12.3 ^f	11.9	11.5	12.2	15.1	15.5	15.4	15.4	15.3
11 Securitized business loans ¹²	19.6	19.4	19.4	17.7	17.1	16.7	16.6	17.0	17.0	17.1	17.0	16.9
<i>Small domestically chartered commercial banks, adjusted for mergers</i>												
12 Mortgage-backed securities ⁹	236.8	277.6 ^f	280.8 ^f	283.9 ^f	287.3	300.1	301.5	302.0	300.5	299.4	301.0	307.8
13 Securitized consumer loans ¹²	232.2	257.1	251.3	248.2	248.5 ^f	250.3 ^f	251.5 ^f	247.5	249.1	245.8	245.3	247.6
14 Credit cards and related plans	224.1	249.3	243.7	240.7	240.6	242.8	244.5	244.0	245.9	242.5	242.1	244.5
15 Other	8.2	7.8	7.6	7.5 ^f	7.9 ^f	7.5 ^f	7.0 ^f	3.5	3.2	3.2	3.2	3.1
<i>Foreign-related institutions</i>												
16 Revaluation gains on off-balance-sheet items ⁸	56.9	54.8	52.2	46.8	46.2	49.6	54.4 ^f	59.6	57.9	60.7	59.9	61.2
17 Revaluation losses on off-balance-sheet items ⁸	52.2	51.5	48.0	40.6	39.8	42.4	48.5	55.7	53.0	55.7	55.4	60.5
18 Securitized business loans ¹²	27.4	25.5	25.1	24.1	23.5	22.5	22.0 ^f	21.6	21.7	21.7	21.5	21.5

NOTE. Tables 1.26, 1.27, and 1.28 have been revised to reflect changes in the Board's H.8 statistical release, "Assets and Liabilities of Commercial Banks in the United States." Table 1.27, "Assets and Liabilities of Large Weekly Reporting Commercial Banks," and table 1.28, "Large Weekly Reporting U.S. Branches and Agencies of Foreign Banks," are no longer being published in the *Bulletin*. Instead, abbreviated balance sheets for both large and small domestically chartered banks have been included in table 1.26, parts C and D. Data are both merger-adjusted and break-adjusted. In addition, data from large weekly reporting U.S. branches and agencies of foreign banks have been replaced by balance sheet estimates of all foreign-related institutions and are included in table 1.26, part E. These data are break-adjusted.

The not-seasonally-adjusted data for all tables now contain additional balance sheet items, which were available as of October 2, 1996.

1. Covers the following types of institutions in the fifty states and the District of Columbia: domestically chartered commercial banks that submit a weekly report of condition (large domestic); other domestically chartered commercial banks (small domestic); branches and agencies of foreign banks, and Edge Act and agreement corporations (foreign-related institutions). Excludes International Banking Facilities. Data are Wednesday values or pro rata averages of Wednesday values. Large domestic banks constitute a universe; data for small domestic banks and foreign-related institutions are estimates based on weekly samples and on quarter-end condition reports. Data are adjusted for breaks caused by reclassifications of assets and liabilities.

The data for large and small domestic banks presented on pp. A17-19 are adjusted to remove the estimated effects of mergers between these two groups. The adjustment for mergers changes past levels to make them comparable with current levels. Estimated quantities of balance sheet items acquired in mergers are removed from past data for the bank group that contained the acquired bank and put into past data for the group containing the

acquiring bank. Balance sheet data for acquired banks are obtained from Call Reports, and a ratio procedure is used to adjust past levels.

2. Excludes federal funds sold to, reverse RPs with, and loans made to commercial banks in the United States, all of which are included in "Interbank loans."

3. Consists of reverse RPs with brokers and dealers and loans to purchase and carry securities.

4. Includes vault cash, cash items in process of collection, balances due from depository institutions, and balances due from Federal Reserve Banks.

5. Excludes the due-from position with related foreign offices, which is included in "Net due to related foreign offices."

6. Excludes unearned income, reserves for losses on loans and leases, and reserves for transfer risk. Loans are reported gross of these items.

7. This balancing item is not intended as a measure of equity capital for use in capital adequacy analysis. On a seasonally adjusted basis, this item reflects any differences in the seasonal patterns estimated for total assets and total liabilities.

8. Fair value of derivative contracts (interest rate, foreign exchange rate, other commodity and equity contracts) in a gain/loss position, as determined under FASB Interpretation No. 39.

9. Includes mortgage-backed securities issued by U.S. government agencies, U.S. government-sponsored enterprises, and private entities.

10. Difference between fair value and historical cost for securities classified as available-for-sale under FASB Statement No. 115. Data are reported net of tax effects. Data shown are restated to include an estimate of these tax effects.

11. Mainly commercial and industrial loans but also includes an unknown amount of credit extended to other than nonfinancial businesses.

12. Total amount outstanding.

1.32 COMMERCIAL PAPER OUTSTANDING

Millions of dollars, seasonally adjusted, end of period

Item	Year ending December					2002					
	1997	1998	1999	2000	2001	Jan.	Feb.	Mar.	Apr.	May	June
1 All issuers	966,699	1,163,303	1,403,023	1,615,341	1,438,764	1,428,494	1,402,875	1,358,114	1,351,516	1,366,259	1,327,569
Financial companies ¹											
2 Dealer-placed paper, total ²	513,307	614,142	786,643	973,060	989,364	984,251	984,441	964,070	972,268	989,957	986,489
3 Directly placed paper, total ³	252,536	322,030	337,240	298,848	224,553	224,595	218,266	205,292	196,056	199,572	169,193
4 Nonfinancial companies ⁴	200,857	227,132	279,140	343,433	224,847	219,648	200,168	188,753	183,192	176,730	171,887

1. Institutions engaged primarily in commercial, savings, and mortgage banking; sales, personal and mortgage financing; factoring, finance leasing, and other business lending; insurance underwriting; and other investment activities.

2. Includes all financial-company paper sold by dealers in the open market.

3. As reported by financial companies that place their paper directly with investors.

4. Includes public utilities and firms engaged primarily in such activities as communications, construction, manufacturing, mining, wholesale and retail trade, transportation, and services.

1.33 PRIME RATE CHARGED BY BANKS Short-Term Business Loans¹

Percent per year

Date of change	Rate	Period	Average rate	Period	Average rate	Period	Average rate
1999—Jan. 1	7.75	1999	8.00	2000—Jan.	8.50	2001—Jan.	9.05
July 1	8.00	2000	9.23	Feb.	8.73	Feb.	8.50
Aug. 25	8.25	2001	6.91	Mar.	8.83	Mar.	8.32
Nov. 17	8.50			Apr.	9.00	Apr.	7.80
		1999—Jan.	7.75	May	9.24	May	7.24
2000—Feb. 3	8.75	Feb.	7.75	June	9.50	June	6.98
Mar. 22	9.00	Mar.	7.75	July	9.50	July	6.75
May 17	9.50	Apr.	7.75	Aug.	9.50	Aug.	6.67
		May	7.75	Sept.	9.50	Sept.	6.28
2001—Jan. 4	9.00	June	7.75	Oct.	9.50	Oct.	5.53
Feb. 1	8.50	July	8.00	Nov.	9.50	Nov.	5.10
Mar. 21	8.00	Aug.	8.06	Dec.	9.50	Dec.	4.84
Apr. 19	7.50	Sept.	8.25			2002—Jan.	4.75
May 16	7.00	Oct.	8.25			Feb.	4.75
June 28	6.75	Nov.	8.37			Mar.	4.75
Aug. 22	6.50	Dec.	8.50			Apr.	4.75
Sept. 18	6.00					May	4.75
Oct. 3	5.50					June	4.75
Nov. 7	5.00					July	4.75
Dec. 12	4.75					Aug.	4.75

1. The prime rate is one of several base rates that banks use to price short-term business loans. The table shows the date on which a new rate came to be the predominant one quoted by a majority of the twenty-five largest banks by asset size, based on the most recent Call

Report. Data in this table also appear in the Board's H.15 (519) weekly and G.13 (415) monthly statistical releases. For ordering address, see inside front cover.

1.35 INTEREST RATES Money and Capital Markets

Percent per year; figures are averages of business day data unless otherwise noted

Item	1999	2000	2001	2002				2002, week ending				
				Apr.	May	June	July	June 28	July 5	July 12	July 19	July 26
MONEY MARKET INSTRUMENTS												
1 Federal funds ^{1,2,3}	4.97	6.24	3.88	1.75	1.75	1.75	1.73	1.75	1.75	1.73	1.74	1.72
2 Discount window borrowing ^{2,4}	4.62	5.73	3.40	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
<i>Commercial paper^{3,5,6}</i>												
<i>Nonfinancial</i>												
3 1-month	5.09	6.27	3.78	1.76	1.75	1.74	1.74	1.75	1.75	1.74	1.74	1.74
4 2-month	5.14	6.29	3.68	1.77	1.76	1.74	1.74	1.74	1.74	1.74	1.74	1.74
5 3-month	5.18	6.31	3.65	1.81	1.78	1.76	1.75	1.75	1.74	1.76	1.76	1.73
<i>Financial</i>												
6 1-month	5.11	6.28	3.80	1.76	1.76	1.75	1.74	1.75	1.75	1.74	1.74	1.74
7 2-month	5.16	6.30	3.71	1.79	1.77	1.77	1.75	1.76	1.76	1.75	1.75	1.75
8 3-month	5.22	6.33	3.65	1.83	1.80	1.78	1.76	1.78	1.76	1.77	1.76	1.75
<i>Certificates of deposit, secondary market^{3,7}</i>												
9 1-month	5.19	6.35	3.84	1.81	1.80	1.80	1.78	1.80	1.80	1.79	1.79	1.77
10 3-month	5.33	6.46	3.71	1.87	1.82	1.81	1.79	1.81	1.81	1.80	1.79	1.77
11 6-month	5.46	6.59	3.66	2.11	1.93	1.92	1.84	1.87	1.87	1.86	1.85	1.80
12 Eurodollar deposits, 3-month ^{3,8}	5.31	6.45	3.70	1.88	1.82	1.81	1.78	1.80	1.80	1.80	1.79	1.77
<i>U.S. Treasury bills</i>												
<i>Secondary market^{1,5}</i>												
13 4-week	n.a.	n.a.	2.43	1.69	1.71	1.69	1.69	1.67	1.68	1.69	1.69	1.69
14 3-month	4.64	5.82	3.40	1.72	1.73	1.70	1.68	1.68	1.69	1.69	1.69	1.67
15 6-month	4.75	5.90	3.34	1.93	1.86	1.79	1.70	1.74	1.72	1.71	1.70	1.66
U.S. TREASURY NOTES AND BONDS												
<i>Constant maturities⁹</i>												
16 1-year	5.08	6.11	3.49	2.48	2.35	2.20	1.96	2.10	2.06	2.00	1.97	1.88
17 2-year	5.43	6.26	3.83	3.42	3.26	2.99	2.56	2.87	2.84	2.67	2.57	2.32
18 3-year	5.49	6.22	4.09	4.01	3.80	3.49	3.01	3.36	3.31	3.14	3.05	2.74
19 5-year	5.55	6.16	4.56	4.65	4.49	4.19	3.81	4.08	4.05	3.92	3.85	3.56
20 7-year	5.79	6.20	4.88	5.02	4.90	4.60	4.30	4.51	4.52	4.39	4.33	4.09
21 10-year	5.65	6.03	5.02	5.21	5.16	4.93	4.65	4.84	4.83	4.71	4.68	4.47
22 20-year	6.20	6.23	5.63	5.85	5.81	5.65	5.51	5.61	5.61	5.52	5.52	5.40
23 Treasury long-term average ^{10,11} 25 years and above	n.a.	n.a.	n.a.	5.82	5.79	5.66	5.54	5.62	5.63	5.54	5.55	5.45
STATE AND LOCAL NOTES AND BONDS												
<i>Moody's series¹²</i>												
24 Aaa	5.28	5.58	4.99	5.09	5.03	4.92	4.81	4.86	4.86	4.84	4.79	4.73
25 Baa	5.70	6.19	5.75	5.86	5.79	5.70	5.55	5.63	5.63	5.59	5.50	5.47
26 Bond Buyer series ¹³	5.43	5.71	5.15	5.22	5.19	5.09	5.02	5.07	5.10	5.04	5.00	4.94
CORPORATE BONDS												
27 Seasoned issues, all industries ¹⁴	7.45	7.98	7.49	7.36	7.37	7.22	7.14	7.19	7.20	7.16	7.16	7.06
<i>Rating group</i>												
28 Aaa ¹⁵	7.05	7.62	7.08	6.76	6.75	6.63	6.53	6.58	6.59	6.53	6.54	6.46
29 Aa	7.36	7.83	7.26	7.16	7.20	7.07	6.98	7.02	7.02	7.01	7.00	6.92
30 A	7.53	8.11	7.67	7.49	7.43	7.24	7.15	7.21	7.22	7.17	7.18	7.05
31 Baa	7.88	8.37	7.95	8.03	8.09	7.95	7.90	7.93	7.99	7.92	7.94	7.80
MEMO												
32 Dividend-price ratio ¹⁶ Common stocks	1.25	1.15	1.32	1.42	1.48	1.58	1.76	1.65	1.68	1.75	1.78	1.88

NOTE: Some of the data in this table also appear in the Board's H.15 (519) weekly statistical release. For ordering address, see inside front cover.

1. The daily effective federal funds rate is a weighted average of rates on trades through New York brokers.

2. Weekly figures are averages of seven calendar days, ending on Wednesday of the current week; monthly figures include each calendar day in the month.

3. Annualized using a 360-day year or bank interest.

4. Rate for the Federal Reserve Bank of New York.

5. Quoted on a discount basis.

6. Interest rates interpolated from data on certain commercial paper trades settled by the Depository Trust Company. The trades represent sales of commercial paper by dealers or direct issuers to investors (that is, the offer side). See the Board's Commercial Paper web pages (<http://www.federalreserve.gov/releases/cp>) for more information.

7. An average of dealer offering rates on nationally traded certificates of deposit.

8. Bid rates for eurodollar deposits collected around 9:30 a.m. Eastern time. Data are for indication purposes only.

9. Yields on actively traded issues adjusted to constant maturities.

SOURCE: U.S. Department of the Treasury.

10. Based on the unweighted average of the bid yields for all Treasury fixed-coupon securities with remaining terms to maturity of 25 years and over.

11. A factor for adjusting the daily long-term average in order to estimate a 30-year rate can be found at <http://www.treas.gov/offices/domestic-finance/debt-management/interest-rate/lccompositeindex.html>.

12. General obligation bonds based on Thursday figures; Moody's Investors Service.

13. State and local government general obligation bonds maturing in twenty years are used in compiling this index. The twenty-bond index has a rating roughly equivalent to Moody's A1 rating. Based on Thursday figures.

14. Daily figures are averages of Aaa, Aa, A, and Baa yields from Moody's Investors Service. Based on yields to maturity on selected long-term bonds.

15. Effective December 7, 2001, the Moody's Aaa yield includes yields only for industrial firms. Prior to December 7, 2001, the Aaa yield represented both utilities and industrial.

16. Standard & Poor's corporate series. Common stock ratio is based on the 500 stocks in the price index.

1.36 STOCK MARKET Selected Statistics

Indicator	1999	2000	2001	2001		2002						
				Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
Prices and trading volume (averages of daily figures)												
<i>Common stock prices (indexes)</i>												
1 New York Stock Exchange (Dec. 31, 1965 = 50)	619.52	643.71	606.03	575.31	582.82	581.74	569.55	600.74	587.58	575.75	544.36	486.11
2 Industrial	775.29	809.40	749.46	715.98	727.67	723.56	715.80	751.79	732.71	718.12	677.58	603.04
3 Transportation	491.62	414.73	444.45	410.05	433.70	446.13	453.51	490.51	470.00	459.55	449.42	416.07
4 Utility	284.82	478.99	377.72	330.78	325.33	322.92	301.32	316.25	300.57	287.10	265.21	230.21
5 Finance	530.97	552.48	596.61	577.85	585.47	591.94	570.18	609.72	610.24	603.15	577.05	524.01
6 Standard & Poor's Corporation (1941-43 = 10) ¹	1,327.33	1,427.22	1,194.18	1,129.68	1,144.93	1,140.21	1,100.67	1,153.79	1,112.03	1,079.27	1,014.05	903.59
7 American Stock Exchange (Aug. 31, 1973 = 50) ²	770.90	922.22	879.08	814.78	828.19	835.02	845.81	891.08	915.09	935.10	911.59	840.76
<i>Volume of trading (thousands of shares)</i>												
8 New York Stock Exchange	799,554	1,026,867	1,216,529	1,242,965	1,240,245	1,401,913	1,362,830	1,321,351	1,280,714	1,215,786	1,539,282	1,848,962
9 American Stock Exchange	32,629	51,437	68,074	88,694	53,337	55,151	55,657	56,375	n.a.	n.a.	n.a.	n.a.
Customer financing (millions of dollars, end-of-period balances)												
10 Margin credit at broker-dealers ³	228,530	198,790	150,450	148,650	150,450	150,390	147,030	149,370	150,940	150,860	146,270	136,160
<i>Free credit balances at brokers⁴</i>												
11 Margin accounts ⁵	55,130	100,680	101,640	98,330	101,640	97,330	99,350	93,700	92,140	92,950	95,830	98,080
12 Cash accounts	79,070	84,400	78,040	72,090	78,040	75,110	72,730	69,790	68,540	66,120	68,280	68,860
Margin requirements (percent of market value and effective date)⁶												
	Mar. 11, 1968		June 8, 1968		May 6, 1970		Dec. 6, 1971		Nov. 24, 1972		Jan. 3, 1974	
13 Margin stocks	70		80		65		55		65		50	
14 Convertible bonds	50		60		50		50		50		50	
15 Short sales	70		80		65		55		65		50	

1. In July 1976 a financial group, composed of banks and insurance companies, was added to the group of stocks on which the index is based. The index is now based on 400 industrial stocks (formerly 425), 20 transportation (formerly 15 rail), 40 public utility (formerly 60), and 40 financial.

2. On July 5, 1983, the American Stock Exchange rebased its index, effectively cutting previous readings in half.

3. Since July 1983, under the revised Regulation T, margin credit at broker-dealers has included credit extended against stocks, convertible bonds, stocks acquired through the exercise of subscription rights, corporate bonds, and government securities. Separate reporting of data for margin stocks, convertible bonds, and subscription issues was discontinued in April 1984.

4. Free credit balances are amounts in accounts with no unfulfilled commitments to brokers and are subject to withdrawal by customers on demand.

5. Series initiated in June 1984.

6. Margin requirements, stated in regulations adopted by the Board of Governors pursuant to the Securities Exchange Act of 1934, limit the amount of credit that can be used to purchase and carry "margin securities" (as defined in the regulations) when such credit is collateralized by securities. Margin requirements on securities are the difference between the market value (100 percent) and the maximum loan value of collateral as prescribed by the Board. Regulation T was adopted effective Oct. 15, 1934; Regulation U, effective May 1, 1936; Regulation G, effective Mar. 11, 1968; and Regulation X, effective Nov. 1, 1971.

On Jan. 1, 1977, the Board of Governors for the first time established in Regulation T the initial margin required for writing options on securities, setting it at 30 percent of the current market value of the stock underlying the option. On Sept. 30, 1985, the Board changed the required initial margin, allowing it to be the same as the option maintenance margin required by the appropriate exchange or self-regulatory organization; such maintenance margin rules must be approved by the Securities and Exchange Commission.

1.40 FEDERAL DEBT SUBJECT TO STATUTORY LIMITATION

Billions of dollars, end of month

Item	2000			2001				2002	
	June 30	Sept. 30	Dec. 31	Mar. 31	June 30	Sept. 30	Dec. 31	Mar. 31	June 30
1 Federal debt outstanding	5,714.2	5,701.9	5,803.5	5,800.6	5,753.9	5,834.5	5,970.3	6,032.4	6,153.3
2 Public debt securities	5,685.9	5,674.2	5,662.2	5,773.7	5,726.8	5,807.5	5,943.4	6,006.0	6,126.5
3 Held by public	3,495.7	3,438.5	3,527.4	3,434.4	3,274.2	3,338.7	3,393.8	3,443.7	3,463.5
4 Held by agencies	2,190.2	2,235.7	2,248.7	2,339.4	2,452.6	2,468.8	2,549.7	2,562.4	2,662.9
5 Agency securities	28.3	27.7	27.4	26.8	27.1	27.0	26.8	26.4	26.8
6 Held by public	28.2	27.6	27.3	26.8	27.1	27.0	26.8	26.4	26.8
7 Held by agencies	.1	.1	.1	.1	.0	.0	.0	.0	.0
8 Debt subject to statutory limit	5,600.6	5,591.6	5,580.5	5,692.5	5,645.0	5,732.6	5,871.4	5,935.1	6,058.3
9 Public debt securities	5,600.5	5,591.4	5,580.2	5,692.3	5,644.8	5,732.4	5,871.2	5,935.0	6,058.1
10 Other debt ¹	.2	.2	.2	.2	.2	.2	.3	.2	.2
MEMO									
11 Statutory debt limit	5,950.0	5,950.0	5,950.0	5,950.0	5,950.0	5,950.0	5,950.0	5,950.0	6,400.0

1. Consists of guaranteed debt of U.S. Treasury and other federal agencies, specified participation certificates, notes to international lending organizations, and District of Columbia stadium bonds.

SOURCE: U.S. Department of the Treasury, *Monthly Statement of the Public Debt of the United States* and *Monthly Treasury Statement*.

1.41 GROSS PUBLIC DEBT OF U.S. TREASURY Types and Ownership

Billions of dollars, end of period

Type and holder	1998	1999	2000	2001	2001		2002	
					Q3	Q4	Q1	Q2 ⁷
1 Total gross public debt	5,614.2	5,776.1	5,662.2	5,943.4	5,807.5	5,943.4	6,006.0	6,126.5
<i>By type</i>								
2 Interest-bearing	5,605.4	5,766.1	5,618.1	5,930.8	5,763.6	5,930.8	5,962.2	6,087.0
3 Marketable	3,355.5	3,281.0	2,966.9	2,982.9	2,897.3	2,982.9	3,003.3	3,024.8
4 Bills	691.0	737.1	646.9	811.3	734.9	811.3	834.4	822.5
5 Notes	1,960.7	1,784.5	1,557.3	1,413.9	1,399.6	1,413.9	1,411.7	1,446.9
6 Bonds	621.2	643.7	626.5	602.7	612.9	602.7	596.7	592.9
7 Inflation-indexed notes and bonds ¹	67.6	100.7	121.2	140.1	134.9	140.1	145.6	147.5
8 Nonmarketable ²	2,249.9	2,485.1	2,651.2	2,947.9	2,866.4	2,947.9	2,958.9	3,062.2
9 State and local government series	165.3	165.7	151.0	146.3	146.4	146.3	141.1	142.8
10 Foreign issues ³	34.3	31.3	27.2	15.4	18.3	15.4	14.6	13.3
11 Government	34.3	31.3	27.2	15.4	18.3	15.4	14.6	13.3
12 Public	.0	.0	.0	.0	.0	.0	.0	.0
13 Savings bonds and notes	180.3	179.4	176.9	181.5	179.6	181.5	183.6	184.8
14 Government account series ⁴	1,840.0	2,078.7	2,266.1	2,574.8	2,492.1	2,574.8	2,589.7	2,691.4
15 Non-interest-bearing	8.8	10.0	44.2	12.7	43.8	12.7	43.8	39.5
<i>By holder⁵</i>								
16 U.S. Treasury and other federal agencies and trust funds	1,828.1	2,064.2	2,270.1	2,572.2	2,493.7	2,572.2	2,581.1	2,686.0
17 Federal Reserve Banks ⁶	452.1	478.0	511.7	551.7	534.1	551.7	575.4	590.7
18 Private investors	3,334.0	3,233.9	2,880.4	2,819.5	2,779.7	2,819.5	2,849.2 ⁷	2,819.8
19 Depository institutions	237.3	246.5	199.2	181.7	189.5	181.7	187.5	n.a.
20 Mutual funds	253.9	229.1	221.8	256.8	230.5	256.8	266.8	n.a.
21 Insurance companies	141.7	123.4	110.2	82.4	88.5	82.4	82.4	n.a.
22 State and local treasuries ⁷	269.3	266.8	236.2	209.0	208.9	209.0	212.5	n.a.
Individuals								
23 Savings bonds	186.6	186.4	184.8	190.3	186.4	190.3	191.9	n.a.
24 Pension funds	330.2	321.6	305.8	289.3	289.4	289.3	299.6	n.a.
25 Private	112.5	110.4	110.1	103.3	101.7	103.3	104.0	n.a.
26 State and Local	217.7	211.2	195.7	186.0	187.7	186.0	195.6	n.a.
27 Foreign and international ⁸	1,278.7	1,268.7	1,201.3	1,218.1	1,170.1	1,218.1	1,047.5 ⁹	1,072.4
28 Other miscellaneous investors ^{7,9}	636.3	589.8	419.5	390.8	417.3	390.8	560.7	n.a.

1. The U.S. Treasury first issued inflation-indexed securities during the first quarter of 1997.

2. Includes (not shown separately) securities issued to the Rural Electrification Administration, depository bonds, retirement plan bonds, and individual retirement bonds.

3. Nonmarketable series denominated in dollars, and series denominated in foreign currency held by foreigners.

4. Held almost entirely by U.S. Treasury and other federal agencies and trust funds.

5. Data for Federal Reserve Banks and U.S. government agencies and trust funds are actual holdings; data for other groups are Treasury estimates.

6. U.S. Treasury securities bought outright by Federal Reserve Banks, see *Bulletin* table 1.18.

7. In March 1996, in a redefinition of series, fully defeased debt backed by nonmarketable federal securities was removed from "Other miscellaneous investors" and added to "State and local treasuries." The data shown here have been revised accordingly.

8. Includes nonmarketable foreign series Treasury securities and Treasury deposit funds. Excludes Treasury securities held under repurchase agreements in custody accounts at the Federal Reserve Bank of New York.

9. Includes individuals, government-sponsored enterprises, brokers and dealers, bank personal trusts and estates, corporate and noncorporate businesses, and other investors.

SOURCES: Data by type of security, U.S. Treasury Department, *Monthly Statement of the Public Debt of the United States*; data by holder, Federal Reserve Board of Governors, *Flow of Funds Accounts of the United States* and U.S. Treasury Department, *Treasury Bulletin*, unless otherwise noted.

1.42 U.S. GOVERNMENT SECURITIES DEALERS Transactions¹

Millions of dollars, daily averages

Item	2002			2002, week ending								
	Apr.	May	June	June 5	June 12	June 19	June 26	July 3	July 10	July 17	July 24	July 31
<i>By type of security</i>												
1 U.S. Treasury bills	42,502	42,259	42,869	49,480	45,065	40,313	39,400	42,524	38,116	39,389	41,500	48,688
<i>Treasury coupon securities by maturity</i>												
2 Three years or less	127,492	134,554	123,577	133,853	112,885	105,027	134,980	152,765	100,311	130,565	153,656	141,638
3 More than three but less than or equal to six years	76,341	98,161	92,356	90,829	82,688	88,037	107,815	90,966	84,996	114,797	111,319	126,178
4 More than six but less than or equal to eleven years	61,584	69,922	77,695	71,168	64,594	84,788	92,579	65,294	67,604	87,747	87,440	87,212
5 More than eleven years	17,254	17,443	19,744	19,507	16,653	19,365	23,334	19,804	14,160	22,912	20,527	24,319
6 Inflation-indexed ²	2,132	1,620	2,460	1,864	2,398	2,897	2,620	2,018	9,179	3,567	2,911	2,543
<i>Federal agency and government-sponsored enterprises</i>												
7 Discount notes	50,140	48,181	52,908	56,319	45,970	52,701	52,271	67,247	47,908	57,454	51,036	58,870
<i>Coupon securities by maturity</i>												
8 Three years or less	12,209	10,179	12,688	9,508	9,287	15,423	15,488	12,123	14,129	13,751	12,514	10,277
9 More than three years but less than or equal to six years	7,071	9,662	9,209	8,368	9,130	10,164	9,637	7,215	5,634	11,843	15,477	11,561
10 More than six years but less than or equal to eleven years	7,456	8,446	8,080	6,104	5,301	10,733	8,833	9,474	4,781	13,330	8,657	9,260
11 More than eleven years	846	1,106	993	1,167	748	1,033	1,181	771	359	1,096	1,546	857
12 Mortgage-backed	125,503	135,142	153,644	136,912	203,431	146,863	132,223	124,776	219,346	202,887	120,813	140,610
<i>Corporate securities</i>												
13 One year or less	101,705	100,384	98,759	92,719	90,980	115,273	95,276	94,687	88,790	94,997	90,912	83,177
14 More than one year	19,088	18,690	18,584	20,209	16,901	18,900	20,035	15,932	13,336	17,546	13,916	16,710
<i>By type of counterparty</i>												
<i>With interdealer broker</i>												
15 U.S. Treasury	152,004	166,652	169,496	172,532	155,413	159,654	189,455	174,852	151,181	193,766	194,089	200,437
<i>Federal agency and government-sponsored enterprises</i>												
17 Mortgage-backed	37,570	37,136	43,341	42,841	56,571	42,840	33,980	35,673	50,248	57,597	35,758	39,445
18 Corporate	546	425	353	396	327	338	411	241	348	321	361	308
<i>With other</i>												
19 U.S. Treasury	175,300	197,306	189,206	194,169	168,871	180,771	211,274	198,518	163,187	205,211	223,264	230,140
<i>Federal agency and government-sponsored enterprises</i>												
21 Mortgage-backed	66,170	65,903	72,124	71,542	61,482	75,715	74,412	84,904	63,300	84,295	74,398	76,663
22 Corporate	87,933	98,006	110,302	94,071	146,860	104,022	98,243	89,104	169,099	145,291	85,056	101,165
	120,247	118,649	116,990	112,532	107,554	133,835	114,899	110,377	101,778	112,222	104,468	99,579

1. The figures represent purchases and sales in the market by the primary U.S. government securities dealers reporting to the Federal Reserve Bank of New York. Outright transactions include all U.S. government, federal agency, government-sponsored enterprise, mortgage-backed, and corporate securities scheduled for immediate and forward delivery, as well as all U.S. government securities traded on a when-issued basis between the announcement and issue date. Data do not include transactions under repurchase and reverse repurchase (resale) agreements. Averages are based on the number of trading days in the week.

2. Outright Treasury inflation-indexed securities (TIIS) transactions are reported at principal value, excluding accrued interest, where principal value reflects the original issuance par amount (unadjusted for inflation) times the price times the index ratio.

NOTE: Major changes in the report form filed by primary dealers induced a break in the dealer data series as of the week ending July 4, 2001. Current weekly data may be found at the Federal Reserve Bank of New York web site (<http://www.newyorkfed.org/p/home/statistics>) under the Primary Dealer heading.

1.43 U.S. GOVERNMENT SECURITIES DEALERS Positions and Financing¹

Millions of dollars

Item, by type of security	2002			2002, week ending							
	Apr.	May	June	June 5	June 12	June 19	June 26	July 3	July 10	July 17	July 24
	Net outright positions ²										
1 U.S. Treasury bills	34,802	22,905	13,975	32,414	20,166	7,278	4,227	8,868	16,884	17,279	23,562
Treasury coupon securities by maturity											
2 Three years or less	-24,310	-24,473	-21,351	-21,105	-21,303	-17,870	-25,799	-20,047	-22,437	-28,724	-15,164
3 More than three years but less than or equal to six years	-32,608	-27,550	-24,943	-29,342	-26,943	-24,955	-19,840	-24,857	-22,925	-23,997	-32,405
4 More than six but less than or equal to eleven years	-18,337	-16,183	-19,472	-19,973	-18,692	-18,931	-20,847	-18,752	-19,833	-19,614	-18,688
5 More than eleven	8,103	6,289	6,658	5,452	6,636	7,042	6,569	7,688	8,489	10,140	9,678
6 Inflation-indexed	3,663	2,915	3,518	3,258	3,470	3,252	3,796	3,906	3,318	1,265	1,151
Federal agency and government-sponsored enterprises											
7 Discount notes	45,988	47,436	44,125	40,008	40,576	43,126	47,903	50,618	44,020	43,859	41,810
Coupon securities, by maturity											
8 Three years or less	10,878	9,452	12,609	11,069	10,751	12,451	14,766	14,286	14,172	14,056	12,278
9 More than three years but less than or equal to six years	3,238	4,179	2,630	2,223	2,811	2,366	3,515	1,732	814	3,271	6,027
10 More than six but less than or equal to eleven years	2,620	1,030	2,511	884	1,801	3,350	3,036	3,401	1,117	1,730	3,015
11 More than eleven	2,122	2,561	2,584	2,698	2,816	2,801	2,348	2,070	1,908	1,812	1,750
12 Mortgage-backed	13,347	15,647	19,395	21,093	16,498	20,538	18,383	22,116	27,164	25,245	30,461
Corporate securities											
13 One year or less	25,916	27,019	30,969	27,421	29,391	35,164	29,514	33,370	28,252	26,962	25,152
14 More than one year	44,266	39,534	45,463	38,679	43,918	45,407	48,023	52,265	52,602	50,393	49,544
	Financing ³										
<i>Securities in, U.S. Treasury</i>											
15 Overnight and continuing	550,742	586,624	566,475	588,049	558,034	561,143	570,904	555,857	587,888	613,957	602,485
16 Term	732,963	712,275	769,738	694,512	753,608	796,995	823,729	749,817	727,356	758,677	807,840
Federal agency and government-sponsored enterprises											
17 Overnight and continuing	154,574	148,895	149,080	146,503	145,653	153,484	149,476	149,900	147,914	151,401	148,447
18 Term	259,399	275,496	266,594	253,466	263,178	267,057	269,061	283,851	280,315	287,632	294,440
Mortgage-backed securities											
19 Overnight and continuing	33,398	36,628	35,635	41,630	38,457	34,782	32,147	30,801	33,235	36,144	41,628
20 Term	226,728	253,236	254,824	251,246	259,335	249,330	259,615	252,635	255,477	274,247	271,403
Corporate securities											
21 Overnight and continuing	46,910	49,713	49,156	49,493	49,505	49,619	48,077	49,200	50,774	48,712	50,524
22 Term	22,627	22,917	23,012	23,326	23,616	23,491	22,550	21,535	20,810	21,079	20,904
MEMO											
Reverse repurchase agreements											
23 Overnight and continuing	380,722	408,714	396,527	412,564	383,017	398,442	405,283	381,447	405,952	431,424	422,482
24 Term	1,114,158	1,139,996	1,173,796	1,094,981	1,165,553	1,188,521	1,230,613	1,161,538	1,144,058	1,202,275	1,248,130
<i>Securities out, U.S. Treasury</i>											
25 Overnight and continuing	526,507	534,630	522,398	548,373	515,109	520,594	523,407	504,077	527,431	561,001	552,710
26 Term	682,748	680,497	721,751	662,617	706,613	737,649	770,387	709,228	700,678	717,149	762,330
Federal agency and government-sponsored enterprises											
27 Overnight and continuing	259,604	256,367	260,537	241,714	249,708	272,920	270,637	263,671	266,776	274,937	269,801
28 Term	212,975	221,338	205,253	195,735	199,298	204,546	206,769	226,159	209,311	216,174	223,054
Mortgage-backed securities											
29 Overnight and continuing	291,840	302,627	287,396	277,506	279,408	292,396	307,924	269,064	296,081	342,966	313,583
30 Term	147,574	166,212	184,380	192,554	190,379	174,109	178,382	192,133	169,120	187,028	176,471
Corporate securities											
31 Overnight and continuing	119,914	123,628	128,188	123,086	128,192	127,723	130,862	130,693	126,186	129,953	132,098
32 Term	18,440	19,597	17,131	19,141	16,996	15,702	16,190	19,000	17,106	16,571	16,048
MEMO											
Repurchase agreements											
33 Overnight and continuing	1,038,639	1,056,125	1,035,629	1,032,180	1,010,654	1,054,406	1,066,692	996,430	1,049,049	1,131,294	1,097,921
34 Term	1,040,296	1,066,219	1,102,716	1,045,391	1,088,179	1,106,534	1,144,331	1,120,303	1,070,350	1,112,471	1,149,245

1. Data for positions and financing are obtained from reports submitted to the Federal Reserve Bank of New York by the U.S. government securities dealers on its published list of primary dealers. Weekly figures are close-of-business Wednesday data. Positions for calendar days of the report week are assumed to be constant. Monthly averages are based on the number of calendar days in the month.

2. Net outright positions include all U.S. government, federal agency, government-sponsored enterprise, mortgage-backed, and corporate securities scheduled for immediate and forward delivery, as well as U.S. government securities traded on a when-issued basis between the announcement and issue date.

3. Figures cover financing U.S. government, federal agency, government-sponsored enterprise, mortgage-backed, and corporate securities. Financing transactions for Treasury inflation-indexed securities (TIIS) are reported in actual funds paid or received, except for pledged securities. TIIS that are issued as pledged securities are reported at par value, which is the value of the security at original issuance (unadjusted for inflation).

NOTE: Major changes in the report form filed by primary dealers included a break in many series as of the week ending July 4, 2001. Current weekly data may be found at the Federal Reserve Bank of New York web site (<http://www.newyorkfed.org/p/home/statistics>) under the Primary Dealer heading.

1.44 FEDERAL AND FEDERALLY SPONSORED CREDIT AGENCIES Debt Outstanding

Millions of dollars, end of period

Agency	1998	1999	2000	2001	2002				
					Jan.	Feb.	Mar.	Apr.	May
1 Federal and federally sponsored agencies	1,296,477	1,616,492	1,851,632	2,121,057	2,125,903	2,139,397	2,169,030	2,144,106	2,150,724
2 Federal agencies	26,502	26,376	25,666	276	290	169	172	188	208
3 Defense Department ¹	6	6	6	6	6	6	6	6	6
4 Export-Import Bank ^{2,3}	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5 Federal Housing Administration ⁴	205	126	255	26,828	26,741	26,431	26,379	26,331	26,450
6 Government National Mortgage Association certificates of participation ⁵	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7 Postal Service ⁶	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8 Tennessee Valley Authority	26,496	26,370	25,660	270	284	163	166	182	202
9 United States Railway Association ⁶	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
10 Federally sponsored agencies ⁷	1,269,975	1,590,116	1,825,966	2,120,781	2,125,613	2,139,228	2,168,858	2,143,918	2,150,516
11 Federal Home Loan Banks	382,131	529,005	594,404	623,740	623,990	619,541	625,849	637,963	640,222
12 Federal Home Loan Mortgage Corporation	287,396	360,711	426,899	565,071	571,867	584,476	603,447	596,800	601,037
13 Federal National Mortgage Association	460,291	547,619	642,700	763,500	760,500	765,200	769,800	783,100	782,000
14 Farm Credit Banks ⁸	63,488	68,883	74,181	76,673	76,494	76,929	79,002	79,186	80,258
15 Student Loan Marketing Association ⁹	35,399	41,988	45,375	48,350	49,400	50,500	48,200	3,721	3,786
16 Financing Corporation ¹⁰	8,170	8,170	8,170	8,170	8,170	8,170	8,170	8,170	8,170
17 Farm Credit Financial Assistance Corporation ¹¹	1,261	1,261	1,261	1,261	1,261	1,261	1,261	1,261	1,261
18 Resolution Funding Corporation ¹²	29,996	29,996	29,996	29,996	29,996	29,996	29,996	29,996	29,996
MEMO									
19 Federal Financing Bank debt¹³	44,129	42,152	40,575	39,096	38,140	39,144	38,027	37,639	37,175
<i>Lending to federal and federally sponsored agencies</i>									
20 Export-Import Bank ³	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
21 Postal Service ⁶	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
22 Student Loan Marketing Association	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
23 Tennessee Valley Authority	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
24 United States Railway Association ⁶	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<i>Other lending¹⁴</i>									
25 Farmers Home Administration	9,500	6,665	5,275	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
26 Rural Electrification Administration	14,091	14,085	13,126	13,876	13,982	14,015	14,055	14,053	14,184
27 Other	20,538	21,402	22,174	25,220	24,158	25,129	23,972	23,586	22,991

1. Consists of mortgages assumed by the Defense Department between 1957 and 1963 under family housing and homeowners assistance programs.

2. Includes participation certificates reclassified as debt beginning Oct. 1, 1976.

3. On-budget since Sept. 30, 1976.

4. Consists of debentures issued in payment of Federal Housing Administration insurance claims. Once issued, these securities may be sold privately on the securities market.

5. Certificates of participation issued before fiscal year 1969 by the Government National Mortgage Association acting as trustee for the Farmers Home Administration; the Department of Health, Education, and Welfare; the Department of Housing and Urban Development; the Small Business Administration; and the Veterans Administration.

6. Off-budget.

7. Includes outstanding noncontingent liabilities: notes, bonds, and debentures. Includes Federal Agriculture Mortgage Corporation; therefore, details do not sum to total. Some data are estimated.

8. Excludes borrowing by the Farm Credit Financial Assistance Corporation, which is shown on line 17.

9. Before late 1982, the association obtained financing through the Federal Financing Bank (FFB). Borrowing excludes that obtained from the FFB, which is shown on line 22.

10. The Financing Corporation, established in August 1987 to recapitalize the Federal Savings and Loan Insurance Corporation, undertook its first borrowing in October 1987.

11. The Farm Credit Financial Assistance Corporation, established in January 1988 to provide assistance to the Farm Credit System, undertook its first borrowing in July 1988.

12. The Resolution Funding Corporation, established by the Financial Institutions Reform, Recovery, and Enforcement Act of 1989, undertook its first borrowing in October 1989.

13. The FFB, which began operations in 1974, is authorized to purchase or sell obligations issued, sold, or guaranteed by other federal agencies. Because FFB incurs debt solely for the purpose of lending to other agencies, its debt is not included in the main portion of the table to avoid double counting.

14. Includes FFB purchases of agency assets and guaranteed loans; the latter are loans guaranteed by numerous agencies, with the amounts guaranteed by any one agency generally being small. The Farmers Home Administration entry consists exclusively of agency assets, whereas the Rural Electrification Administration entry consists of both agency assets and guaranteed loans.

1.45 NEW SECURITY ISSUES Tax-Exempt State and Local Governments

Millions of dollars

Type of issue or issuer, or use	1999	2000	2001	2002							
				Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
1 All issues, new and refunding¹	215,427	180,403	270,566	28,363	20,523	20,175	23,842	23,261	32,858	36,315	25,771
<i>By type of issue</i>											
2 General obligation	73,308	64,475	100,519	9,218	8,157	8,652	10,269	8,559	10,446	16,166	10,130
3 Revenue	142,120	115,928	170,047	19,146	12,366	11,523	13,574	14,702	22,413	20,149	15,642
<i>By type of issuer</i>											
4 State	16,376	19,944	30,099	746	1,826	3,238	3,265	3,057	1,531	3,718	3,404
5 Special district or statutory authority ²	152,418	111,695	281,427	22,525	14,369	11,950	15,479	15,520	23,866	27,283	16,007
6 Municipality, county, or township	46,634	39,273	61,040	5,093	4,329	4,987	5,098	4,683	7,461	5,315	6,361
7 Issues for new capital	161,065	154,257	192,161	21,389	14,631	13,248	16,856	17,115	20,663	23,727	19,189
<i>By use of proceeds</i>											
8 Education	36,563	38,665	50,054	4,818	4,138	3,961	5,484	5,279	6,027	7,060	4,205
9 Transportation	17,394	19,730	21,411	1,349	1,079	613	1,633	773	1,795	3,351	3,251
10 Utilities and conservation	15,098	11,917	21,917	2,560	1,711	1,606	1,290	2,091	1,785	1,087	1,660
11 Social welfare	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
12 Industrial aid	9,099	7,122	6,607	1,642	539	125	515	344	614	631	760
13 Other purposes	47,896	47,309	55,733	6,319	4,639	4,897	4,894	6,784	6,962	7,653	5,893

1. Par amounts of long-term issues based on date of sale.
2. Includes school districts.

SOURCE: Securities Data Company beginning January 1990; *Investment Dealer's Digest* before then.

1.46 NEW SECURITY ISSUES U.S. Corporations

Millions of dollars

Type of issue, offering, or issuer	1999	2000	2001	2001		2002					
				Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1 All issues¹	1,072,866	942,198	1,382,003	123,517	96,576	102,688	86,090	158,904	103,575	112,103²	136,623
2 Bonds²	941,298	807,281	1,253,449	110,888	81,339	88,241	79,515	145,984	93,039	103,141²	120,087
<i>By type of offering</i>											
3 Sold in the United States	818,683	684,484	1,197,060	106,563	79,636	79,472	73,474	128,026	88,051	93,279 ²	108,362
4 Sold abroad	122,615	122,798	56,389	4,326	1,703	8,770	6,041	17,958	4,989	9,862	11,725
MEMO											
5 Private placements, domestic	24,703	18,370	8,734	4,936	2,880	0	0	0	0	4,506 ²	3,068
<i>By industry group</i>											
6 Nonfinancial	293,963	242,207	445,930	42,189	21,647	18,894	30,770	43,231	34,803	19,157	26,696
7 Financial	647,335	565,074	807,519	68,699	59,692	69,348	48,746	102,753	58,237	83,984 ²	93,392
8 Stocks³	244,308	320,357	228,554	20,962	23,570	14,447	6,575	12,920	10,536	8,962	16,536
<i>By type of offering</i>											
9 Public	131,568	134,917	128,554	12,629	15,237	14,447	6,575	12,920	10,536	8,962	16,536
10 Private placement ⁴	112,740	185,440	100,000	8,333	8,333	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<i>By industry group</i>											
11 Nonfinancial	110,284	118,369	77,577	7,592	7,771	9,579	4,024	4,893	7,834	6,633	11,608
12 Financial	21,284	16,548	50,977	5,037	7,466	4,868	2,551	8,027	2,702	2,329	4,928

1. Figures represent gross proceeds of issues maturing in more than one year; they are the principal amount or number of units calculated by multiplying by the offering price. Figures exclude secondary offerings, employee stock plans, investment companies other than closed-end, intracorporate transactions, and Yankee bonds. Stock data include ownership securities issued by limited partnerships.

2. Monthly data include 144(a) offerings.
3. Monthly data cover only public offerings.
4. Data are not available.

SOURCE: Securities Data Company and the Board of Governors of the Federal Reserve System.

A30 Domestic Financial Statistics □ October 2002

1.47 OPEN-END INVESTMENT COMPANIES Net Sales and Assets¹

Millions of dollars

Item	2000	2001	2001	2002						
			Dec.	Jan.	Feb.	Mar.	Apr.	May	June ^e	July
1 Sales of own shares ²	2,279,315	1,806,474	151,779	171,499	141,463	170,326	164,504	154,987	138,520	170,963
2 Redemptions of own shares	2,057,277	1,677,266	149,705	138,773	123,013	130,661	140,524	138,052	144,153	200,143
3 Net sales ³	222,038	129,208	2,074	32,726	18,450	39,665	23,980	16,935	-5,633	-29,180
4 Assets ⁴	5,123,747	4,689,624	4,689,624	4,667,688	4,623,041	4,814,961	4,704,886	4,693,928	4,434,603	4,124,524
5 Cash ⁵	277,386	219,620	219,620	240,141	234,510	241,078	249,078	243,755	208,390	199,381
6 Other	4,846,361	4,470,004	4,470,004	4,427,547	4,388,531	4,573,883	4,455,808	4,450,173	4,226,213	3,925,143

1. Data include stock, hybrid, and bond mutual funds and exclude money market mutual funds.

2. Excludes reinvestment of net income dividends and capital gains distributions and share issue of conversions from one fund to another in the same group.

3. Excludes sales and redemptions resulting from transfers of shares into or out of money market mutual funds within the same fund family.

4. Market value at end of period, less current liabilities.

5. Includes all U.S. Treasury securities and other short-term debt securities.

SOURCE: Investment Company Institute. Data based on reports of membership, which comprises substantially all open-end investment companies registered with the Securities and Exchange Commission. Data reflect underwritings of newly formed companies after their initial offering of securities.

1.51 DOMESTIC FINANCE COMPANIES Assets and Liabilities¹

Billions of dollars, end of period; not seasonally adjusted

Account	1999	2000 ^e	2001 ^e	2000	2001				2002	
				Q4 ^e	Q1 ^e	Q2 ^e	Q3 ^e	Q4 ^e	Q1 ^e	Q2
ASSETS										
1 Accounts receivable, gross ²	845.4	958.7	948.3	958.7	954.5	988.8	967.8	948.3	929.9	926.6
2 Consumer	304.4	328.0	340.1	328.0	319.3	324.6	329.3	340.1	329.8	328.0
3 Business	395.1	458.4	447.0	458.4	459.1	481.9	451.1	447.0	443.0	440.8
4 Real estate	145.8	172.3	161.3	172.3	176.1	182.3	187.4	161.3	157.2	157.8
5 LESS: Reserves for unearned income	61.4	69.7	60.6	69.7	69.9	61.5	60.8	60.6	59.5	58.7
6 Reserves for losses	14.7	16.7	21.0	16.7	17.2	17.4	18.0	21.0	21.5	22.0
7 Accounts receivable, net	769.3	872.3	866.7	872.3	867.3	909.8	889.0	866.7	849.0	845.8
8 All other	406.6	461.5	523.4	461.5	474.8	458.9	478.7	523.4	515.2	539.6
9 Total assets	1,175.9	1,333.7	1,390.1	1,333.7	1,342.1	1,368.7	1,367.7	1,390.1	1,364.2	1,385.4
LIABILITIES AND CAPITAL										
10 Bank loans	35.4	35.9	50.8	35.9	41.6	45.3	44.5	50.8	49.4	56.9
11 Commercial paper	230.4	238.8	158.6	238.8	180.9	181.6	171.0	158.6	137.0	129.4
<i>Debt</i>										
12 Owed to parent	87.8	102.5	99.2	102.5	97.2	93.4	91.7	99.2	82.6	82.3
13 Not elsewhere classified	429.9	502.2	567.4	502.2	533.8	542.1	555.8	567.4	574.4	598.4
14 All other liabilities	237.8	301.8	325.5	301.8	325.2	336.3	327.6	325.5	329.1	328.0
15 Capital, surplus, and undivided profits	154.5	152.5	188.6	152.5	163.5	170.0	177.2	188.6	191.7	190.4
16 Total liabilities and capital	1,175.9	1,333.7	1,390.1	1,333.7	1,342.1	1,368.7	1,367.7	1,390.1	1,364.2	1,385.4

1. Includes finance company subsidiaries of bank holding companies but not of retailers and banks. Data are amounts carried on the balance sheets of finance companies; securitized pools are not shown, as they are not on the books.

2. Before deduction for unearned income and losses. Excludes pools of securitized assets.

1.52 DOMESTIC FINANCE COMPANIES Owned and Managed Receivables¹

Billions of dollars, amounts outstanding

Type of credit	1999	2000	2001	2002					
				Jan.	Feb.	Mar.	Apr.	May	June
Seasonally adjusted									
1 Total	1,031.2	1,186.9	1,252.3	1,236.4	1,243.1	1,236.2	1,231.5^e	1,238.0^e	1,252.9
2 Consumer	410.2	465.2	514.6	512.1	519.3	518.5	518.8	518.8 ^e	526.7
3 Real estate	174.0	198.9	211.6	202.3	199.7	195.0	190.6 ^e	194.5 ^e	197.5
4 Business	446.9	522.8	526.2	522.0	524.1	522.7	522.1	524.7	528.6
Not seasonally adjusted									
5 Total	1,036.4	1,192.1	1,257.6	1,240.4	1,244.3	1,240.9	1,237.0^e	1,241.2^e	1,259.0
6 Consumer	412.7	468.3	518.1	512.8	517.6	514.1	514.9	515.0	526.6
7 Motor vehicle loans	129.2	141.6	173.9 ^f	168.9 ^f	172.5 ^f	171.9 ^f	168.6 ^f	168.2 ^f	169.8
8 Motor vehicle leases	102.9	108.2	103.5	102.4	101.2	97.5	96.8	96.1	94.4
9 Revolving ^g	32.5	37.6	31.5	29.8	28.8	27.9	29.0	28.7	30.9
10 Other ^h	39.8	40.7	31.1	31.4	31.8	32.4	32.5	33.2	33.5
Securitized assets ⁴									
11 Motor vehicle loans	73.1	97.1	131.9 ⁱ	135.2 ⁱ	136.8 ⁱ	137.8 ⁱ	142.3 ⁱ	143.5 ⁱ	147.4
12 Motor vehicle leases	9.7	6.6	6.8	6.7	6.6	6.5	6.3	6.3	6.2
13 Revolving	6.7	19.6	25.0	24.6	26.0	26.5	26.2	25.8	29.2
14 Other	18.8	17.1	14.3	13.8	13.9	13.6	13.2 ⁱ	13.2 ⁱ	15.0
15 Real estate	174.0	198.9	211.6	202.3	199.7	195.0	190.6 ^e	194.5 ^e	197.5
16 One- to four-family	108.2	130.6	142.5	118.3	118.7	117.0	113.6	117.0 ^e	118.4
17 Other	37.6	41.7	41.2	39.4	38.1	36.8	34.8 ^e	35.1 ^e	36.9
Securitized real estate assets ⁴									
18 One- to four-family	28.0	24.7	22.2	40.3	40.1	39.8	40.9	41.0	40.8
19 Other .....	.2	1.9	5.7	4.3	2.8	1.4	1.4	1.4	1.4
20 Business	449.6	525.0	527.9	525.2	527.0	531.9	531.5	531.8	534.9
21 Motor vehicles	69.4	75.5	54.0	51.9	54.3	58.0	57.0	61.1	59.8
22 Retail loans	21.1	18.3	16.1	16.3	16.7	17.1	16.1	16.4	17.0
23 Wholesale loans ⁵	34.8	39.7	20.3	18.0	20.1	22.8	23.0	26.9	25.7
24 Leases	13.6	17.6	17.6	17.6	17.5	18.0	18.0	17.8	17.1
25 Equipment	238.7	283.5	289.4	287.3	285.5	284.2	285.1	282.7	288.0
26 Loans	64.5	70.2	77.8	78.0	78.7	81.5	82.2	81.3	78.9
27 Leases	174.2	213.3	211.6	209.3	206.7	202.7	202.8	201.4	209.2
28 Other business receivables ⁶	87.0	99.4	103.5	103.7	100.8	100.8	104.5	103.7	103.0
Securitized assets ⁴									
29 Motor vehicles	31.5	37.8	50.1	48.4	45.4	44.0	44.5	42.7	42.7
30 Retail loans	2.9	3.2	5.1	4.0	3.1	2.3	2.6	2.6	2.6
31 Wholesale loans	26.4	32.5	42.5	41.9	39.6	39.0	39.1	37.4	37.4
32 Leases	2.1	2.2	2.5	2.6	2.7	2.7	2.7	2.7	2.7
33 Equipment	14.6	23.1	23.2	22.3	25.5	25.4	20.8	21.9	21.8
34 Loans	7.9	15.5	16.4	15.5	18.6	18.5	14.2	15.2	15.2
35 Leases	6.7	7.6	6.8	6.8	6.8	6.9	6.7	6.6	6.6
36 Other business receivables ⁶	8.4	5.6	7.7	11.6	15.6	19.5	19.6	19.6	19.6

NOTE. This table has been revised to incorporate several changes resulting from the benchmarking of finance company receivables to the June 1996 Survey of Finance Companies. In that benchmark survey, and in the monthly surveys that have followed, more detailed breakdowns have been obtained for some components. In addition, previously unavailable data on securitized real estate loans are now included in this table. The new information has resulted in some reclassification of receivables among the three major categories (consumer, real estate, and business) and in discontinuities in some component series between May and June 1996.

¹ Includes finance company subsidiaries of bank holding companies but not of retailers and banks. Data in this table also appear in the Board's G.20 (422) monthly statistical release. For ordering address, see inside front cover.

² Owned receivables are those carried on the balance sheet of the institution. Managed receivables are outstanding balances of pools upon which securities have been issued; these balances are no longer carried on the balance sheets of the loan originator. Data are shown

before deductions for unearned income and losses. Components may not sum to totals because of rounding.

³ Excludes revolving credit reported as held by depository institutions that are subsidiaries of finance companies.

⁴ Includes personal cash loans, mobile home loans, and loans to purchase other types of consumer goods, such as appliances, apparel, boats, and recreation vehicles.

⁵ Outstanding balances of pools upon which securities have been issued; these balances are no longer carried on the balance sheets of the loan originator.

⁶ Credit arising from transactions between manufacturers and dealers, that is, floor plan financing.

⁷ Includes loans on commercial accounts receivable, factored commercial accounts, and receivable dealer capital; small loans used primarily for business or farm purposes; and wholesale and lease paper for mobile homes, campers, and travel trailers.

1.53 MORTGAGE MARKETS Mortgages on New Homes

Millions of dollars except as noted

Item	1999	2000	2001	2002						
				Jan.	Feb.	Mar.	Apr.	May	June	July
Terms and yields in primary and secondary markets										
PRIMARY MARKETS										
<i>Terms¹</i>										
1 Purchase price (thousands of dollars)	210.7	234.5	245.0	245.8	250.6	255.6	262.9	265.0	268.2	268.2
2 Amount of loan (thousands of dollars)	161.7	177.0	184.2	186.7	190.1	193.3	198.9	199.1	201.1	201.6
3 Loan-to-price ratio (percent)	78.7	77.4	77.3	78.1	78.2	78.2	77.7	77.2	77.1	77.5
4 Maturity (years)	28.8	29.2	28.8	28.8	28.8	29.1	28.8	29.0	29.0	29.1
5 Fees and charges (percent of loan amount) ² .....	.77	.70	.67	.66	.62	.62	.64	.59	.56	.62
<i>Yield (percent per year)</i>										
6 Contract rate ¹	6.94	7.41	6.90	6.77	6.72	6.66	6.65	6.51	6.38	6.28
7 Effective rate ^{1,3}	7.06	7.52	7.00	6.87	6.82	6.76	6.74	6.59	6.47	6.37
8 Contract rate (HUD series) ⁴	7.45	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
SECONDARY MARKETS										
<i>Yield (percent per year)</i>										
9 FHA mortgages (section 203) ⁵	7.74	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
10 GNMA securities ⁶	7.03	7.57	6.36	6.32	6.13	6.50	6.33	6.21	6.03	5.82
Activity in secondary markets										
FEDERAL NATIONAL MORTGAGE ASSOCIATION										
<i>Mortgage holdings (end of period)</i>										
11 Total	523,941	610,122	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
12 FHA/VA insured	55,318	61,539	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
13 Conventional	468,623	548,583	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
14 Mortgage transactions purchased (during period)	195,210	154,231	270,384	36,392	33,249	21,305	23,175	17,432	16,310	17,586
<i>Mortgage commitments (during period)</i>										
15 Issued ⁷	187,948	163,689	304,084	21,544	19,321	13,340	20,203	18,305	24,700	n.a.
16 To sell ⁸	5,900	11,786	7,586	255	1,419	1,748	621	124	2,535	n.a.
FEDERAL HOME LOAN MORTGAGE CORPORATION										
<i>Mortgage holdings (end of period)⁸</i>										
17 Total	324,443	385,693	491,719	508,238	522,886	526,107	521,611	515,732	518,816	521,137
18 FHA/VA insured	1,836	3,332	3,506	3,447	3,387	3,332	3,298 ⁹	2,571 ⁹	3,649 ⁹	n.a.
19 Conventional	322,607	382,361	488,213	504,791	519,499	522,775	518,313 ⁹	513,161 ⁹	515,167 ⁹	n.a.
<i>Mortgage transactions (during period)</i>										
20 Purchases	239,793	174,043	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
21 Sales	233,031	166,901	389,611	49,031	47,473	42,545	40,704	29,831	30,767	29,335
22 Mortgage commitments contracted (during period) ⁹	228,432	169,231	417,434	47,076	41,442	41,561	36,368	n.a.	n.a.	n.a.

1. Weighted averages based on sample surveys of mortgages originated by major institutional lender groups for purchase of newly built homes; compiled by the Federal Housing Finance Board in cooperation with the Federal Deposit Insurance Corporation.

2. Includes all fees, commissions, discounts, and "points" paid (by the borrower or the seller) to obtain a loan.

3. Average effective interest rate on loans closed for purchase of newly built homes, assuming prepayment at the end of ten years.

4. Average contract rate on new commitments for conventional first mortgages; from U.S. Department of Housing and Urban Development (HUD). Based on transactions on the first day of the subsequent month.

5. Average gross yield on thirty-year, minimum-downpayment first mortgages insured by the Federal Housing Administration (FHA) for immediate delivery in the private secondary market. Based on transactions on first day of subsequent month.

6. Average net yields to investors on fully modified pass-through securities backed by mortgages and guaranteed by the Government National Mortgage Association (GNMA), assuming prepayment in twelve years on pools of thirty-year mortgages insured by the Federal Housing Administration or guaranteed by the Department of Veterans Affairs.

7. Does not include standby commitments issued, but includes standby commitments converted.

8. Includes participation loans as well as whole loans.

9. Includes conventional and government-underwritten loans. The Federal Home Loan Mortgage Corporation's mortgage commitments and mortgage transactions include activity under mortgage securities swap programs, whereas the corresponding data for the Federal National Mortgage Association exclude swap activity.

1.54 MORTGAGE DEBT OUTSTANDING¹

Millions of dollars, end of period

Type of holder and property	1998	1999	2000	2001				2002
				Q1	Q2	Q3	Q4	Q1
1 All holders	5,718,488	6,325,012	6,887,458	7,011,255	7,217,523	7,410,814	7,596,130	7,752,769
<i>By type of property</i>								
2 One- to four-family residences	4,367,367	4,792,280	5,205,588	5,300,170	5,460,014	5,602,177	5,740,121	5,871,807
3 Multifamily residences	332,605	371,242	406,189	415,235	426,896	440,658	453,424	461,574
4 Nonfarm, nonresidential	922,009	1,058,528	1,166,846	1,185,977	1,217,562	1,253,314	1,286,358	1,301,486
5 Farm	56,506	102,962	108,836	109,873	113,050	114,665	116,227	117,902
<i>By type of holder</i>								
6 Major financial institutions	2,195,869	2,396,265	2,620,886	2,664,837	2,716,269	2,737,607	2,792,907	2,789,210
7 Commercial banks ²	1,338,273	1,496,844	1,661,411	1,688,673	1,727,463	1,740,321	1,793,061	1,802,265
8 One- to four-family	798,009	880,208	966,502	978,144	999,396	989,081	1,024,842	1,019,408
9 Multifamily	54,174	67,666	77,821	79,890	80,542	84,051	84,981	86,826
10 Nonfarm, nonresidential	457,054	517,130	583,071	596,405	612,366	631,757	647,669	660,052
11 Farm	29,035	31,839	34,016	34,234	35,159	35,432	35,569	35,978
12 Savings institutions ³	643,957	668,634	723,534	741,114	751,660	758,343	758,109	745,915
13 One- to four-family	533,895	549,046	595,053	608,289	616,506	620,882	620,975	605,494
14 Multifamily	56,847	59,168	61,094	62,666	63,193	64,193	64,323	65,002
15 Nonfarm, nonresidential	52,798	59,945	66,852	69,589	71,378	72,695	72,275	74,863
16 Farm	417	475	535	569	583	574	536	557
17 Life insurance companies	213,640	230,787	235,941	235,050	237,146	238,943	241,737	241,030
18 One- to four-family	6,590	5,934	4,903	4,877	5,003	5,085	5,144	5,129
19 Multifamily	31,522	32,818	33,681	33,557	33,842	33,842	34,488	34,387
20 Nonfarm, nonresidential	164,004	179,048	183,757	183,078	184,634	186,235	188,165	187,615
21 Farm	11,524	12,987	13,600	13,538	13,667	13,781	13,940	13,899
22 Federal and related agencies	293,613	322,132	343,962	347,463	356,817	363,001	376,969	385,027
23 Government National Mortgage Association	7	7	6	6	6	9	8	8
24 One- to four-family	7	7	6	6	6	9	8	8
25 Multifamily	0	0	0	0	0	0	0	0
26 Farmers Home Administration ⁴	40,851	73,871	73,323	73,361	73,206	72,118	72,452	72,362
27 One- to four-family	16,895	16,506	16,372	16,297	16,153	15,916	15,824	15,665
28 Multifamily	11,739	11,741	11,733	11,725	11,725	11,710	11,712	11,707
29 Nonfarm, nonresidential	7,705	41,355	41,070	41,247	41,262	40,470	40,965	41,134
30 Farm	4,513	4,268	4,148	4,093	4,072	4,023	3,952	3,855
31 Federal Housing Admin. and Dept. of Veterans Affairs	3,674	3,712	3,507	2,873	2,918	3,155	3,290	3,361
32 One- to four-family	1,849	1,851	1,308	1,276	1,267	1,251	1,260	1,255
33 Multifamily	1,825	1,861	2,199	1,597	1,651	1,904	2,031	2,105
34 Resolution Trust Corporation	0	0	0	0	0	0	0	0
35 One- to four-family	0	0	0	0	0	0	0	0
36 Multifamily	0	0	0	0	0	0	0	0
37 Nonfarm, nonresidential	0	0	0	0	0	0	0	0
38 Farm	0	0	0	0	0	0	0	0
39 Federal Deposit Insurance Corporation	361	152	45	50	24	26	13	7
40 One- to four-family	58	25	7	8	4	4	2	1
41 Multifamily	70	29	9	10	5	5	3	1
42 Nonfarm, nonresidential	233	98	29	32	15	17	8	4
43 Farm	0	0	0	0	0	0	0	0
44 Federal National Mortgage Association	157,675	151,500	155,363	157,481	160,820	165,687	169,908	176,051
45 One- to four-family	147,594	141,195	144,150	145,014	147,730	151,786	155,060	160,300
46 Multifamily	10,081	10,305	11,213	12,467	13,090	13,901	14,848	15,751
47 Federal Land Banks	32,983	34,187	36,326	37,072	38,686	39,722	40,855	41,981
48 One- to four-family	1,941	2,012	2,137	2,181	2,276	2,337	2,404	2,470
49 Farm	31,042	32,175	34,189	34,891	36,410	37,385	38,451	39,511
50 Federal Home Loan Mortgage Corporation	57,085	56,676	59,240	60,110	61,542	59,638	62,792	59,624
51 One- to four-family	49,106	44,321	42,871	42,771	42,537	39,217	40,309	35,955
52 Multifamily	7,979	12,355	16,369	17,339	19,005	20,421	22,483	23,669
53 Mortgage pools or trusts ⁵	2,581,297	2,948,245	3,231,415	3,300,561	3,432,654	3,583,079	3,697,560	3,871,461
54 Government National Mortgage Association	537,446	582,263	611,553	601,523	598,019	603,186	591,368	587,631
55 One- to four-family	522,498	565,189	592,624	581,743	577,228	581,796	569,460	564,535
56 Multifamily	14,948	17,074	18,929	19,780	20,792	21,391	21,908	23,096
57 Federal Home Loan Mortgage Corporation	646,459	749,081	822,310	833,616	873,750	927,490	948,409	1,012,478
58 One- to four-family	643,465	744,619	816,602	827,769	867,924	921,709	940,933	1,005,136
59 Multifamily	2,994	4,462	5,708	5,847	5,826	5,781	7,476	7,342
60 Federal National Mortgage Association	834,517	960,883	1,057,750	1,099,049	1,163,978	1,228,131	1,290,351	1,355,404
61 One- to four-family	804,204	924,941	1,016,398	1,055,412	1,116,534	1,177,995	1,238,125	1,301,374
62 Multifamily	30,313	35,942	41,352	43,637	47,444	50,136	52,226	54,030
63 Farmers Home Administration ⁴	1	0	0	0	0	0	0	0
64 One- to four-family	0	0	0	0	0	0	0	0
65 Multifamily	0	0	0	0	0	0	0	0
66 Nonfarm, nonresidential	0	0	0	0	0	0	0	0
67 Farm	1	0	0	0	0	0	0	0
68 Private mortgage conduits	562,874	656,018	739,802	766,373	796,907	824,272	867,432	915,948
69 One- to four-family ⁶	405,153	455,021	499,834	523,300	539,200	550,039	574,500	618,400
70 Multifamily	33,784	42,293	48,786	49,007	50,836	53,627	56,910	57,808
71 Nonfarm, nonresidential	123,937	158,704	191,182	194,066	206,871	220,606	236,022	239,740
72 Farm	0	0	0	0	0	0	0	0
73 Individuals and others ⁷	647,709	658,371	691,196	698,394	711,784	727,126	728,693	707,071
74 One- to four-family	435,138	459,609	490,890	496,778	508,826	522,597	523,781	505,183
75 Multifamily	76,320	75,297	77,074	77,509	78,764	79,524	79,880	79,709
76 Nonfarm, nonresidential	116,277	102,248	100,884	101,559	101,035	101,534	101,254	98,078
77 Farm	19,974	21,217	22,348	22,547	23,160	23,471	23,779	24,102

1. Multifamily debt refers to loans on structures of five or more units.

2. Includes loans held by nondeposit trust companies but not loans held by bank trust departments.

3. Includes savings banks and savings and loan associations.

4. FmHA-guaranteed securities sold to the Federal Financing Bank were reallocated from FmHA mortgage pools to FmHA mortgage holdings in 1986:Q4 because of accounting changes by the Farmers Home Administration.

5. Outstanding principal balances of mortgage-backed securities insured or guaranteed by the agency indicated.

6. Includes securitized home equity loans.

7. Other holders include mortgage companies, real estate investment trusts, state and local credit agencies, state and local retirement funds, noninsured pension funds, credit unions, and finance companies.

SOURCE: Based on data from various institutional and government sources. Separation of nonfarm mortgage debt by type of property, if not reported directly, and interpolations and extrapolations, when required for some quarters, are estimated in part by the Federal Reserve. Line 69 from Inside Mortgage Securities and other sources.

A34 Domestic Financial Statistics □ October 2002

1.55 CONSUMER CREDIT¹

Millions of dollars, amounts outstanding, end of period

Holder and type of credit	1999	2000	2001	2002					
				Jan.	Feb. ¹	Mar.	Apr.	May ¹	June
Seasonally adjusted									
1 Total	1,416,316	1,560,571	1,667,477¹	1,673,319¹	1,679,870	1,686,472¹	1,695,112¹	1,704,634	1,713,034
2 Revolving	597,669	666,544	699,445 ¹	700,942 ¹	700,564	703,979 ¹	708,656 ¹	711,075	714,898
3 Nonrevolving ²	818,647	894,027	968,032	972,377	979,306	982,493 ¹	986,456	993,559	998,136
Not seasonally adjusted									
4 Total	1,446,127	1,593,051	1,701,387¹	1,686,493¹	1,677,095	1,675,318¹	1,682,468¹	1,692,066	1,705,841
<i>By major holder</i>									
5 Commercial banks	499,758	541,470	558,023	557,190	552,053	550,809	556,098	557,486	553,676
6 Finance companies	201,549	219,783	236,505 ¹	230,034 ¹	233,129	232,212 ¹	230,087 ¹	230,155	234,306
7 Credit unions	167,921	184,434	189,570	188,126	186,509	186,476	187,197	188,459	189,910
8 Savings institutions	61,527	64,557	69,070	68,906	68,758	68,595	69,287	69,980	70,672
9 Nonfinancial business	80,311	82,662	67,939	63,183	59,017	58,102	56,924	55,803	52,970
10 Pools of securitized assets ³	435,061	500,145	580,281 ¹	579,054 ¹	577,629	579,124 ¹	582,874 ¹	590,183	604,306
<i>By major type of credit⁴</i>									
11 Revolving	621,914	692,955	726,850 ¹	712,464 ¹	701,421	697,780 ¹	703,984 ¹	706,198	712,230
12 Commercial banks	189,352	218,063	224,486	218,979	216,126	216,291	221,326	218,334	215,718
13 Finance companies	32,483	37,561	31,484	29,762	28,844	27,918	28,982	28,693	30,938
14 Credit unions	20,641	22,226	22,265	21,516	21,250	20,813	20,852	20,878	20,994
15 Savings institutions	15,838	16,560	17,767	17,498	17,256	16,988	17,425	17,862	18,299
16 Nonfinancial business	42,783	42,430	29,790	26,280	23,041	22,402	21,357	20,359	17,833
17 Pools of securitized assets ³	320,817	356,114	401,059 ¹	398,429 ¹	394,903	393,367 ¹	394,043 ¹	400,071	408,448
18 Nonrevolving	824,213	900,095	974,537	974,029	975,675	977,538 ¹	978,483	985,869	993,611
19 Commercial banks	310,406	323,407	333,537	338,212	335,927	334,518	334,772	339,153	337,959
20 Finance companies	169,066	182,221	205,021 ¹	200,272 ¹	204,285	204,294 ¹	201,105 ¹	201,462	203,368
21 Credit unions	147,280	162,208	167,305	166,610	165,259	165,663	166,345	167,581	168,916
22 Savings institutions	45,689	47,997	51,303	51,408	51,502	51,607	51,862	52,117	52,373
23 Nonfinancial business	37,528	40,232	38,149	36,903	35,976	35,699	35,568	35,443	35,137
24 Pools of securitized assets ³	114,244	144,031	179,222 ¹	180,625 ¹	182,726	185,757 ¹	188,832 ¹	190,112	195,859

1. The Board's series on amounts of credit covers most short- and intermediate-term credit extended to individuals, excluding loans secured by real estate. Data in this table also appear in the Board's G.19 (421) monthly statistical release. For ordering address, see inside front cover.

2. Comprises motor vehicle loans, mobile home loans, and all other loans that are not included in revolving credit, such as loans for education, boats, trailers, or vacations. These loans may be secured or unsecured.

3. Outstanding balances of pools upon which securities have been issued: these balances are no longer carried on the balance sheets of the loan originator.

4. Totals include estimates for certain holders for which only consumer credit totals are available.

1.56 TERMS OF CONSUMER CREDIT¹

Percent per year except as noted

Item	1999	2000	2001	2002						
				Dec.	Jan.	Feb.	Mar.	Apr.	May	June
INTEREST RATES										
<i>Commercial banks²</i>										
1 48-month new car	8.44	9.34	8.50	n.a.	n.a.	7.50	n.a.	n.a.	7.74	n.a.
2 24-month personal	13.39	13.90	13.22	n.a.	n.a.	11.72	n.a.	n.a.	12.57	n.a.
<i>Credit card plan</i>										
3 All accounts	15.21	15.71	14.89	n.a.	n.a.	13.65	n.a.	n.a.	13.55	n.a.
4 Accounts assessed interest	14.81	14.91	14.44	n.a.	n.a.	12.98	n.a.	n.a.	13.34	n.a.
<i>Auto finance companies</i>										
5 New car	6.66	6.61	5.65	3.31	4.02	n.a.	n.a.	n.a.	n.a.	n.a.
6 Used car	12.60	13.55	12.18	10.89	10.84	n.a.	n.a.	n.a.	n.a.	n.a.
OTHER TERMS³										
<i>Maturity (months)</i>										
7 New car	52.7	54.9	55.1	48.6	48.8	56.4	56.4	55.9	57.3 ¹	58.6
8 Used car	55.9	57.0	57.5	56.5	57.3	57.8	57.7	57.7	57.8	57.7
<i>Loan-to-value ratio</i>										
9 New car	92	92	91	91	90	89	90	93	92	92
10 Used car	99	99	100	100	100	100	100	101	101	100
<i>Amount financed (dollars)</i>										
11 New car	19,880	20,923	22,822	24,812	24,137	22,741	23,065	23,535	23,324 ¹	23,115
12 Used car	13,642	14,058	14,416	14,653	14,355	14,049	14,149	14,363	14,700	14,787

1. The Board's series on amounts of credit covers most short- and intermediate-term credit extended to individuals. Data in this table also appear in the Board's G.19 (421) monthly statistical release. For ordering address, see inside front cover.

2. Data are available for only the second month of each quarter.

3. At auto finance companies.

1.57 FUNDS RAISED IN U.S. CREDIT MARKETS¹

Billions of dollars; quarterly data at seasonally adjusted annual rates

Transaction category or sector	1996	1997	1998	1999	2000	2000	2001				2002	
						Q4'	Q1'	Q2'	Q3'	Q4'	Q1'	Q2'
Nonfinancial sectors												
1 Total net borrowing by domestic nonfinancial sectors	733.3'	804.4'	1,042.4'	1,068.5'	860.2'	822.0	917.1	1,022.0	1,275.4	1,216.6	937.5	1,531.5
<i>By sector and instrument</i>												
2 Federal government	144.9	23.1	-52.6	-71.2	-295.9	-306.1	-59.3	-215.8	-209.3	43.4	39.8	451.3
3 Treasury securities	146.6	23.2	-54.6	-71.0	-294.9	-304.9	-57.0	-216.9	209.7	44.2	41.6	449.5
4 Budget agency securities and mortgages	-1.6	-1	2.0	-2	-1.0	-1.2	-2.2	1.1	-4	-7	-1.8	1.8
5 Nonfederal	588.3'	781.3'	1,095.0'	1,139.7'	1,156.1'	1,128.1	976.4	1,237.8	1,066.1	1,173.2	897.7	1,080.2
<i>By instrument</i>												
6 Commercial paper	-9	13.7	24.4	37.4	48.1	-4.0	-199.2	-133.4	-66.1	45.5	-155.7	-93.0
7 Municipal securities and loans	2.6	71.4	96.8	68.2	35.3	62.0	102.9	107.3	70.0	190.1	70.3	186.4
8 Corporate bonds	116.3	150.5	218.7	229.9	171.1	175.6	399.5	419.5	187.9	323.5	233.8	207.0
9 Bank loans n.e.c.	70.4	106.4	108.2'	82.8'	101.7'	75.1	-19.5	-121.0	-24.4	-164.5	-18.8	-183.2
10 Other loans and advances	28.7	59.5	82.1	57.1	101.5	127.8	7	122.1	58.3	-104.2	-10.8	51.2
11 Mortgages	280.1'	322.3'	489.8'	564.9'	559.4'	561.0	547.5	767.3	769.8	732.8	697.4	810.0
12 Home	241.7'	258.3'	387.7'	424.6'	413.5'	399.9	423.2	607.6	559.2	530.5	601.8	648.8
13 Multifamily residential	9.8'	7.3'	23.4'	35.7'	35.2'	42.2	37.6	40.8	56.5	56.5	29.2	43.5
14 Commercial	25.8'	53.5	72.2'	98.8'	104.2'	116.8	82.3	107.0	147.1	139.0	59.6	109.4
15 Farm	2.7	3.1	6.5	5.8	6.5	2.1	4.3	11.9	7.0	6.7	6.7	8.3
16 Consumer credit	91.3	57.5	75.0	99.5	139.0	130.7	144.5	76.0	70.6	149.9	81.4	101.9
<i>By borrowing sector</i>												
17 Household	339.8'	332.7	454.8'	498.0'	541.0'	515.1	506.3	650.4	661.2	623.2	703.0	705.5
18 Nonfinancial business	255.3'	392.5'	559.9'	589.4'	587.9'	556.5	373.8	484.8	348.4	392.2	132.4	201.1
19 Corporate	183.1'	291.6'	392.1'	401.6'	406.3'	386.4	205.9	303.3	190.2	242.8	16.9	78.6
20 Nonfarm noncorporate	67.3	94.7	159.7	182.4	170.7	159.4	162.2	170.1	153.8	141.1	110.3	114.8
21 Farm	4.9	6.2	8.0	5.5	10.9	10.8	5.7	11.5	4.4	8.3	5.1	7.7
22 State and local government	-6.8	56.1	80.3	52.3	27.2	56.5	96.3	102.5	56.6	157.7	62.3	173.6
23 Foreign net borrowing in United States	88.4	71.8	43.2	25.2	65.7'	65.1	-8.5	-50.5	-106.7	16.0	75.3	13.6
24 Commercial paper	11.3	3.7	7.8	16.3	31.7	48.9	-33.8	-3.8	-25.2	5.9	64.8	34.8
25 Bonds	67.0	61.4	34.9	14.1'	23.9'	9.1	21.4	-15.8	-83.9	29.7	-2.3	-41.0
26 Bank loans n.e.c.	9.1	8.5	6.6'	.5	11.4'	12.0	14.3	-31.4	4.2	-16.3	13.9	22.1
27 Other loans and advances	1.0	-1.8	-6.0	-5.7	-1.3	-4.9	-10.4	5	-1.8	-3.3	-1.2	-2.3
28 Total domestic plus foreign	821.7'	876.2'	1,085.6'	1,093.7'	925.9'	887.0	908.6	971.5	1,168.8	1,232.5	1,012.8	1,545.1
Financial sectors												
29 Total net borrowing by financial sectors	550.1	662.2	1,087.2	1,084.4	815.4'	918.9	884.0	818.0	1,117.4	982.1	874.7	916.3
<i>By instrument</i>												
30 Federal government-related	231.4	212.9	470.9	592.0	433.5	613.6	432.6	674.6	818.4	591.8	692.0	497.1
31 Government-sponsored enterprise securities	90.4	98.4	278.3	318.2	234.1	304.5	262.3	268.3	326.2	306.5	191.3	151.1
32 Mortgage pool securities	141.0	114.6	192.6	273.8	199.4	309.1	170.3	406.2	492.2	285.3	500.7	346.0
33 Loans from U.S. government	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
34 Private	318.7	449.3	616.3	492.4'	382.0'	305.3	451.4	143.4	299.0	390.3	182.7	419.1
35 Open market paper	92.2	166.7	161.0	176.2	127.7	84.6	-83.8	-77.9	-72.2	-13.6	-178.3	-109.1
36 Corporate bonds	178.1	218.9	310.2'	218.2	205.8'	210.1	427.8	212.9	312.7	378.3	358.1	472.7
37 Bank loans n.e.c.	12.6	13.3	30.1	-14.2	-2'	-6.7	24.3	10.8	1.6	18.3	.2	31.9
38 Other loans and advances	27.9	35.6	90.2	107.1	42.5	15.5	90.6	-18.7	58.8	8.9	-3.9	16.7
39 Mortgages	7.9	14.9	24.8	5.1	6.2	1.8	-7.5	16.2	-1.9	-1.6	6.6	7.0
<i>By borrowing sector</i>												
40 Commercial banking	13.0	46.1	72.9	67.2	60.0	39.0	138.1	-10.5	39.7	44.1	24.3	13.3
41 Savings institutions	25.5	19.7	52.2	48.0	27.3	20.1	55.5	3.4	39.4	-68.6	-33.1	-12.0
42 Credit unions	1	1	6	2.2	.0	1.0	-6	8	1.5	4.4	2.4	2.0
43 Life insurance companies	1.1	.2	.7	.7	-7	-7	-2.4	1	3.5	1.4	2.4	1.2
44 Government-sponsored enterprises	90.4	98.4	278.3	318.2	234.1	304.5	262.3	268.3	326.2	306.5	191.3	151.1
45 Federally related mortgage pools	141.0	114.6	192.6	273.8	199.4	309.1	170.3	406.2	492.2	285.3	500.7	346.0
46 Issuers of asset-backed securities (ABSs)	150.8	202.2	321.4	223.4	196.2'	305.2	288.7	195.6	317.7	435.7	267.6	273.4
47 Finance companies	50.6	57.8	57.1	70.3	81.2	15.6	-54.0	36.8	41.8	-25.3	-31.2	79.5
48 Mortgage companies	4.1	-4.6	1.6	.2	.1	1.0	.7	.6	.8	.6	.8	.7
49 Real estate investment trusts (REITs)	11.9	39.6	62.7	6.3	2.7	-8.1	-6.1	10.5	-2.4	7.8	7.4	25.3
50 Brokers and dealers	-2.0	8.1	7.2	-17.2	15.6	-6.6	-23.7	35.6	12.6	-18.9	-15.7	17.5
51 Funding corporations	63.8	79.9	40.0	91.5	-4	-61.2	55.3	-129.6	-155.7	9.1	-42.2	18.2

1.57 FUNDS RAISED IN U.S. CREDIT MARKETS¹—Continued

Billions of dollars; quarterly data at seasonally adjusted annual rates

Transaction category or sector	1996	1997	1998	1999 ^a	2000 ^a	2000	2001				2002	
						Q4 ^a	Q1 ^a	Q2 ^a	Q3 ^a	Q4 ^a	Q1 ^a	Q2 ^a
All sectors												
52 Total net borrowing, all sectors	1,371.7^r	1,538.5^r	2,172.8^r	2,178.0	1,741.3	1,805.9	1,792.5	1,789.5	2,286.2	2,214.7	1,887.5	2,461.3
53 Open market paper	102.6	184.1	193.1	229.9	207.6	129.5	-316.8	-215.1	-163.5	37.8	-269.2	-167.3
54 U.S. government securities	376.3	236.0	418.3	520.7	137.6	307.5	373.3	458.8	1,027.8	635.2	731.8	948.4
55 Municipal securities	2.6	71.4	96.8	68.2	35.3	62.0	102.9	107.3	70.0	190.1	70.3	186.4
56 Corporate and foreign bonds	361.3	430.8	563.7	462.2	400.8	394.8	848.8	616.6	416.7	731.5	589.6	638.7
57 Bank loans n.e.c.	92.1	128.2	145.0	69.0	112.8	80.4	19.2	-141.6	-18.6	-162.4	-4.6	-129.3
58 Other loans and advances	57.7	93.2	166.3	158.5	142.7	138.3	80.8	103.9	115.3	-98.7	-15.8	65.6
59 Mortgages	287.9 ^r	337.2 ^r	514.6 ^r	570.0	565.6	562.8	540.0	783.5	767.9	731.2	704.0	817.0
60 Consumer credit	91.3	57.5	75.0	99.5	139.0	130.7	144.5	76.0	70.6	149.9	81.4	101.9
Funds raised through mutual funds and corporate equities												
61 Total net issues	232.9	185.3	113.7	156.9	197.2	-37.3	236.3	412.3	99.2	360.1	414.8	313.5
62 Corporate equities	-4.7	-79.9	-165.8	-34.3	-37.8	-177.5	120.3	138.8	-61.2	104.2	28.0	206.2
63 Nonfinancial corporations	-69.5	-114.4	-267.0	-143.5	-159.7	-367.5	-25.0	-70.7	-126.6	-25.0	-3.7	62.5
64 Foreign shares purchased by U.S. residents	82.8	57.6	101.3	114.3	103.6	96.6	86.1	222.9	43.5	74.7	-5.9	80.9
65 Financial corporations	-18.1	-23.0	-1	-5.1	18.3	93.5	59.1	-13.4	21.8	54.5	37.6	62.8
66 Mutual fund shares	237.6	265.1	279.5	191.2	235.0	140.2	116.0	273.5	160.4	255.9	386.8	107.2

1. Data in this table also appear in the Board's Z.1 (780) quarterly statistical release, tables F.2 through F.4. For ordering address, see inside front cover.

2.12 OUTPUT, CAPACITY, AND CAPACITY UTILIZATION¹

Seasonally adjusted

Series	2001		2002		2001		2002		2001		2002	
	Q3	Q4	Q1	Q2 ²	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2 ²
	Output (1992=100)				Capacity (percent of 1992 output)				Capacity utilization rate (percent) ²			
1 Total industry	139.6	137.2	138.1	139.6	183.2	183.6	184.1	184.5	76.2	74.7	75.0	75.6
2 Manufacturing	144.2	141.9	142.9	144.3	193.6	194.0	194.4	194.9	74.5	73.1	73.5	74.0
3 Primary processing ³	167.1	164.5	168.0	172.2	223.8	224.5	225.3	226.2	74.7	73.3	74.6	76.1
4 Advanced processing ⁴	131.5	129.3	129.2	129.1	176.9	177.2	177.4	177.7	74.3	73.0	72.8	72.7
5 Durable goods	178.3	174.1	176.1	178.4	247.5	248.5	249.4	250.4	72.0	70.1	70.6	71.2
6 Lumber and products	115.5	112.7	112.3	111.9	148.8	149.1	149.3	149.6	77.6	75.6	75.2	74.8
7 Primary metals	117.8	109.1	112.1	115.2	150.6	150.4	149.4	147.8	78.2	72.6	75.0	77.9
8 Iron and steel	115.7	104.0	109.3	116.2	146.8	146.2	144.4	141.5	78.8	71.2	75.7	82.2
9 Nonferrous	120.6	115.3	115.6	114.3	155.6	155.8	155.9	155.9	77.5	74.0	74.1	73.3
10 Industrial machinery and equipment	208.8	202.2	205.7	208.6	298.8	299.8	300.4	301.1	69.9	67.5	68.5	69.3
11 Electrical machinery	485.3	485.7	499.3	515.3	745.4	752.5	762.1	774.4	65.1	64.6	65.5	66.5
12 Motor vehicles and parts	169.5	165.1	173.7	180.6	221.5	222.9	224.2	225.4	76.5	74.1	77.5	80.1
13 Aerospace and miscellaneous transportation equipment	95.9	91.2	86.2	82.4	135.2	135.1	135.1	134.8	71.0	67.5	63.8	61.1
14 Nondurable goods	111.0	110.2	110.6	111.1	142.9	142.9	142.9	143.0	77.7	77.1	77.4	77.7
15 Textile mill products	85.3	82.4	84.9	86.7	116.4	115.4	114.4	113.4	73.3	71.5	74.3	76.4
16 Paper and products	108.5	105.8	104.4	107.7	138.8	139.0	139.0	138.8	78.1	76.1	75.1	77.6
17 Chemicals and products	121.1	122.4	122.9	122.8	158.5	158.6	158.9	159.7	76.4	77.2	77.4	76.9
18 Plastics materials	117.4	115.6	119.9	128.2	153.0	153.4	153.8	154.1	76.7	75.4	77.9	83.2
19 Petroleum products	113.2	113.7	116.2	115.8	122.4	122.7	122.9	123.0	92.5	92.7	94.6	94.1
20 Mining	101.8	98.6	96.3	96.5	112.2	112.6	112.9	112.9	90.7	87.6	85.3	85.5
21 Utilities	119.1	116.9	119.3	123.6	138.1	139.9	141.6	143.0	86.3	83.6	84.3	86.4
22 Electric	122.2	121.1	122.1	126.1	137.4	139.8	141.9	143.7	88.9	86.7	86.0	87.8

Footnotes appear on page A41.

2.12 OUTPUT, CAPACITY, AND CAPACITY UTILIZATION¹—Continued

Seasonally adjusted

Series	1973	1975	Previous cycle ⁵		Latest cycle ⁶		2001	2002					
	High	Low	High	Low	High	Low	July	Feb.	Mar.	Apr. ⁷	May ⁷	June ⁷	July ⁸
	Capacity utilization rate (percent) ²												
1 Total industry	89.2	72.6	87.3	71.1	85.4	78.1	76.7	75.0	75.2	75.3	75.6	76.0	76.1
2 Manufacturing	88.5	70.5	86.9	69.0	85.7	76.6	75.1	73.5	73.7	73.6	74.0	74.4	74.4
3 Primary processing ³	91.8	67.3	88.6	65.7	88.3	76.7	74.9	74.6	75.1	75.4	76.3	76.6	76.7
4 Advanced processing ⁴	86.5	72.5	86.3	71.0	84.2	76.6	75.1	72.7	72.8	72.5	72.5	73.0	72.9
5 Durable goods	89.2	68.9	87.7	63.9	84.6	73.1	72.8	70.6	70.7	70.8	71.2	71.6	71.9
6 Lumber and products	88.7	61.2	87.9	60.8	93.6	75.5	76.6	74.4	75.6	74.7	74.9	74.9	74.8
7 Primary metals	100.2	65.9	94.2	45.1	92.7	73.7	79.3	74.8	75.9	75.6	77.7	80.5	81.7
8 Iron and steel	105.8	66.6	95.8	37.0	95.2	71.8	80.8	76.6	76.8	77.7	82.3	86.5	88.9
9 Nonferrous	90.8	59.8	91.1	60.1	89.3	74.2	77.7	72.8	74.9	73.2	72.8	74.1	74.1
10 Industrial machinery and equipment	96.0	74.3	93.2	64.0	85.4	72.3	70.5	68.4	68.9	68.7	69.5	69.6	69.2
11 Electrical machinery	89.2	64.7	89.4	71.6	84.0	75.0	65.4	65.7	65.7	66.0	67.1	66.6	66.2
12 Motor vehicles and parts	93.4	51.3	95.0	45.5	89.1	55.9	79.0	77.8	77.9	79.7	79.3	81.4	84.7
13 Aerospace and miscellaneous transportation equipment	78.4	67.6	81.9	66.6	87.3	79.2	71.8	63.9	62.7	61.8	61.0	60.6	59.5
14 Nondurable goods	87.8	71.7	87.5	76.4	87.3	80.7	78.0	77.3	77.6	77.3	77.7	78.0	77.6
15 Textile mill products	91.4	60.0	91.2	72.3	90.4	77.7	72.2	74.4	76.4	76.3	76.9	76.1	76.2
16 Paper and products	97.1	69.2	96.1	80.6	93.5	85.0	77.9	74.4	75.2	75.8	78.3	78.5	77.4
17 Chemicals and products	87.6	69.7	84.6	69.9	86.2	79.3	76.5	77.4	77.2	76.7	77.1	76.9	76.5
18 Plastics materials	102.0	50.6	90.9	63.4	97.0	74.8	76.9	78.2	80.3	80.4	85.2	84.0	82.4
19 Petroleum products	96.7	81.1	90.0	66.8	88.5	85.1	93.6	95.4	94.9	95.0	94.0	93.3	94.1
20 Mining	94.3	88.2	96.0	80.3	88.0	87.0	90.9	85.6	84.5	84.4	85.5	86.5	85.5
21 Utilities	96.2	82.9	89.1	75.9	92.6	83.4	86.0	84.9	85.8	87.0	85.8	86.6	88.3
22 Electric	99.0	82.7	88.2	78.9	95.0	87.1	88.5	85.9	87.4	88.4	86.6	88.4	90.4

1. Data in this table also appear in the Board's G.17 (419) monthly statistical release. The data are also available on the Board's web site, <http://www.federalreserve.gov/releases/g17>. The latest historical revision of the industrial production index and the capacity utilization rates was released in November 2001. The recent annual revision is described in the March 2002 issue of the *Bulletin*. For a description of the methods of estimating industrial production and capacity utilization, see "Industrial Production and Capacity Utilization: Historical Revision and Recent Developments," *Federal Reserve Bulletin*, vol. 83 (February 1997), pp. 67-92, and the references cited therein. For details about the construction of individual industrial production series, see "Industrial Production: 1989 Developments and Historical Revision," *Federal Reserve Bulletin*, vol. 76 (April 1990), pp. 187-204.

2. Capacity utilization is calculated as the ratio of the Federal Reserve's seasonally adjusted index of industrial production to the corresponding index of capacity.

3. Primary processing includes textiles; lumber; paper; industrial chemicals; synthetic materials; fertilizer materials; petroleum products; rubber and plastics; stone, clay, and glass; primary metals; fabricated metals; semiconductors and related electronic components; and motor vehicle parts.

4. Advanced processing includes foods, tobacco, apparel, furniture and fixtures, printing and publishing, chemical products such as drugs and toiletries, agricultural chemicals, leather and products, machinery except semiconductors and related electronic components, transportation equipment except motor vehicle parts, instruments, and miscellaneous manufacturing.

5. Monthly highs, 1978-80; monthly lows, 1982.

6. Monthly highs, 1988-89; monthly lows, 1990-91.

3.10 U.S. INTERNATIONAL TRANSACTIONS Summary

Millions of dollars; quarterly data seasonally adjusted except as noted¹

Item credits or debits	1999	2000	2001	2001				2002
				Q1	Q2	Q3	Q4	Q1
1 Balance on current account	-292,856	-410,341	-393,371	-107,722	-99,234	-91,331	-95,086	-112,487
2 Balance on goods and services	-261,838	-375,739	-347,810	-97,160	-93,324	-79,778	-88,028	-94,858
3 Exports	957,146	1,064,239	998,022	266,004	256,766	242,325	232,930	233,609
4 Imports	-1,219,383	-1,442,920	-1,356,312	-363,164	-350,090	-322,103	-320,958	-328,467
5 Income, net	-13,613	-14,792	-19,118	1,046	6,006	807	6,521	-1,779
6 Investment, net	23,877	27,651	20,539	2,563	7,526	2,345	8,102	-151
7 Direct	75,009	88,862	102,595	22,249	27,832	23,908	28,602	20,904
8 Portfolio	-51,132	-61,211	-82,056	-19,686	-20,306	-21,563	-20,500	-21,055
9 Compensation of employees	-5,739	-5,869	-6,157	-1,517	-1,520	-1,538	-1,581	-1,628
10 Unilateral current transfers, net	-48,757	-53,442	-49,463	-11,608	-11,916	-12,360	-13,579	-15,850
11 Change in U.S. government assets other than official reserve assets, net (increase, -)	2,750	-941	-486	77	-783	77	143	239
12 Change in U.S. official reserve assets (increase, -)	8,747	-290	-4,911	190	-1,343	-3,559	-199	390
13 Gold	0	0	0	0	0	0	0	0
14 Special drawing rights (SDRs)	10	-722	-630	-189	-156	-145	-140	-109
15 Reserve position in International Monetary Fund	5,484	2,308	-3,600	574	-1,015	-3,242	83	652
16 Foreign currencies	3,253	-1,876	-681	-195	-172	-172	-142	-153
17 Change in U.S. private assets abroad (increase, -)	-489,066	-605,258	-365,565	-216,082	-77,910	28,460	-100,032	-14,510
18 Bank-reported claims ²	-76,263	-148,657	-128,705	-113,914	-685	69,576	-83,682	10,006
19 Nonbank-reported claims	-95,466	-150,805	-14,358	-51,759	9,670	-9,479	37,210	-4,030
20 U.S. purchase of foreign securities, net	-128,436	-127,502	-94,662	-26,895	-51,764	10,087	-26,090	2,047
21 U.S. direct investments abroad, net	-188,901	-178,294	-127,840	-23,514	-35,131	-41,724	-27,470	-22,533
22 Change in foreign official assets in United States (increase, +)	43,551	37,619	6,092	4,087	-20,831	16,882	5,086	9,034
23 U.S. Treasury securities	12,177	-10,233	10,760	-1,027	-20,798	15,810	16,760	-582
24 Other U.S. government obligations	20,350	40,909	20,920	3,574	9,932	-216	7,630	7,296
25 Other U.S. government liabilities ³	-2,855	-1,987	-2,482	-676	-791	89	-504	-790
26 Other U.S. liabilities reported by U.S. banks ⁴	12,964	5,803	-28,825	1,213	-10,202	-782	-20,507	2,384
27 Other foreign official assets ⁵	915	3,127	5,719	1,003	1,028	1,981	1,707	726
28 Change in foreign private assets in United States (increase, +)	770,193	986,599	889,367	298,423	202,441	1,007	245,711	104,281
29 U.S. bank-reported liabilities ⁴	54,232	87,953	95,214	15,633	55,003	-45,567	85,598	-25,299
30 U.S. nonbank-reported liabilities	69,075	177,010	98,222	111,644	-5,307	-25,154	1,170	34,704
31 Foreign private purchases of U.S. Treasury securities, net	-20,490	-52,792	15,779	-4,744	-14,685	-15,470	27,229	-5,682
32 U.S. currency flows	22,407	1,129	23,783	2,311	2,772	8,203	10,497	4,525
33 Foreign purchases of other U.S. securities, net	343,963	485,644	498,433	129,990	113,556	64,787	99,320	70,329
34 Foreign direct investments in United States, net	301,006	287,655	157,936	43,589	51,102	14,208	21,897	25,704
35 Capital account transactions, net ⁵	-3,340	837	826	208	207	206	205	201
36 Discrepancy	-48,822	696	-39,193	20,819	-2,547	48,258	-55,828	12,852
37 Due to seasonal adjustment				7,691	875	-10,286	1,721	9,956
38 Before seasonal adjustment	31,286	7	10,701	13,128	-3,422	58,544	-57,549	2,896
MEMO								
<i>Changes in official assets</i>								
39 U.S. official reserve assets (increase, -)	8,747	-290	-4,911	190	-1,343	-3,559	-199	390
40 Foreign official assets in United States, excluding line 25 (increase, +)	46,406	39,606	8,574	4,763	-20,040	16,793	5,590	9,824
41 Change in Organization of Petroleum Exporting Countries official assets in United States (part of line 22)	1,621	12,000	-1,725	673	-1,699	-4,081	3,382	-8,471

1. Seasonal factors are not calculated for lines 11-16, 18-20, 22-35, and 38-41.

2. Associated primarily with military sales contracts and other transactions arranged with or through foreign official agencies.

3. Consists of investments in U.S. corporate stocks and in debt securities of private corporations and state and local governments.

4. Reporting banks included all types of depository institutions as well as some brokers and dealers.

5. Consists of capital transfers (such as those of accompanying migrants entering or leaving the country and debt forgiveness) and the acquisition and disposal of nonproduced nonfinancial assets.

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business*.

3.12 U.S. RESERVE ASSETS

Millions of dollars, end of period

Asset	1999 ^c	2000 ^c	2001 ^c	2002							
				Jan.	Feb.	Mar.	Apr.	May	June	July	Aug. ^p
1 Total	71,516	67,647	68,654	67,532	67,357	67,574	67,844	69,579	74,696	74,751 ^r	75,307
2 Gold stock ¹	11,048	11,046	11,045	11,044	11,044	11,044	11,044	11,044	11,044	11,042 ^r	11,042
3 Special drawing rights ^{2,3}	10,336	10,539	10,774	10,657	10,763	10,809	10,988	11,297	11,645	11,575	11,752
4 Reserve position in International Monetary Fund ²	17,950	14,824	17,854	17,602	17,169	17,078	16,184	16,498	19,841	19,863	20,043
5 Foreign currencies ⁴	32,182	31,238	28,981	28,229	28,381	28,643	29,628	30,740	32,166	32,271	32,470

1. Gold held "under earmark" at Federal Reserve Banks for foreign and international accounts is not included in the gold stock of the United States; see table 3.13, line 3. Gold stock is valued at \$42.22 per fine troy ounce.

2. Special drawing rights (SDRs) are valued according to a technique adopted by the International Monetary Fund (IMF) in July 1974. Values are based on a weighted average of exchange rates for the currencies of member countries. From July 1974 through December 1980, sixteen currencies were used; since January 1981, five currencies have been used. U.S.

SDR holdings and reserve positions in the IMF also have been valued on this basis since July 1974.

3. Includes allocations of SDRs by the International Monetary Fund on Jan. 1 of the year indicated, as follows: 1970—\$867 million; 1971—\$717 million; 1972—\$710 million; 1979—\$1,139 million; 1980—\$1,152 million; 1981—\$1,093 million; plus net transactions in SDRs.

4. Valued at current market exchange rates.

3.13 FOREIGN OFFICIAL ASSETS HELD AT FEDERAL RESERVE BANKS¹

Millions of dollars, end of period

Asset	1999 ^c	2000 ^c	2001 ^c	2002							
				Jan.	Feb.	Mar.	Apr.	May	June	July	Aug. ^p
1 Deposits	71	215	61	162	89	256	111	127	90	164	86
<i>Held in custody</i>											
2 U.S. Treasury securities ²	632,482	594,094	592,630	592,031	591,202	593,865	589,531	605,501	619,226	635,036	638,003
3 Earmarked gold ³	9,933	9,451	9,099	9,098	9,098	9,098	9,091	9,084	9,077	9,071	9,064

1. Excludes deposits and U.S. Treasury securities held for international and regional organizations

2. Marketable U.S. Treasury bills, notes, and bonds and nonmarketable U.S. Treasury securities, in each case measured at face (not market) value.

3. Held in foreign and international accounts and valued at \$42.22 per fine troy ounce; not included in the gold stock of the United States.

3.15 SELECTED U.S. LIABILITIES TO FOREIGN OFFICIAL INSTITUTIONS

Millions of dollars, end of period

Item	1999	2000		2001		2002			
		Mar. ⁶	Mar. ⁶	Dec.	Dec.	Mar.	Apr.	May	June ⁶
1 Total¹	806,318	829,290	958,725	975,304	987,261	995,692	999,274	1,013,699	1,042,774
<i>By type</i>									
2 Liabilities reported by banks in the United States ²	138,847	136,577	136,577	144,593	123,125	124,116	133,120	139,021	148,531
3 U.S. Treasury bills and certificates ³	156,177	164,781	164,781	153,010	161,719	161,312	155,770	162,516	176,178
<i>U.S. Treasury bonds and notes</i>									
4 Marketable	422,266	430,243	465,111	450,832	454,306	454,383	452,777	452,708	454,869
5 Nonmarketable ⁴	6,111	5,734	5,734	5,348	3,411	3,159	3,179	3,199	3,000
6 U.S. securities other than U.S. Treasury securities ⁵	82,917	91,955	186,522	221,521	244,700	252,722	254,428	256,255	260,196
<i>By area</i>									
7 Europe ¹	244,805	251,815	238,548	240,325	243,137	241,917	244,471	248,021	253,637
8 Canada	12,503	13,683	15,016	13,727	13,440	14,308	12,341	11,947	11,095
9 Latin America and Caribbean	73,518	77,195	70,884	70,442	71,103	66,466	66,075	65,306	64,363
10 Asia	463,703	474,269	612,116	626,017	635,180	646,755	651,794	663,919	687,490
11 Africa	7,523	7,979	13,504	14,690	15,171	15,035	15,103	14,850	15,102
12 Other countries	4,266	4,349	8,655	10,101	9,228	11,209	9,488	9,654	11,085

1. Includes the Bank for International Settlements.
 2. Principally demand deposits, time deposits, bankers acceptances, commercial paper, negotiable time certificates of deposit, and borrowings under repurchase agreements.

3. Includes nonmarketable certificates of indebtedness and Treasury bills issued to official institutions of foreign countries.

4. Excludes notes issued to foreign official nonreserve agencies. Includes current value of zero-coupon Treasury bond issues to foreign governments as follows: Mexico, beginning March 1990, 30-year maturity issue; Venezuela, beginning December 1990, 30-year maturity issue; Argentina, beginning April 1993, 30-year maturity issue.

5. Debt securities of U.S. government corporations and federally sponsored agencies, and U.S. corporate stocks and bonds.

6. Data in the two columns shown for this date reflect different benchmark bases for foreigners' holdings of selected U.S. long-term securities. Figures in the first column are comparable to those for earlier dates; figures in the second column are based in part on a benchmark survey as of end-March 2000 and are comparable to those shown for following dates.

SOURCE: Based on U.S. Department of the Treasury data and on data reported to the Treasury by banks (including Federal Reserve Banks) and securities dealers in the United States, and in periodic benchmark surveys of foreign portfolio investment in the United States.

3.16 LIABILITIES TO, AND CLAIMS ON, FOREIGNERS Reported by Banks in the United States¹

Payable in Foreign Currencies

Millions of dollars, end of period

Item	1998	1999	2000	2001			2002
				June	Sept.	Dec.	Mar.
1 Banks' liabilities	101,125	88,537	77,779	107,806	92,557	89,627	90,254
2 Banks' claims	78,162	67,365	56,912	77,439	69,116	75,872	80,025
3 Deposits	45,985	34,426	23,315	32,713	36,364	45,382	50,293
4 Other claims	32,177	32,939	33,597	44,726	32,752	30,490	29,732
5 Claims of banks' domestic customers ²	20,718	20,826	24,411	21,144	20,885	17,631	16,454

1. Data on claims exclude foreign currencies held by U.S. monetary authorities.

2. Assets owned by customers of the reporting bank located in the United States that represent claims on foreigners held by reporting banks for the accounts of the domestic customers.

3.19 BANKS' OWN AND DOMESTIC CUSTOMERS' CLAIMS ON FOREIGNERS Reported by Banks in the United States¹

Payable in U.S. dollars

Millions of dollars, end of period

Type of claim	1999	2000	2001	2002						
				Dec.	Jan.	Feb.	Mar.	Apr.	May	June ⁶
1 Total	944,937	1,095,869	1,253,952	1,253,952	...	...	1,257,022	...	...	...
2 Banks' claims	793,139	904,642	1,051,573	1,051,573	1,007,368	1,009,570	1,056,667	1,104,635	1,090,401 ¹	1,109,285
3 Foreign public borrowers	35,090	37,907	49,278	49,278	54,542	50,034	55,562	52,746	49,524	51,042
4 Own foreign offices ²	529,682	630,137	745,834	745,834	699,055	717,854	751,162	789,435	784,390 ¹	795,215
5 Unaffiliated foreign banks	97,186	95,243	100,575	100,575	98,424	92,109	94,895	95,058	89,084 ¹	92,344
6 Deposits	34,538	23,886	26,189	26,189	27,073	25,978	26,266	22,778	21,598 ¹	24,010
7 Other	62,648	71,357	74,386	74,386	71,351	66,131	68,629	72,280	67,486 ¹	68,334
8 All other foreigners	131,181	141,355	155,886	155,886	155,347	149,573	155,048	167,396	167,403	170,684
9 Claims of banks' domestic customers ³	151,798	191,227	202,379	202,379	...	...	200,355	...	...	...
10 Deposits	88,006	100,352	92,546	92,546	...	...	87,634	...	...	...
11 Negotiable and readily transferable instruments ⁴	51,161	78,147	94,016	94,016	...	...	98,050	...	...	...
12 Outstanding collections and other claims	12,631	12,728	15,817	15,817	...	...	14,671	...	...	...
MEMO										
13 Customer liability on acceptances	4,553	4,257	2,588	2,588	...	...	2,139	...	...	...
14 Banks' loans under resale agreements ⁵	n.a.	n.a.	137,349	137,349	118,984	123,082	114,917	135,731	133,620	149,206
15 Dollar deposits in banks abroad, reported by nonbanking business enterprises in the United States ⁶	31,125	53,153	60,711	60,711	54,563	55,177	61,417	57,884	48,488 ¹	62,161

1. For banks' claims, data are monthly; for claims of banks' domestic customers, data are for quarter ending with month indicated.

2. Reporting banks include all types of depository institution as well as some brokers and dealers.

3. For U.S. banks, includes amounts due from own foreign branches and foreign subsidiaries consolidated in quarterly Consolidated Reports of Condition filed with bank regulatory agencies. For agencies, branches, and majority-owned subsidiaries of foreign banks, consists

principally of amounts due from the head office or parent foreign bank, and from foreign branches, agencies, or wholly owned subsidiaries of the head office or parent foreign bank.

4. Assets held by reporting banks in the accounts of their domestic customers.

5. Principally negotiable time certificates of deposit and bankers acceptances, and commercial paper.

6. Data available beginning January 2001.

7. Includes demand and time deposits and negotiable and nonnegotiable certificates of deposit denominated in U.S. dollars issued by banks abroad.

3.20 BANKS' OWN CLAIMS ON UNAFFILIATED FOREIGNERS Reported by Banks in the United States¹

Payable in U.S. dollars

Millions of dollars, end of period

Maturity, by borrower and area ²	1998	1999	2000	2001			2002
				June	Sept.	Dec.	Mar.
1 Total	250,418	267,082	274,009	302,304	298,924	305,172	304,297
<i>By borrower</i>							
2 Maturity of one year or less	186,526	187,894	186,103	191,979	178,458	200,222	188,785
3 Foreign public borrowers	13,671	22,811	21,399	26,621	19,994	27,293	26,914
4 All other foreigners	172,855	165,083	164,704	165,358	158,464	172,929	161,871
5 Maturity of more than one year	63,892	79,188	87,906	110,325	120,466	104,950	115,512
6 Foreign public borrowers	9,839	12,013	15,838	25,018	25,844	21,324	26,748
7 All other foreigners	54,053	67,175	72,068	85,307	94,622	83,626	88,764
<i>By area</i>							
<i>Maturity of one year or less</i>							
8 Europe	68,679	80,842	142,464	80,682	70,700	83,091	79,694
9 Canada	10,968	7,859	8,323	8,624	7,897	10,174	7,763
10 Latin America and Caribbean	81,766	69,498	151,840	73,029	75,562	70,657	69,178
11 Asia	18,007	21,802	43,371	24,181	19,381	29,666	24,554
12 Africa	1,835	1,122	2,263	971	707	1,144	1,147
13 All other ³	5,271	6,771	11,717	4,492	4,211	5,490	6,449
<i>Maturity of more than one year</i>							
14 Europe	14,923	22,951	57,770	39,947	41,597	34,074	39,813
15 Canada	3,140	3,192	3,174	3,995	4,292	3,633	3,362
16 Latin America and Caribbean	33,442	39,051	82,684	47,068	52,651	47,402	48,744
17 Asia	10,018	11,257	19,536	15,240	17,491	15,190	19,444
18 Africa	1,232	1,065	1,567	774	798	769	669
19 All other ³	1,137	1,672	5,954	3,301	3,637	3,882	3,480

1. Reporting banks include all types of depository institutions as well as some brokers and dealers.

2. Maturity is time remaining until maturity.

3. Includes nonmonetary international and regional organizations.

3.21 CLAIMS ON FOREIGN COUNTRIES Held by U.S. and Foreign Offices of U.S. Banks¹

Billions of dollars, end of period

Area or country	1998	1999	2000				2001				2002
			Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	
1 Total	1,051.6	945.5	955.0	991.0	954.4	1,027.3	1,141.1 ¹	1,137.0 ¹	1,280.6 ¹	912.7 ¹	796.0
2 G-10 countries and Switzerland	217.7	243.4	272.4	313.6	280.3	300.7	334.6 ¹	336.3 ¹	291.8 ¹	406.2 ¹	322.2
3 Belgium and Luxembourg	10.7	14.3	14.2	13.9	13.0	14.2	15.2 ¹	13.0	14.3 ¹	19.1	16.4
4 France	18.4	29.0	27.1	32.6	29.0	29.6	30.0	35.8 ¹	34.4 ¹	39.1 ¹	33.4
5 Germany	30.9	38.7	37.3	31.5	37.6	45.1	45.0 ¹	51.4 ¹	40.9 ¹	42.9 ¹	49.2
6 Italy	11.5	18.1	19.9	20.5	18.6	21.3	20.3 ¹	23.6 ¹	22.6 ¹	20.9 ¹	19.0
7 Netherlands	7.8	12.3	17.0	16.0	17.5	18.4	22.1 ¹	18.6 ¹	20.7 ¹	19.3 ¹	23.7
8 Sweden	2.3	3.0	3.9	3.5	4.3	3.6	4.7	4.7	5.1 ¹	5.3 ¹	5.5
9 Switzerland	8.5	10.3	10.1	13.8	10.9	13.2	13.7 ¹	13.3 ¹	12.8 ¹	12.4 ¹	13.5
10 United Kingdom	85.4	79.3	101.9	138.2	112.8	115.6	140.2 ¹	126.2 ¹	93.8 ¹	194.9 ¹	109.5
11 Canada	16.8	16.3	17.3	18.2	18.5	16.7	15.4	21.3	20.3	19.1	16.6
12 Japan	25.4	22.1	23.5	25.4	18.1	23.0	28.0	28.3	26.8	33.1	35.3
13 Other industrialized countries	69.0	68.4	62.7	75.3	73.7	74.5	75.2 ¹	70.0 ¹	70.6 ¹	70.4 ¹	69.9
14 Austria	1.4	3.5	2.6	2.8	3.5	4.1	3.8	3.6	4.4	4.8	5.1
15 Denmark	2.2	2.6	1.5	1.2	1.8	1.9	3.1	2.7	2.7	2.6	3.5
16 Finland	1.4	.9	.8	1.2	2.8	1.5	1.4	1.2	1.3	1.1	2.1
17 Greece	5.9	6.0	5.7	6.7	6.4	8.3	4.1	3.6	3.6	3.2	3.3
18 Norway	3.2	3.3	3.0	4.6	8.5	8.3	10.2	7.9	6.2	8.1	9.0
19 Portugal	1.4	1.0	1.0	2.0	1.5	2.0	1.9	1.4	1.4	1.6	1.8
20 Spain	13.7	12.1	11.3	12.2	10.5	10.3	12.4 ¹	12.4	13.7 ¹	12.1	12.1
21 Turkey	4.8	4.8	5.1	5.6	5.6	5.9	5.0 ¹	4.5	4.1	3.9	5.3
22 Other Western Europe	10.4	6.8	8.4	7.9	8.3	6.5	7.1 ¹	6.9	7.2 ¹	8.3 ¹	8.4
23 South Africa	4.4	3.8	4.8	4.6	4.2	3.6	4.1	3.8	4.4	4.1	3.3
24 Australia	20.3	23.5	18.6	26.3	20.5	22.1	21.9	22.1	21.6	20.6	15.9
25 OPEC ²	27.1	31.4	28.9	32.1	31.4	28.9	27.9 ¹	27.1	27.4 ¹	27.3	27.5
26 Ecuador	1.3	.8	.7	.7	.6	.6	.6	.6	.6	.6	.6
27 Venezuela	3.2	2.8	3.0	2.9	2.9	2.5	2.7	2.6	2.6	2.4	2.4
28 Indonesia	4.7	4.2	3.9	4.1	4.4	4.6	4.4	4.2	4.0	3.7	3.6
29 Middle East countries	17.0	23.1	21.1	23.8	22.4	20.3	19.7 ¹	19.3	19.9 ¹	20.3	20.6
30 African countries	1.0	.5	.2	.7	1.2	.8	.5	.4	.4	.3	.3
31 Non-OPEC developing countries	143.4	149.4	154.6	158.1	149.5	145.5	150.1	157.6	201.6	203.3 ¹	195.9
Latin America											
32 Argentina	23.1	23.2	22.4	21.6	21.4	21.4	20.9	19.8	19.2	19.2	12.8
33 Brazil	24.7	27.7	28.1	28.3	28.5	28.8	29.4	30.9	30.9	28.0	26.6
34 Chile	8.3	7.4	8.2	8.1	7.3	7.6	7.3	7.0	6.4	7.0	7.1
35 Colombia	3.2	2.5	2.5	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.4
36 Mexico	18.9	18.7	18.3	20.4	17.5	15.7	16.7	16.3	60.0	68.2 ¹	67.1
37 Peru	2.2	1.7	1.9	2.1	2.1	2.0	2.0	2.0	1.9	1.8	1.5
38 Other	5.4	5.9	6.5	6.7	6.2	6.3	8.6	8.3	8.1	8.9	7.9
Asia											
China											
39 Mainland	3.0	3.6	4.6	3.8	3.4	2.9	3.2	6.7	5.9	5.0	7.0
40 Taiwan	13.3	12.0	12.6	12.6	12.8	10.8	11.2	10.7	10.8	12.2	12.6
41 India	5.5	7.7	7.9	8.2	5.8	9.1	6.5	11.8	14.1	6.9	6.3
42 Israel	1.1	1.8	3.3	1.5	1.1	2.7	2.2	2.0	3.2	3.7	2.4
43 Korea (South)	13.7	15.2	17.7	21.7	21.4	15.5	19.9	19.3	19.3	18.5	22.4
44 Malaysia	5.6	6.1	6.5	6.8	6.9	7.1	6.5	6.8	6.1	6.7	6.4
45 Philippines	5.1	6.2	5.3	5.3	4.7	5.1	5.2	5.4	5.2	5.6	5.4
46 Thailand	4.7	4.1	4.3	4.0	3.9	4.0	4.2	4.2	3.9	5.1	4.0
47 Other Asia	2.9	2.9	2.0	1.9	1.7	1.9	1.7	1.8	1.6	1.9	1.9
Africa											
48 Egypt	1.3	1.4	1.4	1.3	1.1	1.1	1.2	1.2	1.4	1.2	1.3
49 Morocco	.5	.4	.3	.3	.4	.3	.3	.3	.3	.1	.1
50 Zaire	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
51 Other Africa ³	1.0	1.0	.9	.9	.8	.7	.7	.7	.8	.7	.7
52 Eastern Europe	5.5	5.2	6.3	9.4	9.0	10.1	9.5	9.5	10.2	10.1	10.6
53 Russia ⁴	2.2	1.6	1.7	1.5	1.4	1.0	1.5	1.5	1.6	1.6	2.8
54 Other	3.3	3.6	4.7	7.9	7.6	9.1	8.0	8.0	8.5	8.5	7.9
55 Offshore banking centers	93.9	59.9	53.9	60.6	59.4	76.3	71.4 ¹	58.1 ¹	71.5 ¹	72.0 ¹	56.6
56 Bahamas	35.4	13.7	14.4	8.8	9.3	13.5	7.0	.0	1.1	7.5	7.5
57 Bermuda	4.6	8.0	7.3	6.3	6.3	9.0	7.9	5.7	7.6	7.6	8.1
58 Cayman Islands and other British West Indies	12.8	1.3	.0	5.1	5.9	14.6	13.6 ¹	11.9 ¹	20.3 ¹	16.4 ¹	5.0
59 Netherlands Antilles	2.6	1.7	2.5	2.6	1.9	1.9	2.9	1.7	5.8	2.8	3.3
60 Panama ⁵	3.9	3.9	3.4	3.3	2.5	3.2	3.8	3.4	3.5	3.2	3.3
61 Lebanon	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
62 Hong Kong, China	23.3	21.0	22.2	20.7	20.6	18.7	21.5	22.3	17.9	18.9	15.7
63 Singapore	11.1	10.1	4.1	13.6	12.6	15.2	14.6	12.9	15.2	15.5	13.5
64 Other ⁶	.2	.1	.1	.1	.1	.2	.1	.1	.0	.1	.0
65 Miscellaneous and unallocated ⁷	495.1	387.9	376.1	342.1	351.1	391.2	472.4	478.6	607.6 ¹	123.4 ¹	113.4

1. The banking offices covered by these data include U.S. offices and foreign branches of U.S. banks, including U.S. banks that are subsidiaries of foreign banks. Offices not covered include U.S. agencies and branches of foreign banks. Beginning March 1994, the data include large foreign subsidiaries of U.S. banks. The data also include other types of U.S. depository institutions as well as some types of brokers and dealers. To eliminate duplication, the data are adjusted to exclude the claims on foreign branches held by a U.S. office or another foreign branch of the same banking institution.

These data are on a gross claims basis and do not necessarily reflect the ultimate country risk or exposure of U.S. banks. More complete data on the country risk exposure of U.S. banks are available in the quarterly Country Exposure Lending Survey published by the Federal Financial Institutions Examination Council.

2. Organization of Petroleum Exporting Countries, shown individually; other members of OPEC (Algeria, Gabon, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, and United Arab Emirates), and Bahrain and Oman (not formally members of OPEC).

3. Excludes Liberia. Beginning March 1994 includes Namibia.

4. As of December 1992, excludes other republics of the former Soviet Union.

5. Includes Canal Zone.

6. Foreign branch claims only.

7. Includes New Zealand, Liberia, and international and regional organizations.

3.22 LIABILITIES TO UNAFFILIATED FOREIGNERS Reported by Nonbanking Business Enterprises in the United States

Millions of dollars, end of period

Type of liability, and area or country	1998	1999	2000	2000	2001				2002
				Dec.	Mar.	June	Sept.	Dec.	Mar.
1 Total	46,570	53,044	73,904	73,904	73,655	68,028	53,526	66,718	74,085
2 Payable in dollars	36,668	37,605	48,931	48,931	46,526	41,734	35,347	42,957	46,853
3 Payable in foreign currencies	9,902	15,415	24,973	24,973	27,129	26,294	18,179	23,761	27,232
<i>By type</i>									
4 Financial liabilities	19,255	27,980	47,419	47,419	47,808	41,908	27,502	41,034	45,588
5 Payable in dollars	10,371	13,883	25,246	25,246	23,201	17,655	11,415	18,763	20,122
6 Payable in foreign currencies	8,884	14,097	22,173	22,173	24,607	24,253	16,087	22,271	25,466
7 Commercial liabilities	27,315	25,064	26,485	26,485	25,847	26,120	26,024	25,684	28,497
8 Trade payables	10,978	12,857	14,293	14,293	12,481	13,127	11,740	11,820	14,923
9 Advance receipts and other liabilities	16,337	12,207	12,192	12,192	13,366	12,993	14,284	13,864	13,574
10 Payable in dollars	26,297	23,722	23,685	23,685	23,325	24,079	23,932	24,194	26,731
11 Payable in foreign currencies	1,018	1,318	2,800	2,800	2,522	2,041	2,092	1,490	1,766
<i>By area or country</i>									
Financial liabilities									
12 Europe	12,589	23,241	34,172	34,172	37,422	32,785	22,083	31,806	38,697
13 Belgium and Luxembourg	79	31	147	147	112	98	76	154	119
14 France	1,097	1,659	1,480	1,480	1,553	1,222	1,538	2,841	3,531
15 Germany	2,063	1,974	2,168	2,168	2,624	2,463	1,994	2,344	2,802
16 Netherlands	1,406	1,996	2,016	2,016	2,169	1,763	1,998	1,954	1,951
17 Switzerland	155	147	104	104	103	93	92	94	84
18 United Kingdom	5,980	16,521	26,362	26,362	28,812	25,363	14,819	22,852	28,180
19 Canada	693	284	411	411	718	628	436	955	942
20 Latin America and Caribbean	1,495	892	4,125	4,125	3,632	2,100	414	2,858	1,547
21 Bahamas	7	1	6	6	18	40	5	157	5
22 Bermuda	101	5	1,739	1,739	1,837	461	47	960	836
23 Brazil	152	126	148	148	26	21	22	35	35
24 British West Indies	957	492	406	406	1,657	1,508	243	1,627	612
25 Mexico	59	25	26	26	31	20	24	36	27
26 Venezuela	2	0	2	2	1	1	3	2	1
27 Asia	3,785	3,437	7,965	7,965	5,324	5,639	3,869	5,042	4,010
28 Japan	3,612	3,142	6,216	6,216	4,757	3,297	3,442	3,269	3,299
29 Middle Eastern oil-exporting countries ¹	0	4	11	11	15	8	9	10	15
30 Africa	28	28	52	52	38	61	59	53	122
31 Oil-exporting countries ²	0	0	0	0	0	0	5	5	91
32 All other ³	665	98	694	694	674	695	672	320	270
Commercial liabilities									
33 Europe	10,030	9,262	9,629	9,629	8,792	8,723	8,855	9,230	8,381
34 Belgium and Luxembourg	278	140	293	293	251	297	160	99	105
35 France	920	672	979	979	689	665	892	735	701
36 Germany	1,392	1,131	1,047	1,047	982	1,017	966	908	550
37 Netherlands	429	507	300	300	349	343	343	1,163	463
38 Switzerland	499	626	502	502	623	697	683	790	637
39 United Kingdom	3,697	3,071	2,847	2,847	2,542	2,706	2,296	2,280	2,748
40 Canada	1,390	1,775	1,933	1,933	1,625	1,957	1,569	1,633	1,813
41 Latin America and Caribbean	1,618	2,310	2,381	2,381	2,166	2,293	2,879	2,729	3,457
42 Bahamas	14	22	31	31	5	31	44	52	23
43 Bermuda	198	152	281	281	280	367	570	591	433
44 Brazil	152	145	114	114	239	279	312	290	277
45 British West Indies	10	48	76	76	64	21	28	45	67
46 Mexico	347	887	841	841	792	762	884	901	1,460
47 Venezuela	202	305	284	284	243	218	242	166	281
48 Asia	12,342	9,886	10,983	10,983	11,542	11,384	11,114	10,532	12,992
49 Japan	3,827	2,609	2,757	2,757	2,431	2,377	2,421	2,592	4,294
50 Middle Eastern oil-exporting countries ¹	2,852	2,551	2,832	2,832	3,359	3,087	3,053	2,642	3,150
51 Africa	794	950	948	948	1,072	1,115	938	836	976
52 Oil-exporting countries ²	393	499	483	483	566	539	471	436	454
53 Other ³	1,141	881	614	614	650	648	669	724	878

1. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).

2. Comprises Algeria, Gabon, Libya, and Nigeria.

3. Includes nonmonetary international and regional organizations.

3.23 CLAIMS ON UNAFFILIATED FOREIGNERS Reported by Nonbanking Business Enterprises in the United States

Millions of dollars, end of period

Type of claim, and area or country	1998	1999	2000	2001					2002
				Dec.	Mar.	June	Sept.	Dec.	Mar.
1 Total	77,462	76,669	90,157	90,157	107,705	97,470	94,076	113,155	102,147
2 Payable in dollars	72,171	69,170	79,558	79,558	94,932	87,690	83,292	103,937	92,563
3 Payable in foreign currencies	5,291	7,472	10,599	10,599	12,773	9,780	10,784	9,218	9,584
<i>By type</i>									
4 Financial claims	46,260	40,231	53,031	53,031	74,255	61,891	60,015	81,287	71,696
5 Deposits	30,199	18,566	23,374	23,374	25,419	25,381	22,391	29,801	28,128
6 Payable in dollars	28,549	16,373	21,015	21,015	23,244	23,174	19,888	27,850	26,317
7 Payable in foreign currencies	1,650	2,193	2,359	2,359	2,175	2,207	2,503	1,951	1,811
8 Other financial claims	16,061	21,665	29,657	29,657	48,836	36,510	37,624	51,486	43,568
9 Payable in dollars	14,049	18,593	25,142	25,142	41,417	32,038	32,076	46,621	39,553
10 Payable in foreign currencies	2,012	3,072	4,515	4,515	7,419	4,472	5,548	4,865	4,015
11 Commercial claims	31,202	36,438	37,126	37,126	33,450	35,579	34,061	31,868	30,451
12 Trade receivables	27,202	32,629	33,104	33,104	28,958	30,631	29,328	27,586	25,635
13 Advance payments and other claims	4,000	3,809	4,022	4,022	4,492	4,948	4,733	4,282	4,816
14 Payable in dollars	29,573	34,204	33,401	33,401	30,271	32,478	31,328	29,466	26,693
15 Payable in foreign currencies	1,629	2,207	3,725	3,725	3,179	3,101	2,733	2,402	3,758
<i>By area or country</i>									
Financial claims									
16 Europe	12,294	13,023	23,136	23,136	31,855	23,975	23,069	26,118	23,671
17 Belgium and Luxembourg	661	529	296	296	430	262	372	625	751
18 France	864	967	1,206	1,206	3,142	1,376	1,682	1,450	1,801
19 Germany	304	504	848	848	1,401	1,163	1,112	1,068	941
20 Netherlands	875	1,229	1,396	1,396	2,313	1,072	954	2,138	1,820
21 Switzerland	414	643	699	699	613	653	665	589	308
22 United Kingdom	7,766	7,561	15,900	15,900	20,938	15,913	15,670	16,510	14,023
23 Canada	2,503	2,553	4,576	4,576	4,847	4,787	4,254	6,193	5,291
24 Latin America and Caribbean	27,714	18,206	19,317	19,317	28,791	24,403	26,099	41,201	35,001
25 Bahamas	403	1,593	1,353	1,353	561	818	649	976	1,197
26 Bermuda	39	11	19	19	1,729	426	80	918	611
27 Brazil	835	1,476	1,827	1,827	1,648	1,877	2,065	2,127	1,892
28 British West Indies	24,388	12,099	12,596	12,596	21,227	17,505	19,234	32,965	27,350
29 Mexico	1,245	1,798	2,448	2,448	2,461	2,633	2,910	3,075	2,777
30 Venezuela	55	48	87	87	38	66	80	83	79
31 Asia	3,027	5,457	4,697	4,697	7,215	6,829	5,274	6,430	6,489
32 Japan	1,194	3,262	1,631	1,631	3,867	1,698	1,761	1,604	2,009
33 Middle Eastern oil-exporting countries ¹	9	23	80	80	86	76	100	135	79
34 Africa	159	286	411	411	430	476	456	414	390
35 Oil-exporting countries ²	16	15	57	57	42	35	83	49	51
36 All other ³	563	706	894	894	1,117	1,421	891	931	854
Commercial claims									
37 Europe	13,246	16,389	15,938	15,938	13,775	14,469	14,381	14,036	12,720
38 Belgium and Luxembourg	238	316	452	452	395	403	354	268	272
39 France	2,171	2,236	3,095	3,095	3,479	3,190	3,062	2,922	2,884
40 Germany	1,822	1,960	1,982	1,982	1,586	1,993	1,977	1,662	1,201
41 Netherlands	467	1,429	1,729	1,729	757	863	844	529	415
42 Switzerland	483	610	763	763	634	473	514	611	436
43 United Kingdom	4,769	5,827	4,502	4,502	3,562	3,724	3,571	3,839	3,585
44 Canada	2,617	2,757	3,502	3,502	3,392	3,470	3,116	2,855	2,798
45 Latin America and Caribbean	6,296	5,959	5,851	5,851	5,144	6,033	5,590	4,874	4,908
46 Bahamas	24	20	37	37	20	39	35	42	42
47 Bermuda	536	390	376	376	407	650	526	369	422
48 Brazil	1,024	905	957	957	975	1,363	1,183	958	842
49 British West Indies	104	181	137	137	130	135	124	95	73
50 Mexico	1,545	1,678	1,507	1,507	1,350	1,375	1,442	1,401	1,236
51 Venezuela	401	439	328	328	292	321	301	288	312
52 Asia	7,192	9,165	9,630	9,630	8,985	9,499	8,704	7,855	7,534
53 Japan	1,681	2,074	2,796	2,796	2,560	3,148	2,438	2,007	1,976
54 Middle Eastern oil-exporting countries ¹	1,135	1,625	1,024	1,024	966	1,040	919	851	661
55 Africa	711	631	672	672	773	601	838	645	630
56 Oil-exporting countries ²	165	171	180	180	165	102	170	88	109
57 Other ³	1,140	1,537	1,572	1,572	1,381	1,507	1,432	1,603	1,861

1. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).

2. Comprises Algeria, Gabon, Libya, and Nigeria.

3. Includes nonmonetary international and regional organizations.

3.24 FOREIGN TRANSACTIONS IN SECURITIES

Millions of dollars

Transaction, and area or country	2000	2001	2002	2001	2002					
			Jan.- June	Dec.	Jan.	Feb.	Mar.	Apr.	May	June ^e
U.S. corporate securities										
Stocks										
1 Foreign purchases	3,605,196	3,051,335	1,597,443	239,276	255,717	259,946	286,550	272,125	274,543	248,562
2 Foreign sales	3,430,306	2,934,949	1,568,315	225,992	247,101	257,845	279,633	264,298	274,889	244,549
3 Net purchases, or sales (-)	174,890	116,386	29,128	13,284	8,616	2,101	6,917	7,827	-346	4,013
4 Foreign countries	174,903	116,183	29,280	13,265	8,737	2,104	6,932	7,834	-324	3,997
5 Europe	164,656	88,098	19,372	6,740	8,730	4,442	6,810	2,591	-2,548	-653
6 France	5,727	5,914	694	101	1,302	304	405	1,202	-1,270	-1,249
7 Germany	31,752	8,415	1,117	688	479	429	332	56	-48	-131
8 Netherlands	4,915	10,919	112	1,271	406	100	192	-663	41	36
9 Switzerland	11,960	3,456	1,798	854	470	566	569	814	89	-710
10 United Kingdom	58,736	38,492	7,369	2,033	3,972	1,323	3,110	-324	-1,829	1,117
11 Channel Islands and Isle of Man ¹	n.a.	-698	-365	20	-81	-103	-113	-63	-3	-2
12 Canada	5,956	10,984	3,827	1,250	591	457	598	1,262	546	373
13 Latin America and Caribbean	-17,812	-5,155	-5,027	3,931	-1,447	-4,495	302	1,989	-703	-673
14 Middle East ²	9,189	1,789	-1,075	249	96	-165	-901	-273	-30	198
15 Other Asia	12,494	20,724	10,832	599	571	1,634	245	2,143	2,253	3,986
16 Japan	2,070	6,788	8,540	65	-209	194	1,002	1,244	3,116	3,193
17 Africa	415	-366	-22	-7	32	5	-26	-41	9	-1
18 Other countries	5	109	1,373	503	164	226	-96	163	149	767
19 Nonmonetary international and regional organizations	-11	203	-151	19	-121	-2	-15	-7	-22	16
BONDS ³										
20 Foreign purchases	1,208,386	1,943,158	1,211,215	177,721	181,519	168,724	219,993	217,174	219,182	204,623
21 Foreign sales	871,416	1,556,217	1,012,204	155,238	161,985	155,237	173,530	175,184	174,561	171,707
22 Net purchases, or sales (-)	336,970	386,941	199,011	22,483	19,534	13,487	46,463	41,990	44,621	32,916
23 Foreign countries	337,074	386,376	199,006	22,452	19,624	13,217	46,642	42,005	44,751	32,767
24 Europe	180,917	195,798	93,191	8,077	7,890	4,619	21,094	20,875	18,777	19,936
25 France	2,216	5,028	1,852	330	68	14	578	380	350	462
26 Germany	4,067	12,362	2,583	-12	93	-253	1,545	385	132	681
27 Netherlands	1,130	1,538	-953	-637	-1,495	550	-173	732	-49	-518
28 Switzerland	3,973	5,721	3,273	75	143	826	-102	247	1,050	1,109
29 United Kingdom	141,223	153,158	69,555	5,985	7,619	1,740	16,350	15,540	15,299	13,007
30 Channel Islands and Isle of Man ¹	n.a.	2,000	551	404	130	14	309	20	92	-14
31 Canada	13,287	4,595	2,079	892	338	-243	869	385	-193	923
32 Latin America and Caribbean	59,444	77,217	51,078	5,765	6,077	13,531	8,261	8,261	15,618	2,936
33 Middle East ¹	2,076	2,338	1,000	455	420	342	377	9	-172	24
34 Other Asia	78,794	106,812	50,832	7,721	6,802	2,094	10,321	12,440	10,610	8,565
35 Japan	39,356	34,099	14,753	-810	-717	-957	-466	8,511	5,048	3,334
36 Africa	938	760	464	-45	-30	22	34	95	13	330
37 Other countries	1,618	-1,144	362	-413	-451	306	416	-60	98	53
38 Nonmonetary international and regional organizations	-70	566	5	31	-90	270	-179	-15	-130	149
Foreign securities										
39 Stocks, net purchases, or sales (-)	-13,088	-50,113	-10,131	-8,955	3,822	-2,723	5,553	-3,565	-8,245 ^e	-4,973
40 Foreign purchases	1,802,185	1,397,664	655,173	88,033	103,389	95,364	116,460	114,997	113,259 ^e	111,704
41 Foreign sales	1,815,273	1,447,777	665,304	96,988	99,567	98,087	110,907	118,562	121,504 ^e	116,677
42 Bonds, net purchases, or sales (-)	-4,054	30,423	17,082	-945	-5,558	2,245	7,333	461	6,871	5,730
43 Foreign purchases	958,932	1,159,185	634,292	69,504	93,550	89,172	109,465	99,383	124,357	118,365
44 Foreign sales	962,986	1,128,762	617,210	70,449	99,108	86,927	102,132	98,922	117,486	112,635
45 Net purchases, or sales (-), of stocks and bonds	-17,142	-19,690	6,951	-9,900	-1,736	-478	12,886	-3,104	-1,374 ^e	757
46 Foreign countries	-17,278	-19,102	6,954	-9,832	-1,720	-467	12,981	-3,208	-1,423 ^e	791
47 Europe	-25,386	-12,117	2,732	-9,831	-2,417	588	13,670	-4,809	329 ^e	-4,629
48 Canada	-3,888	2,943	4,189	1,010	1,381	-289	-764	1,565	56	2,240
49 Latin America and Caribbean	-15,688	4,245	2,508	118	2,644	-1,469	1,353	-1,106	-1,699	2,785
50 Asia	24,488	-11,869	-870	-1,494	-3,478	614	-949	2,220	381	342
51 Japan	20,970	-20,116	-3,440	-1,924	400	-660	-2,789	998	-518	-871
52 Africa	943	-557	-1,189	134	72	62	-72	-1,141	-118	8
53 Other countries	2,253	-1,747	-414	231	78	29	-257	63	-372	45
54 Nonmonetary international and regional organizations	150	-587	-5	-68	-16	-13	-95	104	49	-34

1. Before January 2001, data included in United Kingdom.

2. Comprises oil-exporting countries as follows: Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).

3. Includes state and local government securities and securities of U.S. government agencies and corporations. Also includes issues of new debt securities sold abroad by U.S. corporations organized to finance direct investments abroad.

3.25 MARKETABLE U.S. TREASURY BONDS AND NOTES Foreign Transactions¹

Millions of dollars: net purchases, or sales (-) during period

Area or country	2000	2001	2002	2001	2002					
			Jan.- June	Dec.	Jan.	Feb.	Mar.	Apr.	May	June ^P
1 Total estimated	-54,032	18,472	1,324	10,497	-16,762	-169	13,916	-9,146	73	13,412
2 Foreign countries	-53,571	19,158	653	10,531	-17,027	-493	13,767	-9,456	573	13,289
3 Europe	-50,704	-20,510	-12,534	278	-6,688	-79	7,068	-6,544	-6,732	441
4 Belgium ²	73	-598	268	202	-108	-263	410	-71	8	292
5 Germany	-7,304	-1,668	-2,037	1,075	-3,466	-277	1,759	-115	649	-587
6 Luxembourg ²	n.a.	462	-967	-34	-514	-126	79	-325	-166	85
7 Netherlands	2,140	-6,728	-20,557	-948	-2,098	812	-3,891	-3,295	-9,328	-2,757
8 Sweden	1,082	-1,190	52	-197	-337	-230	269	103	55	192
9 Switzerland	-10,326	1,412	609	335	313	-115	973	-1,262	341	359
10 United Kingdom	-33,669	-7,185	9,972	2,007	-86	1,938	7,110	-3,696	1,854	2,852
11 Channel Islands and Isle of Man ³	n.a.	-179	635	-136	-3	47	-251	-35	84	793
12 Other Europe and former U.S.S.R.	-2,700	-4,836	-509	-2,026	-389	-1,865	610	2,152	-229	-788
13 Canada	-550	-4,136	-1,051	2,978	-3,473	1,204	1,695	-1,075	1,454	-856
14 Latin America and Caribbean	-4,914	5,046	10,326	-6,368	2,603	-6,194	-424	-720	7,755	7,306
15 Venezuela	1,288	290	162	3	33	-12	-7	-18	6	160
16 Other Latin America and Caribbean	-11,581	15,500	12,234	-3,984	1,635	-3,072	8,838	-1,138	1,749	4,222
17 Netherlands Antilles	5,379	-10,744	-2,070	-2,387	935	-3,110	-9,255	436	6,000	2,924
18 Asia	1,639	37,992	2,379	14,423	-9,221	3,862	5,653	-1,389	-2,366	5,840
19 Japan	10,580	17,774	20	4,379	-6,649	2,456	-2,309	3,173	655	2,694
20 Africa	-414	-880	224	-293	-65	134	70	-176	-38	299
21 Other	1,372	1,646	1,309	-487	-183	580	-295	448	500	259
22 Nonmonetary international and regional organizations	-461	-686	671	-34	265	324	149	310	-500	123
23 International	-483	-290	526	43	138	52	199	398	-240	-21
24 Latin American Caribbean regional	76	41	-24	-25	-1	15	-5	-47	-14	28
MEMO										
25 Foreign countries	-53,571	19,158	653	10,531	-17,027	-493	13,767	-9,456	573	13,289
26 Official institutions	-6,302	3,474	563	1,061	-3,000	-2,177	5,254	-1,606	-69	2,161
27 Other foreign	-47,269	15,684	90	9,470	-14,027	1,684	8,513	-7,850	642	11,128
Oil-exporting countries										
28 Middle East ⁴	3,483	865	1,113	2,217	784	50	137	1,382	-753	-487
29 Africa ⁵	0	-2	-24	0	0	-1	2	-25	0	0

1. Official and private transactions in marketable U.S. Treasury securities having an original maturity of more than one year. Data are based on monthly transactions reports. Excludes nonmarketable U.S. Treasury bonds and notes held by official institutions of foreign countries.

2. Before January 2001, combined data reported for Belgium and Luxembourg.

3. Before January 2001, these data were included in the data reported for the United Kingdom.

4. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).

5. Comprises Algeria, Gabon, Libya, and Nigeria.

3.28 FOREIGN EXCHANGE RATES AND INDEXES OF THE FOREIGN EXCHANGE VALUE OF THE U.S. DOLLAR¹

Currency units per U.S. dollar except as noted

Item	1999	2000	2001	2002					
				Mar.	Apr.	May	June	July	Aug.
Exchange rates									
COUNTRY/CURRENCY UNIT									
1 Australia/dollar ²	64.54	58.15	51.69	52.56	53.52	54.98	56.82	55.38	54.13
2 Brazil/real	1.8207	1.8301	2.3527	2.3450	2.3227	2.4753	2.7144	2.9414	3.1082
3 Canada/dollar	1.4858	1.4855	1.5487	1.5877	1.5815	1.5502	1.5318	1.5456	1.5694
4 China, P.R./yuan	8.2783	8.2784	8.2770	8.2773	8.2772	8.2770	8.2767	8.2768	8.2767
5 Denmark/krone	6.9900	8.0953	8.3323	8.4795	8.3942	8.1098	7.7775	7.4807	7.5948
6 European Monetary Union/euro ³	1.0653	0.9232	0.8952	0.8766	0.8860	0.9170	0.9561	0.9935	0.9781
7 Greece/drachma	306.30	365.92	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8 Hong Kong/dollar	7.7594	7.7924	7.7997	7.7997	7.8000	7.7994	7.8000	7.8000	7.8008
9 India/rupee	43.13	45.00	47.22	48.77	48.94	49.02	48.98	48.79	48.62
10 Japan/yen	113.73	107.80	121.57	131.06	130.77	126.38	123.29	117.90	118.99
11 Malaysia/ringgit	3.8000	3.8000	3.8000	3.8000	3.8000	3.8000	3.8000	3.8000	3.8000
12 Mexico/peso	9.553	9.459	9.337	9.064	9.165	9.510	9.767	9.779	9.839
13 New Zealand/dollar ²	52.94	45.68	42.02	43.33	44.28	46.10	48.86	48.09	50.90
14 Norway/krone	7.8071	8.8131	8.9964	8.8072	8.6102	8.2050	7.7533	7.4694	7.6042
15 Singapore/dollar	1.6951	1.7250	1.7930	1.8295	1.8285	1.8004	1.7831	1.7524	1.7553
16 South Africa/rand	6.1191	6.9468	8.6093	11.4863	11.0832	10.1615	10.1841	10.1032	10.5878
17 South Korea/won	1,189.84	1,130.90	1,292.01	1,322.90	1,318.09	1,262.20	1,219.70	1,179.99	1,197.51
18 Sri Lanka/rupee	70.868	76.964	89.602	94.903	96.030	96.318	96.408	96.266	96.281
19 Sweden/krona	8.2740	9.1735	10.3425	10.3324	10.3070	10.0642	9.5376	9.3474	9.4610
20 Switzerland/franc	1.5045	1.6904	1.6891	1.6743	1.6542	1.5889	1.5399	1.4718	1.4972
21 Taiwan/dollar	32.322	31.260	33.824	35.020	34.917	34.454	33.889	33.272	33.884
21 Thailand/baht	37.887	40.210	44.532	43.415	43.442	42.817	42.160	41.257	42.193
23 United Kingdom/pound ²	161.72	151.56	143.96	142.30	144.29	145.98	148.37	155.65	153.68
24 Venezuela/bolivar	606.82	680.52	724.10	922.66	871.38	985.80	1,212.07	1,317.38	1,379.73
Indexes ⁴									
NOMINAL									
25 Broad (January 1997=100) ⁵	116.87	119.67	126.09	129.27	128.95	127.35	125.96	124.20	125.64
26 Major currencies (March 1973=100) ⁶	94.07	98.32	104.32	107.76	107.03	104.09	101.42	98.97	100.35
27 Other important trading partners (January 1997=100) ⁷	129.94	130.33	136.34	138.49	138.86	139.71	140.70	140.47	141.69
REAL									
28 Broad (March 1973=100) ⁵	100.78 ^f	104.32 ^f	110.42 ^f	112.78 ^f	112.70 ^f	111.16 ^f	109.90 ^f	108.43 ^f	109.67
29 Major currencies (March 1973=100) ⁶	97.06	103.17	110.73	114.60	113.96	110.63	107.80	105.40 ^f	107.04
30 Other important trading partners (March 1973=100) ⁷	114.26 ^f	114.53 ^f	119.21 ^f	119.82 ^f	120.45 ^f	121.08 ^f	121.83 ^f	121.53 ^f	122.31

1. Averages of certified noon buying rates in New York for cable transfers. Data in this table also appear in the Board's G.5 (405) monthly statistical release. For ordering address, see inside front cover.

2. U.S. cents per currency unit.

3. The euro is reported in place of the individual euro area currencies. By convention, the rate is reported in U.S. dollars per euro. The bilateral currency rates can be derived from the euro rate by using the fixed conversion rates (in currencies per euro) as shown below:

Euro equals			
13.7603	Austrian schillings	1,936.27	Italian lire
40.3399	Belgian francs	40,339.9	Luxembourg francs
5.94573	Finnish markkas	2,203.71	Netherlands guilders
6.55957	French francs	200.482	Portuguese escudos
1.95583	German marks	166.386	Spanish pesetas
.787564	Irish pounds	340.750	Greek drachmas

4. Starting with the February 2002 *Bulletin*, revised index values resulting from the periodic revision of data that underlie the calculated trade weights are reported. For more information on the indexes of the foreign exchange value of the dollar, see *Federal Reserve Bulletin*, vol. 84 (October 1998), pp. 811-818.

5. Weighted average of the foreign exchange value of the U.S. dollar against the currencies of a broad group of U.S. trading partners. The weight for each currency is computed as an average of U.S. bilateral import shares from and export shares to the issuing country and of a measure of the importance to U.S. exporters of that country's trade in third country markets.

6. Weighted average of the foreign exchange value of the U.S. dollar against a subset of broad index currencies that circulate widely outside the country of issue. The weight for each currency is its broad index weight scaled so that the weights of the subset of currencies in the index sum to one.

7. Weighted average of the foreign exchange value of the U.S. dollar against a subset of broad index currencies that do not circulate widely outside the country of issue. The weight for each currency is its broad index weight scaled so that the weights of the subset of currencies in the index sum to one.

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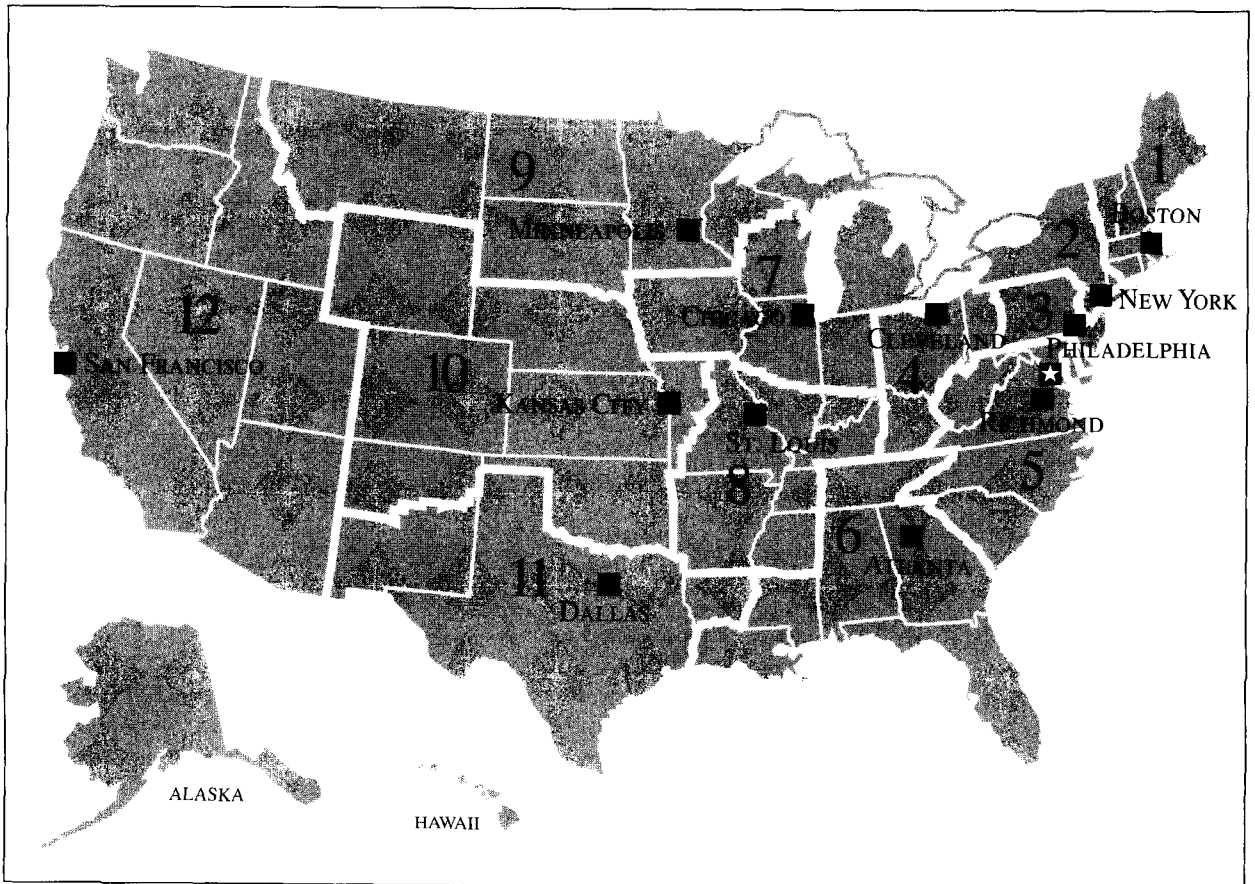
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Maps of the Federal Reserve System



LEGEND

Both pages

- Federal Reserve Bank city
- ☆ Board of Governors of the Federal Reserve System, Washington, D.C.

Facing page

- Federal Reserve Branch city
- Branch boundary

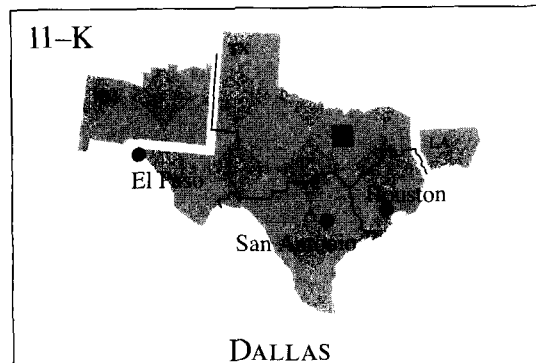
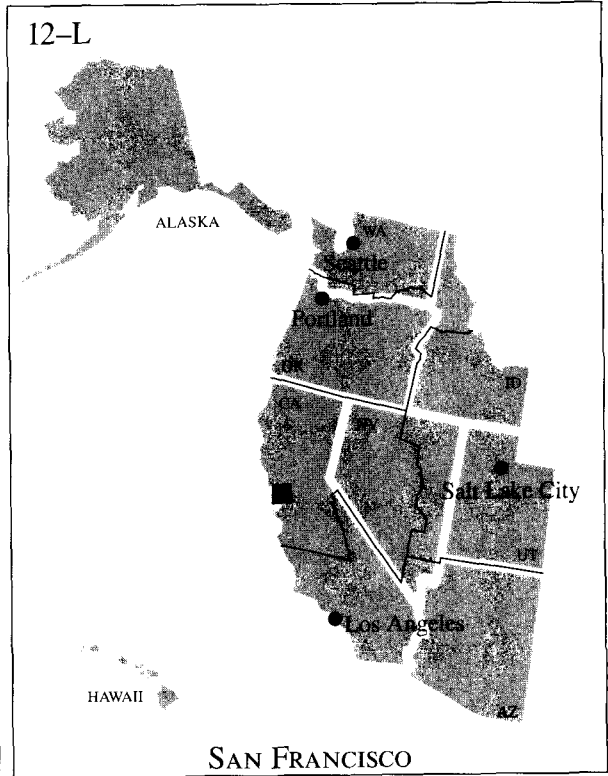
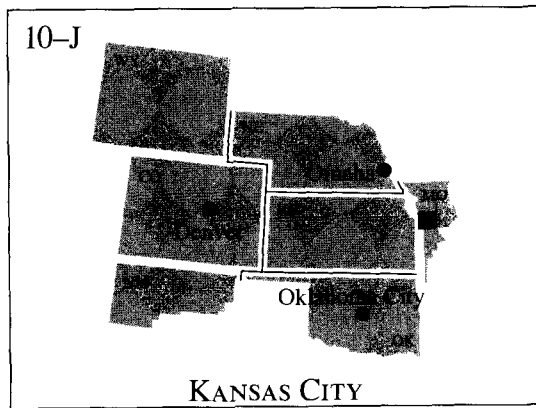
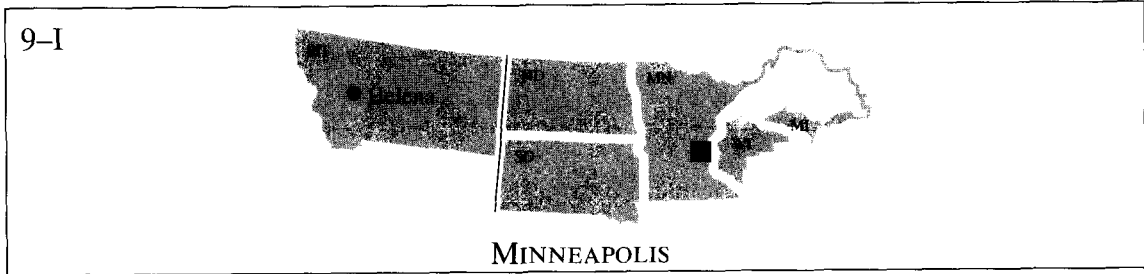
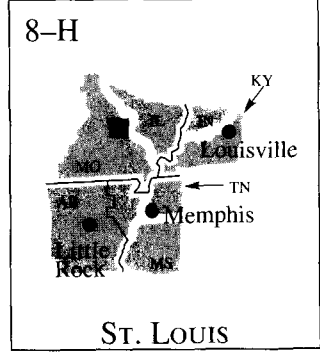
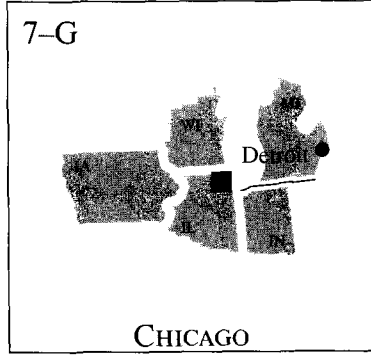
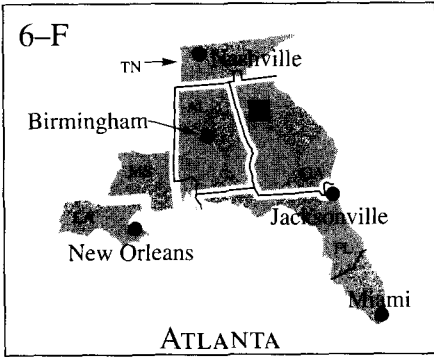
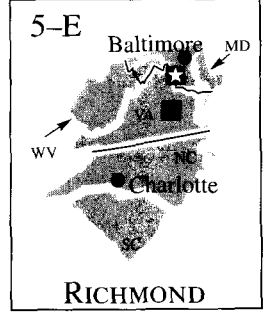
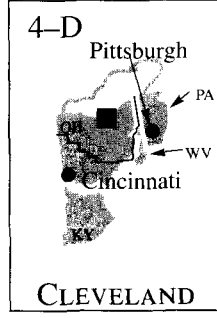
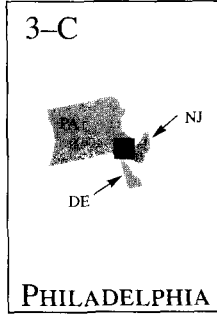
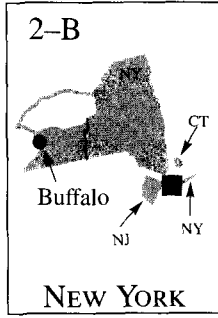
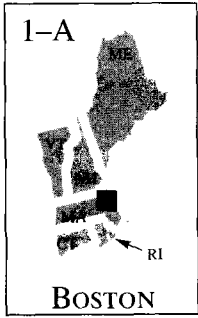
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In the 12th District, the Seattle Branch serves Alaska, and the San Francisco Bank serves Hawaii.

The System serves commonwealths and territories as follows: the New York Bank serves the Commonwealth

of Puerto Rico and the U.S. Virgin Islands; the San Francisco Bank serves American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands. The Board of Governors revised the branch boundaries of the System most recently in February 1996.



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