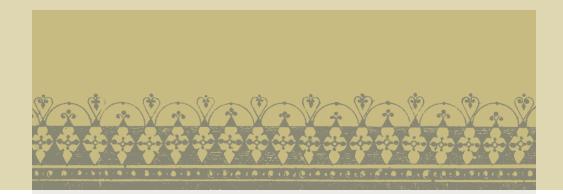


## MISSION

As a regional Reserve Bank, we work within the Federal Reserve System to foster the stability, integrity, and efficiency of the nation's monetary, financial, and payments systems. In doing so, we inspire trust and confidence in the U.S. financial system.

#### VISION

We want to be a standard of excellence within the Federal Reserve System and continuously improve our service to our customers and the public. Because success depends on each of us, we are striving to create a workplace where we all live our Bank's values and can reach our full potential.



## A MESSAGE FROM THE PRESIDENT AND FIRST VICE PRESIDENT

To our stakeholders, customers, and Fifth District communities:

The new millennium brought excitement and new energy to the Bank and its staff as we sought new opportunities to serve our stakeholders and the broader public. We worked to strengthen further our contribution to Federal Reserve monetary, banking, and payments system policies. We focused our bank supervision and regulation resources on carefully monitoring the challenges that might arise in a slowing economy and an increasingly volatile financial environment. And we looked inward to find ways to further develop and reinforce the ability of our talented staff to serve our customers at the highest level of excellence. While there is always room for continued improvement, we believe the Bank made notable progress in each of these areas, as detailed in "Mileposts on the Road to Excellence."

Both the national and Fifth District economies shifted to markedly slower growth over the course of 2000. The robust activity that characterized the U.S. economy in recent years continued in the first half of the year. District businesses took extraordinary measures to attract and retain workers in exceptionally tight labor markets. Optimism prevailed, both in financial markets and the general business community.

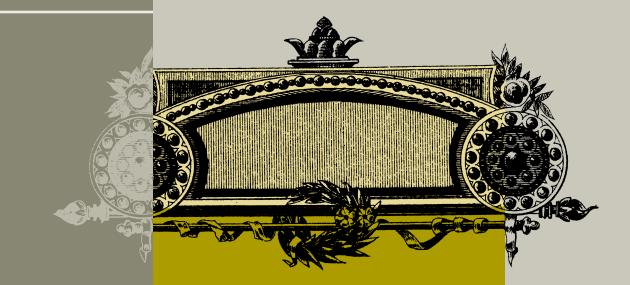
Later in the year, though, consumer and business spending and job growth decelerated sharply, both nationally and regionally, amidst rising energy prices and diminished optimism in equity markets. The weakening in activity was especially abrupt in the manufacturing sector, which challenged those local areas in the District that depend heavily on manufacturing for jobs, income, and growth. Layoffs and plant closings in the textile and furniture industries in the Carolinas and parts of Virginia were also particularly noteworthy.

Regrettably, the economic slowdown had a negative impact on many District households and businesses. The prospect of more sustainable growth in the demand for goods and services, however, will provide a firm foundation for productive investment, stronger real economic growth, and rising living standards over the longer term. We at this Bank are dedicated to helping produce this result.

For many years we have followed a tradition of publishing in our Report an essay regarding a significant issue related to Federal Reserve policy. This year Alfred Broaddus and Marvin Goodfriend, senior vice president and policy advisor, address a question many would not have anticipated even five years ago — challenges the Fed will face in conducting monetary policy in an era of potential government budget surpluses. What assets should the Fed acquire to support essential longer-run growth in the nation's money supply if continuing surpluses sharply reduce the supply of U.S. Treasury securities? The issue may appear arcane at first glance, but it goes to the heart of the Federal Reserve's ability to conduct monetary policy effectively in the years ahead.

We are grateful for your support and look forward to continuing to serve you in the future.

J. Alfred Broaddus, Jr. PRESIDENT Walter A. Varvel



WHAT ASSETS SHOULD THE FEDERAL RESERVE BUY?

> J. Alfred Broaddus, Jr. and Marvin Goodfriend

## 

## I. INTRODUCTION

or the first time in memory, large federal budget surpluses have led to a substantial paying down of federal government debt. It is even possible that most of the Treasury debt could be retired sometime before the end of the decade if the economy continues to grow steadily as it has in recent years.<sup>1</sup>

The possibility that the stock of Treasury debt could be reduced substantially in coming years presents the Federal Reserve with an important policy dilemma. The Fed implements monetary policy by buying and selling Treasury securities. Over time the Fed is a net buyer of these securities, since it must provide for the growth of the monetary base — currency and bank reserves needed to support a growing economy. As a consequence, the Fed has acquired a portfolio of around \$500 billion of marketable Treasury debt, about 15 percent of the roughly \$3 trillion of marketable Treasury debt outstanding. If the stock of Treasury debt outstanding were retired, the Fed would be forced to replace its current holdings of Treasury securities with other assets. Moreover, to provide for growth of currency and bank reserves in the future, the Fed would have to acquire additional assets other than Treasury securities.<sup>2</sup>

This essay has two objectives. First, we provide a context for thinking about the broad asset acquisition policy of the Federal Reserve. Second, working within this context, we propose that the Fed and the Treasury cooperate to ensure that the Fed can continue to acquire and hold Treasury securities as fiscal surpluses reduce the stock of Treasury securities outstanding.

Fundamental principles of central banking guide our thinking. In Section 2, we distinguish between Federal Reserve monetary and credit policies. Monetary policy is concerned with the *overall size* of the Fed's balance sheet and involves the management of the Fed's aggregate liabilities: currency plus bank reserves. Credit policy, in contrast, involves the *composition* of the assets that the Fed acquires when it creates money.

From an operational perspective, the assets that the Fed buys matter little for monetary policy; asset acquisition is merely the vehicle by which the Federal Reserve injects money into the economy. Therefore, the Fed must look beyond the operational requirements of monetary policy in setting policies regarding the assets it holds. In Section 3, we argue that the Fed's asset acquisition policies should support monetary policy by protecting the Fed's independence. We assert two closely related principles. First, the Fed's asset acquisitions should respect the integrity of the fiscal policymaking process by minimizing the Fed's involvement in allocating credit across sectors of the economy. Second, assets should be chosen to minimize the risk that political entanglements might undermine the Fed's independence and the effectiveness of monetary policy.

The authors are respectively president, and senior vice president and policy advisor. The views expressed are the authors' and not necessarily those of the Federal Reserve System.

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As we explain below, the Fed's current practice of dealing in Treasury securities satisfies these two principles in a quite natural manner. As additional Treasury debt is paid down, however, the Fed can no longer count on the existence of a large outstanding stock of Treasury securities to satisfy its needs. The Fed could replace Treasury debt in its portfolio with assets such as discount window loans to depository institutions, repurchase agreements with private counterparties, securities of private businesses, debt of state, local or foreign governments, and liabilities of federal agencies or federal government sponsored enterprises, to name several possibilities.<sup>3</sup> In Section 3 we stress that these alternatives risk drawing the Federal Reserve into potentially compromising and politically sensitive disputes involving the allocation of its credit.

We regard the design of its asset acquisition policy as part of the unfinished business of building the modern, independent Federal Reserve. The Fed's roots as a modern central bank can be traced back to the 1951 Treasury-Federal Reserve Accord. This agreement between the Truman administration and the Federal Reserve freed the Fed from its World War II commitment to support Treasury bond prices and enabled the Fed to pursue monetary policy independently of the Treasury's fiscal concerns. As it happened, the huge wartime increase in Treasury borrowing and the recurring budget deficits thereafter created a stock of Treasury debt large enough to satisfy the Fed's asset needs.

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In retrospect, the crucial role played by the availability of Treasury debt in supporting the Fed's monetary policy independence appears to have been taken for granted. Without it the Federal Reserve would have had to look elsewhere for assets to acquire in implementing monetary policy. In Section 4 we argue that the nation should recognize the advantages of continuing to provide the Fed with Treasury debt for its portfolio. In particular, we propose that the Treasury cooperate with the Federal Reserve to ensure that the Fed can always satisfy its asset needs with Treasury securities. In the final section we evaluate our proposal from the perspective of the fiscal authorities — the Treasury and Congress in its fiscal role.

In effect, we are proposing that the Fed and the Treasury arrange an accord for credit policy to supplement the 1951 Accord for monetary policy.<sup>4</sup> Our proposed credit policy accord would complete the institutional foundation of the modern, independent Federal Reserve and help to ensure its effectiveness as a central bank in the years ahead.

## II. THE DISTINCTION BETWEEN MONETARY POLICY AND CREDIT POLICY

ny analysis of the Fed's asset acquisition practices must begin by distinguishing between monetary and credit policy.<sup>5</sup> The distinction between monetary and credit policy is straightforward. Monetary policy is undertaken in pursuit of the Fed's overall macroeconomic objectives — the maintenance of low inflation in order to facilitate economic growth and efficient use of the nation's resources. Monetary policy involves changes in the monetary base (currency plus bank reserves) accomplished through open market operations. For example, the Fed might take an expansionary monetary policy action by deliberately purchasing securities in order to expand aggregate bank reserves and the money supply. In practice, the Fed implements monetary policy using the federal funds rate — a key overnight interest rate in the national money market - as its policy instrument. The Federal Open Market Committee (FOMC) announces a target for the funds rate. It then holds the actual funds rate close to the target by adjusting the overall size of the Fed's balance sheet with open market operations to satisfy the public's demand for bank reserves and currency at the targeted funds rate.

From the standpoint of conducting monetary policy, the *composition* of the Federal Reserve's portfolio is largely a matter of indifference. There are two operational requirements for monetary policy purposes. First, the Fed must be prepared to acquire liquid assets to satisfy a temporary need for currency and reserves that would otherwise put undesired upward pressure on its federal funds rate target.<sup>6</sup> Second, the Fed must hold a portion of its portfolio in liquid securities that can be sold quickly to drain currency or reserves on short notice whenever market forces put undesired downward pressure on the FOMC's federal funds rate target.<sup>7</sup>

*Credit policy*, as distinct from monetary policy, involves the choice of Federal Reserve assets, i.e., the allocation of Federal Reserve credit, given the overall size of the Fed's balance sheet. For example, the Fed takes a credit policy action when it funds a discount window loan to a commercial bank with proceeds from selling Treasury securities. In this case, the Federal Reserve would be redirecting credit from the Treasury to a private bank. The important point is this: Monetary policy determines the quantity of the monetary base and, as a by-product, establishes the aggregate amount of credit that the Federal Reserve will extend. Federal Reserve credit policy, on the other hand, determines how this given aggregate amount of credit will be allocated across alternative assets.



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# III. GUIDING PRINCIPLES FOR FED ASSET ACQUISITION

t is now widely recognized that central bank independence strengthens the conduct of monetary policy and improves its effectiveness. Federal Reserve asset acquisition practices have the potential to strengthen or weaken the Fed's independence. We begin this section by describing three aspects of Fed independence and their importance for the conduct of monetary policy. Then we propose two principles to guide the Fed's acquisition of assets: acquisitions should respect the integrity of fiscal policy and protect the independence of the Federal Reserve. We explain why restricting the Fed's asset purchases to Treasury securities satisfies both principles. We also explain how the acquisition of assets other than Treasury securities could undermine the independence of the Federal Reserve and, with it, the effectiveness of monetary policy.

## THE CRUCIAL IMPORTANCE OF FEDERAL RESERVE INDEPENDENCE

The birth of the modern, independent Federal Reserve is generally dated to 1951 when the famous Accord between the Fed and the Treasury restored the Fed's *instrument independence* after the wartime interest rate peg.<sup>8</sup> Ever since, the Fed has independently employed the instruments of monetary policy — currently the federal funds rate — to achieve its macroeconomic policy objectives.

In the 1950s monetary policy was committed to supporting the fixed dollar price of gold as part of the Bretton Woods fixed exchange rate system. The nation left the gold standard when this system collapsed in 1973. After several years of rising inflation and no clear guidance from Congress regarding a replacement for the gold standard, the Fed in 1979 asserted the high priority it attached to low inflation as a longer-term objective for monetary policy. The Federal Reserve took responsibility publicly for high inflation and subsequently brought it down. Today, the public broadly understands that Fed monetary policy determines the trend rate of inflation over any substantial period of time. In effect, and importantly, the Fed's *independent commitment to low inflation* has come to substitute for the gold standard as the nominal anchor for U.S. monetary policy.

Beyond these first two aspects of Fed independence, Congress early on recognized that the Fed needed *financial independence* in order to conduct monetary policy effectively. The Fed is allowed to fund its operations from interest earnings on its portfolio of securities, and the FOMC is given wide discretion regarding the size and composition of its portfolio.<sup>o</sup> The Fed was exempted from the congressional appropriations process in order to keep the political system



from abusing its money creation powers and to enable the Fed to react quickly and independently to unanticipated short-run developments in the economy.

Financial independence is the bedrock institutional foundation of effective monetary policy. In its absence, Congress and the Treasury could become more influential in the conduct of policy. In that event, the Fed's instrument independence would be weakened, and possibly its low inflation commitment as well, with adverse consequences for the economy.<sup>10</sup>

## ASSET ACQUISITION SHOULD RESPECT THE INTEGRITY OF FISCAL POLICY

With these points about Fed independence in mind, we assert as a first guiding principle that Federal Reserve asset acquisition should respect the integrity of fiscal policy." Congress has bestowed financial independence on the Fed only because it is essential if the Fed is to do its job effectively. A healthy democracy requires full public disclosure and discussion of the expenditure of public funds. The congressional appropriations process enables Congress to evaluate competing budgetary programs and to establish priorities for the allocation of public resources. Hence the Fed — precisely because it is exempted from the appropriations process — should avoid, to the fullest extent possible, taking actions that can properly be regarded as within the province of fiscal policy and the fiscal authorities.

When the Fed purchases Treasury securities, it extends Federal Reserve credit to the Treasury. Doing so, however, leaves all the fiscal decisions to Congress and the Treasury and hence does not infringe on their fiscal policy pre-rogatives. When the Fed extends credit to private or other public entities, however, it is allocating credit to particular borrowers, and therefore taking a fiscal action and invading the territory of the fiscal authorities.<sup>12</sup> Except where banking or foreign exchange policy dictates the acquisition of particular assets — namely, loans to depository institutions or foreign exchange — any such fiscal incursion by the Fed should be regarded as a violation of the integrity of the fiscal policymaking process.<sup>13</sup>

The huge quantity of Treasury debt issued during World War II and the recurring deficits throughout the postwar era have enabled the Federal Reserve to satisfy the bulk of its asset acquisition needs by purchasing outstanding Treasury debt. When the Fed holds Treasury securities, it remits the interest earned to the Treasury.<sup>14</sup> The Fed's open market purchases in effect enable the government as a whole to buy back interest-bearing debt and replace it with non-interest-bearing monetary liabilities of the central bank.<sup>15</sup>

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The Fed's Treasuries-only asset acquisition policy has worked exceedingly well in respecting the integrity of fiscal policy.<sup>16</sup> By acquiring primarily Treasury securities, the Fed has extended the bulk of its credit to the Treasury and therefore minimized its participation in private credit markets. Doing so has enabled the Fed to steer clear of credit allocation decisions and has minimized its exposure to credit risk while providing sufficient liquidity to meet its needs. The use of the Federal Reserve's credit policy powers to lend more widely would have amounted to fiscal policy inessential to central banking that is properly left to the fiscal authorities.

To sum up, we think that respect for the primacy of the regular appropriations process should figure prominently in the choice of Federal Reserve assets. The Treasuries-only policy has been highly desirable because it has reinforced the integrity of the fiscal policymaking process. Equally importantly, it has protected the Fed's financial independence by shielding the Fed from charges that it has usurped the authority of Congress by making independent fiscal policy decisions.

## ASSET ACQUISITION SHOULD SUPPORT FEDERAL RESERVE INDEPENDENCE

As a second guiding principle, we assert that the Fed's asset acquisition policy ought to give priority to preserving public support for the Fed's independence by insulating the central bank as much as possible from potentially damaging disputes regarding credit allocation. This second principle is closely related to — in fact, inseparable from — the first, since choosing assets to respect the integrity of the fiscal policy process also minimizes the opportunity for the Fed to become ensnarled in contentious disputes over its portfolio. Clearly, the Treasuries-only policy satisfies the second principle as well as the first.

Since the Federal Reserve can no longer depend on a large pool of outstanding Treasury securities to draw on, alternative approaches using other assets will naturally be considered. It is important, however, to appreciate the difficulties the Fed would confront if it were forced to depart from Treasuriesonly. At a minimum, the Fed would have to decide whether to allocate its credit more widely to depository institutions through discount window loans; to private counterparties by engaging in repurchase agreements or purchasing their securities; or to state or local governments, foreign governments, or federal government agencies and federal government sponsored enterprises.<sup>17</sup>

In these circumstances, because all financial assets other than Treasuries carry *some* credit risk, the Federal Reserve would be responsible for judging risk relative to return in order to decide whether prospective asset acqui-



sitions were priced appropriately and whether assets in its portfolio were worth retaining.<sup>18</sup> There would be costs associated with assessing asset value and creditworthiness, whether the Federal Reserve hired staff to make those judgments internally or hired independent portfolio management. Further, the extension of even a small amount of Federal Reserve credit to a particular entity might be interpreted as conferring a preferential status enhancing that entity's creditworthiness. The status of a particular asset or loan could deteriorate while in the Fed's portfolio, requiring it to be sold, or not rolled over, in order to avoid taxpayer losses. It might be difficult, however, for political or bank supervisory reasons, for the Fed to sell such an asset or call such a loan.

In any case, the Federal Reserve would be held accountable by Congress for its investment returns and would have to defend its asset allocations. Needless to say, for purposes of accountability, if nothing else, the Fed's asset holdings and its portfolio actions would need to be completely transparent. If the Fed were routinely choosing among non-Treasury securities, ongoing congressional oversight would open the door to political interference in its particular asset choices. If the Fed were holding a variety of assets other than Treasury securities, there would be considerable scope for misallocation of Fed credit. Particular forces in Congress might be tempted to exploit the Fed's off-budget status to circumvent the appropriations process. The Fed could be subjected to pressure from private entities, directly and through Congress or the administration. Relatively small and seemingly innocuous requests from Congress or the administration might be difficult for the Fed to resist.

Although the Fed is independent in the three senses described above, it needs cooperation from Congress and the administration on banking, financial, and payments system policy matters to function effectively within the government. This interdependence could expose the Fed to political pressure to make undesirable concessions with respect to its asset acquisitions in return for support on other matters. Worse, the Fed could be pressured to make concessions to particular interests in conducting *monetary policy* in order to deflect pressure regarding asset acquisitions.<sup>19</sup>

In short, a forced departure from Treasuries-only would create significant challenges for the Federal Reserve. Acquiring assets other than Treasuries would inevitably confront the Fed with difficult, politically charged decisions regarding the management of its asset portfolio. It might be possible to design an asset acquisition policy relying on non-Treasury securities that would surmount these difficulties to some extent. However, restricting asset acquisition to Treasuries alone is the only *credible*, *bright line* policy because all other assets would involve the Fed in the allocation of credit to one degree or another. Crossing that line *at all* would create significant problems.



# IV. TREASURIES-ONLY WITH THE COOPERATION OF THE TREASURY

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s fiscal surpluses diminish the stock of Treasury debt, the Fed's first priority in choosing an asset acquisition strategy in the new environment should be to uphold the principles of independent central banking presented above. This suggests that before the Fed broadens the range of assets that it acquires beyond Treasury securities, it should explore how the Treasury might tailor its debt management to help meet the Fed's needs. As we propose below, it would be straightforward for the Treasury and the Fed to agree to a new accord for Fed *credit* policy in the form of a cooperative arrangement that would allow the Fed to meet its asset acquisition needs with Treasury securities alone.

Our proposed arrangement would work as follows. Even if federal budget surpluses enabled the Treasury to pay down all of its debt outstanding, the Treasury would still maintain an outstanding stock of securities large enough to accommodate the Federal Reserve's needs.<sup>20</sup> Over time, maturing securities in the Fed's portfolio could be reissued by the Treasury, which would also issue additional securities to accommodate the secular growth in the monetary base.<sup>21</sup> The Fed would purchase the newly issued securities both to replace the maturing issues and to meet the growing demand for base money.<sup>22</sup> In order to help the Treasury accommodate its needs, the Fed could project the likely growth of its balance sheet, and any adjustments in the desired liquidity or maturity composition of its portfolio, and report these to the Treasury in advance. The Treasury would incur no interest cost by providing debt for the Fed to buy since the Fed would remit the interest to the Treasury.

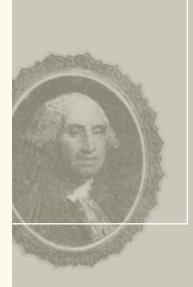
It is important to recognize that even if — in contrast to our proposal the Fed accommodated the demand for base money by purchasing securities other than Treasury debt, the Fed would still remit to the Treasury the earnings on its portfolio after expenses. This implies that, for the Treasury, the choice between the Fed following a Treasuries-only policy or purchasing non-Treasury assets is a choice as to how it will realize the revenue from money creation. With a Treasuries-only policy, the revenue from money creation would be realized when the Treasury issues debt that the Fed would buy — in effect, the Treasury would capitalize the flow of earnings on non-Treasury investments that the Fed otherwise would have held. If, instead, the Fed abandoned Treasuries-only and held non-Treasury assets, the Treasury would receive the revenue from money creation as a flow of earnings on the Fed's portfolio.

The Treasury's choice between these two alternatives would have *no direct budgetary consequences*. The overall federal budget position (combining the Federal Reserve and the Treasury) would be the same whether the Treasury enabled the Fed to continue its Treasuries-only policy by issuing additional

debt or not. Without a change in tax or expenditure policy, the projected federal surpluses imply that eventually either the Fed or some other government entity must acquire non-Treasury assets. In that case, the only question is how the government will choose to manage its investment portfolio.

From this perspective, then, the central issue is whether the Fed should meet the public's growing demand for base money by acquiring assets other than Treasury debt and remitting the earnings to the Treasury, or the Treasury should capitalize the flow of remittances by issuing debt which the Federal Reserve would buy. By capitalizing the Fed's remittances, the Treasury would immunize the Fed from having to acquire assets other than Treasury securities. Moreover, in doing so the Treasury would lodge the responsibility for choosing how to utilize the revenue from money creation completely and appropriately with the fiscal authorities.

Thus, under our proposed cooperative arrangement the Fed would satisfy its current and secular asset acquisition needs with cooperation from the Treasury. Seasonal, cyclical, or emergency fluctuations in the demand for base money could be provided for in a number of ways. The Fed could meet temporary increases in money demand or offset sales of foreign exchange by purchasing non-Treasury financial instruments.<sup>23</sup> Since such acquisitions of private assets would be self-reversing and relatively limited in size, they would involve the Fed only minimally in credit allocation. Even in these temporary instances, however, the Fed would need to buy non-Treasury securities only if the stock of liquid securities that the Treasury was willing to maintain in the markets was too small to meet the Fed's needs. The Treasury could, of course, routinely maintain an outstanding stock of short-term debt large enough to accommodate reasonable projections of the Fed's prospective short-term needs above and beyond its secular requirements. Alternatively, the Treasury could agree to meet the Fed's temporary needs with additional supply. There might be good reason for the Treasury to maintain a floating liquid debt in any case to sustain a market presence and market expertise, to serve as a shock absorber for its own fiscal financial needs, and to provide the financial markets with a stock of highly liquid, safe securities. If the Treasury chose to support an active market for its securities, the Fed could readily sell Treasury securities from its portfolio to offset discount window lending or foreign exchange purchases; otherwise, the Fed could establish a facility to borrow from the public as a means of draining base money temporarily.





It is worth pointing out that the Treasury and Congress in its fiscal role would benefit from our proposal as would the Fed. Presumably, the fiscal authorities would prefer to consolidate fiscal (credit) policy decisions fully under their control in order to ensure the integrity of the fiscal policymaking process. The fiscal authorities would presumably favor having the *exclusive* power to invest the revenue from money creation, even if there were other surplus funds to invest. By freeing the Fed from having to acquire non-Treasury securities, our proposed arrangement would preclude the Federal Reserve from investing *any* of that revenue.<sup>24</sup> Consequently, our proposal is not simply a request for the fiscal authorities to do a favor for the monetary authority. By granting full control of the revenue from money creation to the fiscal authorities, our proposal would clarify the relationship between monetary and fiscal policy with respect to asset acquisition, helping to avoid conflict and strengthen both.

The above point notwithstanding, one might well ask whether our proposal is just a way to shift the burden of investing in private assets from the Fed to the fiscal authorities. In response, we would emphasize that nothing requires the government to accumulate assets with the revenue it receives from money creation. The government could, if it so chose, use the revenue to reduce other taxes or increase expenditures. So, if the government does choose to accumulate private assets with the revenue from money creation, it would have to be for fiscal reasons unrelated to monetary policy. Therefore, such investments ought to be carried out and managed by the fiscal authorities independently of the Federal Reserve.

A second question, closely related to the first, is this: If the government decides to accumulate private assets, for whatever reason, shouldn't it take advantage of the Fed's independence to minimize the risk of political interference in the choice of assets? (This question will more likely be asked by people who think the Fed's independence is secure, rather than by people like us who think it is fragile.) The answer to this question is the same as the answer to the first. It is not necessary for the government to acquire private assets permanently in order to implement monetary policy, so the Fed should not be made the instrumentality for doing so.

A final concern is that, as a practical matter, it might be difficult for the Fed to persuade Congress and the Treasury to cooperate in a Treasuries-only policy. We would point out, however, that there could be adverse financial consequences for the fiscal authorities if the Fed were forced to depart from Treasuries-only. As a prudent, independent central bank following the two principles set out above, the Fed would properly purchase liquid, low-risk assets. Precisely because of their desirable properties, such assets would pay a relatively low return.<sup>25</sup> Remember, though, that this return would be the gov-

ernment's revenue from money creation under any alternative where the Fed purchases private assets. Therefore, acquiring assets because of their desirable features from the Fed's point of view would limit the government's revenue from money creation. In essence, the Fed would be using a part — perhaps a sizable part — of the revenue from money creation to buy liquidity services and insure the Fed's assets against credit and price risk, thereby denying the government the use of this revenue for other purposes.<sup>26</sup>

We believe that if it were understood that a forced departure from Treasuries-only would be costly to the government, then Congress and the Treasury, *in their own narrow budgetary interest*, ought to prefer that the Fed stick to Treasuries-only. To reiterate, Treasuries-only would enable the Fed to transfer directly to the fiscal authorities *all* the revenue (net of the Fed's operating expenses) that the government gets from the creation of additional base money in a growing economy. The fiscal authorities could then utilize that revenue in whatever manner they deemed appropriate.

## **VI.** CONCLUSION

he core of this essay is our proposal that the Federal Reserve and the Treasury cooperate to enable the Fed to continue acquiring Treasury securities in its operations supporting the growth of the monetary base, even if prospective federal budget surpluses reduce the stock of these securities outstanding in the future.

Our proposal — and, indeed, the whole subject of Fed asset acquisition — may at first glance appear to be in the realm of lower-level operational details in implementing monetary policy. As we have tried to show, however, Fed asset acquisition policies can profoundly affect the Fed's conduct of monetary policy. To formulate and carry out monetary policy effectively, the Fed must maintain a high level of independence within the government, and its asset acquisition practices must support and reinforce that independence. With this in mind, we proposed two related principles to guide Fed asset selection: (1) that acquisitions respect the integrity of fiscal policy by precluding the use of the Fed's off-budget status to allocate credit across various sectors of the economy, and (2) that they insulate the Fed from political entanglements that could undermine its independence. We showed that the Fed could

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conform to both of these principles by restricting its asset portfolio to Treasury securities. While we did not discuss alternative acquisition policies in detail, we warned that *all* alternatives would present significant risks to the integrity of fiscal policy and to the Fed's independence, and hence to the quality of U.S. monetary policy.

In addition, we emphasized several points. First, there is no need for the Fed or the government as a whole to acquire private assets, except maybe temporarily, to implement monetary policy. Second, it is feasible for the Fed to follow a Treasuries-only policy with the cooperation of the Treasury, even if the Treasury has no other reason to issue debt. Third, there would be no interest cost to the government to provide debt for the Fed to buy. Fourth, since the government would forego revenue if the Fed held a portfolio of safe, liquid non-Treasury assets, it is in the financial interest of the fiscal authorities to cooperate with the Fed in a Treasuries-only approach. Fifth, and similarly, Treasuries-only enables the Fed to transfer directly to the fiscal authorities all the revenue (net of the Fed's operating expenses) from money creation. Sixth, the government could reduce taxes or raise expenditures as an alternative to acquiring private assets with the revenue from money creation. Finally, and in accordance with the first point in this list, any decision to acquire private assets with that revenue would be for fiscal purposes unrelated to monetary policy; hence, those assets should be managed independently of the Federal Reserve.

In sum, we believe that a Treasuries-only policy is both feasible and by far the best approach to Fed asset acquisition despite the impact of the federal budget surpluses on the stock of outstanding Treasury debt. The Fed has been fortunate indeed to be able to pursue a Treasuries-only policy for so long. We urge the Fed and the Treasury to find a way to cooperate, under the auspices of Congress if need be, to ensure that the Fed can continue to restrict its assets to Treasuries in the future.

This article benefited from the comments of our colleagues in the Bank's Research Department, especially Michael Dotsey, Robert Hetzel, Thomas Humphrey, Jeffrey Lacker, John Walter, and John Weinberg. Robert King, Bennett McCallum, and David Small also contributed valuable comments.



#### ENDNOTES

1. The Congressional Budget Office (2001) forecasts that, given current projections of the federal surplus, all Treasury debt available for redemption will be retired by the end of the decade. The debt may disappear more slowly, of course, if the cumulative surpluses turn out to be smaller than currently forecast. This would be the case if economic growth slowed, if Congress reduced federal tax rates, or if Congress increased federal spending.

The CBO estimates that in 2001 about \$1 trillion of Treasury debt will be unavailable for redemption, primarily 30-year bonds that will not mature until after 2011. The Treasury began to buy back long-term debt in 2000. However, the buyback program will be limited because it seems likely that many holders will not choose to sell at prices that the government is willing to pay. Debt held in nonmarketable form (for example, savings bonds or securities issued to state and local governments) and debt that serves other purposes besides financing government activities also adds to debt unavailable for redemption. See Congressional Budget Office (2001), pp. 14-15.

2. The Congressional Budget Office (2000) suggests that the disappearance of Treasury debt will be temporary. For instance, one CBO forecast, assuming onbudget balance through 2010 and that the surpluses in the Social Security trust fund are saved, predicts that the government will begin to accumulate private assets within the decade and that net federal debt will reach zero shortly thereafter. Growing expenditures projected for health and retirement programs associated with aging baby boomers then push the budget back into deficit. In this forecast the stock of private assets is drawn down by 2027, and Treasury debt begins to grow rapidly thereafter.

In light of the likely temporary nature of the problem, some might argue that the concerns raised in this article are exaggerated. We think otherwise. Even if Treasury debt returns, the Fed could be denied the use of Treasury securities for decades — plenty of time for the problems highlighted in the article to emerge. Moreover, the acquisition of private assets by the Fed would inevitably benefit certain market participants who would then have a financial stake in preventing a return to Treasuries. Consequently, political pressure might make it difficult for the Fed to exit private asset widely available.

3. The legal issues are complex, and legislation may be required for the Fed to meet its asset needs with at least some of the possible alternatives to Treasury securities. For instance, the Fed is not authorized under current law to purchase private bonds or securities. See Small and Clouse (2001) for a thorough discussion of the assets the Fed is authorized to acquire under the Federal Reserve Act.

4. The policy prescription advanced here builds on Goodfriend (1994).

5. This distinction was used initially in Goodfriend and King (1988).

6. See, for instance, Meulendyke (1998), especially pp. 168-69.

7. Alternatively, the Fed could establish a facility to borrow from the public in order to drain currency and reserves from the economy.

8. See Stein (1969) for an account of the dramatic events leading up to the 1951 Accord.

9. The Federal Reserve also receives significant revenue from depository institutions and the Treasury in return for the provision of financial services. 10. See Blinder (1998), Chapter III; Fischer (1994), Sections 2.7 and 2.8; and Meyer (2000) for central-banker perspectives on independence. For formal theoretical and empirical analysis, see Cukierman (1992), Part IV; Drazen (2000), Part 5.4; Persson and Tabellini (2000), Part V, Section 17.2, and references contained therein.

11. Hetzel (1997), Section 5, develops this point in detail.

12. In principle, the Fed could consider purchasing and maintaining a "neutral" portfolio of non-Treasury financial assets mirroring the aggregate outstanding stock of financial assets in some way. Defining and maintaining such neutrality in practice, however, would be exceedingly difficult if not impossible, especially in the short run.

13. There are good reasons for the Fed to limit its discount window lending and foreign exchange operations. See Goodfriend and King (1988), Broaddus and Goodfriend (1996), and Goodfriend and Lacker (1999).

14. In keeping with its financial independence, the Federal Reserve remits the interest earned on its portfolio after expenses. Since interest earnings run well over expenses, all interest on the marginal acquisition of Treasury securities is remitted to the Treasury.

15. As an accounting matter, Treasury securities held by the Federal Reserve are regarded as outstanding because the Federal Reserve Banks are independent of the government.

16. The Federal Reserve generally has restricted its asset acquisitions to U.S. government securities, i.e., the bills, notes, and bonds of the U.S. Treasury. For convenience, we refer to this practice as *Treasuries-only*. The main exceptions have been discount window loans, holdings of foreign currency denominated assets, and modest holdings of the debt of federal agencies.

A major exception occurred in order to satisfy the enlarged temporary demand for currency around the century date change. The FOMC voted on August 24, 1999, to suspend several provisions of its "Guidelines for the Conduct of System Operations in Federal Agency Securities" in order to enlarge temporarily the pool of securities eligible as collateral for the Federal Reserve Open Market Desk's repurchase agreements. The principal effect of this action from the perspective of this article was the inclusion of pass-through mortgage securities of the Government National Mortgage Association (Ginnie Mae), Freddie Mac, and Fannie Mae. See Federal Reserve Bank of New York (2000), p. 3.

17. Dudley and Youngdahl (2000) discuss some of these alternatives and their drawbacks. Recall also footnotes 3 and 12 above.

18. Credit risk is an issue for all practical alternatives to Treasuries except gold and some classes of non-Treasury securities that carry the full faith and credit of the U.S. government. Ginnie Mae is the only such entity whose securities are issued on a large scale.

19. See Meyer (2000) for a discussion of the relationship between the Federal Reserve and the executive and legislative branches of the federal government.

20. Actually, the outstanding stock of Treasury debt would become insufficient to meet the Fed's needs well before the entire stock was paid down. See the discussion in Dudley and Youngdahl (2000).

21. The Fed's balance sheet must expand over time to satisfy the public's need for additional base money (mainly currency) as the economy grows; otherwise, the growing real demand for base money would create deflation. Note that the Fed must also meet the demand for U.S. currency abroad.

22. If the Treasury maintained a sizable stock of floating debt, and there continued to be a relatively liquid market for its securities, then the Treasury periodically could auction securities (above and beyond the floating debt), which the Fed could buy in the secondary market as it does today. Liquidity would be enhanced, in turn, by the Fed's participation in the market for Treasury securities.

The Treasury could issue securities for the Fed to buy even if its securities were relatively illiquid. Financial entities could continue to bid for Treasury debt at auction and sell it to the Fed in the secondary market. In this case, however, transactions costs might be higher in equilibrium to compensate market makers for dealing in relatively illiquid Treasury debt.

Alternatively, arrangements could be made for the Treasury to place its debt directly with the Fed. To implement this arrangement, Congress would have to repeal a provision in the Federal Reserve Act that prevents such direct placements. The mechanics and safeguards for arranging direct placements would have to be worked out carefully. In particular, legislation would have to require unequivocally that direct placements would be undertaken *only at the Fed's request*.

23. See footnote 13.

24. Alternatively, Congress could provide legislative direction regarding how the Fed should invest the revenue from money creation. It would be difficult, however, for Congress to anticipate the many particular issues the Fed would confront in managing its investments, let alone provide guidance for all these contingencies in advance. Therefore, difficult decisions would have to be made on an ongoing basis under congressional oversight, with all the adverse consequences for monetary and fiscal policy warned of in this article.

25. Repurchase agreements, for example, have these properties. RP credit is doubly protected by the counterparty and the underlying collateral. RPs are short-term self-liquidating assets that would allow the Fed to exit situations discretely where credit quality had deteriorated. Moreover, RPs would present little price risk. RP collateral could be arranged on a wide variety of securities of short- or long-term maturity with an appropriate haircut from the market price for purposes of valuing the collateral. See Lumpkin (1993).

While RPs might raise fewer obvious credit allocation issues than other alternatives, however, we believe that over time they would pose the same kind of credit allocation problems for the Fed outlined in Section 3.

26. Treasury security yields are also relatively low because of their liquidity and safety. But if the Fed maintained Treasuries-only, its holdings of securities would not represent a positive asset position for the government as a whole.

#### REFERENCES

Blinder, Alan S. Central Banking in Theory and Practice. Cambridge, Mass.: MIT Press, 1998.

Broaddus, J. Alfred, Jr., and Marvin Goodfriend. "Foreign Exchange Operations and the Federal Reserve," Federal Reserve Bank of Richmond *Economic Quarterly*, vol. 82 (Winter 1996), pp. 1-19. Cukierman, Alex. Central Bank Strategy, Credibility, and Independence. Cambridge, Mass.: MIT Press, 1992.

Drazen, Allan. Political Economy in Macroeconomics. Princeton, N.J.: Princeton University Press, 2000.

Dudley, Bill, and John Youngdahl. "Why the Fed's Open Market Operations Must Be Changed," Goldman, Sachs and Co. U.S. Analust (September 1, 2000), pp. 4-6.

Federal Reserve Bank of New York. "Domestic Open Market Operations During 1999," February 2000.

Fischer, Stanley. "Modern Central Banking," in Forest Capie, Charles Goodhart, Stanley Fischer, and Norbert Schnadt, eds., The Future of Central Banking: The Tercentenary Symposium of the Bank of England. Cambridge: Cambridge University Press, 1994.

Goodfriend, Marvin. "Why We Need an 'Accord' for Federal Reserve Credit Policy: A Note," *Journal of Money*, *Credit and Banking*, vol. 26 (August 1994, part 2), pp. 572-80.

\_\_\_\_\_, and Robert G. King. "Financial Deregulation, Monetary Policy, and Central Banking," Federal Reserve Bank of Richmond *Economic Review*, vol. 74 (May/June 1988), pp. 3-22.

\_\_\_\_\_, and Jeffrey Lacker. "Limited Commitment and Central Bank Lending," Federal Reserve Bank of Richmond Economic Quarterly, vol. 85 (Fall 1999), pp. 1-27.

Hetzel, Robert L. "The Case for a Monetary Rule in a Constitutional Democracy," Federal Reserve Bank of Richmond *Economic Quarterly*, vol. 83 (Spring 1997), pp. 45-65.

Lumpkin, Stephen. "Repurchase and Reverse Repurchase Agreements," in Timothy Cook and Robert LaRoche, eds., Instruments of the Money Market, 7th ed. Richmond: Federal Reserve Bank of Richmond, 1993.

Meulendyke, Ann-Marie. U.S. Monetary Policy and Financial Markets. New York: Federal Reserve Bank of New York, 1998.

Meyer, Laurence. "The Politics of Monetary Policy: Balancing Independence and Accountability." Remarks before the University of Wisconsin, La Crosse, Wisconsin, October 24, 2000.

Persson, Torsten, and Guido Tabellini. Political Economy: Explaining Economic Policy. Cambridge, Mass.: MIT Press, 2000.

Small, David, and James Clouse. "The Scope of Monetary Policy Actions Authorized Under the Federal Reserve Act." Washington: Board of Governors of the Federal Reserve System, 2001.

Stein, Herbert. "The Liberation of Monetary Policy," in The Fiscal Revolution in America. Chicago: University of Chicago Press, 1969, pp. 241-80.

U.S. Congressional Budget Office. The Budget and Economic Outlook: Fiscal Years 2001-2011. Washington: Government Printing Office, 2001.

\_\_\_\_\_, The Long-Term Budget Outlook. Washington: Government Printing Office, 2000.

## MILEPOSTS ON THE ROAD TO EXCELLENCE

## 

Our Bank traditionally has made significant contributions to the Federal Reserve System's stewardship of the U.S. economy and financial system. We have consistently challenged ourselves to meet high standards in the pursuit of our goals. In the past year, we took several important steps toward achieving the goals of our new strategic plan by improving services, operations, and communications. We are encouraged by the progress we've made so far. But like long-distance runners in the middle stages of a race, we recognize that we have more mileposts to pass before we have finished.



## Influence Monetary and Banking Policy

MILEPOSTS: The Bank continued to contribute to the analysis, formulation, and implementation of monetary, banking, and payments system policies. As usual, staff economists prepared President Alfred Broaddus for participation in Federal Open Market Committee meetings. The staff also prepared First Vice President Walter Varvel to fulfill his duties as a member of the System's Financial Services Policy Committee.

Staff economists pursued research on the complex relationships between monetary policy, economic activity, and inflation. They continued to play a leading role in the development of the "new neoclassical synthesis." New synthesis models blend features from 'real business cycle' and 'Keynesian' economics to improve our understanding of the interaction of monetary policy with productivity growth and inflation. President Broaddus presented an analysis of current monetary policy using the new neoclassical synthesis in a conference sponsored by the Austrian National Bank in Vienna. Additionally, the Bank's senior policy advisor, Marvin Goodfriend, used this framework to make the case for price stability in a paper presented at a European Central Bank conference in Frankfurt, Germany.

Several presentations attracted the attention of economists, practitioners, and the media. At the Chicago Fed's annual conference on banking structure, President Broaddus discussed the implications of the Fed's lending to depository institutions for the current effort to improve the supervision of banks and enhance market discipline. Mr. Goodfriend presented a paper on financial stability, deflation, and monetary policy at a conference sponsored by the Bank of Japan in Tokyo. Staff economists contributed basic research on the economics of payment arrangements. The Bank hosted a conference in Colonial Williamsburg that convened 48 academic, Federal Reserve, and foreign central bank economists to debate issues regarding payments system incentives, instruments, and settlement issues.

Contributions to economic literacy were fundamental to last year's outreach and educational programs. Bank staff made numerous appearances to discuss the role of the Federal Reserve and to build relationships with our Fifth District community. The Bank also sponsored a Districtwide Fed Challenge competition for high school students to foster an understanding of monetary policy and its role in the nation's economy. The winning team participated in a national competition held at the Board of Governors in Washington, D.C.

To disseminate research and economic information more effectively, staff improved the content, navigation, and format of the Bank's public Web site. *Region Focus*, the Bank's quarterly business magazine, published four issues and garnered eight awards for journalistic and design excellence. *Marketwise*, the Community Affairs magazine, published three issues and won two awards for journalism and design excellence.



## Manage Risk for Market Stability

MILEPOSTS: The Fed-

eral Reserve's responsibility for supervising and regulating state-chartered member banks and bank holding companies requires intensive monitoring and analysis, especially in view of the Fifth District's concentration of large complex banking organizations. The District is home to 237 bank holding companies with \$1.1 trillion in assets (18 are financial holding companies), and 121 state member banks with \$72.9 billion in assets. In 2000, the Bank implemented a new Federal Reserve Systemwide program for supervising large financial organizations. President Broaddus and other senior officers now routinely meet with the boards of large financial institutions. There also is regular interaction between Bank supervisory staff, the staffs of financial institutions, and other regulators aimed at improving communications and risk assessment.

As part of its commitment to excellence, the Bank strengthened training opportunities for both its own staff and members of the staffs of supervised financial institutions to ensure efficient and effective practices, policies, and partnerships. The Bank also trained financial institutions in developing plans for accessing loans through the discount window to satisfy temporary needs for cash.

Rounding out risk management efforts was the Bank's smooth navigation of the Y2K rollover and a multi-year building security project.



## Provide Exceptional Customer Service

**MILEPOSTS:** The Bank took several steps to improve financial services for depository institutions and the U.S. Treasury. Cash services, check services, customer support, and securities transfer services completed the second round of quality surveys in 2000. The surveys showed significant improvements over the already strong ratings of two years earlier, with three of the areas recording improvements of over 25 percentage points. The Bank was commended for its reliability, accuracy, response time, understanding of customer needs, courtesy, accessibility, and clarity of reports and communications.

As part of a multi-year Systemwide effort to modernize check services, the Bank took several first steps in converting to standard, centralized hardware and software systems for processing checks, archiving images, sharing data, and providing Web-based electronic access for check customers.

The Bank and the U.S. Treasury worked closely on new Web-based programs to improve the efficiency of U.S. government payment and collection systems. Staff collaborated on projects to develop and enhance systems for sharing accounting information among federal agencies, consolidating federal grant payments, and improving check reclamation and accounting. Working with the Bureau of Engraving and Printing, the Bank processed more than 88 million potentially defective \$20 bills and salvaged about 71 million bills, saving the U.S. Treasury about 1.8 million in printing costs. By the time the project is completed in mid-2001, about 121 million bills will have been processed and about \$2.6 million saved.

The Bank also consolidated some of its human-resources-related automated services with Reserve Banks in Kansas City, St. Louis, and San Francisco as part of overall efficiency efforts.

Improve Performance and Communication

**MILEPOSTS:** The Bank made significant strides toward developing its future leaders, as well as improving employee performance and communication. The Bank held a special three-day conference to discuss leadership issues and methods for developing talent. For six months following the conference, work groups throughout the Bank collaborated to develop action plans for improving communications, training, innovation, and productivity. Management expects to take action on the plans in 2001.

The Bank also launched a new performance management training program. More than 100 managers and supervisors in Richmond and Charleston completed five daylong training sessions for setting performance expectations, coaching employees, and monitoring and tracking performance.

The Bank took several measures to improve communications with employees and foster commitment and community spirit. One of the most visible was the redesign of the former 5*E Observer* employee magazine into a colorful "magapaper." The quarterly publication provides useful and stimulating information on Bank business initiatives and tracks progress on meeting strategic plan goals. Feedback on the new format has been highly favorable. The publication also won its first award for journalistic excellence.

#### FEDERAL RESERVE BANK OF RICHMOND

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December 31, 2000



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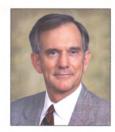
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#### December 31, 2000

To the Board of Directors:

The management of the Federal Reserve Bank of Richmond (FRB Richmond) 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, 2000 (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, and as such, include amounts, some of which are based on judgments and estimates of management.

The management of the FRB Richmond 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 Richmond 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, the management of the FRB Richmond believes that the FRB Richmond 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 Richmond

J. Alfred Broaddus, Jr.

Walter A. Varvel

#### **Report of Independent Accountants**

To the Board of Directors of the Federal Reserve Bank of Richmond:

We have examined management's assertion that the Federal Reserve Bank of Richmond ("FRB") maintained effective internal control over financial reporting and the safeguarding of assets as they relate to the Financial Statements as of December 31, 2000, included in the accompanying Management's Assertion.

Our examination was made in accordance with standards established by the American Institute of Certified Public Accountants, and accordingly, included obtaining an understanding of the internal control over financial reporting, testing, and evaluating the design and operating effectiveness of the internal control, and 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 the 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 the FRB maintained effective internal control over financial reporting and over the safeguarding of assets as they relate to the Financial Statements as of December 31, 2000, is fairly stated, in all material respects, based upon criteria described in "Internal Control – Integrated Framework" issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Friendtchousedoopors LLP

March 2, 2001

#### **Report of Independent Accountants**

To the Board of Governors of the Federal Reserve System and the Board of Directors of the Federal Reserve Bank of Richmond:

We have audited the accompanying statements of condition of the Federal Reserve Bank of Richmond (the "Bank") as of December 31, 2000 and 1999, and the related statements of income and changes in capital for the years then ended. These financial statements are the responsibility of the Bank's management. Our responsibility is to express an opinion on the 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 discussed in Note 3, the 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, 2000 and 1999, and results of its operations for the years then ended, on the basis of accounting described in Note 3.

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March 2, 2001

## **Statements of Condition**

(in millions)

AS OF DECEMBER 31	2000	1999
ASSETS		
Gold certificates	\$ 750	\$ 834
Special drawing rights certificates	147	516
Coin	117	38
Items in process of collection	658	493
Loans to depository institutions	5	12
U.S. government and federal agency securities, net	30,437	36,404
Investments denominated in foreign currencies	4,121	3,356
Accrued interest receivable	355	366
Prepaid expense – interest on Federal Reserve notes		
to the U.S. Treasury	584	-
Interdistrict settlement account	2,402	646
Bank premises and equipment, net	202	201
Other assets	102	90
Total assets	\$39,880	\$42,956
LIABILITIES AND CAPITAL		
Liabilities:		
Federal Reserve notes outstanding, net	\$34,048	\$36,876
Deposits:	+,	+ ,
Depository institutions	1,641	1,957
Other deposits	47	48
Deferred credit items	683	566
Interest on Federal Reserve notes due U.S. Treasury	-	31
Accrued benefit costs	76	70
Other liabilities	27	26
Total liabilities	36,522	39,574
 Capital:		
Capital.	1,679	1,691
		/ = = -
Capital paid-in Surplus	1,679	1,691
Capital paid-in		1,691 3,382

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

## **Statements of Income**

(in millions)

## FEDERAL RESERVE BANK OF RICHMOND

FOR THE YEARS ENDED DECEMBER 31	2000	1999
INTEREST INCOME		
Interest on U.S. government and		
federal agency securities	\$1,982	\$2,085
Interest on investments denominated	. ,	. ,
in foreign currencies	71	45
Interest on loans to depository institutions	1	1
Total interest income	2,054	2,131
OTHER OPERATING INCOME (LOSS)		
Income from services	68	66
Reimbursable services to government agencies	34	31
Foreign currency losses, net	(371)	(105
U.S. government securities losses, net	(5)	(2
Other income	4	5
Total other operating loss	(270)	(5
OPERATING EXPENSES		
Salaries and other benefits	187	170
Occupancy expense	24	23
Equipment expense	69	74
Assessments by Board of Governors	75	85
Other credits	(34)	(48
Total operating expenses	321	304
Net income prior to distribution	\$1,463	\$1,822
DISTRIBUTION OF NET INCOME		
Dividends paid to member banks	\$ 101	\$ 86
Transferred to surplus	974	453
Payments to U.S. Treasury as interest on		
Federal Reserve notes	388	1,283
Total distribution	\$1,463	\$1,822

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

# Statements of Changes in Capital

(in millions)

FOR THE YEARS ENDED DECEMBER 31, 2000	Capital		Total
AND DECEMBER 31, 1999	Paid-in	Surplus	Capital
Balance at January 1, 1999			
(24.7 million shares)	\$1,238	\$1,238	\$2,476
Net income transferred to surplus	-	453	453
Net change in capital stock issued			
(9.1 million shares)	453	-	453
Balance at December 31, 1999			
(33.8 million shares)	\$1,691	\$1,691	\$3,382
Net income transferred to surplus	-	974	974
Surplus transfer to the U.S. Treasury	-	(986)	(986)
Net change in capital stock redeemed			
(0.2 million shares)	(12)	-	(12)
Balance at December 31, 2000			
(33.6 million shares)	\$1,679	\$1,679	\$3,358

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

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## 1. ORGANIZATION

The Federal Reserve Bank of Richmond ("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. 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.

#### Structure

The Bank and its branches in Richmond, Virginia; Baltimore, Maryland; and Charlotte, North Carolina, serve the Fifth Federal Reserve District, which includes Maryland, North Carolina, South Carolina, Virginia, the District of Columbia, and a portion of West Virginia. In accordance with the Federal Reserve Act, supervision and control of the Bank is exercised by a Board of Directors. 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**

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 operations and check processing; distribution of coin and currency; 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, matched salepurchase transactions, the purchase of securities under agreements to resell, 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 and securities contracts in nine foreign currencies, 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 to 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 generally accepted accounting principles ("GAAP"). The primary differences are the presentation of all security holdings at amortized cost, rather than at the fair value presentation requirements of GAAP, and the accounting for matched sale-purchase transactions as separate sales and purchases, rather than secured borrowings with pledged collateral, as is generally required by GAAP. In addition, the Bank has elected not to present a Statement of Cash Flows. The Statement of Cash Flows has not been included as 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. Therefore, a Statement of Cash Flows would not provide any additional useful information. There are no other significant differences between the policies outlined in the Financial Accounting Manual and GAAP.

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 and 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 upon Federal Reserve notes outstanding in each District at the end of the preceding year.

#### 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 SDRs, at the direction of the U.S. Treasury, for the purpose of financing SDR certificate acquisitions or for financing exchange stabilization operations. The Board of Governors allocates each SDR transaction among Reserve Banks based upon Federal Reserve notes outstanding in each District at the end of the preceding year.

#### 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 Banks. 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 any loans were deemed to be uncollectible, an appropriate reserve would be established. Interest is recorded on the accrual basis and is charged at the applicable discount rate established at least every fourteen days by the Board of Directors of the Reserve Banks, subject to review by the Board of Governors. However, Reserve Banks retain the option to impose a surcharge above the basic rate in certain circumstances.

### 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

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the FRBNY to execute operations in foreign markets for major currencies in order to counter disorderly conditions in exchange markets or other needs specified by the FOMC in carrying out the System's central bank responsibilities.

Purchases of securities under agreements to resell and matched sale-purchase transactions are accounted for as separate sale and purchase transactions. Purchases under agreements to resell are transactions in which the FRBNY purchases a security and sells it back at the rate specified at the commencement of the transaction. Matched sale-purchase transactions are transactions in which the FRBNY sells a security and buys it back at the rate specified at the commencement of the transaction.

Effective April 26, 1999 FRBNY was given the 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, 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 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 FRBNY on a daily basis, with additional collateral obtained as necessary. The securities loaned continue to be accounted for in the SOMA. Prior to April 26, 1999 all Reserve Banks were authorized to engage in such lending activity.

Foreign exchange 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 prearranged 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 that 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 which 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 can result in gains or losses when holdings are sold prior to maturity. However, decisions regarding the securities and foreign currencies transactions, including their purchase and sale, are motivated by monetary policy objectives rather than profit. Accordingly, 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 and federal agency 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. Interest income is accrued on a straight-line basis and is reported as "Interest on U.S. government and federal agency securities" or "Interest on investments denominated in foreign currencies," as appropriate. 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. Gains and losses on the sales of U.S. government and federal agency securities are reported as "U.S. government securities losses, net." Foreign currency denominated assets are revalued monthly at current 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 losses, net." Foreign currencies held through F/X swaps, when initiated by the counter-party, and warehousing arrangements are revalued monthly, with the unrealized gain or loss reported by the FRBNY as a component of "Other assets" or "Other liabilities," as appropriate.

Balances of U.S. government and federal agency securities bought outright, investments denominated in foreign currency, interest income, amortization of premiums and discounts on securities bought outright, gains and losses on sales of securities, and realized and unrealized gains and losses on investments denominated in foreign currencies, excluding those held under an F/X swap arrangement, are allocated to each Reserve Bank. Effective April 26, 1999 income from securities lending transactions undertaken by FRBNY was also allocated to each Reserve Bank. 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.

#### e. Bank Premises and Equipment

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 2 to 50 years. New assets, major alterations, renovations and improvements are capitalized at cost as additions to the asset accounts. Maintenance, repairs and minor replacements are charged to operations in the year incurred. Internally developed software is capitalized based on the cost of direct materials and services and those indirect costs associated with developing, implementing, or testing software.

#### 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 automated clearinghouse 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 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. In accordance with the Federal Reserve Act, gold certificates, special drawing rights certificates, U.S. government and federal agency securities, triparty agreements, loans to depository institutions, and investments denominated in foreign currencies are pledged as collateral for net Federal Reserve notes outstanding. 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 Board of Governors may, at any time, call upon a Reserve Bank for additional security to adequately collateralize the Federal Reserve notes. The Reserve Banks have entered into an agreement which provides for certain assets of the Reserve Banks to be jointly pledged as collateral for the Federal Reserve notes of all Reserve Banks in order to satisfy their obligation of providing sufficient collateral for outstanding Federal Reserve notes. 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 Federal Reserve notes reduced by currency held in the vaults of the Bank of \$16,797 million, and \$17,884 million at December 31, 2000 and 1999, 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 the Reserve Bank's stock must be adjusted. Member banks are those 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.

## 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. Reserve Banks are required by the Board of Governors to transfer to the U.S. Treasury 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.

The Consolidated Appropriations Act of 2000 (Public Law 106-113, Section 302) directed the Reserve Banks to transfer to the U.S. Treasury additional surplus funds of \$3,752 million during the Federal Government's 2000 fiscal year. Federal Reserve Bank of Richmond transferred \$987 million to the U.S. Treasury during the year ended December 31, 2000. Reserve Banks were not permitted to replenish surplus for these amounts during fiscal year 2000 which ended September 30, 2000.

In the event of losses or a substantial increase in capital, payments to the U.S. Treasury are suspended until such losses or increases in capital are recovered through subsequent earnings. At year end, the Bank's payments had not resumed. A portion of the payments made to the U.S. Treasury earlier in the year are classified as "Prepaid expense-interest on Federal Reserve notes to the U.S. Treasury." Weekly payments to the U.S. Treasury may vary significantly.

## 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. The costs of providing fiscal agency and depository services to the Treasury Department that have been billed but will not be paid are immaterial and included in "Other expenses."

#### k. Taxes

The Reserve Banks are exempt from federal, state, and local taxes, except for taxes on real property, which are reported as a component of "Occupancy expense."

## 4. U.S. GOVERNMENT AND FEDERAL AGENCY SECURITIES

Securities bought outright are held in the SOMA at the FRBNY. An undivided interest in SOMA activity, with the exception of securities held under agreements to resell and the related premiums, discounts and income, is allocated to each Reserve Bank on a percentage basis derived from an annual settlement of interdistrict clearings. The settlement, performed in April of each year, equalizes Reserve Bank gold certificate holdings to Federal Reserve notes outstanding. The Bank's allocated share of SOMA balances was 5.870 percent and 7.523 percent at December 31, 2000 and 1999, respectively.

The Bank's allocated share of securities held in the SOMA at December 31, that were bought outright, were as follows (in millions):

Total allocated to Bank	\$30,437	\$36,404
Unaccreted discounts	(180)	(251)
Unamortized premiums	571	684
Total par value	30,046	35,971
Bonds	5,447	6,243
Notes	14,099	16,435
Bills	10,492	13,279
U.S. government:		
Federal agency	\$8	\$ 14
Par value:		
	2000	1999

Total SOMA securities bought outright were \$518,501 million and \$483,902 million at December 31, 2000 and 1999, respectively.

The maturity distribution of U.S. government and federal agency securities bought outright, which were allocated to the Bank at December 31, 2000, were as follows (in millions):

		Par value	
	U.S. Government	Federal Agency	
Maturities of Securities Held	Securities	Obligations	Total
Within 15 days	\$ 1,060	\$-	\$ 1,060
16 days to 90 days	6,396	-	6,396
91 days to 1 year	7,369	-	7,369
Over 1 year to 5 years	7,795	8	7,803
Over 5 years to 10 years	3,256	-	3,256
Over 10 years	4,162	-	4,162
Total	\$30,038	\$8	\$30,046

At December 31, 2000 and 1999, matched sale-purchase transactions involving U.S. government securities with par values of \$21,112 million and \$39,182 million, respectively, were outstanding, of which \$1,239 million and \$2,948 million were allocated to the Bank. Matched sale-purchase transactions are generally overnight arrangements.

## 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 held 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 26.301 percent and 20.792 percent at December 31, 2000 and 1999, respectively.

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

Total	\$4,121	\$3,356
Accrued interest	13	10
agreements to resell	1,445	1,850
Government debt instruments including		
Foreign currency deposits	724	67
Japanese Yen:		
agreements to resell	721	528
Government debt instruments including		
Foreign currency deposits	\$1,218	\$ 901
European Union Euro:		
	2000	1999

Total investments denominated in foreign currencies were \$15,670 million and \$16,140 million at December 31, 2000 and 1999, respectively.

The maturity distribution of investments denominated in foreign currencies which were allocated to the Bank at December 31, 2000, were as follows (in millions):

Maturities of Investments Denominated in Foreign Currencies		
Within 1 year	\$3,868	
Over 1 year to 5 years	110	
Over 5 years to 10 years	114	
Over 10 years	29	
Total	\$4,121	

At December 31, 2000 and 1999, there were no open foreign exchange contracts or outstanding F/X swaps. At December 31, 2000 and 1999, the warehousing facility was \$5,000 million, with no balance outstanding.

### 6. BANK PREMISES AND EQUIPMENT

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

	2000	1999
Bank premises and equipment:		
Land	\$ 16	\$ 16
Buildings	118	116
Building machinery and equipment	35	35
Construction in process	8	3
Furniture and equipment	254	234
	431	404
Accumulated depreciation	(229)	(203)
Bank premises and equipment, net	\$ 202	\$ 201

Depreciation expense was \$30 million and \$35 million for the years ended December 31, 2000 and 1999, respectively.

Bank premises and equipment at December 31 include the following amounts for leases that have been capitalized (in millions):

	2000	1999
Bank premises and equipment	\$ 33	\$ 33
Accumulated depreciation	(22)	(19)
Capitalized leases, net	\$ 11	\$ 14

The Bank leases unused space to outside tenants. Those leases have terms of 1 year or less. Rental income from such leases was \$1.3 million and \$1.4 million for the years ended December 31, 2000 and 1999, respectively. Future minimum lease payments under noncancellable agreements in existence at December 31, 2000, were (in millions):

2001

## 7. COMMITMENTS AND CONTINGENCIES

\$1.0

At December 31, 2000, the Bank was obligated under noncancelable leases for premises and equipment with terms ranging from 1 to approximately 6 years. These leases provide for increased rentals 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 \$37 million and \$36 million for the years ended December 31, 2000 and 1999, respectively. Certain of the Bank's leases have options to renew.

Future minimum rental payments under noncancelable operating leases and capital leases, net of sublease rentals, with terms of one year or more, at December 31, 2000, were (in thousands):

	Operating	Capital
2001	\$1,716	\$ 991
2002	1,418	531
2003	1,230	68
2004	1,132	-
2005	389	-
Thereafter	62	-
	\$5,947	1,590
Amount representing interest		(63)
Present value of net minimum lease payment	_	\$1,527

At December 31, 2000, there were no other commitments and long-term obligations in excess of one year.

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 1 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, 2000 or 1999.

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"). The System Plan is a multi-employer plan with contributions fully funded by participating employers. No separate accounting is maintained of assets contributed by the participating employers. The Bank's projected benefit obligation and net pension costs for the BEP at December 31, 2000 and 1999, 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 \$6 million and \$5 million for the years ended December 31, 2000 and 1999, respectively, 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):

	2000	1999
Accumulated postretirement benefit obligation at January 1	\$63.8	\$67.2
Service cost-benefits earned during the period	1.9	2.1
Interest cost of accumulated benefit obligation	4.7	4.0
Actuarial loss/(gain)	3.0	(7.5)
Contributions by plan participants	0.3	0.3
Benefits paid	(2.7)	(2.3)
Accumulated postretirement benefit obligation at December 31	\$71.0	\$63.8

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

	2000	1999
Fair value of plan assets at January 1	\$ -	\$ -
Actual return on plan assets	-	-
Contributions by the employer	2.4	2.0
Contributions by plan participants	0.3	0.3
Benefits paid	(2.7)	(2.3)
Fair value of plan assets at December 31	\$ -	\$ -
Unfunded postretirement benefit obligation	\$71.0	\$63.8
Unrecognized prior service cost	0.7	0.7
Unrecognized net actuarial gain (loss)	(7.9)	(5.0)
Accrued postretirement benefit costs	\$63.8	\$59.5

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

At December 31, 2000 and 1999, the weighted-average assumption used in developing the postretirement benefit obligation was 7.5 percent.

For measurement purposes, an 8.75 percent annual rate of increase in the cost of covered health care benefits was assumed for 2001. Ultimately, the health care cost trend rate is expected to decrease gradually to 5.50 percent by 2008, and remain at that level thereafter.

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, 2000 (in millions):

	1 Percentage	1 Percentage	
	Point Increase	Point Decrease	
Effect on aggregate of service and interest cost components			
of net periodic postretirement benefit costs	\$ 1.6	\$ (1.2)	
Effect on accumulated postretirement benefit obligation	12.6	(10.4)	

The following is a summary of the components of net periodic postretirement benefit costs for the years ended December 31 (in millions):

	2000	1999
Service cost-benefits earned during the period	\$1.9	\$2.1
Interest cost of accumulated benefit obligation	4.7	4.0
Amortization of prior service cost	(0.1)	-
Recognized net actuarial loss	0.1	0.2
Net periodic postretirement benefit costs	\$6.6	\$6.3

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

#### **Postemployment benefits**

The Bank offers benefits to former or inactive employees. Postemployment benefit costs are actuarially determined and include the cost of medical and dental insurance, survivor income, and disability benefits. Costs were projected 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 at December 31, 2000 and 1999, were \$11.8 million and \$10.1 million, respectively. This cost is included as a component of "Accrued benefit costs." Net periodic postemployment benefit costs included in 2000 and 1999 operating expenses were \$2.4 million and \$2.0 million, respectively.

## FEDERAL RESERVE BANK OF RICHMOND

# **Summary of Operations**

(unaudited)

YEAR-TO-DATE DECEMBER	Dollar Amount		Volume	
	2000	1999	2000	1999
CASH				
Currency received and				
counted	47.6 Bil.	39.3 Bil.	3.0 Bil.	3.3 Bil.
Currency destroyed	8.7 Bil.	6.8 Bil.	1,168.9 Mil.	638.9 Mil.
Coin bags received and				
counted	68.8 Mil.	55.0 Mil.	110.9 Thou.	84.6 Thou
NONCASH PAYMENTS				
Commercial checks processed	1.3 Tril.	1.3 Tril.	1.7 Bil.	1.7 Bil.
Commercial checks, packaged				
items handled	706.3 Bil.	574.9 Bil.	814.5 Mil.	837.8 Mil.
U.S. government checks				
processed	40.8 Bil.	45.7 Bil.	28.8 Mil.	30.6 Mil.
Automated Clearing House				
transactions:				
Commercial	856.4 Bil.	789.4 Bil.	264.7 Mil.	226.3 Mil.
Government	387.1 Bil.	368.1 Bil.	3.2 Mil.	3.7 Mil.
				10011
Fedwire funds transfers	19.6 Tril.	18.9 Tril.	10.8 Mil.	10.3 Mil.
LOANS TO DEPOSITORY INSTITU		18.9 Tril.	10.8 Mil.	10.3 Mil.
		18.9 Tril. 2.8 Bil.	10.8 Mil. 160	10.3 Mil. 146
LOANS TO DEPOSITORY INSTITU	JTIONS			
LOANS TO DEPOSITORY INSTITU Discount window loans made SECURITIES SERVICES	JTIONS			
LOANS TO DEPOSITORY INSTITU Discount window loans made SECURITIES SERVICES Safekeeping balance of	JTIONS			
LOANS TO DEPOSITORY INSTITU Discount window loans made SECURITIES SERVICES	JTIONS			
LOANS TO DEPOSITORY INSTITU Discount window loans made SECURITIES SERVICES Safekeeping balance of book-entry securities as of	JTIONS 2.5 Bil.	2.8 Bil.	160	146 N/A
LOANS TO DEPOSITORY INSTITU Discount window loans made SECURITIES SERVICES Safekeeping balance of book-entry securities as of December 31	JTIONS 2.5 Bil. 226.7 Bil. 11.1 Tril.	2.8 Bil. 241.1 Bil. 16.5 Tril.	160 N/A	146 N/A
LOANS TO DEPOSITORY INSTITU Discount window loans made SECURITIES SERVICES Safekeeping balance of book-entry securities as of December 31 Fedwire securities transfers SERVICES TO U.S. TREASURY A	JTIONS 2.5 Bil. 226.7 Bil. 11.1 Tril.	2.8 Bil. 241.1 Bil. 16.5 Tril.	160 N/A	146 N/A
LOANS TO DEPOSITORY INSTITU Discount window loans made SECURITIES SERVICES Safekeeping balance of book-entry securities as of December 31 Fedwire securities transfers SERVICES TO U.S. TREASURY A Issues, redemptions, and	JTIONS 2.5 Bil. 226.7 Bil. 11.1 Tril.	2.8 Bil. 241.1 Bil. 16.5 Tril.	160 N/A	146 N/A
LOANS TO DEPOSITORY INSTITU Discount window loans made SECURITIES SERVICES Safekeeping balance of book-entry securities as of December 31 Fedwire securities transfers SERVICES TO U.S. TREASURY A	JTIONS 2.5 Bil. 226.7 Bil. 11.1 Tril.	2.8 Bil. 241.1 Bil. 16.5 Tril.	160 N/A	146 N/A
LOANS TO DEPOSITORY INSTITU Discount window loans made SECURITIES SERVICES Safekeeping balance of book-entry securities as of December 31 Fedwire securities transfers SERVICES TO U.S. TREASURY A Issues, redemptions, and exchanges of U.S.	JTIONS 2.5 Bil. 226.7 Bil. 11.1 Tril. ND GOVERNMEI	2.8 Bil. 241.1 Bil. 16.5 Tril.	160 N/A 655.8 Thou.	146 N/A 855.5 Thou
LOANS TO DEPOSITORY INSTITU Discount window loans made SECURITIES SERVICES Safekeeping balance of book-entry securities as of December 31 Fedwire securities transfers SERVICES TO U.S. TREASURY A Issues, redemptions, and exchanges of U.S. savings bonds	JTIONS 2.5 Bil. 226.7 Bil. 11.1 Tril. ND GOVERNMEI	2.8 Bil. 241.1 Bil. 16.5 Tril.	160 N/A 655.8 Thou.	146 N/A 855.5 Thou

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