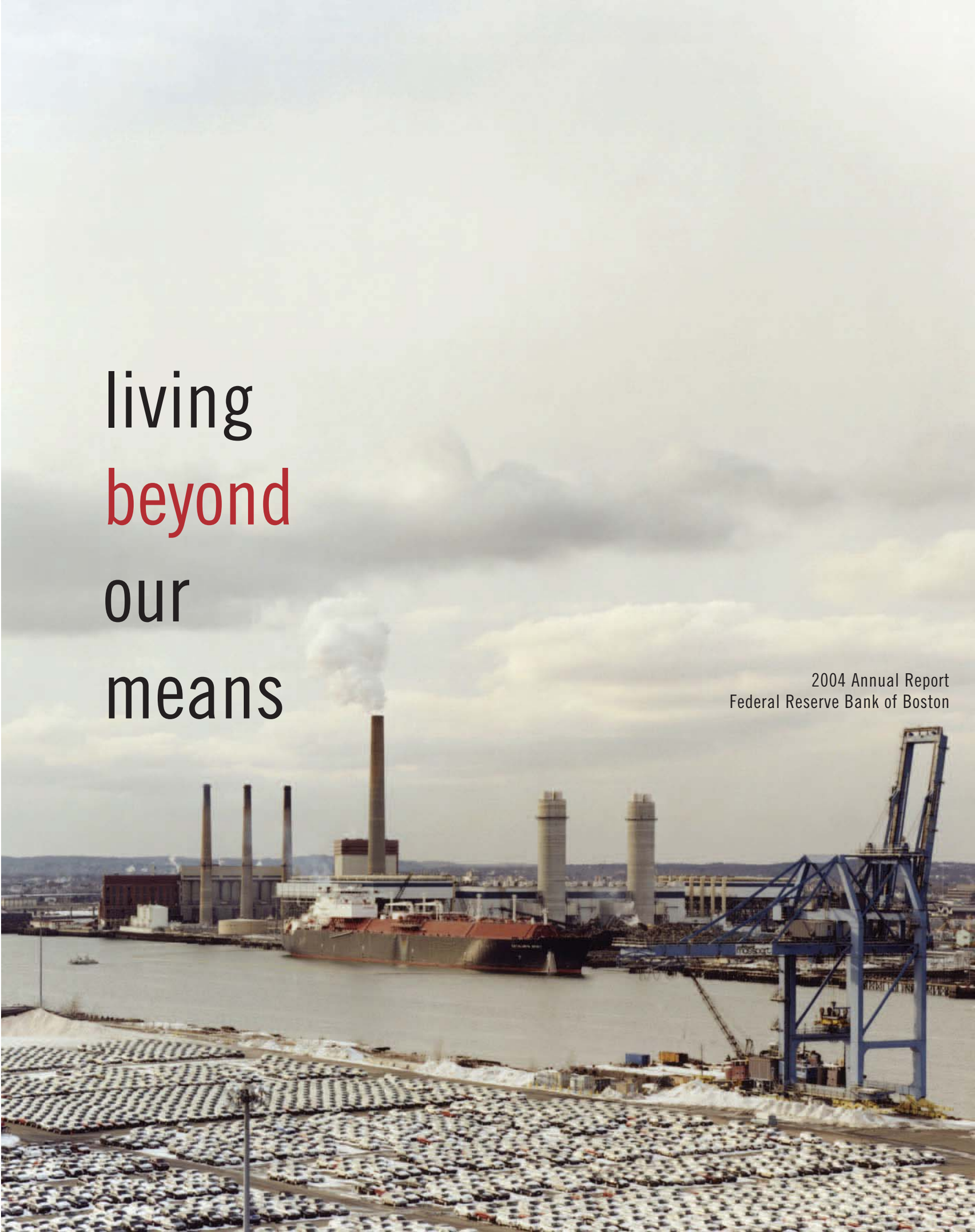


living beyond our means

2004 Annual Report
Federal Reserve Bank of Boston

Contents

Letter from the President

In times of rapid change, experience teaches that good management involves doing two things simultaneously: performing at a high level in the current environment and preparing for the future – a future that may differ from the present in significant ways. This dual focus on present performance and looking ahead was a hallmark of our work in 2004 – in economic analysis and monetary policy, in bank supervision and regulation, in financial services, and in all aspects of our organization.

Economic conditions in 2004 highlight the challenge of managing in the present while preparing for the future. On balance, 2004 was a good year for the U.S. economy and the near-term outlook is promising. Economic conditions also brightened in New England. Longer term, however, our economy faces serious challenges.

The U.S. economy performed quite well in 2004, both in comparison with the rest of the industrialized world and in light of our own recent record. Real GDP was up 4.4 percent from the previous year, a rate of growth above the average for the past 50 years or so and, even after recent surges in productivity, above what some would view as sustainable over the long run. Employment finally began to increase after several years of stagnation, and the unemployment rate drifted down. Moreover, the outlook for 2005 is encouraging. Relatively vigorous job growth should sustain consumption, even though fiscal and monetary policy have become less accommodative. Businesses enjoyed very strong profits in 2004, and balance sheets are in excellent

shape, creating conditions favorable to investment. There are risks to the 2005 outlook – in particular, core inflation has picked up modestly. But with continued strong productivity growth, near-term prospects for solid economic growth and continued low inflation are good.

Yet there are clouds on the economic horizon. In particular, the low rate of saving in the United States confronts policymakers with serious challenges down the road. Households' saving in this country has fallen to extremely low levels, below one percent of disposable income. At the same time, the federal government has moved from a budget surplus in the late 1990s to a sizable deficit. While strong consumption, supported by federal tax cuts, increased government spending, and accommodative monetary policy, helped sustain the economy through the recession of 2001 and the tentative early years of recovery, their legacy has been a very large federal government deficit and an external deficit of unprecedented size. We are in uncharted territory and the way out is not clear. National saving must increase, but how and when?

The essay in this year's Annual Report explores the implications of these "twin deficits," describing how they are linked, the risks they pose, and the challenges for policymakers. The message of the essay is that we must take action to increase national savings if we are to enjoy a prosperous future.

Within the Bank, the year demanded intense focus on our current performance. Many of our operations met significant challenges most admirably, and we succeeded in achieving some very formidable goals. For example, while the decline in paper check payments is a good development for U.S. consumers and businesses, it has challenged our check-clearing operation to reduce costs and infrastructure to keep pace with lower volumes. We successfully met that challenge in 2004, exceeding very demanding operational and revenue targets – all while promoting next-generation electronic check-image services to assist our customers. And in our high-speed currency-processing operations, years of innovation bore fruit in dramatic productivity gains.

Without question, the hallmark of recent years has been the increasing pace of change. With hindsight, we are likely to look back on the past few years as a period in which many longstanding activities evolved in significant ways, and a range of important new responsibilities emerged. In check, we will be consolidating all our processing activities at the site in Windsor Locks, Connecticut. We also learned that TreasuryDirect call center responsibilities will wind down this year. At the same time, the U.S. Treasury asked the Bank to establish an internet payments platform that will allow federal agencies to reduce the

cumbersome paperwork and costs of their transactions with suppliers. Meanwhile, four additional New England institutions opted for membership in the Federal Reserve System, increasing our community bank supervision responsibilities. Our supervisory staff contributed nationally and internationally, playing a valuable role in the development of Basel II capital standards, particularly as they relate to operational risk. We also established three new research efforts to focus our expertise and advance our policy contributions – the Behavioral Economics Center, an emerging payments research group, and the New England Public Policy Center. And, in its first full year of operation, our New England Economic Adventure proved quite successful, becoming part of the economics and financial literacy curriculum of nearly 5,000 students and affecting many more through our innovative web site.

The Bank also devoted considerable effort to developing a vision for the future. Although the Bank's core mission of fostering sound growth and financial stability is unchanged, we know that many of the particulars of our activities will be very different. And we recognize that we need to be aggressive in responding to the continuing changes in technology, banking structure, the payments system, and the economy, if we are to remain a dynamic and vital organization effectively serving the public interest.

We looked ahead and assessed the opportunities and the risks. We developed a vision of a Bank that is sought after for its expertise and policy contributions, that is recognized for the effectiveness of its services and its use of state-of-the art technologies and organizational approaches, and that engenders pride among its employees. And we are moving forward to achieve this vision, with particular emphasis on helping our staff develop the skills necessary to take on new and challenging responsibilities. Our new research centers, our work with the U.S. Treasury, our contributions to monetary and supervisory policy, and new initiatives in economic and consumer education are all examples of how we are moving to fulfill our vision.

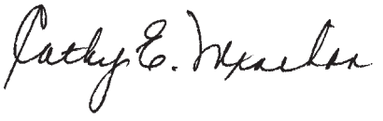
We also took time to look back, at our past. The Bank reached its 90th birthday in November 2004, as did all of our sister Federal Reserve Banks. As an organization we reflected on nine decades of service, and we were reminded again that the Bank's work has always been shaped by technological change and customer needs. Nine decades ago, the Bank opened for business in two rooms below street level. In our first decade, Morse code messages replaced the movement of currency or gold as the primary means of funds transfers. In our fourth decade, the Federal Reserve and the banking industry developed magnetic ink character recognition (MICR) encoding, allowing automated check processing. In

our seventh decade, the Bank moved into its current home at 600 Atlantic Avenue, and the Reserve Banks began nationwide processing of Automated Clearing House electronic payments.

Today, we are doing things like serving the U.S. Treasury with stored-value-card services for soldiers in far-flung places like Qatar, running internet firewall services for the entire Federal Reserve System, contributing to supervision policy nationally and internationally, and organizing economic conferences on issues ranging from the effectiveness of fiscal policy to the workplace challenges facing high-achieving women. We also are refurbishing the property surrounding our building, creating a beautiful and secure setting that will serve us many decades in the future.

Last but far from least, I must acknowledge all the officers and staff who made these achievements possible. We will miss the many valued colleagues and friends who retired in 2004. I am also grateful to all those who served on the Bank's advisory groups; their insights have been most helpful in discerning the course of the economy and identifying emerging issues. The Bank's board of directors has been a valuable source of guidance, support, and energy in these challenging times. We especially thank Larry Fish, Chairman, President and Chief Executive Officer of Citizens Financial Group, who completed his three-year service as a director.

The Bank has always played a crucial role in the financial and economic fabric of New England and the nation. By continuing to assess and improve our present policy contributions and services, and looking out towards the future, we are confident that we will meet the present and future needs of the public we are here to serve.



Cathy E. Minehan

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President and Chief Executive Officer

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living BEYOND our means

The authors thank Jane Little and Radoslav Raykov for their analytical assistance and Heidi Furse for her keen eye and graphics expertise.

Individuals and families are very familiar with what **“living beyond our means”** can involve. It can be fun for a short while, but a family that consistently spends more than it earns will deplete its savings and build up increasing amounts of **debt.** And families cannot live beyond their means forever – at some point, lenders will start charging increasingly **higher interest rates** on the family’s borrowing and eventually stop making new loans altogether. At that point, family members will find they cannot spend what they earn on things they need – interest charges and eventual repayment of the principal will cut into their spending, leading to a **reduced standard of living.**

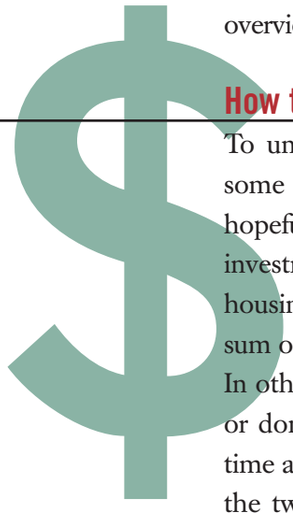
Elder care spending

Countries are different from families and individuals in fundamental ways, but the basic principle still holds that if a country lives significantly beyond its means now, it is likely to have a lower standard of living in the future than would otherwise have been attainable. In recent years, we in the United States have arguably been spending beyond our means. The income we earn from exports has been much less than we spend on imported goods and services, producing large deficits in what is known as the current account. Concurrently, our federal government has been spending much more than it receives in tax revenue, resulting in large budget deficits. As a consequence of these shortfalls, we run the risk of reducing our prospects for future growth in living standards.

Both the current account deficit and the federal fiscal deficit, often dubbed the "twin deficits," are symptoms of living beyond our means. A deficit in the federal budget results in increased government debt, which in turn requires higher future taxes or lower government spending than would otherwise be the case. A deficit in the current account must be balanced through inflows of foreign savings. In some ways, a current account deficit is a good thing: it allows us temporarily to consume and invest more than we could based on our own income alone. It may also signal that the United States is viewed as a desirable investment destination. But, as we discuss below, it is unlikely that growing deficits of the magnitude we have recently been experiencing can be sustained. Making a gradual transition to smaller deficits through some combination of faster world growth, increased U.S. savings, and slower U.S. consumption would make this situation less of a problem, but it is possible to envision more abrupt and difficult transitions.

In this essay, we first provide the basic conceptual background, starting with

some elements of national income accounting. We show how the two deficits are related to each other, and how they may be affected by public policy and private actions that impact economic behavior. We then cover the facts about the two deficits – their magnitude and their recent history. Next comes the question of sustainability and the long term consequences of the deficits. We conclude with an overview of the current situation and the dilemma faced by policymakers.



How the Deficits Are Related

To understand how the two deficits are related, one cannot avoid learning some rudiments of national income accounting. Here, we provide a brief and hopefully painless primer. The key relationship to consider is that all the investment in our economy (that is, expenditures on long-lived assets such as housing, factories, office buildings, and equipment and software) must equal the sum of national saving plus savings inflows into the United States from abroad. In other words, investment must have some source of funding – either foreign or domestic. Investment is vital to the ability of an economy to expand over time and improve the living standards of its citizens. And, as we will see below, the two sources of funds for investment spending are closely related to the two deficits.

National saving is the sum of private saving – that is, saving by households and businesses – and government saving. Government saving (or dissaving) equals the combined surpluses (or deficits) of all levels of governments in the United States, although, typically, state and local governments operate with some form of balanced budget requirement. Thus, when government dissaving is discussed, the government in question is typically the federal government. An increase in the budget deficit equals a rise in government dissaving of the same amount, but such dissaving does not necessarily result in a decrease in national saving. For example, if households save all of a tax cut that increases the budget deficit, then the increase in private saving exactly offsets the decrease in government saving, leaving overall national saving unaffected.[1] The empirical evidence indicates, however, that most of an increase in a budget deficit is not saved but results in decreased national saving.

"The key relationship to consider is that all the investment in our economy must equal the sum of national saving plus savings inflows into the United States from abroad."

The current account position – whether surplus or deficit – largely reflects our trade balance, that is, the value of exported goods and services less the value of imported goods and services, although the net balance of income earned here


Military spending

by foreigners and income earned abroad by U.S. residents, among other factors, figures in as well. The value of U.S. imports currently exceeds the value of our exports by a significant amount; the resulting trade deficit represents nearly all of the current account deficit, with the net income balance a positive.[2] Any shortfall in the current account must be balanced by an equivalent change in the sum of U.S. investments abroad, less the sum of foreign investments in the United States. This balance is known as the net international investment position of the United States. Because the United States has run a current account deficit for many years, our net international investment position has turned increasingly negative, as Figure 6 shows (page 20).

"Any shortfall in the current account must be balanced by an equivalent change in the sum of U.S. investments abroad, less the sum of foreign investments in the United States. This balance is known as the net international investment position of the United States."

Are the budget deficit and the current account deficit really "twins"? Suppose, for a moment, that investment spending and private saving were held constant. In this case, an increase in the budget deficit would be offset by an increase of the same magnitude in the current account deficit, since investment spending is equal to national saving plus net capital inflows. In this case, the two deficits really would act in identical ways – they would grow and shrink over time by the same amount. Of course, in reality, investment spending and private saving are not constant, and so the two deficits do not move in lockstep with each other.

It is instructive to analyze the consequences for investment and saving of a change in one of the deficits. Consider the case of an increase in the budget deficit. Suppose that neither private saving nor the current account deficit were to change. In this case, private investment would have to drop by exactly the same magnitude as the increase in the budget deficit. Because investment in new productive capacity is a key determinant of economic growth and improve-

ments in living standards, crowding out of investment over a long period is clearly not desirable. The decrease in investment could be avoided, at least in part, if either the current account deficit or private saving were to increase. And both of these events could well occur. An increase in the budget deficit does not in itself reduce the profitability of new domestic investment projects. So, if an increase in the deficit results in a reduction in the funds available from domestic sources to finance new investment, upward pressure on the rate of return to investment will help to draw in funds from abroad (increasing the current account deficit) and will also potentially increase the rate of private saving. If the economy is operating with some slack, an increase in the deficit might also stimulate aggregate demand and increase the profitability of investment.

Next, consider the case of a decrease in the current account deficit. Unless national saving increases, investment must decrease by the same amount that the current account deficit decreases. Of course, a change in the current account deficit does not occur on its own but instead results from changes in the economic environment such as a lower budget deficit or higher private savings.

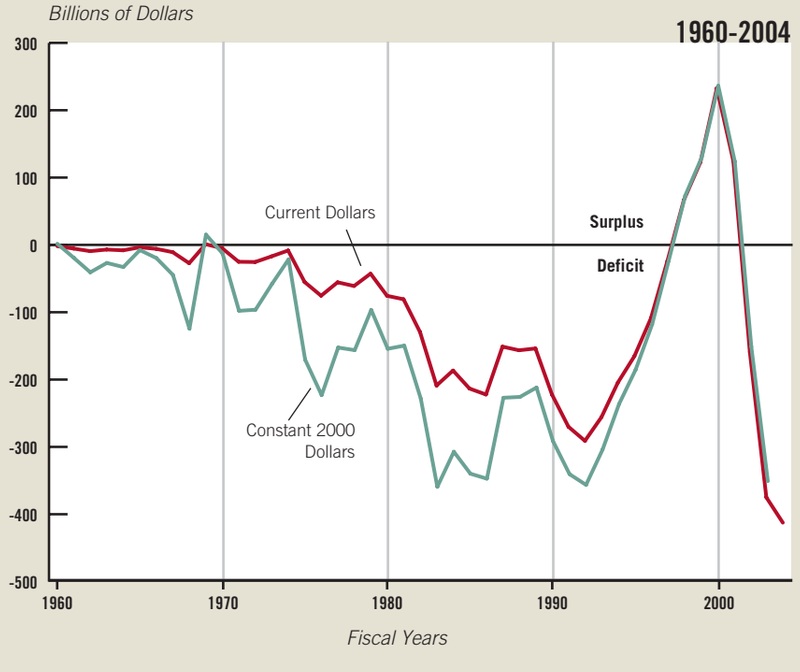
It is important to stress that national income accounting identities are not models of economic behavior. The fact that investment equals the sum of national saving plus inflows of foreign savings does not allow us to predict how investment and saving will evolve over time. But it does provide a constraint on the co-movements of investment, national saving, and the current account deficit. And knowledge of that constraint can be quite useful in evaluating the potential consequences of deficits in the budget and in the current account.

The Federal Fiscal Deficit

Recent headlines have announced that the federal budget deficit is running at record levels. In a sense this is true: as Figure 1 shows, at $413 billion, the 2004 deficit easily exceeds the 1992 deficit of $290 billion. But, after adjusting for inflation (the green line in the figure), the 2004 and 1992 deficits are of roughly the same magnitude. The current size of the 2004 deficit is greater than that of the 1992 deficit simply because the value of today's dollars relative to 1992 has been eroded by inflation. But, while this helps us

FIGURE 1

Federal Budget Surplus (Deficit)



National Saving = Private Saving + Government Saving

Government Saving = Federal + State + Local Budget Surpluses

U.S. Investment = National Saving + Foreign Savings Inflows to the U.S.

Trade Deficit = Imports – Exports

Current Account Deficit = Trade Deficit + Net Income Flows from Abroad

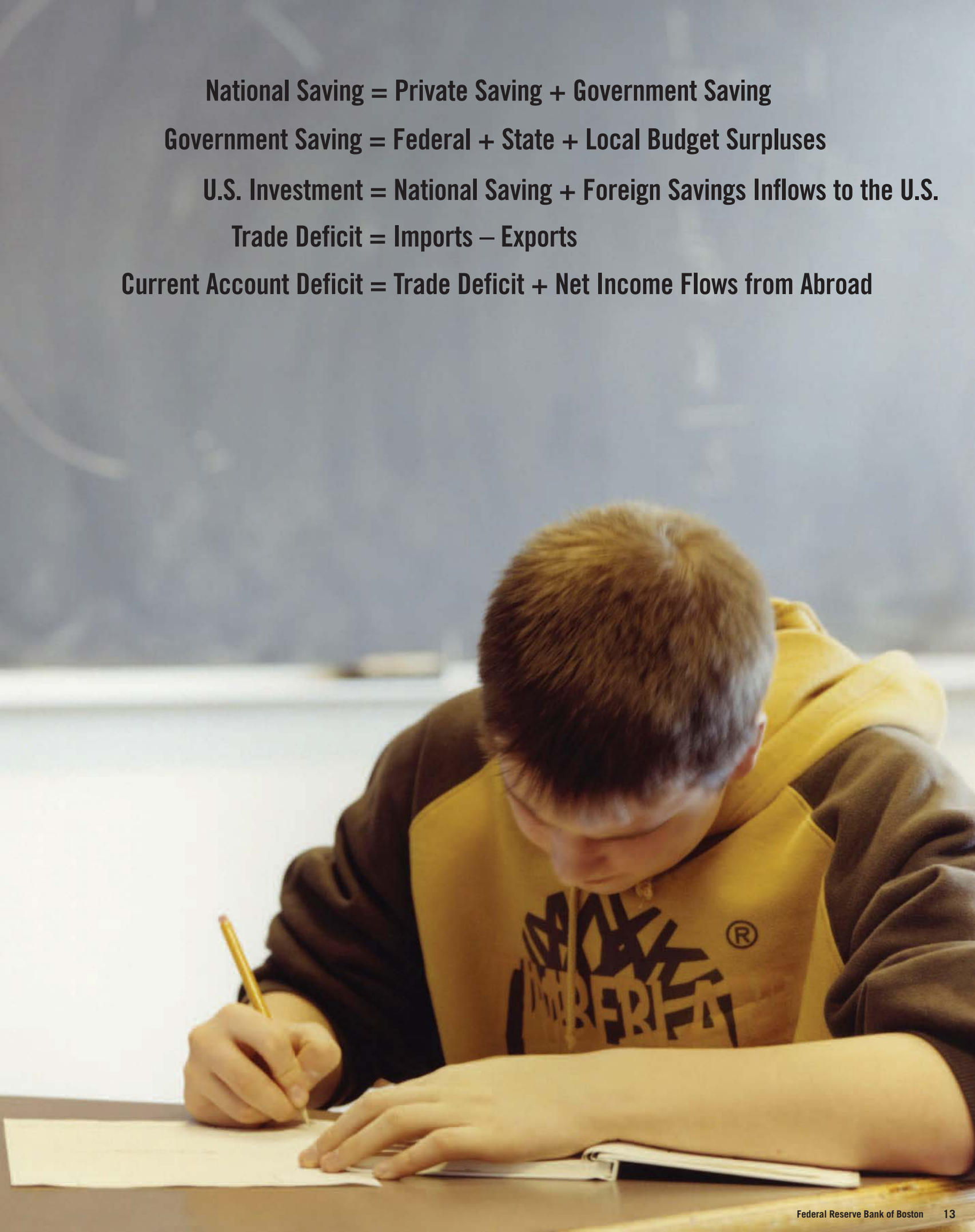
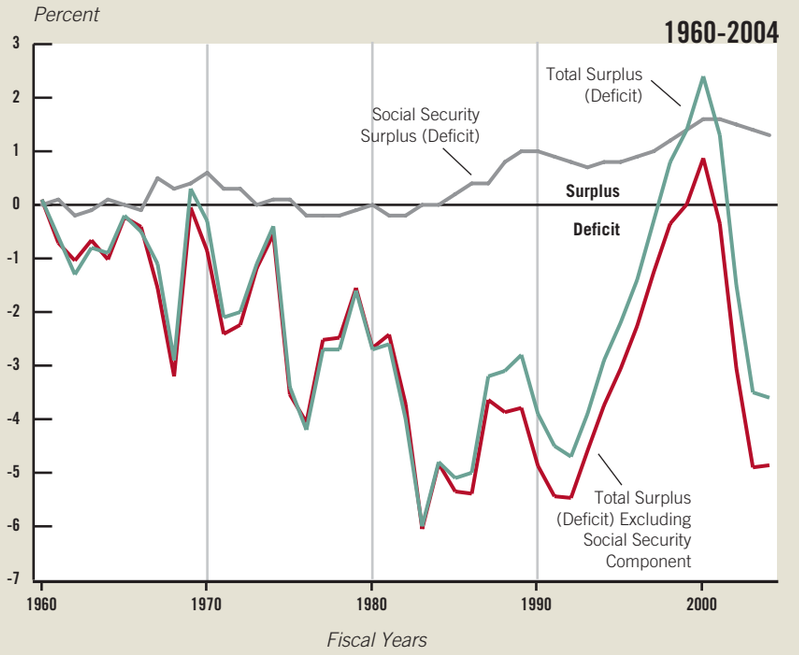


FIGURE 2

Federal Budget Surplus (Deficit) as a Percent of GDP



understand current headlines, it doesn't say much about the size of the deficit, which is, of course, relevant only in today's dollars.

A more informative view of the deficit can be gleaned by examining the deficit relative to the size of the economy, as shown by the green line in Figure 2. Just as a household is able to safely handle more debt as its income rises, the ability of the U.S. economy to generate the tax revenue needed to pay interest on government debt increases as national economic income grows. From this perspective, the current budget situation does not seem quite so bad. The 2004 budget deficit was 3.6 percent of GDP, a much smaller fraction of national output than the deficit in 1992 (4.7 percent of GDP) or 1983 (6.0 percent of GDP).

Unfortunately, however, several other factors make today's fiscal situation much more serious than the size of the deficit relative to GDP would indicate. First, the deficit would be much larger, 4.9 percent of GDP, if it were not for a sizable surplus in Social Security – a surplus that is the direct result of the increase in payroll tax rates designed to prepare the Social Security system for the surge in benefit payments that will result as baby boomers retire. As the gray line in Figure 2 shows, Social Security has been in surplus since 1985. The Social Security surpluses have been deposited into the social insurance trust funds and invested in nonmarketable Treasury securities. In essence, the trust funds are providing a loan to the rest of the federal government – a loan that will have to be paid back with interest as baby boomers collect their Social Security benefits. The Social Security surplus is forecast to gradually diminish, and, beginning in about 2018, Social Security will start to pay out more in benefits than it receives from payroll taxes.[3] Once this happens, Social Security will start exerting upward pressure on the magnitude of the unified federal budget deficit. Payroll taxes to cover Medicare expenditures are currently in a surplus position as well. Over time, however, such expenditures are also expect-

"In essence, the trust funds are providing a loan to the rest of the federal government – a loan that will have to be paid back with interest as baby boomers collect their Social Security benefits."

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ed to increase more rapidly than related tax revenues, creating a deficit problem that many analysts see as greater in size, and more difficult to control, than that associated with Social Security.

A second reason for concern about the current fiscal situation is the failure of the political process so far to enact measures that might credibly be expected to bring the budget back close to balance. The budget deficits of the early 1980s and early 1990s resulted in legislative actions that worked toward reducing the budget deficit. Although a case can be made that fiscal stimulus was needed to facilitate the recovery from the 2001 recession, the need for such stimulus has now passed, and actions similar to those of the 1980s and early 1990s are needed.

A third reason for concern over the fiscal situation is closely tied to both the first reason – that the budget deficit is much larger once one subtracts the Social Security and Medicare surpluses – and to the large current account deficit: the nation needs to prepare economically for the retirement of the baby boom generation. As the boomers retire, the fraction of the population that is in the workforce will likely decrease. In addition to the fiscal problems this creates for our retirement-related social insurance programs, the increase in economic dependency creates a more fundamental economic problem. There will be fewer workers per consumer. Maintenance of living standards requires that each worker produce more. In other words, increased labor productivity is necessary. And investment in new technology and equipment is a key factor in labor productivity growth. The funds for such new investment must come either from national saving or from abroad, through current account deficits. By dragging down national saving, the large federal budget deficit has made us much more reliant on financial flows from abroad for funding our domestic investment. And that brings us to the current account deficit.


Health care spending

The Current Account Deficit

The current account deficit (shown by the red line in Figure 3), was over 6 percent of GDP in late 2004, the largest current account deficit ever recorded for the United States. Recall the national accounting identity stating that investment must be equal to the sum of national saving plus savings inflows from abroad. Or, equivalently, that the current account deficit is equal to the difference between total investment and national saving. This implies that mirroring the large current account deficit is an equally large gap between investment (the gray line in Figure 3) and national saving (the green line in Figure 3).

Examination of the recent history of the current account, national saving, and investment reveals an interesting picture. During the 1960s and 1970s, the current account balance was usually relatively small – national saving and investment were generally roughly equal in magnitude. That changed in the 1980s. A large deficit in the current account emerged as national saving lagged during the recovery from the 1980-81 recession, and investment spending increased. Given the dynamics of investment and foreign and national savings flows, causality is sometimes hard to determine. Still, it seems clear that the Reagan era tax cuts produced large federal budget deficits and put downward pressure on national saving. Thus, many came to view the current account deficit as being largely caused by the fiscal deficit, and the "twin deficits" view of the current account and budget deficits became popular. Defenders of the tax cuts maintain

FIGURE 3

Current Account Balance as a Percent of GDP

Showing Net Domestic Investment and Net Domestic Saving as a Percent of GDP

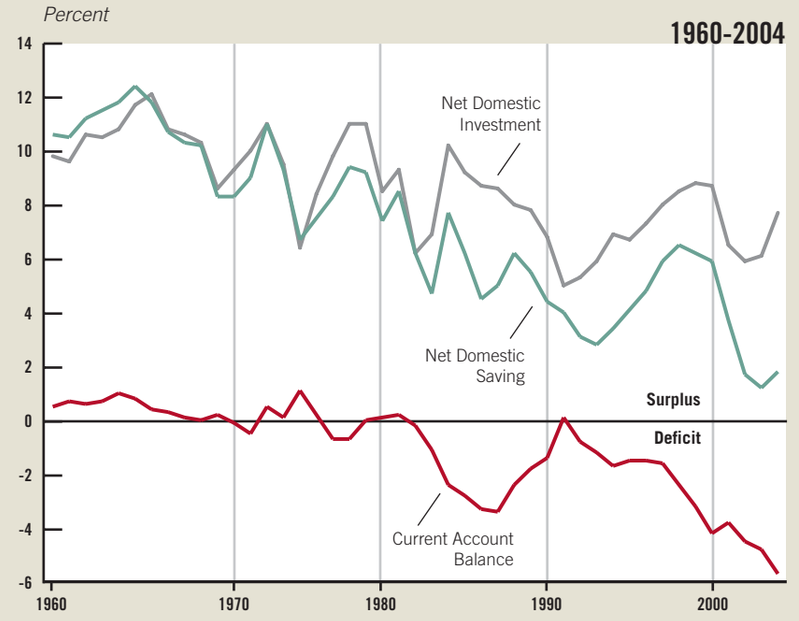
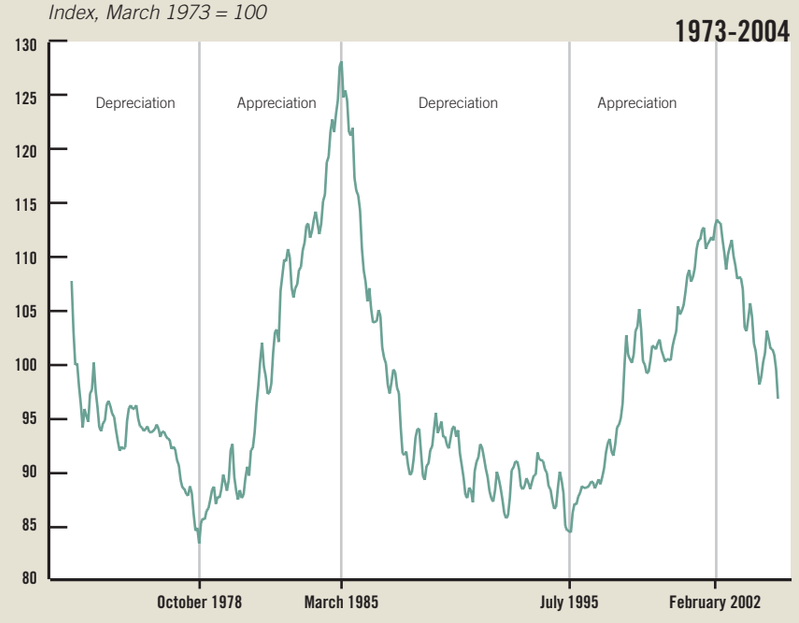


FIGURE 4

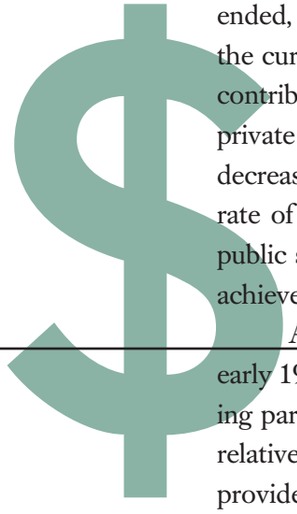
Trade-Weighted Exchange Value of the U.S. Dollar



that the more favorable tax climate helped to promote business investment. In their view, the current account deficits were driven mainly by the more favorable investment opportunities in the United States relative to the rest of the world. And, of course, interest rates and the value of the dollar, both of which are discussed below, played a role as well.

In the 1991 recession, national saving outpaced investment, and the current account came back into balance. Since then, however, there has been a fairly steady increase in the current account deficit measured as a share of GDP. During the 1990s, economic growth was accompanied by both an investment boom and a radical improvement in the federal fiscal position. But private saving decreased (relative to GDP), and national saving was not sufficient to fund all of the nation's investment.

Both investment and national saving decreased as the late 1990s boom ended, but saving fell by a much greater amount than did investment, sending the current account into record-breaking territory. Large federal tax cuts have contributed to the recent decrease in national saving as has a sizable decline in private savings. If the current account deficit is to be narrowed without a decrease in investment, then national saving will need to increase. Unless the rate of private saving increases by much more than expected, an increase in public saving – that is, a reduction in the budget deficit – will be necessary to achieve the required increase in national saving.



At the same time that the current account deficit was emerging in the early 1980s, the dollar appreciated sharply relative to the currencies of our trading partners (Figure 4). By decreasing the price of foreign goods and services relative to those produced in the United States, an appreciation of the dollar provides a boost to imports, but it makes U.S. exports less competitive in international markets. This tends to increase the trade deficit and probably the overall current account deficit as well.

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The sharp run-up in the foreign exchange value of the dollar in the early 1980s was followed by an equally sharp fall in the value of the dollar later in the same decade. This fall made U.S.-produced goods and services cheaper relative to those produced abroad. The quantities of goods and services imported and exported generally change more sluggishly than do exchange rates, and so initially a depreciation of the dollar may be accompanied by an increase in the trade


Infrastructure improvements

deficit. But, as happened in the late 1980s, a sharp depreciation eventually leads to a decrease in the trade deficit.

More recently, in the late 1990s, the dollar experienced a substantial appreciation, as foreign investors bought dollar-denominated assets in order to both participate in the rapidly expanding U.S. equity markets of the time and earn the relatively risk-free returns on U.S. government debt. The resulting rise in the value of the dollar increased both the trade and the current account deficits. Since early 2002, the dollar has weakened and partially retraced the previous appreciation. But, so far, the trade and current account deficits have not narrowed.

Are the Deficits Sustainable?

Although there is considerable controversy about when, and how, narrowing of the current account and federal budget deficits will occur, there is consensus that the projected growth in both deficits relative to GDP is not sustainable. To understand why this is true, one needs to consider the long run consequences of sustained deficits.

Turning first to the federal budget deficit, it is important to remember that federal budget deficits cumulate into increased federal debt. The most meaningful way to express the quantity of public debt is as a percent of national economic output (GDP), as shown in Figure 5. Expressing debt as a percent of GDP is useful because our ability to repay a given amount of public debt depends on the level of national income. In addition, many economists believe that the trend in the ratio of public debt to GDP is a good indicator of the pressure that fiscal policy is placing on long term interest rates.

A quick comparison of Figures 2 and 5 reveals a relationship that is at first surprising: federal debt expressed as a percent of GDP can be falling even

"Because these surpluses have been invested in special, nonmarketable Treasury issues, the quantity of Treasury debt held by the public is much smaller than it otherwise would be."

during a period when the federal government is running sustained budget deficits. But, upon reflection, this is not much of a surprise. If the budget is balanced, then even though the dollar amount of public debt remains constant, the debt to GDP ratio will fall as the economy grows. Similarly, if the government continuously runs a small deficit, then the debt to GDP ratio will still fall as long as the public debt is growing at a slower rate than GDP. Put somewhat more generally, the ratio of overall public debt to GDP will not increase as long as the ratio of the deficit to GDP is no larger than the economy's growth rate.

Federal debt was a little over 55 percent of GDP at the start of the 1960s, largely as a legacy of the huge debt incurred in fighting World War II. The debt to GDP ratio fell through the early 1970s, despite budgets that were generally in the red, because the deficits were small relative to the growth of GDP. The 1980s were a different story – during this decade, the ratio of the federal deficit to GDP generally exceeded the growth rate of GDP, and so the ratio of federal debt to GDP grew.

It was during the 1980s that an increasingly large wedge appeared between the paths of total federal debt and federal debt held by the public (the gap between the green and the red lines in Figure 5). The increasing size of the wedge is a consequence of the Social Security and Medicare surpluses associated with the increase in payroll tax rates implemented in preparation for the retirement of baby boomers. Because these surpluses have been invested in special, nonmarketable Treasury issues, the quantity of Treasury debt held by the public is much smaller than it otherwise would be. This situation will change relatively soon, as the trust funds start to liquidate their holdings to pay the benefits owed to the baby boomers. Because of this expected liquidation, a large increase in federal debt held by the public is likely, even if the federal budget exclusive of Social Security and Medicare is brought into balance. And without focused attention on the deficit, that seems unlikely to occur in the near future.

FIGURE 5

Federal Debt as a Percent of GDP

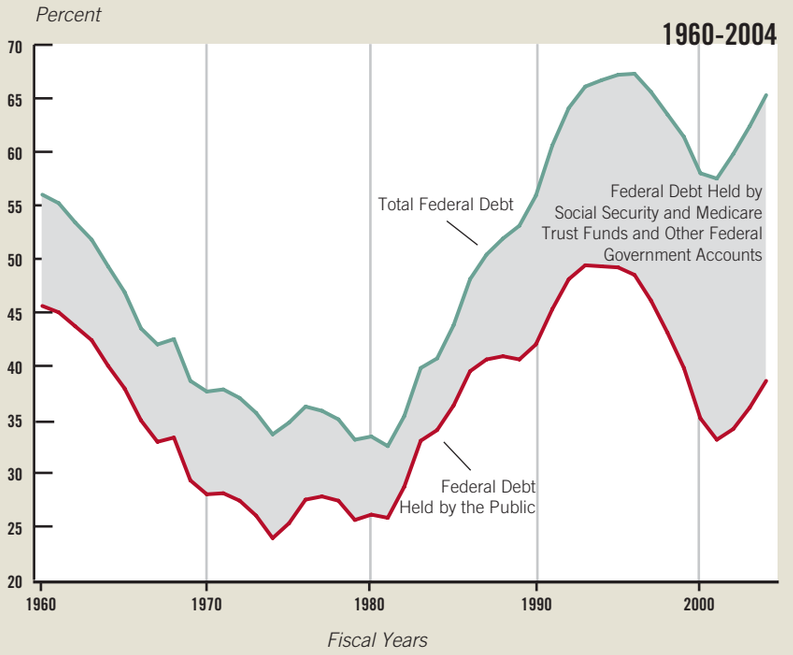
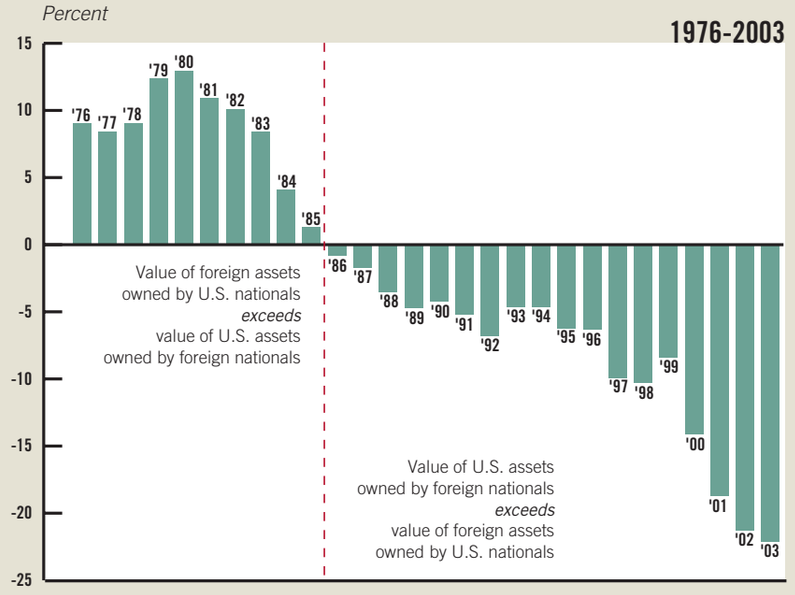


FIGURE 6

Net U.S. International Investment Position as a Percent of GDP



Next, consider the consequences of a sustained deficit in the current account. Just as sustained deficits in the federal budget increase the stock of federal debt, sustained current account deficits increase the net U.S. asset holdings of foreign nationals. As with the federal debt, it is useful to express the net U.S. international investment position (U.S.-owned foreign assets net of foreign-owned U.S. assets) as a percent of GDP; this is shown in Figure 6. The United States had a positive net international investment position until 1986, when it became a net debtor. Since that time, the net international investment position of the United States has deteriorated fairly steadily, with the particularly sharp drop since 1999 reflecting the growing magnitude of the current account deficit relative to GDP.

Even though the net international debt of the United States was over 22 percent of GDP in 2003, the balance on income from assets held abroad was actually slightly in favor of the United States. That is, our income from foreign assets was somewhat greater than the income earned by foreign entities on their U.S. assets, even though our holdings of their assets were considerably smaller than theirs were of ours. This seems surprising at first, but it results from a significantly higher average rate of return earned by U.S. investors on their foreign assets compared with the average rate of return earned by foreigners on their U.S. asset holdings. The difference in relative rates of return is due, in part, to the relatively heavy concentration of low-yielding but risk-free Treasury issues in the U.S. portion of foreign portfolios. Recall that the current account deficit is the sum of the trade deficit (exports minus imports) and the difference between income received in the United States from abroad and income paid from U.S. sources to foreign entities. So, the positive income flow on net foreign investment enjoyed by the United States has worked toward keeping the current account deficit lower than it would otherwise be. If the rates of return enjoyed by U.S. and foreign entities move closer in value (perhaps as a result of a decrease in foreigners' demand for Treasury issues), then there will be further deterioration in the U.S. current account.

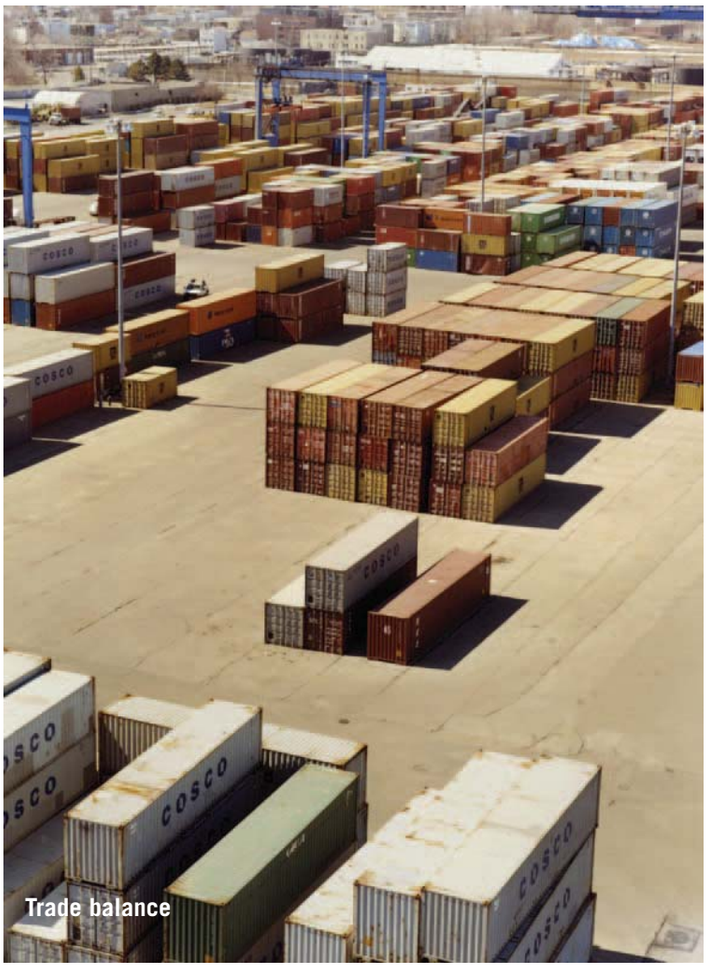
"Just as the budget deficit can saddle us with higher interest charges that must be paid to debt holders, sustained current account deficits eventually create an obligation to pay increasing amounts to the foreign owners of U.S. assets."

Can these rising deficits be sustained? The answer is very clearly, no. If the federal budget deficit continues to grow faster than GDP, there will be continued increases in federal debt relative to GDP. As a result, interest payments on the debt will be an increasing share of federal expenditures, a phenomenon that would very likely be exacerbated by upward pressure on real interest rates created by the increasing public debt itself. At some point, either tax receipts will have to increase (as a percent of GDP), or expenditures (in excess of interest payments on the debt) will have to decrease (as a share of GDP). Otherwise, it would be impossible to pay the increasing interest charges owed on the public debt accrued through past deficits.

Similarly, if the current account deficit continues to grow faster than GDP, there will be continued deterioration in the U.S. net international investment position. If this occurs, the U.S. balance on investment income must at some point become negative, and then increasingly so. The trade balance must eventually improve just in order to maintain a given level of the current account deficit relative to GDP. Just as the budget deficit can saddle us with higher interest charges that must be paid to debt holders, sustained current account deficits eventually create an obligation to pay increasing amounts to the foreign owners of U.S. assets.

As in the 1980s, many argue that, given the depth and liquidity of U.S. capital markets and the propensity of the residents of other countries to save at high rates for a variety of reasons, some level of current account deficit is likely sustainable over time. Estimates of this possibly sustainable level usually fall around 2 to 3 percent of GDP. These arguments make sense, but the big question is how to move from a deficit that is better

Spending on housing



Trade balance

than 6 percent of GDP, and growing, to one that is half that size and relatively stable.

In this regard, national income accounting tells us something about the sustainability of the deficits, but it does not dictate how a narrowing of these deficits will occur. The trade deficit could be reduced through some combination of increased exports and decreased imports relative to GDP, although not every combination is equally probable or cost-free. Stronger domestically led economic growth in our major trading partners could work toward increasing the demand for U.S. exports. This would be highly desirable as it would not only cause our trade deficit to fall, but would also indicate that the major industrial countries that are our largest trading partners had achieved strong, self-sustaining growth as well. Robust levels of domestic demand in these countries benefit everyone, but such demand has proven hard to attain, at least in the Euro-zone and Japan. Demographic and structural issues, among others, have frustrated domestic demand growth in both of these areas, and it is not clear how soon these impediments might be overcome.

Slower U.S. growth would decrease the demand for imported goods and services in the United States. Clearly, for instance, if personal savings rates rise, consumption will fall, at least in the short run. This would have important short term negative effects for U.S. GDP and for the rest of the world as well, but it may well be unavoidable, and even desirable, if a better balance between investment and national saving is to be achieved. Similarly, a reduction in the federal budget deficit might well both increase national savings and reduce consumption and growth if it is not offset by decreased private saving. And further depreciation of the dollar relative to the currencies of our trading partners might also

"Slower U.S. growth would decrease the demand for imported goods and services in the United States. Clearly, for instance, if personal savings rates rise, consumption will fall, at least in the short run."

help to close the trade deficit, given some growth in demand abroad, although the fairly sizable depreciation that has occurred to date has not had much effect except to raise import prices to a small degree. More generally, though, a large, prolonged dollar depreciation can bring risks of inflation.

An arguably remote but potentially very disruptive possibility is a rapid change in the willingness of foreign entities to increase the share of U.S. assets in their portfolios. This might result from an increase in the perceived likelihood of a major rapid depreciation in the U.S. dollar, which would decrease the expected return to foreigners from holding dollar-denominated assets. Portfolio considerations could play a role as well. Although foreigners may have had good reasons to increase their stake in the U.S. economy in light of increased trade liberalization and strong U.S. productivity growth, one should not expect this phenomenon to continue indefinitely. There are undoubtedly limits to the share of their portfolios that foreign investors want to hold in U.S. assets. At some point, moreover, foreign central banks may also prove less willing to support the value of the dollar relative to their currencies. Major shifts seem quite unlikely, but they are not impossible, and the consequences would be dramatic.

Unless the national savings rate increases, a sharp reduction in the U.S. current account deficit would imply an equal reduction in U.S. investment spending. The market mechanism that yields this result would likely be an increase in interest rates. If foreign entities become less willing to finance U.S. investment, then the required rate of return would be bid up to the point where U.S. investment drops enough to equal the sum of U.S. national saving plus the newly reduced flow of capital from abroad. Such an increase in interest rates would depress current output and would likely have sizable negative effects on equity markets. The resulting financial volatility would have a major impact on short term economic activity. More importantly, it would also decrease prospects for future growth by decreasing investment in new equipment and technologies.

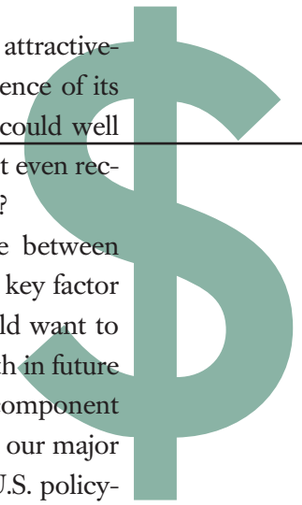
Policy Choices

It seems clear from the above discussion that a range of possibilities exist for the inevitable process of restraining the growth of the rapidly widening U.S. external deficit. A narrowing will occur at some point, but it is difficult to predict how or when. This is not a comfortable situation for policymakers. External deficits of the size of the current U.S. position relative to GDP have rarely been seen in major developed countries. Where they have been seen is in the developing world, and there the results have

usually involved major financial and economic crises. The unique size and attractiveness of the United States as an investment location, the strength and resilience of its economy, and the fact that its external debt is largely in its own currency could well help to ward off the major negative consequences of the current situation. But even recognizing this, what should policy do to better ensure a reasonable outcome?

The current account deficit is a direct reflection of the imbalance between national saving and investment spending. And the federal budget deficit is a key factor underlying the deficient rate of national saving. It is clear what policy should want to avoid: a drop in U.S. investment spending and decreased prospects for growth in future living standards. It is also clear that increased national saving must be one component of correcting the imbalances. As noted above, increased domestic growth in our major trading partners could help, but achieving this is not within the control of U.S. policymakers. And gradual changes in the value of the dollar would be beneficial as well, although foreign exchange markets can be volatile and, potentially, destabilizing. Thus, depending on a smooth dollar decline is chancy at best.

Private saving rates in the United States are currently quite low relative to income, especially given the aging of the baby boomers. Policy changes that provide incentives to increase private saving have proven over time to be ineffective, however. This leaves us with public saving. It is true that attempts to increase national saving by increasing its public component – that is, by decreasing the deficit – may be partly reversed by private dissaving, but deficit reduction remains by far the best option for increasing national saving. Therein lies a stark conclusion: the best available way to address the risks to future economic well-being that are posed by the current account and fiscal deficits is to implement policies that substantially reduce the fiscal deficit. It should be obvious there is no free lunch here. Reducing the fiscal deficit through tighter fiscal policy results, all other things being equal, in slower U.S. growth. However, more modest growth in the short run and increased national savings could well ensure more robust growth in the long run.



". . . there is no free lunch here. Reducing the fiscal deficit through tighter fiscal policy results, all other things being equal, in slower U.S. growth. However, more modest growth in the short run and increased national savings could well ensure more robust growth in the long run."

Endnotes

1. The offset is exact only if there are no effects of the tax cut on real economic variables such as employment or output.
2. The current account balance includes the balance of trade in goods and services, net income flows, and unilateral transfers, such as U.S. government grants, U.S. government pension payments, and private remittances. In 2004, a net deficit on goods and services of $617 billion, net income inflows of $24 billion, and net unilateral outflows of $73 billion resulted in a current account deficit of $666 billion.
3. The Social Security trust fund is expected to continue running a surplus for approximately ten years beyond that date as a result of the interest income it receives from the Treasury securities held by its trust fund.

Data sources for figures:

Figure 1: Office of Management and Budget
Figure 2: Bureau of Economic Analysis
Figure 3: Bureau of Economic Analysis
Figure 4: Board of Governors of the Federal Reserve System
Figure 5: U.S. Department of the Treasury
Figure 6: Bureau of Economic Analysis

The Federal Reserve Bank of Boston, like all Reserve Banks, is responsible for conducting economic research, supervising and regulating financial institutions, offering payments services to the public through financial institutions, and providing community outreach and educational programs in the region. How we carry out these responsibilities is shaped by the four strategic objectives we have set for ourselves.

1 Develop our people

2 Lead in core competencies

3 Bring value to New England and the nation

4 Transform the Bank and strengthen performance

The following pages review performance against objectives in 2004.

Bank Highlights

1 Develop our people

Developing Leadership

The Bank is changing from a large transaction focused organization to a smaller, more professional one that is tightly aligned to meet its policy goals. Effective leadership is critical in managing this change. In 2004, the Bank intensified its commitment to leadership development through rotations, stretch assignments, 360-degree reviews, mentoring, and an expanded management training curriculum. The Bank instituted a more robust succession planning process and reorganized its focus on diversity, giving particular attention to diversity recruitment and development.

Communications

As part of its program to manage change, Bank leadership made itself more visible and accessible to all staff. Management strengthened its commitment to tell staff what we know when we know it and to engage staff earlier in decisions that affect them. This strategy of staff engagement helped us assess and redesign our medical plans. Further, a new communications group strengthened internal communications through development of a comprehensive communication strategy, redesign of the Bank's intranet, and the use of other new media. An online discussion forum is now providing a vehicle to share information and ideas and foster creativity and innovation.

2 Lead in core competencies

Basel II Leadership

The Bank continued its leadership role in the development of new international capital standards for large banks, standards commonly referred to as Basel II. Bank staff led the quantification teams for all operational-risk benchmarking reviews, participated in a number of economic-capital reviews, and contributed to efforts related to the credit-risk component of Basel II. Banking economists issued a white paper and two working papers on Basel II concerns.

National Competency Centers

The Bank's national competency centers – the Financial Support Office, Image Services Group, Internet and Directory Services Group, and Wholesale Payments Group – spearheaded numerous improvements in their Federal Reserve System responsibilities. The wholesale payments group converted customers to FedLine Advantage, the System's newest and most comprehensive solution for access to Federal Reserve financial services, including ACH, funds, and securities services. The Bank began work to develop a new competency in the area of consumer payment preferences through the establishment of a cross-functional emerging payments work group.

Internet Payments Leadership

In work on behalf of the U.S. Treasury, the Bank completed an 18-month pilot of an Internet payments platform that streamlines the exchange of information and payments between the government and its vendors. In 2005, the Bank will develop a permanent automation platform and establish a business support group for this function. Also on behalf of the Treasury, the Bank expanded the reach of the stored value card program that provides electronic payment services to the military and piloted technology enhancements.

3 Transform the Bank and strengthen performance

Changes in Check Processing

In recognition of the declining volume of paper checks, Boston and the other Reserve Banks implemented a second round of check restructuring in 2004. By early 2006, the Boston Fed's check processing operations will be consolidated at a single check processing center in Windsor Locks, Connecticut. Besides working to achieve this consolidation, Bank staff prepared the Reserve System and its customers for Check 21, a new law that took effect in the fall of 2004. Check 21 facilitates innovation and efficiency in payments processing by legalizing the use of check reproductions, known as substitute checks. The Boston Fed led Check 21-related product and pricing development for the System and headed the System's marketing and communications initiatives. The Bank also modified its own check processing operations, incorporating new technology and procedures related to Check 21.

Greater Efficiency in Cash Services

Change characterized the Bank's cash services as well. New equipment was installed, and the Bank field-tested a new currency processing model developed by our staff. The Bank helped other Reserve Banks to implement the model, which resulted in improved productivity and cost savings.

Enterprise Risk Management

The Bank formed a formal enterprise risk management function in January 2004. Staff analyzed the Bank's statement of strategic direction and vision, department budgets, and business plans to assess the Bank's risks. "Bottom up" business-line self-assessments were supplemented by "top-down" strategic assessments by cross-functional groups of officers, leading to identification of specific risks and measures to mitigate them.

Plaza Construction

With the Big Dig nearing completion, the Bank began construction on an extensive project to renovate the plaza surrounding our building. The project extends around the building's perimeter and is designed to improve security and to create an attractive outdoor environment in an area of the city that has for some years served as a construction site for the depression of the Central Artery/Interstate 93.

4 Bring value to New England and the nation

Economic Research

The Bank made greater use of the web in 2004 to disseminate the work of its economists. Two new web-only papers series were introduced, along with *Update New England*, a quarterly web-only publication analyzing current economic conditions in the region. A new print publication was also introduced. *Research Review* offers busy readers executive summaries of economists' work and Bank-sponsored research conferences. Altogether, Boston Fed economists issued 20 papers and briefs to share their work with colleagues and the public.

New Initiatives in Research

At year-end, the Bank was working to establish two new research and policy centers for 2005:

- A center for behavioral economics and decision-making will conduct and publish research on behavioral-economics topics and explore the implications for macroeconomic policy.
- The New England Public Policy Center will collect data, conduct and publish research, and host conferences and events, all from a regional perspective, to meet the needs of policymakers, policy analysts, and the public.

Conferences

The Bank hosted several conferences in 2004:

- "Reaching the Top," a women's leadership conference held in March, brought together academics, business executives, and Bank staff to discuss the significant progress women have made in recent decades, as well as factors still holding them back.
- In early June, the Bank was pleased to host the first "IDEAS Boston" conference, sponsored by the *Boston Globe*. Some 400 intellectual innovators from a variety of fields came together for two days to discuss emerging issues and celebrate the creativity of the Boston area.
- The Bank's 49th economic conference, "The Macroeconomics of Fiscal Policy," held in mid June, provided a forum for discussion of fiscal policy. Considerable attention was given to the twin deficits facing our country – the fiscal budget deficit and the current account deficit.
- Two regional bankers conferences were held, the first, a forum on Check 21 security issues and audit, and the second, an accounting roundtable for chief financial officers and accountants that highlighted key issues affecting the banking industry.

Educational Center and Web Site

2004 marked the first full year of operation of the New England Economic Adventure, an economic education program designed to acquaint students with the concepts of economic growth and improving living standards. The Adventure features both an interactive learning center at the Boston Fed and a lively web site. About 5,000 visitors came to the Bank in 2004 to experience this program.

Classroom Programs

The Bank expanded its financial literacy program in 2004, reaching middle school students in Providence as well as Boston. To date, more than 5,000 students have experienced this program, which is taught by bankers in the Boston area and by students and teachers at Johnson and Wales College in Rhode Island. Another of the Bank's educational initiatives, "Classroom at the Workplace," provided literacy and math tutorials and internships for some 30 students.

Research on Immigration

New England has a growing immigrant population for whom access to financial services and community economic development are pressing concerns. Recognizing this, the Bank began a series of research projects on New England's immigrants. The first of these, "Who Are New England's Immigrants?" appears as a research report in the fall 2004 issue of the Bank publication *Communities & Banking*. The report describes how immigration patterns have differed in New England from other parts of the country.

we care about kids

community care day

homeless children's holiday party

books and kids program

project protech

United Way

boston summer jobs program

boston private industry council

dearborn middle school mentoring program

classroom at the workplace

boston after school jobs program

job shadow day

school-to-career project

workforce development

south boston high school partnership

the BANK

in the community

90th anniversary of the

Federal Reserve Bank of Boston

December 23, 1913 – President Woodrow Wilson signs the Federal Reserve Act "to provide for the establishment of Federal reserve banks, to furnish an elastic currency, to afford means of rediscounting commercial paper, to establish a more effective supervision of banking in the United States, and for other purposes."

November 16, 1914 – The Federal Reserve Bank of Boston opens for business, serving the six New England states. Bankers, businesspeople, politicians, and educators had united to recommend that the organizing committee establish a Reserve Bank to serve the New England region.

• The Bank is housed in two rooms below street level in the Converse Building at 101 Milk Street and is staffed by three officers and 14 clerks. 66 percent of all commercial banks in the District are member banks. Alfred Aiken, previously president of Worcester National Bank, is named Governor (now President) of the Federal Reserve Bank of Boston.

• Discount-window lending is the primary tool used to accommodate seasonal swings in the demand for currency and credit.

1920 – The Bank begins construction of a building at 30 Pearl Street, which opens in 1922.

• Early in the 1920s, most Federal Reserve officials regard open market purchases of securities primarily as a source of revenue rather than as a tool for controlling money and credit. Each regional Bank makes its own purchases of Treasury securities and bankers' acceptances.

1923 – The Federal Reserve Bank of Boston opens an office in Havana, Cuba, to provide cable services for transferring funds, but closes it in 1927.

1929 – Eddie McCarthy starts work at the Bank as a messenger, earning $600 per year. He will work for the Bank for almost 70 years, becoming the Bank's "eyes and ears" on the financial markets.

1932 – The Glass-Steagall Act of 1932 permits Reserve Banks to make loans to member banks on any security the Reserve Banks consider satisfactory, and in unusual circumstances even to make loans to nonbank borrowers; later, companies such as Raytheon and Anderson Little will take out loans from the Boston Fed.

1933 – The Glass-Steagall Act of 1933 places significant restrictions on the ability of banks to engage in investment banking.

1935 – The Banking Act of 1935 restructures the Federal Reserve System, introducing the basic structure that exists today. The Treasury Secretary and Comptroller of the Currency no longer serve on the Board.

1940s – As deficit financing of World War II expands, the Federal Reserve becomes a more active purchaser of Treasury debt.

1950s – The Federal Reserve and the banking industry develop

and implement magnetic ink character recognition (MICR) encoding, allowing automated check processing.

• Open market operations become the primary tool for carrying out monetary policy, with discount rate and reserve requirement changes used as occasional supplements.

• Under Research Director George Ellis, the Bank studies the loss of textile and shoe-manufacturing jobs in New England, and begins to promote the idea that the region should specialize in high-value-added industries that tap its educational and intellectual resources.

1961 – George Ellis is named President of the Federal Reserve Bank of Boston.

1968 – Frank Morris succeeds George Ellis as President of the Boston Fed.

• The Reserve Banks initiate the book-entry securities system.

1969 – Bank President Frank Morris joins the preeminent Boston business group, "The Vault." The Bank begins planning for a new building, eventually choosing a site that held deteriorating warehouses, many of them abandoned. Construction on this site extends Boston's financial district and leads to revitalization of the South Station area.

1970 – The Federal Reserve formally adopts monetary targets.

• Amendments to the Bank Holding Company Act bring one-bank holding companies under federal supervision, ushering in the modern era of bank-holding-company supervision and regulation. For the Federal Reserve, the exclusive federal regulator of bank holding companies, this means significantly expanded responsibilities.

1970s – The Bank elects its first minority Director, Kenneth Guscott, who serves on the Board from 1974 until 1979, and its first female Director, Carol Goldberg, who serves from 1978 until 1982.

1972 – The Boston Fed establishes regional check processing centers (RCPCs) in Windsor Locks, CT, and Lewiston, ME.

1976 – At the request of the state of Massachusetts, which is in a fiscal crisis, the Bank uses its expertise to examine the state budget and the administration's plans to balance it. Bank researchers and executives travel to New York City to brief – and reassure – wary bond dealers on the state's efforts to put its fiscal house in order.

1977 – The Community Reinvestment Act encourages depository institutions to help meet the credit needs of their communities.

• Bank staff move into the new building at 600 Atlantic Avenue.

1980 – The Depository Institutions Deregulation and Monetary Control Act requires all depository institutions to hold reserves and the Reserve Banks to price and offer their services to all depository institutions. The Act also applies uniform reserve requirements to all depository institutions and extends access to the discount window, among other provisions.

• The Boston Fed begins exploring the feasibility of applying image technology to check processing.

• The Riegle-Neal Interstate Banking and Branching Efficiency Act permits interstate banking. Well before Riegle-Neal, New England was at the cusp of the interstate banking movement with the creation of regional compacts that allowed reciprocal mergers and acquisitions across state lines.

1999 – The Gramm-Leach-Bliley Act permits banks, securities firms, and insurance companies to affiliate within a new "financial holding company" structure, and expands the list of nonbanking financial activities permitted to banks. The Federal Reserve is given the challenge of serving as the umbrella supervisor of the new holding companies. The Act also establishes sweeping consumer privacy protections.

2003 – The New England Economic Adventure opens at the Boston Fed. The Adventure features interactive exhibits and activities that use New England's history to teach about economic growth and rising living standards.

• Faced with declining check volume, the Reserve Banks implement a process to better match national infrastructure with volumes. Thirteen offices discontinue check processing, while two others expand.

2004 – The U. S. Treasury chooses the Boston Fed to build and maintain the systems and networks for the Treasury's Internet payments platform (IPP) initiative, which will allow government agencies to electronically procure and pay for goods and services.

• The decision is made to move Boston check services to Windsor Locks, Connecticut, in early 2006.

1914 -2004

1987 – On October 19, the Dow Jones industrial average falls 508 points, or 22.6 percent. The Federal Reserve reassures markets that liquidity is available.

1989 – Frank Morris retires; Dick Syron becomes President of the Boston Fed.

1990s – The late 1980s to early 1990s are a period of substantial challenge to the Bank, given the severely distressed condition of depository institutions in New England and the region's depressed economy. The region incurs a significant number of bank failures, and the Bank's banking supervision, discount window, and financial services functions are challenged to ensure the maintenance of essential services and facilitate the orderly resolution of failed institutions.

1992 – The Bank publishes a groundbreaking statistical study that documents the role that race played in home mortgage approvals in Boston's neighborhoods, leading to reforms.

1994 – The Federal Reserve Board implements same-day settlement rules to require paying banks to accept checks presented by 8:00 a.m. without requiring payment of presentment fees and to pay for those checks in same-day final settlement.

1994 – Cathy Minehan replaces Dick Syron as President, becoming the first female President of the Federal Reserve Bank of Boston.

• President Minehan continues the Bank's active involvement with the Boston Public Schools and the Boston Private Industry Council's workforce readiness efforts, begun under Frank Morris.

• As an experiment, the FOMC begins announcing policy decisions on the day they are made. This begins a period of increasing transparency.

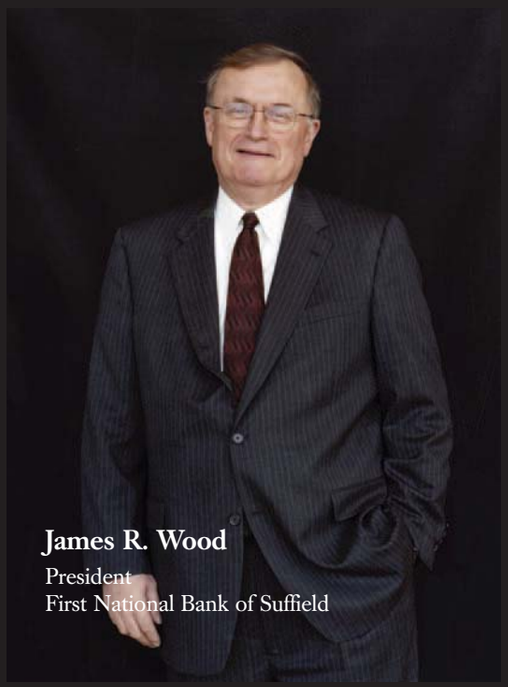
Board of Directors

Dr. Blenda J. Wilson (Deputy Chairman)
President and Chief Executive Officer
Nellie Mae Education Foundation
(seated on left)

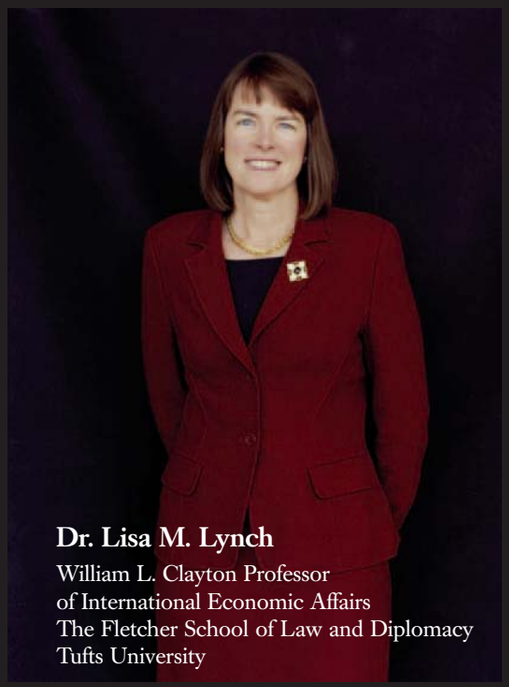
Dr. Samuel O. Thier (Chairman)
Professor of Medicine and Health Care Policy
Harvard Medical School
(standing on right)

Seated on right:
Cathy E. Minehan

Standing on left:
Paul M. Connolly



James R. Wood
President
First National Bank of Suffield



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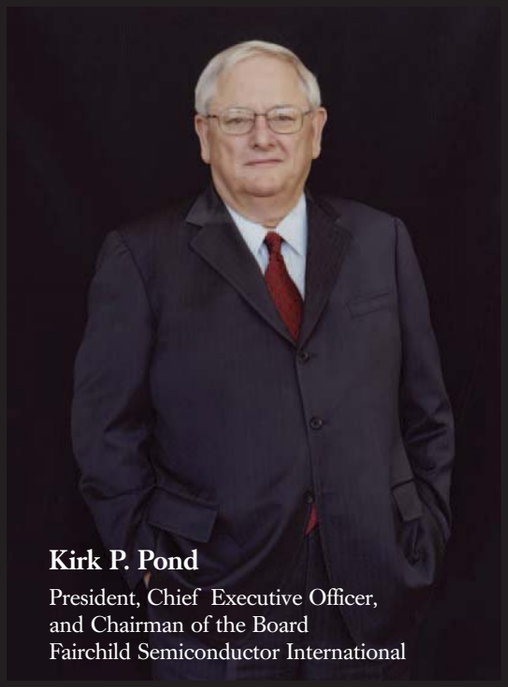
Tufts University



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President, Chief Executive Officer,
and Chairman of the Board
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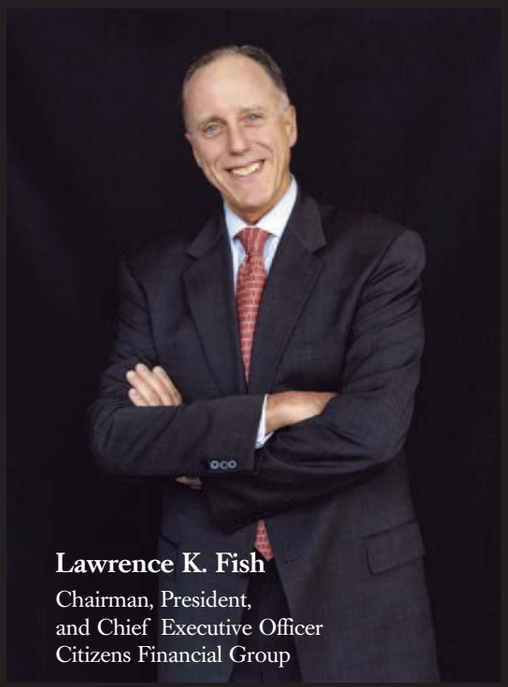
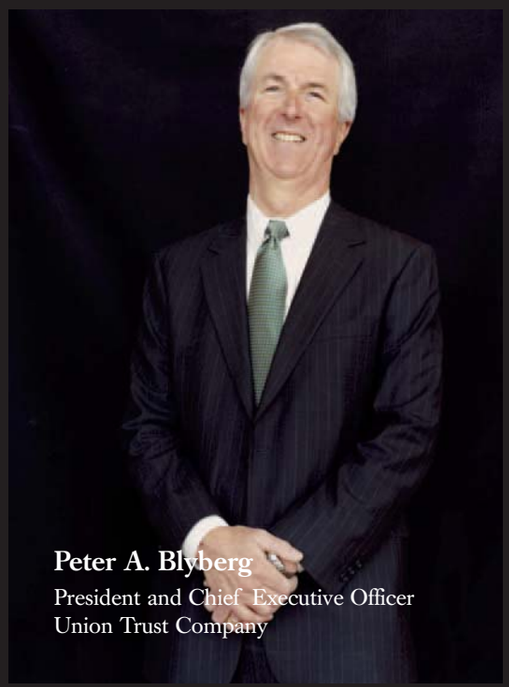


Lawrence K. Fish
Chairman, President,
and Chief Executive Officer
Citizens Financial Group



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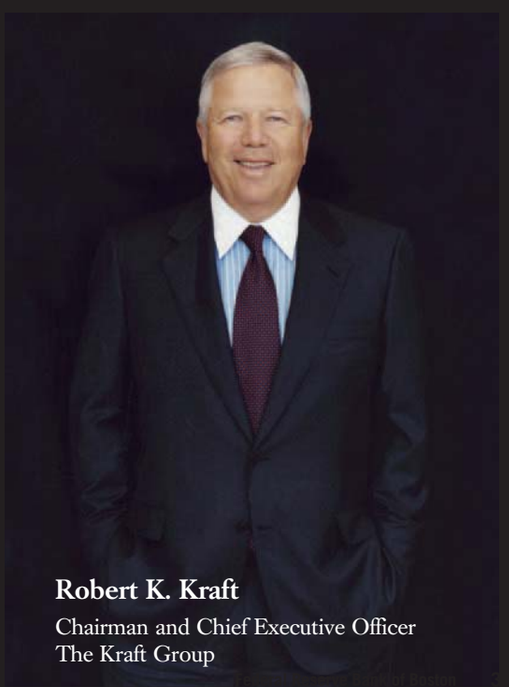
President and Chief Executive Officer
Union Trust Company

Orit Gadiesh
Chairman of the Board
Bain & Company, Inc.



Robert K. Kraft
Chairman and Chief Executive Officer
The Kraft Group

New England Advisory Council

Left to right, standing: Joseph Boulos, Yolanda Kodrzycki, James Brett, Dwight Sargent, Amar Kapur, Paul Connolly.
Left to right, sitting: Cathy Minehan, Kathy Weare, Gregory Howey, Joyce Plotkin, Nancy Connolly, Leslie Kenney, John Morison, Alan Wilson, Elisabeth Robert.

Elisabeth Robert (Chair)
President
Vermont Teddy Bear Company, Inc.

Joseph Boulos
Chief Executive Officer
CB Richard Ellis/The Boulos Company

Craig D. Carlson
Director of Corporate Development
Viacom Boston

Gregory B. Howey
President
Okay Industries

Amar Kapur
President and Chief Executive Officer
Aimtek, Inc.

Leslie Kenney
Chief Executive Officer
Kenney Manufacturing Corporation

Craig Moore
Chief Operating Officer
Marox Corporation

John H. Morison III
President and Chief Executive Officer
Hitchiner Manufacturing Company, Inc.

Joyce Plotkin
President
Massachusetts Software and Internet Council, Inc.

Dwight Sargent
President
Pompanoosuc Mills Corporation

Kirk Sykes
President
The Primary Group, Inc.

Alan Wilson
President
Wilson Farms, Inc.

Kathy Weare
Chief Executive Officer
The Cliff House Resort and Spa

James Brett (Advisor)
President and Chief Executive Officer
The New England Council

Community Development Advisory Council

Left to right: Brenda Clement, Elizabeth Humstone, William Armitage, Dennis Lagueux, Cathy Minehan, Richard Walker, Charles Newton, Paul Douglas, Marlon Shields, Marilyn Weekes.

Richard C. Walker III (Chairman)
Vice President
Federal Reserve Bank of Boston

Marilyn Weekes
Assistant Vice President and
Community Affairs Officer
Federal Reserve Bank of Boston

William Armitage II
Executive Director
Biddeford-Saco Area Economic
Development Corporation

Brenda Clement
Executive Director
Housing Network of Rhode Island

Paul Douglas
Executive Director
Franklin County Regional Housing and
Redevelopment Authority

Elizabeth Humstone
Executive Director
Vermont Forum on Sprawl

Thomas Kennedy
Senior Vice President and CRA Manager
Sovereign Bank

Dennis P. Lagueux
Vice President and Director
of Community Development
Banknorth Group

Christopher R. Miller
Director, Management and Development
New Hampshire Housing Finance Authority

Charles Newton
Executive Director
Penquis Community Action Program, Inc.

William Rodriguez
Executive Director
La Alianza Hispana, Inc.

Cynthia Russell
President and Chief Executive Officer
Connecticut Housing Investment
Fund, Inc.

Marlon Shields
Founder and President
Greystone Financial Services, LLC

Peter Walsh
Senior Vice President
Bank Rhode Island

Senior Officers

Sarah G. Green
Executive Vice President
Payments and Financial Services

Steven M. Whitney
Senior Vice President
Retail Payments

William N. McDonough
Executive Vice President
and General Counsel

Eric S. Rosengren
Senior Vice President
Supervison, Regulation and Credit

Jeffery C. Fuhrer
Senior Vice President
and Director of Research

Lynn E. Browne
Executive Vice President
and Economic Advisor

Management assertion

March 10, 2005
To the Board of Directors,

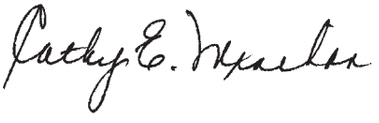
The management of the Federal Reserve Bank of Boston ("FRB Boston") is responsible for the preparation and fair presentation of the Statement of Financial Condition, Statement of Income, and Statement of Changes in Capital as of December 31, 2004 (the "Financial Statements"). The Financial Statements have been prepared in conformity with the accounting principles, policies, and practices established by the Board of Governors of the Federal Reserve System and as set forth in the Financial Accounting Manual for the Federal Reserve Banks ("Manual"), and as such, include amounts, some of which are based on judgements and estimates of management. To our knowledge, the Financial Statements are, in all material respects, fairly presented in conformity with the accounting principles, policies, and practices documented in the Manual and include all disclosures necessary for such fair presentation.

The management of the FRB Boston is responsible for maintaining an effective process of internal controls over financial reporting including the safeguarding of assets as they relate to the Financial Statements. Such internal controls are designed to provide reasonable assurance to management and to the Board of Directors regarding the preparation of reliable Financial Statements. This process of internal controls contains self-monitoring mechanisms, including, but not limited to, divisions of responsibility and a code of conduct. Once identified, any material deficiencies in the process of internal controls are reported to management, and appropriate corrective measures are implemented.

Even an effective process of internal controls, no matter how well designed, has inherent limitations, including the possibility of human error, and therefore can provide only reasonable assurance with respect to the preparation of reliable financial statements.

The management of the FRB Boston assessed its process of internal controls over financial reporting, including the safeguarding of assets reflected in the Financial Statements, based upon the criteria established in the "Internal Control — Integrated Framework" issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this assessment, we believe that the FRB Boston maintained an effective process of internal controls over financial reporting, including the safeguarding of assets as they relate to the Financial Statements.

Federal Reserve Bank of Boston



Cathy E. Minehan, President

Paul M. Connolly, First Vice President

Sarah G. Green, Principal Financial Officer

Report of independent accountants

PRICEWATERHOUSECOOPERS

To the Board of Directors of the
Federal Reserve Bank of Boston

We have examined management's assertion, included in the accompanying Management Assertion, that the Federal Reserve Bank of Boston ("FRB of Boston") maintained effective internal control over financial reporting and the safeguarding of assets as they relate to the financial statements as of December 31, 2004, based on criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. FRB of Boston's management is responsible for maintaining effective internal control over financial reporting and safeguarding of assets as they relate to the financial statements. Our responsibility is to express an opinion on management's assertion based on our examination.

Our examination was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants and, accordingly, included obtaining an understanding of internal control over financial reporting, testing and evaluating the design and operating effectiveness of internal control, and performing such other procedures as we considered necessary in the circumstances. We believe that our examination provides a reasonable basis for our opinion.

Because of inherent limitations in any internal control, misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of internal control over financial reporting to future periods are subject to the risk that the internal control may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, management's assertion that FRB of Boston maintained effective internal control over financial reporting and over the safeguarding of assets as they relate to the financial statements as of December 31, 2004, is fairly stated, in all material respects, based on criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

This report is intended solely for the information and use of management and the Board of Directors and Audit Committee of FRB of Boston, and any organization with legally defined oversight responsibilities and is not intended to be and should not be used by anyone other than these specified parties.

PricewaterhouseCoopers LLP

March 16, 2005
Boston, Massachusetts

Report of independent auditors

PRICEWATERHOUSECOOPERS

To the Board of Governors of the Federal Reserve System
and the Board of Directors of the Federal Reserve Bank of Boston

We have audited the accompanying statements of condition of the Federal Reserve Bank of Boston (the "Bank") as of December 31, 2004 and 2003, and the related statements of income and changes in capital for the years then ended, which have been prepared in conformity with the accounting principles, policies, and practices established by the Board of Governors of the Federal Reserve System. These financial statements are the responsibility of the Bank's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

As described in Note 3, these financial statements were prepared in conformity with the accounting principles, policies, and practices established by the Board of Governors of the Federal Reserve System. These principles, policies, and practices, which were designed to meet the specialized accounting and reporting needs of the Federal Reserve System, are set forth in the *Financial Accounting Manual for Federal Reserve Banks* and constitute a comprehensive basis of accounting other than accounting principles generally accepted in the United States of America.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Bank as of December 31, 2004 and 2003, and results of its operations for the years then ended, on the basis of accounting described in Note 3.

PricewaterhouseCoopers LLP

March 16, 2005
Boston, Massachusetts

Statements of condition

as of December 31, 2004 and 2003 (in millions)

	2004	2003
ASSETS		
Gold certificates	$ 494	$ 495
Special drawing rights certificates	115	115
Coin	19	23
Items in process of collection	457	531
Loans to depository institutions	1	-
U.S. government securities, net	34,072	32,661
Investments denominated in foreign currencies	1,083	1,034
Accrued interest receivable	239	244
Interdistrict settlement account	2,979	3,079
Bank premises and equipment, net	118	113
Interest on Federal Reserve notes due from U.S. Treasury	460	-
Other assets	22	24
Total assets	$40,059	$38,319
LIABILITIES AND CAPITAL		
Liabilities:		
Federal Reserve notes outstanding, net	$33,917	$33,877
Securities sold under agreements to repurchase	1,446	1,240
Deposits:		
Depository institutions	1,050	1,633
Other deposits	4	3
Deferred credit items	578	576
Interest on Federal Reserve notes due U.S. Treasury	-	17
Accrued benefit costs	60	66
Other liabilities	13	11
Total liabilities	37,068	37,423
Capital:		
Capital paid-in	1,638	448
Surplus	1,353	448
Total capital	2,991	896
Total liabilities and capital	$40,059	$38,319

The accompanying notes are an integral part of these financial statements.

Statements of income

for the years ended December 31, 2004 and 2003 (in millions)

	2004	2003
Interest income:		
Interest on U.S. government securities	$1,040	$1,134
Interest on investments denominated in foreign currencies	14	14
Total interest income	1,054	1,148
Interest expense:		
Interest expense on securities sold under agreements to repurchase	14	11
Net interest income	1,040	1,137
Other operating income :		
Income from services	38	39
Reimbursable services to government agencies	23	25
Foreign currency gains, net	62	141
Other income	12	10
Total other operating income	135	215
Operating expenses:		
Salaries and other benefits	91	103
Occupancy expense	14	13
Equipment expense	13	14
Assessments by Board of Governors	48	47
Other expenses	51	53
Total operating expenses	217	230
Net income prior to distribution	$ 958	$1,122
Distribution of net income:		
Dividends paid to member banks	$ 53	$ 27
Transferred to surplus	905	12
Payments to U.S. Treasury as interest on Federal Reserve notes	-	1,083
Total distribution	$ 958	$1,122

The accompanying notes are an integral part of these financial statements.

Statements of changes in capital

for the years ended December 31, 2004 and 2003 (in millions)

	Capital Paid-in	Surplus	Total Capital
Balance at January 1, 2003			
(8.7 million shares)	$ 436	$ 436	$ 872
Transferred to surplus		12	12
Net change in capital stock issued			
(0.3 million shares)	12		12
Balance at December 31, 2003			
(9.0 million shares)	$ 448	$ 448	$ 896
Transferred to surplus		905	905
Net change in capital stock issued			
(23.8 million shares)	1,190		1,190
Balance at December 31, 2004			
(32.8 million shares)	$1,638	$1,353	$2,991

The accompanying notes are an integral part of these financial statements.

Notes to financial statements

1. STRUCTURE

The Federal Reserve Bank of Boston ("Bank") is part of the Federal Reserve System ("System") created by Congress under the Federal Reserve Act of 1913 ("Federal Reserve Act") which established the central bank of the United States. The System consists of the Board of Governors of the Federal Reserve System ("Board of Governors") and twelve Federal Reserve Banks ("Reserve Banks"). The Reserve Banks are chartered by the federal government and possess a unique set of governmental, corporate, and central bank characteristics. The Bank serves the First Federal Reserve District, which includes Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and a portion of Connecticut. Other major elements of the System are the Federal Open Market Committee ("FOMC") and the Federal Advisory Council. The FOMC is composed of members of the Board of Governors, the president of the Federal Reserve Bank of New York ("FRBNY"), and, on a rotating basis, four other Reserve Bank presidents. Banks that are members of the System include all national banks and any state-chartered bank that applies and is approved for membership in the System.

Board of Directors

In accordance with the Federal Reserve Act, supervision and control of the Bank are exercised by a Board of Directors. The Federal Reserve Act specifies the composition of the Board of Directors for each of the Reserve Banks. Each board is composed of nine members serving three-year terms: three directors, including those designated as Chairman and Deputy Chairman, are appointed by the Board of Governors, and six directors are elected by member banks. Of the six elected by member banks, three represent the public and three represent member banks. Member banks are divided into three classes according to size. Member banks in each class elect one director representing member banks and one representing the public. In any election of directors, each member bank receives one vote, regardless of the number of shares of Reserve Bank stock it holds.

2. OPERATIONS AND SERVICES

The System performs a variety of services and operations. Functions include formulating and conducting monetary policy; participating actively in the payments mechanism, including large-dollar transfers of funds, automated clearinghouse ("ACH") operations, and check processing; distributing coin and currency; performing fiscal agency functions for the U.S. Treasury and certain federal agencies; serving as the federal government's bank; providing short-term loans to depository institutions; serving the consumer and the community by providing educational materials and information regarding consumer laws; supervising bank holding companies and state member banks; and administering other regulations of the Board of Governors. The Board of Governors' operating costs are funded through assessments on the Reserve Banks.

The FOMC establishes policy regarding open market operations, oversees these operations, and issues authorizations and directives to the FRBNY for its execution of transactions. Authorized transaction types include direct purchase and sale of securities, the purchase of securities under agreements to resell, the sale of securities under agreements to repurchase, and the lending of U.S. government securities. The FRBNY is also authorized by the FOMC to hold balances of, and to execute spot and forward foreign exchange ("F/X") and securities contracts in, nine foreign currencies and to invest such foreign currency holdings ensuring adequate liquidity is maintained. In addition, FRBNY is authorized to maintain reciprocal currency arrangements ("F/X swaps") with various central banks, and "warehouse" foreign currencies for the U.S. Treasury and Exchange Stabilization Fund ("ESF") through the Reserve Banks.

3. SIGNIFICANT ACCOUNTING POLICIES

Accounting principles for entities with the unique powers and responsibilities of the nation's central bank have not been formulated by the Financial Accounting Standards Board. The Board of Governors has developed specialized accounting principles and practices that it believes are appropriate for the significantly different nature and function of a central bank as compared with the private sector. These accounting principles and practices are documented in the *Financial Accounting Manual for Federal Reserve Banks* ("Financial Accounting Manual"), which is issued by the Board of Governors. All Reserve Banks are required to adopt and apply accounting policies and practices that are consistent with the Financial Accounting Manual.

The financial statements have been prepared in accordance with the Financial Accounting Manual. Differences exist between the accounting principles and practices of the System and accounting principles generally accepted in the United States of America ("GAAP"). The primary difference is the presentation of all security holdings at amortized cost, rather than at the fair value presentation requirements of GAAP. In addition, the Bank has elected not to present a Statement of Cash Flows. The Statement of Cash Flows has not been included because the liquidity and cash position of the Bank are not of primary concern to the users of these financial statements. Other information regarding the Bank's activities is provided in, or may be derived from, the Statements of Condition, Income, and Changes in Capital. A Statement of Cash Flows, therefore, would not provide any additional useful information. There are no other significant differences between the policies outlined in the Financial Accounting Manual and GAAP.

Each Reserve Bank provides services on behalf of the System for which costs are not shared. Major services provided on behalf of the System by the Bank, for which the costs were not redistributed to the other Reserve Banks, include: Internet and Directory Services, Government Image Archive, Image System Services, Financial Support Office, and Centralized Accounting Technology Services.

The preparation of the financial statements in conformity with the Financial Accounting Manual requires management to make certain estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of income and expenses during the reporting period. Actual results could differ from those estimates. Unique accounts and significant accounting policies are explained below.

a. Gold Certificates

The Secretary of the Treasury is authorized to issue gold certificates to the Reserve Banks to monetize gold held by the U.S. Treasury. Payment for the gold certificates by the Reserve Banks is made by crediting equivalent amounts in dollars into the account established for the U.S. Treasury. These gold certificates held by the Reserve Banks are required to be backed by the gold of the U.S. Treasury. The U.S. Treasury may reacquire the gold certificates at any time and the Reserve Banks must deliver them to the U.S. Treasury. At such time, the U.S. Treasury's account is charged, and the Reserve Banks' gold certificate accounts are lowered. The value of gold for purposes of backing the gold certificates is set by law at $42 2/9 a fine troy ounce. The Board of Governors allocates the gold certificates among Reserve Banks once a year based on average Federal Reserve notes outstanding in each District.

b. Special Drawing Rights Certificates

Special drawing rights ("SDRs") are issued by the International Monetary Fund ("Fund") to its members in proportion to each member's quota in the Fund at the time of issuance. SDRs serve as a supplement to international monetary reserves and may be transferred from one national monetary authority to another. Under the law providing for United States participation in the SDR system, the Secretary of the U.S. Treasury is authorized to issue SDR certificates, somewhat like gold certificates, to the Reserve Banks. At such time, equivalent amounts in dollars are credited to the account established for the U.S. Treasury, and the Reserve Banks' SDR certificate accounts are increased. The Reserve Banks are required to purchase SDR certificates, at the direction of the U.S. Treasury, for the purpose of financing SDR acquisitions or for financing exchange stabilization operations. At the time SDR transactions occur, the Board of Governors allocates SDR certificate transactions among Reserve Banks based upon Federal Reserve notes outstanding in each District at the end of the preceding year. There were no SDR transactions in 2004 or 2003.

c. Loans to Depository Institutions

The Depository Institutions Deregulation and Monetary Control Act of 1980 provides that all depository institutions that maintain reservable transaction accounts or nonpersonal time deposits, as defined in Regulation D issued by the Board of Governors, have borrowing privileges at the discretion of the Reserve Bank. Borrowers execute certain lending agreements and deposit sufficient collateral before credit is extended. Loans are evaluated for collectibility, and currently all are considered collectible and fully collateralized. If loans were ever deemed to be uncollectible, an appropriate reserve would be established. Interest is accrued using the applicable discount rate established at least every fourteen days by the Board of Directors of the Reserve Bank, subject to review by the Board of Governors.

d. U.S. Government and Federal Agency Securities and Investments Denominated in Foreign Currencies

The FOMC has designated the FRBNY to execute open market transactions on its behalf and to hold the resulting securities in the portfolio known as the System Open Market Account ("SOMA"). In addition to authorizing and directing operations in the domestic securities market, the FOMC authorizes and directs the FRBNY to execute operations in foreign markets for major currencies in order to counter disorderly conditions in exchange markets or to meet other needs specified by the FOMC in carrying out the System's central bank responsibilities. Such authorizations are reviewed and approved annually by the FOMC.

The FRBNY has sole authorization by the FOMC to lend U.S. government securities held in the SOMA to U.S. government securities dealers and to banks participating in U.S. government securities clearing arrangements on behalf of the System, in order to facilitate the effective functioning of the domestic securities market. These securities-lending transactions are fully collateralized by other U.S. government securities. FOMC policy requires the FRBNY to take possession of collateral in excess of the market values of the securities loaned. The market values of the collateral and the securities loaned are monitored by the FRBNY on a daily basis, with additional collateral obtained as necessary. The securities lent are accounted for in the SOMA.

F/X contracts are contractual agreements between two parties to exchange specified currencies, at a specified price, on a specified date. Spot foreign contracts normally settle two days after the trade date, whereas the settlement date on forward contracts is negotiated between the contracting parties, but will extend beyond two days from the trade date. The FRBNY generally enters into spot contracts, with any forward contracts generally limited to the second leg of a swap/warehousing transaction.

The FRBNY, on behalf of the Reserve Banks, maintains renewable, short-term F/X swap arrangements with two authorized foreign central banks. The parties agree to exchange their currencies up to a pre-arranged maximum amount and for an agreed-upon period of time (up to twelve months), at an agreed-upon interest rate. These arrangements give the FOMC temporary access to foreign currencies it may need for intervention operations to support the dollar and give the partner foreign central bank temporary access to dollars it may need to support its own currency. Drawings under the F/X swap arrangements can be initiated by either the FRBNY or the partner foreign central bank and must be agreed to by the drawee. The F/X swaps are structured so that the party initiating the transaction (the drawer) bears the exchange rate risk upon maturity. The FRBNY will generally invest the foreign currency received under an F/X swap in interest-bearing instruments.

Warehousing is an arrangement under which the FOMC agrees to exchange, at the request of the Treasury, U.S. dollars for foreign currencies held by the Treasury or ESF over a limited period of time. The purpose of the warehousing facility is to supplement the U.S. dollar resources of the Treasury and ESF for financing purchases of foreign currencies and related international operations.

In connection with its foreign currency activities, the FRBNY, on behalf of the Reserve Banks, may enter into contracts that contain varying degrees of off-balance-sheet market risk, because they represent contractual commitments involving future settlement and counter-party credit risk. The FRBNY controls credit risk by obtaining credit approvals, establishing transaction limits, and performing daily monitoring procedures.

While the application of current market prices to the securities currently held in the SOMA portfolio and investments denominated in foreign currencies may result in values substantially above or below their carrying values, these unrealized changes in value would have no direct effect on the quantity of reserves available to the banking system or on the prospects for future Reserve Bank earnings or capital. Both the domestic and foreign components of the SOMA portfolio from time to time involve transactions that may result in gains or losses when holdings are sold prior to maturity. Decisions regarding the securities and foreign currencies transactions, including their purchase and sale, are motivated by monetary policy objectives rather than profit. Accordingly, market values, earnings, and any gains or losses resulting from the sale of such currencies and securities are incidental to the open market operations and do not motivate its activities or policy decisions.

U.S. government securities and investments denominated in foreign currencies comprising the SOMA are recorded at cost, on a settlement-date basis, and adjusted for amortization of premiums or accretion of discounts on a straight-line basis. Securities sold under agreements to repurchase are accounted for as secured borrowing transactions with the associated interest expense recognized over the life of the transaction. Such transactions are settled by FRBNY. Interest income is accrued on a straight-line basis. Income earned on securities lending transactions is reported as a component of “Other income.” Gains and losses resulting from sales of securities are determined by specific issues based on average cost. Foreign-currency-denominated assets are revalued daily at current foreign currency market exchange rates in order to report these assets in U.S. dollars. Realized and unrealized gains and losses on investments denominated in foreign currencies are reported as “Foreign currency gains, net.”

Activity related to U.S. government securities bought outright, securities sold under agreements to repurchase, securities loaned, investments denominated in foreign currency, excluding those held under an F/X swap arrangement, and deposit accounts of foreign central banks and governments above core balances are allocated to each Reserve Bank. U.S. government securities purchased under agreements to resell and unrealized gains and losses on the revaluation of foreign currency holdings under F/X swaps and warehousing arrangements are allocated to the FRBNY and not to other Reserve Banks.

In 2003, additional interest income of $61 million, representing one day's interest on the SOMA portfolio, was accrued to reflect a change in interest accrual calculations, of which $2.9 million was allocated to the Bank. The effect of this change was not material; therefore, it was included in the 2003 interest income.

e. Bank Premises, Equipment, and Software

Bank premises and equipment are stated at cost less accumulated depreciation. Depreciation is calculated on a straight-line basis over estimated useful lives of assets ranging from two to fifty years. Major alterations, renovations, and improvements are capitalized at cost as additions to the asset accounts and are amortized over the remaining useful life of the asset. Maintenance, repairs, and minor replacements are charged to operations in the year incurred. Costs incurred for software, either developed internally or acquired for internal use, during the application development stage are capitalized based on the cost of direct services and materials associated with designing, coding, installing, or testing software. Capitalized software costs are amortized on a straight-line basis over the estimated useful lives of the software applications, which range from two to five years.

f. Interdistrict Settlement Account

At the close of business each day, all Reserve Banks and branches assemble the payments due to or from other Reserve Banks and branches as a result of transactions involving accounts residing in other Districts that occurred during the day's operations. Such transactions may include funds settlement, check clearing and ACH operations, and allocations of shared expenses. The cumulative net amount due to or from other Reserve Banks is reported as the "Interdistrict settlement account."

g. Federal Reserve Notes

Federal Reserve notes are the circulating currency of the United States. These notes are issued through the various Federal Reserve agents (the Chairman of the Board of Directors of each Reserve Bank) to the Reserve Banks upon deposit with such agents of certain classes of collateral security, typically U.S. government securities. These notes are identified as issued to a specific Reserve Bank. The Federal Reserve Act provides that the collateral security tendered by the Reserve Bank to the Federal Reserve agent must be equal to the sum of the notes applied for by such Reserve Bank.

Assets eligible to be pledged as collateral security include all Federal Reserve Bank assets. The collateral value is equal to the book value of the collateral tendered, with the exception of securities, whose collateral value is equal to the par value of the securities tendered. The par value of securities pledged for securities sold under agreements to repurchase is similarly deducted.

The Board of Governors may, at any time, call upon a Reserve Bank for additional security to adequately collateralize the Federal Reserve notes. To satisfy the obligation to provide sufficient collateral for outstanding Federal Reserve notes, the Reserve Banks have entered into an agreement that provides for certain assets of the Reserve Banks to be jointly

pledged as collateral for the Federal Reserve notes of all Reserve Banks. In the event that this collateral is insufficient, the Federal Reserve Act provides that Federal Reserve notes become a first and paramount lien on all the assets of the Reserve Banks. Finally, as obligations of the United States, Federal Reserve notes are backed by the full faith and credit of the United States government.

The "Federal Reserve notes outstanding, net" account represents the Bank's Federal Reserve notes outstanding reduced by its currency holdings of $4,137 million and $4,750 million at December 31, 2004 and 2003, respectively.

h. Capital Paid-in

The Federal Reserve Act requires that each member bank subscribe to the capital stock of the Reserve Bank in an amount equal to 6 percent of the capital and surplus of the member bank. As a member bank's capital and surplus changes, its holdings of Reserve Bank stock must be adjusted. Member banks are state-chartered banks that apply and are approved for membership in the System and all national banks. Currently, only one-half of the subscription is paid-in and the remainder is subject to call. These shares are nonvoting with a par value of $100. They may not be transferred or hypothecated. By law, each member bank is entitled to receive an annual dividend of 6 percent on the paid-in capital stock. This cumulative dividend is paid semiannually. A member bank is liable for Reserve Bank liabilities up to twice the par value of stock subscribed by it.

The Financial Accounting Standards Board (FASB) has deferred the implementation date for SFAS No. 150, "Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity" for the Bank. When applicable, the Bank will determine the impact and provide the appropriate disclosures.

i. Surplus

The Board of Governors requires Reserve Banks to maintain a surplus equal to the amount of capital paid-in as of December 31. This amount is intended to provide additional capital and reduce the possibility that the Reserve Banks would be required to call on member banks for additional capital.

Pursuant to Section 16 of the Federal Reserve Act, Reserve Banks are required by the Board of Governors to transfer to the U.S. Treasury as interest on Federal Reserve notes excess earnings, after providing for the costs of operations, payment of dividends, and reservation of an amount necessary to equate surplus with capital paid-in.

Due to the substantial increase in capital paid-in and the transfer of surplus, surplus was not equated to capital at December 31, 2004. The amount of additional surplus required due to these events exceeded the Bank's net income in 2004. Net income is affected by SOMA participation as discussed in footnote 4.

In the event of losses or an increase in capital paid-in, payments to the U.S. Treasury are suspended and earnings are retained until the surplus is equal to the capital paid-in. Weekly payments to the U.S. Treasury may vary significantly.

In the event of a decrease in capital paid-in, the excess surplus, after equating capital paid-in and surplus at December 31, is distributed to the U.S. Treasury in the following year. This amount is reported as a component of "Payments to U.S. Treasury as interest on Federal Reserve notes."

j. Income and Costs Related to Treasury Services

The Bank is required by the Federal Reserve Act to serve as fiscal agent and depository of the United States. By statute, the Department of the Treasury is permitted, but not required, to pay for these services.

k. Taxes

The Reserve Banks are exempt from federal, state, and local taxes, except for taxes on real property. The Bank's real property taxes were $5 million and $4 million for the years ended December 31, 2004 and 2003, respectively, and are reported as a component of "Occupancy expense."

l. Restructuring Charges

In 2003, the System started the restructuring of several operations, primarily check, cash, and Treasury services. The restructuring included streamlining the management and support structures, reducing staff, decreasing the number of processing locations, and increasing processing capacity in the remaining locations. These restructuring activities continued in 2004.

Footnote 10 describes the restructuring and provides information about the Bank's costs and liabilities associated with employee separations and contract terminations. The costs associated with the write-down of certain Bank assets are discussed in footnote 6. Costs and liabilities associated with enhanced pension benefits for all Reserve Banks are recorded on the books of the FRBNY.

4. U.S. GOVERNMENT SECURITIES

Securities bought outright are held in the SOMA at the FRBNY. An undivided interest in SOMA activity and the related premiums, discounts, and income, with the exception of securities purchased under agreements to resell, is allocated to each Reserve Bank on a percentage basis derived from an annual settlement of interdistrict clearings that occurs in April of each year. The settlement equalizes Reserve Bank gold certificate holdings to Federal Reserve notes outstanding. The Bank's allocated share of SOMA balances was approximately 4.696 percent and 4.835 percent at December 31, 2004 and 2003, respectively.

The Bank's allocated share of U.S. Government securities, net, held in the SOMA at December 31, was as follows (in millions):

	2004	2003
Par value:	$	$
U.S. government:		
Bills	12,348	11,837
Notes	16,944	15,633
Bonds	4,415	4,760
Total par value	33,707	32,230
Unamortized premiums	442	474
Unaccreted discounts	(77)	(43)
Total allocated to Bank	$34,072	$32,661

The total of the U.S. Government securities, net, held in the SOMA was $725,584 million and $675,569 million at December 31, 2004 and 2003, respectively.

The maturity distribution of U.S. government securities bought outright and securities sold under agreements to repurchase that were allocated to the Bank at December 31, 2004, was as follows (in millions):

	U.S. Government Securities (Par value)	Securities Sold Under Agreements to Repurchase (Contract amount)
Maturities of Securities Held		
Within 15 days	$ 1,439	$1,446
16 days to 90 days	8,375	-
91 days to 1 year	8,002	-
Over 1 year to 5 years	9,780	-
Over 5 years to 10 years	2,553	-
Over 10 years	3,558	-
Total	$33,707	$1,446

At December 31, 2004 and 2003, U.S. government securities with par values of $6,609 million and $4,426 million, respectively, were loaned from the SOMA, of which $310 million and $214 million were allocated to the Bank.

At December 31, 2004 and 2003, securities sold under agreements to repurchase with contract amounts of $30,783 million and $25,652 million, respectively, and par values of $30,808 million and $25,658 million, respectively, were outstanding. The Bank's allocated share at December 31, 2004 and 2003, was $1,446 million and $1,240 million, respectively, of the contract amount and $1,447 million and $1,240 million, respectively, of the par value.

5. INVESTMENTS DENOMINATED IN FOREIGN CURRENCIES

The FRBNY, on behalf of the Reserve Banks, holds foreign currency deposits with foreign central banks and the Bank for International Settlements and invests in foreign government debt instruments. Foreign government debt instruments held include both securities bought outright and securities purchased under agreements to resell. These investments are guaranteed as to principal and interest by the foreign governments.

Each Reserve Bank is allocated a share of foreign-currency-denominated assets, the related interest income, and realized and unrealized foreign currency gains and losses, with the exception of unrealized gains and losses on F/X swaps and warehousing transactions. This allocation is based on the ratio of each Reserve Bank's capital and surplus to aggregate capital and surplus at the preceding December 31. The Bank's allocated share of investments denominated in foreign currencies was approximately 5.069 percent and 5.205 percent at December 31, 2004 and 2003, respectively.

Notes to financial statements

The Bank's allocated share of investments denominated in foreign currencies, valued at current foreign currency market exchange rates at December 31, was as follows (in millions):

	2004	2003
European Union Euro:		
Foreign currency deposits	$ 307	$ 357
Securities purchased under agreements to resell	109	107
Government debt instruments	195	106
Japanese Yen:		
Foreign currency deposits	78	77
Government debt instruments	388	382
Accrued interest	6	5
Total	$1,083	$1,034

Total System investments denominated in foreign currencies were $21,368 million and $19,868 million at December 31, 2004 and 2003, respectively.

The maturity distribution of investments denominated in foreign currencies which were allocated to the Bank at December 31, 2004, was as follows (in millions):

	European Euro	Japanese Yen	Total
Maturities of Investments Denominated in Foreign Currencies			
Within 1 year	$455	$466	$ 921
Over 1 year to 5 years	152	-	152
Over 5 years to 10 years	10	-	10
Over 10 years	-	-	-
Total	$617	$466	$1,083

At December 31, 2004 and 2003, there were no material open foreign exchange contracts.

At December 31, 2004 and 2003, the warehousing facility was $5,000 million, with no balance outstanding.

6. BANK PREMISES, EQUIPMENT, AND SOFTWARE

A summary of bank premises and equipment at December 31 is as follows (in millions):

	Maximum Useful Life (in years)	2004	2003
Bank premises and equipment:			
Land	N/A	$ 22	$ 22
Buildings	$ 50	108	102
Building machinery and equipment	20	19	18
Construction in progress	N/A	8	5
Furniture and equipment	10	62	64
Subtotal		$219	$211
Accumulated depreciation		(102)	(98)
Bank premises and equipment, net		$117	$113
Depreciation expense, for the years ended		$ 10	$ 9

The Bank leases unused space to outside tenants. Those leases have terms ranging from one to twelve years. Rental income from such leases was $10 million and $9 million for the years ended December 31, 2004 and 2003, respectively. Future minimum lease payments under noncancelable agreements in existence at December 31, 2004, were (in millions):

2005	$10
2006	8
2007	7
2008	7
2009	6
Thereafter	28
	$66

The Bank has capitalized software assets, net of amortization, of $3 and $4 million at December 31, 2004 and 2003, respectively. Amortization expense was $2 million for each of the years ended December 31, 2004 and 2003.

Assets impaired as a result of the Bank's restructuring plan, as discussed in footnote 10, include software, building, and equipment. Asset impairment losses of $1 million for the period ending December 31, 2004 were determined using fair values based on quoted market values or other valuation techniques and are reported as a component of "Other expenses." The Bank had no impairment losses in 2003.

Notes to financial statements

7. COMMITMENTS AND CONTINGENCIES

At December 31, 2004, the Bank was obligated under noncancelable leases for premises and equipment with terms ranging from one to approximately eight years. These leases provide for increased rental payments based upon increases in real estate taxes, operating costs, or selected price indices.

Rental expense under operating leases for certain operating facilities, warehouses, and data processing and office equipment (including taxes, insurance, and maintenance when included in rent), net of sublease rentals, was $3 million for each of the years ended December 31, 2004 and 2003. Certain of the Bank's leases have options to renew.

Future minimum rental payments under noncancelable operating leases, net of sublease rentals, with terms of one year or more, at December 31, 2004, were (in thousands):

	Operating
2005	$ 530
2006	530
2007	530
2008	530
2009	530
Thereafter	1,458
	$4,108

At December 31, 2004, other commitments and long-term obligations in excess of one year were not material.

Under the Insurance Agreement of the Federal Reserve Banks dated as of March 2, 1999, each of the Reserve Banks has agreed to bear, on a per incident basis, a pro rata share of losses in excess of one percent of the capital paid-in of the claiming Reserve Bank, up to 50 percent of the total capital paid-in of all Reserve Banks. Losses are borne in the ratio that a Reserve Bank's capital paid-in bears to the total capital paid-in of all Reserve Banks at the beginning of the calendar year in which the loss is shared. No claims were outstanding under such agreement at December 31, 2004 or 2003.

The Bank is involved in certain legal actions and claims arising in the ordinary course of business. Although it is difficult to predict the ultimate outcome of these actions, in management's opinion, based on discussions with counsel, the aforementioned litigation and claims will be resolved without material adverse effect on the financial position or results of operations of the Bank.

8. RETIREMENT AND THRIFT PLANS

Retirement Plans

The Bank currently offers two defined benefit retirement plans to its employees, based on length of service and level of compensation. Substantially all of the Bank's employees participate in the Retirement Plan for Employees of the Federal Reserve System ("System Plan") and the Benefit Equalization Retirement Plan ("BEP"). In addition, certain Bank officers participate in the Supplemental Employee Retirement Plan ("SERP").

The System Plan is a multi-employer plan with contributions fully funded by participating employers. Participating employers are the Federal Reserve Banks, the Board of Governors of the Federal Reserve System, and the Office of Employee Benefits of the Federal Reserve Employee Benefits System. No separate accounting is maintained of assets contributed by the participating employers. The FRBNY acts as a sponsor of the Plan for the System and the costs associated with the Plan are not redistributed to the Bank. The Bank's projected benefit obligation and net pension costs for the BEP and the SERP at December 31, 2004 and 2003, and for the years then ended, are not material.

Thrift Plan

Employees of the Bank may also participate in the defined contribution Thrift Plan for Employees of the Federal Reserve System ("Thrift Plan"). The Bank's Thrift Plan contributions totaled $4 million for each of the years ended December 31, 2004 and 2003, and are reported as a component of "Salaries and other benefits."

9. POSTRETIREMENT BENEFITS OTHER THAN PENSIONS AND POSTEMPLOYMENT BENEFITS

Postretirement Benefits other than Pensions

In addition to the Bank's retirement plans, employees who have met certain age and length of service requirements are eligible for both medical benefits and life insurance coverage during retirement.

The Bank funds benefits payable under the medical and life insurance plans as due and, accordingly, has no plan assets. Net postretirement benefit costs are actuarially determined using a January 1 measurement date.

Following is a reconciliation of beginning and ending balances of the benefit obligation (in millions):

	2004	2003
Accumulated postretirement benefit obligation at January 1	$49.7	$43.9
Service cost-benefits earned during the period	0.8	0.8
Interest cost of accumulated benefit obligation	2.6	2.5
Actuarial (gain)/loss	(3.5)	0.1
Curtailment (gain)/loss	(0.4)	3.4
Special termination (gain)/loss	0.4	0.5
Contributions by plan participants	0.8	0.5
Benefits paid	(3.3)	(2.0)
Plan amendments	(4.5)	-
Accumulated postretirement benefit obligation at December 31	$42.6	$49.7

Notes to financial statements

At December 31, 2004 and 2003, the weighted-average discount rate assumptions used in developing the postretirement benefit obligation were 5.75 percent and 6.25 percent, respectively.

Following is a reconciliation of the beginning and ending balance of the plan assets, unfunded postretirement benefit obligation, and the accrued postretirement benefit costs (in millions):

	2004	2003
Fair value of plan assets at January 1	$ -	$ -
Actual return on plan assets	-	-
Contributions by the employer	2.5	1.5
Contributions by plan participants	0.8	0.5
Benefits paid	(3.3)	(2.0)
Fair value of plan assets at December 31	$ -	$ -
Unfunded postretirement benefit obligation	$42.7	$49.7
Unrecognized net curtailment gain	1.7	0.3
Unrecognized prior service cost	4.7	7.1
Unrecognized net actuarial gain (loss)	4.0	0.6
Accrued postretirement benefit costs	$53.1	$57.7

Accrued postretirement benefit costs are reported as a component of "Accrued benefit costs."

For measurement purposes, the assumed health care cost trend rates at December 31 are as follows:

	2004	2003
Health care cost trend rate assumed for next year	9.00%	10.00%
Rate to which the cost trend rate is assumed to decline (the ultimate trend rate)	4.75%	5.00%
Year that the rate reaches the ultimate trend rate	2011	2011

Assumed health care cost trend rates have a significant effect on the amounts reported for health care plans. A one percentage point change in assumed health care cost trend rates would have the following effects for the year ended December 31, 2004 (in millions):

	One Percentage Point Increase	One Percentage Point Decrease
Effect on aggregate of service and interest cost components of net periodic postretirement benefit costs	$0.6	$(0.4)
Effect on accumulated postretirement benefit obligation	5.4	(4.4)

At December 31, 2004 and 2003, the weighted-average discount rate assumptions used to determine net periodic postretirement benefit costs were 6.25 percent and 6.75 percent, respectively.

	2004	2003
Service cost-benefits earned during the period	$ 0.9	$0.8
Interest cost of accumulated benefit obligation	2.6	2.5
Amortization of prior service cost	(1.1)	(1.1)
Recognized net actuarial (gain)/loss	(0.2)	(0.6)
Total periodic expense	$ 2.2	$1.6
Curtailment (gain)/loss	(4.7)	-
Special termination loss	0.4	0.5
Net periodic postretirement benefit costs	$(2.1)	$2.1

Net periodic postretirement benefit costs are reported as a component of "Salaries and other benefits."

A plan amendment that modified the credited service period eligibility requirements created curtailment gains. The recognition of special termination losses is primarily the result of enhanced retirement benefits provided to employees during the restructuring described in footnote 10. The curtailment gain associated with restructuring programs announced in 2003 was recognized when employees left the Bank in 2004. The curtailment gain associated with restructuring programs announced in 2004 that are described in footnote 10 will be offset by unrecognized actuarial losses and prior service gains. As a result, an unrecognized net curtailment gain will be recorded in 2005 when the affected employees terminate employment.

The Medicare Prescription Drug, Improvement and Modernization Act of 2003 (the "Act") was enacted in December 2003. The Act established a prescription drug benefit under Medicare ("Medicare Part D") and a federal subsidy to sponsors of retiree health care benefit plans that provide benefits that are at least actuarially equivalent to Medicare Part D. Following the guidance of the Financial Accounting Standards Board, the Bank elected to defer recognition of the financial effects of the Act until further guidance was issued in May 2004.

Benefits provided to certain participants are at least actuarially equivalent to Medicare Part D. The estimated effects of the subsidy, retroactive to January 1, 2004, are reflected in actuarial gain in the accumulated postretirement benefit obligation and net periodic postretirement benefit costs.

Following is a summary of the effects of the expected subsidy (in millions):

	2004
Decrease in the accumulated postretirement benefit obligation	$5.0
Decrease in the net periodic postretirement benefit costs	$0.6

	Without Subsidy	With Subsidy
Expected benefit payments:		
2005	$2.3	$2.3
2006	2.4	2.3
2007	2.6	2.4
2008	2.6	2.4
2009	2.7	2.4
2010-2014	14.3	12.9
Total	26.9	24.7

Postemployment Benefits

The Bank offers benefits to former or inactive employees. Postemployment benefit costs are actuarially determined using a December 31, 2004, measurement date and include the cost of medical and dental insurance, survivor income, and disability benefits. For 2004, the Bank changed its practices for estimating postemployment costs and used a 5.25 percent discount rate and the same health care trend rates as were used for projecting postretirement costs. Costs for 2003, however, were estimated using the same discount rate and health care trend rates as were used for projecting postretirement costs. The accrued postemployment benefit costs recognized by the Bank were $7 million for each of the years ended at December 31, 2004 and 2003. This cost is included as a component of "Accrued benefit costs." Net periodic postemployment benefit costs included in 2004 and 2003 operating expenses were $63 thousand and $2 million, respectively.

10. BUSINESS RESTRUCTURING CHARGES

In 2003, the Bank announced plans for restructuring to streamline operations and reduce costs, including consolidation of Check operations and staff reductions in various functions of the Bank. In 2004, additional consolidation and restructuring initiatives were announced in the Check, Treasury Direct, System Purchasing Services (SPS), and FedImage operations. These actions resulted in the following business restructuring charges:

Major categories of expense (in millions):

	Total Estimated Costs	Accrued Liability 12/31/03	Total Charges	Total Paid	Accrued Liability 12/31/04
Employee separation	$3.9	$0.9	$2.6	$0.8	$2.7
Contract termination	-	-	-	-	-
Other	-	-	-	-	-
Total	$3.9	$0.9	$2.6	$0.8	$2.7

Employee separation costs are primarily severance costs related to identified staff reductions of approximately 363, including 207 staff reductions related to restructuring announced in 2003. These costs are reported as a component of "Salaries and other benefits." Contract termination costs include the charges resulting from terminating existing lease and other contracts and are shown as a component of "Other expenses."

Restructuring costs associated with the write-downs of certain Bank assets, including software, buildings, leasehold improvements, furniture, and equipment are discussed in footnote 6. Costs associated with enhanced pension benefits for all Reserve Banks are recorded on the books of the FRBNY as discussed in footnote 8. Costs associated with enhanced postretirement benefits are disclosed in footnote 9.

The Bank anticipates substantially completing its announced plans by February 28, 2006.

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