

## BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

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**Date:** December 14, 1999  
**To:** Board of Governors  
**From:** Edward W. Kelley, Jr.  
**Subject:** Private Sector Adjustment Factor for 2000

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The Committee on Federal Reserve Bank Affairs has reviewed staff's recommendation that the Board adopt a 2000 Private Sector Adjustment Factor (PSAF) for Federal Reserve Bank priced services of \$192.6 million. This represents a significant increase in the PSAF due to the identification and inclusion of additional financing costs associated with pension assets used by priced services. The appropriateness of the inclusion of these additional costs has been thoroughly reviewed by Board and Reserve Bank staff and verbally confirmed by our outside accountant, PricewaterhouseCoopers. I am forwarding the attached staff memorandum to the Board for its consideration as a summary item at the December 17 meeting.

Attachment

# BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

DIVISION OF RESERVE BANK OPERATIONS AND PAYMENT SYSTEMS

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**Date:** December 14, 1999

**To:** Board of Governors

**From:** Division of Reserve Bank Operations and Payment Systems  
(Bill Pullen, Bud Martindale, and Paul Bettge)

**Subject:** Private Sector Adjustment Factor for 2000

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## **ACTION REQUESTED**

Staff requests Board approval of 2000 Private Sector Adjustment Factor (PSAF) for Federal Reserve Bank priced services of \$192.6 million. This amount represents an increase of \$76.8 million, or 66.3 percent, from the PSAF of \$115.8 million for 1999. The large increase is mainly due to the identification of additional costs of financing cumulative net pension assets and benefit liabilities.

## **BACKGROUND**

As required by the Monetary Control Act, the Reserve Banks' fee schedule for priced services includes "taxes that would have been paid and the return on capital that would have been provided had the services been furnished by a private business firm." These imputed costs are based on data developed in part from a model comprising consolidated financial data for the nation's fifty largest (in asset size) bank holding companies (BHCs).

The methodology for calculating the PSAF involves determining the value of Federal Reserve assets that will be used in providing priced services during the coming year. Short-term assets are assumed to be financed with short-term liabilities; long-term assets are assumed to be financed with a combination of long-term debt and equity derived from the BHC model.

Imputed capital costs are determined by applying related interest rates and rates of return on equity from the BHC model. The long-term debt and equity rates are based on BHCs in the model for each of the last five years. Because short-term debt, by definition, matures within one year, only data for the most recent year are used for computing the short-term debt rate.

The PSAF comprises these capital costs as well as imputed sales taxes, expenses of the Board of Governors related to priced services, and an imputed FDIC insurance assessment on clearing balances held with the Federal Reserve Banks to settle transactions.

## **DISCUSSION**

The large increase in the PSAF for 2000 is due mainly to recognition of the effect of including pension assets and postretirement/postemployment benefit liabilities in the PSAF balance sheet and, therefore, in the computation of imputed asset financing costs and return on equity inherent in the PSAF. Estimates of the priced pension credit were included in pricing decisions beginning in 1993 when accounting standards were implemented to recognize postretirement benefit expenses based on actuarial estimates. Results of actual pension credits and other benefit costs have been included in published pro forma financial statements for the priced services since the inception of the related accounting requirements for pension plans in 1987. The same pension asset and postretirement/postemployment liability have not previously been reflected in balance sheet accounts for PSAF calculation purposes since the pension asset is self-financed through actual income generated by the plan's assets, not through imputed long-term debt and equity factors inherent in the PSAF.<sup>1</sup> The same cumulative effect of income and expenses from pension and other benefits accounting procedures is, however, included in the balance sheets of bank holding companies (BHCs) used to compute financing rates and return on equity rates applied to Reserve Bank assets to be financed for the 2000 PSAF. Staff believes, therefore, that these items should be included in the Federal Reserve's PSAF calculation. Including the net cumulative effect of these items in the PSAF would add \$60.5 million of additional imputed costs to the 2000 PSAF. Had this net cumulative asset been included historically in PSAF calculations, the 10-year cost recovery amount for 1989-1998 would have been 99.9 percent rather than the 100.7 percent originally calculated. In the future, staff expects to cite cost recovery percentages that incorporate these additional financing costs for each rolling 10-year period.

### Asset Base

The total estimated value of Federal Reserve assets to be used in providing priced services in 2000 is reflected in table 1. Table 2 shows that the assets assumed to be financed through

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<sup>1</sup>In addition, contributions to fund the Federal Reserve's retirement plan were recognized in expenses when paid and subject to recovery through explicit fees or other recovery methods in those years.

debt and equity are projected to total \$1,116.5 million. This represents a net increase of \$465.1 million, or 71.4 percent, from 1999 assets of \$651.4 million, as shown in table 2. More than three quarters of this increase results from including net pension assets (prepaid pension costs less postretirement/postemployment liabilities) of \$361.5 million in priced assets to be financed through PSAF, with building projects in two districts and check standardization and imaging initiatives accounting for the remaining increase.

#### Cost of Capital, Taxes, and Other Imputed Costs

Table 2 also shows the financing and tax rates and the other required PSAF recoveries proposed for 2000 and compares the 2000 rates with the rates used for developing the PSAF for 1999. The pre-tax return on equity rate decreased slightly from 23.5 percent for 1999 to 23.3 percent for 2000. The decrease is a result of a lower 1998 BHC financial performance included in the 2000 BHC model relative to the 1993 BHC financial performance used in the 1999 BHC model.

#### Capital Adequacy

As shown in table 3, the amount of capital imputed for the proposed 2000 PSAF totals 30.0 percent of risk-weighted assets and 4.82 percent of total assets. The capital to risk-weighted asset ratio and the capital to total assets ratio both exceed regulatory guidelines for adequately capitalized institutions and BHCs.

**Table 1**  
**Comparison of Pro Forma Balance Sheets**  
**for Federal Reserve Priced Services**  
(millions of dollars--average for year)

	<u>2000</u>	<u>1999</u>
Short-term assets		
Imputed reserve requirement on clearing balances	\$ 762.2	\$ 757.7
Investment in marketable securities	6,859.5	6,819.6
Receivables <sup>1</sup>	74.2	69.1
Materials and supplies <sup>1</sup>	3.4	4.1
Prepaid expenses <sup>1</sup>	21.4	20.2
Items in process of collection	<u>3,804.2</u>	<u>3,470.7</u>
Total short-term assets	11,524.9	11,141.4
Long-term assets		
Premises <sup>1 2</sup>	411.7	386.6
Furniture and equipment <sup>1</sup>	180.1	150.3
Leasehold improvements and long-term prepayments <sup>1</sup>	64.2	21.1
Prepaid Pension Costs <sup>1</sup>	<u>599.8</u>	-----
Total long-term assets	1,255.8	558.1
Total assets	<u>\$12,780.7</u>	<u>\$11,699.5</u>
Short-term liabilities		
Clearing balances and balances arising from early credit of uncollected items	\$ 7,621.7	\$ 7,577.3
Deferred credit items	3,804.2	3,470.7
Short-term debt <sup>3</sup>	<u>99.0</u>	<u>93.4</u>
Total short-term liabilities	11,524.9	11,141.4
Long-term liabilities		
Postemployment/retirement benefits <sup>1</sup>	238.3	-----
Long-term debt <sup>3</sup>	<u>400.9</u>	<u>207.6</u>
Total long-term liabilities	<u>639.2</u>	<u>207.6</u>
Total liabilities	12,164.1	11,349.0
Equity <sup>3</sup>	<u>616.6</u>	<u>350.5</u>
Total liabilities and equity	<u>\$12,780.7</u>	<u>\$11,699.5</u>

NOTE: Details may not add to totals due to rounding.

<sup>1</sup> Financed through PSAF; other assets are self-financing.

<sup>2</sup> Includes allocations of Board of Governors' assets to priced services of \$0.5 million for 2000 and \$0.4 million for 1999.

<sup>3</sup> Imputed figures represent the source of financing for certain priced services assets.

**Table 2**  
Derivation of the 2000 and 1999 PSAF  
(millions of dollars)

	<u>2000</u>	<u>1999</u>
A. Assets to be financed <sup>1</sup>		
Short-term	\$ 99.0	\$ 93.4
Long-term <sup>2</sup>	<u>1,017.5</u>	<u>558.1</u>
	\$1,116.5	\$651.4
B. Weighted average cost		
1. Capital Structure <sup>3</sup>		
Short-term debt	9.0%	14.8%
Long-term debt	35.8%	31.7%
Equity	55.1%	53.5%
2. Financing rates/costs <sup>3</sup>		
Short-term debt	5.1%	5.1%
Long-term debt	6.6%	6.6%
Pre-tax equity <sup>4</sup>	23.3%	23.5%
3. Elements of capital costs		
Short-term debt	\$ 99.0 x 5.1% = \$ 5.0	\$ 93.4 x 5.1% = \$ 4.8
Long-term debt	400.9 x 6.6% = 26.5	207.6 x 6.6% = 13.7
Equity	616.6 x 23.3% = <u>143.7</u>	350.5 x 23.5% = <u>82.4</u>
	\$ 175.2	\$ 100.8
C. Other required PSAF recoveries		
Sales taxes	\$ 10.3	\$ 8.7
Federal Deposit Insurance assessment	2.9	2.8
Board of Governors expenses	<u>4.2</u>	<u>3.4</u>
	17.4	14.9
D. Total PSAF recoveries	<u>\$ 192.6</u>	<u>\$ 115.8</u>
As a percent of capital	17.2%	17.8%
As a percent of expenses <sup>5</sup>	28.5%	18.2%
E. Tax rate	31.5%	32.0%

NOTE: Details may not add to totals due to rounding.

<sup>1</sup> Priced service asset base is based on the direct determination of assets method.

<sup>2</sup> Consists of total priced long-term assets less postretirement/postemployment benefit liabilities (for 2000 only).

<sup>3</sup> All short-term assets are assumed to be financed with short-term debt. Of the total long-term assets for 2000, 39.4% are assumed to be financed with long-term debt and 60.6% with equity.

<sup>4</sup> The pre-tax rate of return on equity is based on the average after-tax rate of return on equity, adjusted by the effective tax rate to yield the pre-tax rate of return on equity for each bank holding company for each year. These data are then averaged over five years to yield the pre-tax return on equity for use in the PSAF.

<sup>5</sup> Systemwide 2000 budgeted priced service expenses less shipping are \$675.0 million.

**Table 3**  
 Computation of Proposed 2000 Capital Adequacy  
 for Federal Reserve Priced Services  
 (millions of dollars)

	<u>Assets</u>	<u>Risk Weight</u>	<u>Weighted Assets</u>
Imputed reserve requirement on clearing balances	\$ 762.2	0.0	\$ 0.0
Investment in marketable securities	6,859.5	0.0	0.0
Receivables	74.2	0.2	14.8
Materials and supplies	3.4	1.0	3.4
Prepaid expenses	21.4	1.0	21.4
Items in process of collection	3,804.2	0.2	760.8
Premises	411.7	1.0	411.7
Furniture and equipment	180.1	1.0	180.1
Leases, leasehold improvements & long-term prepayments	64.2	1.0	64.2
Prepaid Pension Costs	<u>599.8</u>	<u>1.0</u>	<u>599.8</u>
 Total	 \$12,780.7		 \$2,056.3
 Imputed Equity for 2000	 \$616.6		
Capital to Risk-Weighted Assets	30.0%		
Capital to Total Assets	4.82%		

NOTE: Details may not add to totals due to rounding.