



**CONGRESSIONAL BUDGET OFFICE
COST ESTIMATE**

October 6, 2000

**H.R. 4209
Bank Reserves Modernization Act of 2000**

*As ordered reported by the House Committee on
Banking and Financial Services on May 17, 2000*

SUMMARY

H.R. 4209, the Bank Reserves Modernization Act of 2000 (BRMA), would permit the Federal Reserve System to pay interest on reserves held on deposit at the Federal Reserve by insured depository institutions. The reduction in revenues as a result of the interest payments would be offset by transfers from surplus funds of Federal Reserve Banks to the U. S. Treasury over the next five years. Pay-as-you-go procedures would apply because the bill would affect receipts. CBO estimates that the bill would not have any net effect on annual revenues over the 2001- 2005 period because the estimated loss in revenues would be offset by transfers from Federal Reserve surplus funds. Enacting H.R. 4209 would decrease revenues after 2005. CBO estimates that the loss in revenues would total approximately \$1.1 billion over the 2006-2010 period.

H.R. 4209 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA) and would not affect the budgets of state, local, or tribal governments.

ESTIMATED COST TO THE FEDERAL GOVERNMENT

The estimated budgetary impact of H.R. 4209 is shown in the following table.

	By Fiscal Year, in Millions of Dollars						
	2001	2002	2003	2004	2005	2001- 2005	2006- 2010
CHANGES IN REVENUES							
Allowing Interest on Reserves	-189	-136	-88	-91	-96	-600	-548
Surplus Transfer to the Treasury	<u>189</u>	<u>136</u>	<u>88</u>	<u>91</u>	<u>96</u>	<u>600</u>	<u>-600</u>
Net Budgetary Effect	0	0	0	0	0	0	-1,148

The initial budgetary effect of BRMA would be a decrease in the payment of profits from the Federal Reserve System to the U.S. Treasury. The Federal Reserve remits its profits to the Treasury, and those payments are classified as governmental receipts, or revenues, in the federal budget. Any additional income or costs to the Federal Reserve, therefore, can affect the federal budget. The Federal Reserve's largest source of income is interest from its holdings of Treasury securities. In effect, the Federal Reserve invests in Treasury securities the reserve balances and issues of currency that comprise the bulk of its liabilities. Since the Federal Reserve pays no interest on reserves or currency, and the Treasury pays the Federal Reserve interest on its security holdings, the Federal Reserve earns profits.

By allowing the Federal Reserve to pay interest on reserves, the bill, according to CBO's analysis, would decrease the Federal Reserve's profits and thereby reduce federal revenues by \$600 million over the period from 2001 to 2005. This budgetary response has several components. First, the Federal Reserve's payment of interest on required reserves balances held at Federal Reserve banks would reduce governmental receipts. It is anticipated that some depository institutions and depositors would respond to the interest payments on reserves by shifting funds out of retail sweep accounts and into demand deposit accounts. This secondary response would increase required reserve balances and partially offset the loss in federal revenues from the payment of interest on reserves. Finally, the profits of depository institutions or their customers would increase with a consequent increase in tax revenues. That result would also have the effect of partially offsetting the decline in federal receipts. The legislation stipulates that this overall revenue loss would be offset by a transfer from surplus funds of Federal Reserve banks to the U.S. Treasury for each of the fiscal years 2001 through 2005.

BASIS OF ESTIMATE

The estimates assume that the provisions would become effective early in fiscal year 2001, unless otherwise specified.

The Allowance of Interest on Reserve Balances

Allowing the payment of interest on the reserves that depository institutions hold on deposit at the Federal Reserve ("required and excess reserve balances") would shift profits from the Federal Reserve to depository institutions and reduce governmental receipts. This budgetary effect is divided into three components. First, the bill would result in the Federal Reserve paying interest on the level of its required reserve balances expected under current law, reducing its net income and, therefore, governmental receipts. Second, the payment of interest on reserves is expected to cause demand balances at depository institutions to increase. That increase would raise the level of reserve balances held at the Federal Reserve, which would invest them at a higher rate than it would pay on them. This change in projected reserves would increase governmental receipts, but only partially offset the loss caused by the payment of interest on reserves projected under current law. Third, the reduction in governmental receipts would be partially offset by increased income tax receipts. The net effect of interest payments on reserves and the anticipated shift to more demand deposit accounts would result in higher profits for depository institutions or their customers.

	Allowing Interest on Reserve Balances (By Fiscal Year, in Millions of Dollars)						
	2001	2002	2003	2004	2005	2001- 2005	2006- 2010
CHANGES IN REVENUES							
Revenue from Federal Reserve:							
Interest on Required Reserves	-291	-234	-209	-219	-229	-1,182	-1,311
Profits from Increased Reserves	<u>39</u>	<u>53</u>	<u>92</u>	<u>97</u>	<u>101</u>	<u>382</u>	<u>580</u>
Net Revenue Effect	-252	-181	-117	-122	-128	-800	-731
Income Tax Revenue	<u>63</u>	<u>45</u>	<u>29</u>	<u>31</u>	<u>32</u>	<u>200</u>	<u>183</u>
Allowing Interest on Reserves	-189	-136	-88	-91	-96	-600	-548

Interest Payments on Reserves Projected Under Current Law. Because depository institutions currently do not earn a return on reserve balances, they have an incentive to minimize such balances. Required reserve balances measured almost \$30 billion at the end of 1993, but have since fallen sharply to just under \$7 billion today. The widely reported expansion of consumer and business sweep accounts have caused this decline. In typical sweep accounts, banks shift their depositors' funds from demand deposits, against which reserves are required, into other depository accounts, against which no reserves are required. The banks shift the funds back to the demand deposit accounts the next business day, or when needed by the depositor. Sweep accounts for business demand deposits have existed in various forms since the early 1970s. Recent advances in computer technology have now made the shifting of funds feasible for many consumer ("retail") accounts as well. Under current law, CBO expects the expansion of retail sweep accounts to continue and required reserve balances to decline further to about \$4 billion by 2002. Thereafter, CBO projects them to rise gradually with growth in the economy.

H.R. 4209 would permit the Federal Reserve to pay interest on required and excess reserve balances. The Federal Reserve would be allowed to choose the interest rate, although the rate chosen could not exceed the general level of short-term interest rates. Staff at the Federal Reserve, however, have indicated that, given the authority, the Federal Reserve would only pay interest on *required* reserve balances and it would choose an interest rate near the key short-term rate, the federal funds rate. The likely rate would be roughly 15 basis points lower than the federal funds rate to account for the lack of risk. Federal Reserve staff have indicated that the Federal Reserve would choose not to pay interest on *excess* reserves unless required reserve balances fell to such a low level that interest on excess reserves was needed to build reserves. That is considered to be an unlikely scenario. Accordingly, CBO assumes that the Federal Reserve would pay interest only on required reserves, at a rate 15 basis points below the federal funds rate.

CBO projects that the federal funds rate will average about 5.5 percent over the 10-year period from 2001 through 2010. The payment of interest on reserves is assumed to start early in fiscal year 2001. CBO projects that BRMA would cause the Federal Reserve to pay interest to depository institutions of about \$291 million in 2001 on the \$4.25 billion of required reserve balances expected under current law. Such interest payments would decline to about \$234 million in 2002 and \$209 million in 2003 because of lower reserve balances. Over the 2001- 2005 period, such interest payments would total approximately \$1.2 billion. Those payments would reduce the profits of the Federal Reserve—and thus its payment to the Treasury—by the same amount.

Projected Impact of the Bill on the Volume of Reserves. If the Federal Reserve pays interest on required reserve balances, there would be a second budgetary effect on the Federal

Reserve that would reduce—but not eliminate—the net revenue loss from the payment of interest. In particular, based on a survey by the Board of Governors of the Federal Reserve System, we would expect reserve balances to increase because depository institutions would close a significant share of their retail sweep accounts and, as a result, maintain a higher level of required reserves. By doing so, the institutions could eliminate the costs of maintaining the sweep accounts and receive a return on their required reserves, although presumably at a lower rate than what they could receive with alternative use of the funds. The closing of *business* sweep accounts, in general, is not expected because depository institutions are not allowed to offer interest-bearing demand deposits to businesses. As a result, businesses would have little incentive to relinquish their interest-bearing sweep accounts.

CBO assumes that depository institutions would eliminate approximately 30 percent of retail sweep accounts currently in existence by 2002, and half of those that otherwise would be established. As a result of the closings of retail sweep accounts, demand deposits on which required reserves are calculated would increase at depository institutions. CBO projects that required reserve balances would increase above the level expected under current law by about \$10 billion in 2002 and \$15 billion by 2005. Although the Federal Reserve would pay interest on the added reserves at approximately the federal funds rate, it would invest the reserves in Treasury securities, earning a rate of return in excess of the federal funds rate by an amount estimated at between 0.55 and 0.65 of a percentage point. As a result of the rate differential, the Federal Reserve would generate additional profits of about \$382 million through 2005 and remit them to the Treasury as governmental receipts.

Projected Impact on Income Tax Revenues. Allowing interest on reserve balances held at the Federal Reserve would have a third budgetary effect that would also reduce—but not eliminate—the decline in revenue from the payment of interest on current balances. The net effect of interest payments on reserves and the anticipated shift to more demand deposit accounts is expected to be a reduction in the profits of the Federal Reserve and an increase in the profits of depository institutions or their customers, with a consequent increase in income tax revenues. CBO assumes that the profits of depository institutions or their customers would increase by roughly the same amount that the profits of the Federal Reserve decline. It is likely that, instead of retaining the additional interest income from the Federal Reserve, depository institutions would pass through some of the increased profits to their consumer and business customers by, for example, raising interest rates on deposits or lowering rates on loans. If a complete passthrough did occur, then the customers—not the depository institutions—would accrue the income and pay additional taxes. Although some of the additional interest income of depository institutions may be passed through in nontaxable form either to their customers or to nontaxable entities, this amount is expected to be negligible. CBO assumes that depository institutions and their customers face an average marginal tax rate on income of 25 percent and estimate that income tax receipts

would increase by about \$63 million in 2001 and approximately \$200 million through 2005. That increase in receipts would offset one-quarter of the reduction in governmental receipts from reduced Federal Reserve profits.

Transfer from Surplus Funds of the Federal Reserve

During the first five years BRMA would be effective (fiscal years 2001 through 2005), the legislation provides that the revenue loss associated with allowing interest payments on reserve balances would be offset by requiring the Federal Reserve to remit from its surplus fund to the Treasury an amount equal to the estimated annual net revenue loss. In addition, during this same five-year period, the bill would make the Federal Reserve payment of net earnings to the Treasury mandatory and the Federal Reserve would not be allowed to replenish its surplus fund. Those provisions would have the effect of reducing the cost of the legislation to zero for the first five years the bill is in effect and postpone the accumulated net revenue loss to the federal government to the sixth year, 2006.

Out of its annual earnings, the Federal Reserve covers its operating costs, pays a small dividend to its member banks, retains monies for its surplus fund, and voluntarily remits the remaining profits to the U.S. Treasury. The Federal Reserve's surplus fund is a stock of retained earnings accumulated over time and is set by the Federal Reserve banks each year at a level equal to the paid-in capital of its member banks. The fund can be used as collateral for issuance of Federal reserve notes and may be viewed as a fiscal cushion. The surplus funds are invested in Treasury securities and the interest generated is remitted to the Treasury along with other profits of the Federal Reserve. During the first five years BRMA is in effect, the Federal Reserve would remit to the Treasury all of its earnings above its operating costs and member bank dividend payments because the Federal Reserve would be prevented from replenishing its surplus fund and its payment of net earnings to the Treasury would be mandatory. In fiscal year 2006, however, the Federal Reserve would be expected to replenish its surplus fund by the entire amount that was transferred from the fund to the Treasury during the 2001-2005 period, an estimated \$600 million. This response is anticipated because the Federal Reserve has replenished its surplus account at its first available opportunity with past legislated surplus fund transfer payments. The legislated surplus fund transfer under BRMA, therefore, has the effect of postponing the accumulated net revenue loss to the Treasury during the first five years the legislation is in effect until the sixth fiscal year, 2006. CBO estimates that the revenue loss in fiscal year 2006 would be about \$700 million. The Federal Reserve would be expected to retain \$600 million out of its earnings to replenish its surplus fund instead of remitting these profits to the Treasury. The remaining \$100 million is the estimated net revenue loss of allowing interest payments on reserve balances for that year. CBO estimates that the resulting revenue loss for the

2006 - 2010 period would be approximately \$1.1 billion.

The analysis shows that the transfer of the surplus funds does not reduce the cost of the bill to the federal government over the long term, it just postpones it. It also is important to note that the transfer of surplus funds from the Federal Reserve to the Treasury has no import for the fiscal status of the Federal government either. If the surplus funds are held at the Federal Reserve, they are invested in government securities and the interest generated is remitted to the Treasury. If the surplus funds are transferred to the Treasury instead, they reduce the public debt and in turn the interest payments owed by the Treasury. Since the interest payments would be identical in either case, where the funds reside has no *economic* significance. Hence, any transfer of the Federal Reserve surplus fund to the Treasury would have no effect on national savings, economic growth, or income.

PAY-AS-YOU-GO CONSIDERATIONS

The Balanced Budget and Emergency Deficit Control Act sets up pay-as-you-go procedures for legislation affecting direct spending or receipts. CBO estimates that H.R. 4209 would not affect receipts over the 2001- 2005 period, but would reduce receipts by \$1,148 million over the 2006 - 2010 period, as shown in the following table. For the purposes of enforcing pay-as-you-go procedures, only the effects in the budget year and the succeeding four years are counted.

	By Fiscal Year, in Millions of Dollars									
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Changes in receipts	0	0	0	0	0	-700	-105	-109	-114	-120
Changes in outlays						Not applicable				

ESTIMATED IMPACT ON STATE, LOCAL, AND TRIBAL GOVERNMENTS

H.R. 4209 contains no intergovernmental mandates as defined in UMRA and would not affect the budgets of state, local, or tribal governments.

ESTIMATED IMPACT ON THE PRIVATE SECTOR

H.R. 4209 would require the Federal Reserve to pay interest on required reserve balances held on deposit at the Federal Reserve. The bill would also authorize the Board of Governors of the Federal Reserve System (FRB) to prescribe regulations concerning the responsibilities of correspondent banks that maintain balances at the Federal Reserve on behalf of other institutions. Such private institutions as commercial banks, Federal Home Loan Banks, and Corporate Credit Unions serve as correspondent banks for many depository institutions that are not members of the Federal Reserve. Based on information provided by the FRB, CBO expects the FRB would not use its authority to issue regulations unless problems arose in the crediting and distribution of interest earnings. Thus, this bill would impose no new private-sector mandates as defined by UMRA. If after a period of time the FRB determined a rule was necessary, the FRB indicates that the form a rule would most likely take is to require that correspondent banks pass the interest earnings back to the institutions for which they maintain required balances at the Federal Reserve. The cost to the correspondent banks of complying with such a rule would be negligible.

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