

FEDERAL RESERVE SYSTEM
[Docket No. 1054]
Federal Reserve Bank Services

AGENCY: Board of Governors of the Federal Reserve System.

ACTION: Notice.

SUMMARY: The Board has approved the fee schedules for Federal Reserve priced services and electronic connections and a private sector adjustment factor (PSAF) for 2000 of \$192.6 million. These actions were taken in accordance with the requirements of the Monetary Control Act of 1980, which requires that, over the long run, fees for Federal Reserve priced services be established on the basis of all direct and indirect costs, including the PSAF.

DATES: The new fee schedules become effective April 3, 2000.

FOR FURTHER INFORMATION CONTACT: For questions regarding the fee schedules: Jeff Stehm, Assistant Director, (202/452-2217); Erik Kiefel, Financial Services Analyst, Check Payments, (202/721-4559); Riaz Ahmed, Assistant Financial Services Analyst, ACH Payments, (202/452-3959); Joshua Weisbrod, Assistant Financial Services Analyst, Funds Transfer and Book-Entry Securities Services, (202/530-6214); Michele Raville, Information Technology Analyst (electronic connections), (202/736-5601); Donna DeCorleto, Financial Services Analyst, Noncash Collection Service, (202/452-3956); or Michael Lambert, Financial Services Analyst, Special Cash Services, (202/452-3376), Division of Reserve Bank Operations and Payment Systems. For questions regarding the Private Sector Adjustment Factor: Paul Bettge, Assistant Director, (202/452-3174); Bill Pullen, Accountant, (202/736-1947), Division of Reserve Bank Operations and Payment Systems. For users of Telecommunications Device for the Deaf (TDD) only, please contact Diane Jenkins (202/452-3749).

Copies of the 2000 fee schedules for the check service are available from the Board or the Reserve Banks.

SUPPLEMENTARY INFORMATION:

I. PRICED SERVICES

A. Overview—The Federal Reserve Banks continue to meet the Monetary Control Act's requirement that they recover, over the long run, their direct and indirect costs, including imputed costs and profits, of providing priced services. Over the period 1989 through 1998, the Reserve Banks recovered 99.9 percent of their total costs for providing priced services, including imputed expenses, special project costs that were budgeted for recovery, and targeted after-tax profits, or return on equity (ROE).¹

For 1999, the Reserve Banks estimate that they will recover 102.8 percent of the costs of providing priced services. They project a 99.0 percent recovery rate in 2000. The primary risk to the 2000 projection lies in the ability of the Reserve Banks to meet aggressive revenue and cost targets in the check service, particularly costs associated with its check automation standardization project.

In their 2000 fee schedules, the Reserve Banks include changes that reduce fees to depository institution customers that provide a continued economic incentive for those customers to make greater use of electronic payment services. In particular, the price index for electronic payment services (automated clearinghouse, funds transfer and net settlement, book-entry securities, and electronic check) and electronic connections is projected to decline approximately 4.9 percent in 2000. The index for paper-based payment services (check, special cash, and noncash collection) is expected to increase 3.6 percent. The overall 2000 price index for all Federal Reserve priced services is projected to increase 1.3 percent, compared with an overall decline of 1.9 percent in 1999.²

The following are changes in fee structures and levels for priced services in 2000:

- The Reserve Banks will reduce fees for Fedwire funds transfers for the fourth consecutive year. The weighted average price for a Fedwire funds transfer will decline 11.9 percent from the 1999 level. The Reserve Banks, however, will increase the surcharge for off-line Fedwire funds transfers to \$15 to reflect better the product's costs. The 2000 fee changes are expected to save customers approximately \$5.1

¹ These imputed costs, such as taxes that would have been paid and the return on capital that would have been earned had the services been provided by a private business firm, are referred to as the PSAF. The PSAF is based on data developed in part from a model comprising the nation's fifty largest (by asset size) bank holding companies. Based on consolidated financial data for the holding companies in the model for each of the last five years, the targeted ROE is the budgeted after-tax profit that the Federal Reserve would have earned had it been a private business firm. The ten-year recovery rate is based on the method used for the pro forma income statement for Federal Reserve priced services published in the Board's *Annual Report*. The pro forma income statement reflects certain costs and offsets to costs differently than do the pro forma cost and revenue performance tables used in this memorandum to set fees. For example, offsets to costs associated with the transition to and retroactive application of the Financial Accounting Standards Board's Statement of Financial Accounting Standards No. 87 (SFAS 87), pension accounting, and SFAS 106, other employee retirement benefits accounting, have not been included in this memorandum. If the modification to the PSAF calculation described in section II on the 2000 PSAF were not applied to prior periods, the ten-year recovery rate would increase to 100.7 percent. The 1998 and 1999 service line recovery data in this memorandum do not reflect the revisions to the PSAF method in order to provide a more accurate comparison against the targeted return on equity that was used for establishing prices within those services.

² These estimates are based on a chained Fisher Ideal price index. This index was not adjusted for quality changes in Federal Reserve priced services.

million next year. Including the fee changes for 2000, the price index for Fedwire funds transfers has declined approximately 49 percent since 1996.

- The Reserve Banks will reduce the fee for an on-line Fedwire book-entry securities transfer almost 17.6 percent in 2000. The Reserve Banks, however, will increase the surcharge for off-line Fedwire securities transfers to \$18 to reflect better the product's costs. The fee changes are expected to save customers approximately \$1.1 million next year. Including the fee changes for 2000, the price index for the book-entry securities service has declined about 16 percent since 1996.
- The Reserve Banks will make reductions of 15.4 percent for an ACH small-file origination and 18.2 percent for a large-file origination in 2000. The price reductions are expected to save depository institution customers approximately \$3.0 million next year. Including the reductions for 2000, the price index for the ACH service has decreased nearly 46 percent since 1996. In addition, funding for ACH promotion and education programs will increase to promote the use of direct deposit and payment.
- The Reserve Banks will increase fees for paper check products 3.3 percent on a volume-weighted basis over current prices (a 7.1 percent increase from January 1999 fee levels). Paper check products include forward-processed, fine sort, and returned checks. The fees for forward-processed items will increase 3.5 percent over current prices (7.2 percent over January 1999 fee levels). Prices for fine sort and return items will increase 4.4 and 2.1 percent, respectively, over current prices (8.9 and 6.5 percent when compared with January 1999 fee levels). Fees for payor bank services, which include electronic check products, will increase about 11.0 percent (a 14.8 percent increase from January 1999 fee levels). Electronic check products include electronic check presentment, image services, and electronic information. Reserve Banks are standardizing these products and implementing a common pricing structure with fixed and per-item fees. Including the fee changes in 2000, the price index for the check service has increased approximately 14 percent since 1996. Aggregate check service fee increases in 2000 are expected to cost depository institution customers approximately \$50 million.
- The Reserve Banks will delay the implementation of the coming year's price and price structure changes until April 3, 2000. The delay is intended to minimize changes during the period surrounding the century rollover. Current Reserve Bank prices and products will remain applicable through the first quarter of next year.

B. Discussion — Table 1 presents an overview of the budgeted 1999, estimated 1999, and projected 2000 cost recovery performance for all priced services. Although the 2000 price changes would not go into effect until April 3, 2000, the 2000 cost recovery rate is a projection for the full calendar year.

TABLE 1

Priced Service	1999 Budget	1999 Estimate	2000 Budget
All Services	101.0%	102.8%	99.0%
Check	100.5%	101.5%	98.7%
ACH	104.5%	112.6%	100.0%
Funds transfer	102.0%	105.5%	100.5%
Book-entry	105.2%	108.1%	101.2%
Noncash collection	118.6%	140.2%	107.6%
Special cash	105.8%	106.2%	101.8%

The aggregate cost-recovery rate is heavily influenced by the check service, which accounts for approximately 83 percent of the total cost of priced services. The electronic services (ACH, Fedwire funds transfer, and Fedwire book-entry securities transfer) account for about 17 percent of costs. The noncash collection and special cash services represent a de minimis proportion of priced services expenses. Figure 1 shows the proportion of 1999 estimated priced services costs attributable to each service.

Table 2 summarizes the cost and revenue performance for priced services since 1998. In 1999, the Reserve Banks completed their recovery of transition costs associated with the automation consolidation project (special project costs) and associated financing costs. In addition to facilitating fee reductions in electronic payment services, the consolidation initiative has dramatically improved the Reserve Banks' disaster recovery and information security capabilities, increased the System's responsiveness to change, and enhanced the central bank's management of payment system risk.

TABLE 2. -- PRO FORMA COST AND REVENUE PERFORMANCE ³								
[\$ millions]								
Year	1 Revenue (a)	2 Operating Costs & Imputed Expenses (b)	3 Special Project Costs Recovered (c)	4 Total Expense [2+3]	5 Net Income (ROE) [1-4]	6 Target ROE (d)	7 Recovery Rate after Target ROE [1/(4+6)]	8 Special Project Costs Deferred & Financed (e)
1998	839.7	753.2	15.7	768.9	70.8	52.3	102.3%	1.7
1999 (Est)	871.4	789.7	1.7	791.4	80.0	56.0	102.8%	0.0
2000 (Bud)	925.5	823.7	13.2	836.8	88.7	98.4	99.0%	0.0

- a. Includes net income on clearing balances.
- b. Imputed expenses include interest on debt, taxes, FDIC insurance, and the cost of float. Credits for prepaid pension costs under SFAS 87 and the charges for retirement benefits in accordance with SFAS 106 are included.
- c. Special project costs include the priced portion of automation consolidation costs through 1999 and check standardization costs in 2000.
- d. Targeted ROE is based on the ROE included in the PSAF and has been adjusted for taxes, which are included in column 2. Targeted ROE has not been adjusted to reflect automation consolidation special project costs deferred and financed in 1998.
- e. Totals include financing costs.

³ Calculations on this table and subsequent pro forma cost and revenue tables may be affected by rounding. If the PSAF method used to calculate the 2000 aggregate priced service cost in this table is applied to the actual 1998 and estimated 1999 calculations, the recovery rate for 1998 would decline to 101.1 percent and that for 1999 would decrease to 99.2 percent.

1. 2000 Projected Performance — The Reserve Banks project that they will recover 99.0 percent of total expenses related to priced services, including imputed expenses and targeted ROE, in 2000. The 2000 fees for priced services will result in a net income of \$88.7 million, compared with a targeted ROE of \$98.4 million. The check service will recover approximately \$13.2 million of priced services costs associated with the check automation standardization special project.⁴

The price index for electronic payment services and electronic connections is projected to decline approximately 4.9 percent in 2000, and the index for paper-based payment services is expected to increase 3.6 percent. The overall 2000 price index for Federal Reserve services is projected to increase 1.3 percent, compared with an overall decline of 1.9 percent in 1999. Increases in prices for check products are the primary reasons for the higher overall price index in 2000. Figure 2 compares the Federal Reserve's price index for priced services with the gross domestic product price deflator, illustrating that Federal Reserve priced services have historically increased more slowly than the deflator.

The continued decline in the price index for electronic payment services reflects, in large part, the ability of the Reserve Banks to capitalize on the operational efficiencies and scale economies inherent in providing payment services through centralized electronic payment processing applications. Between 1992 and 1998, the Reserve Banks' automated data processing facilities were consolidated into three sites, significantly reducing the cost of providing electronic payment services.

⁴ Under an existing Board policy, the Reserve Banks may defer and finance special project costs if they would have a material effect on unit costs, provided that a conservative period is set for full cost recovery and a financing factor is applied to the deferred portion of special project costs. The financing rates represent the weighted-average imputed costs of the Federal Reserve's long-term debt and equity. This method is similar to the approach a private firm would use in financing such costs. The check automation standardization special project did not meet the requirements for deferral and financing. Costs associated with this special project will be fully recovered in 2000.

2. Allocation of Corporate Overhead Costs to Priced Services – Corporate overhead costs are allocated to priced services in total and to other Reserve Bank activities based on their proportion of total Reserve Bank costs (expense-ratio basis). Because corporate overhead costs are not closely related to any particular priced service, these costs are assigned among the individual services to facilitate the funding of significant multiyear strategic investments that would otherwise result in short-term price fluctuations, subject to established minimum and maximum amounts.⁵ In 1998, and to a much smaller extent in 1999, the Reserve Banks assigned these costs among priced services to accelerate the retirement of debt associated with the automation consolidation special project. For 2000, the assignment of corporate overhead costs to individual priced services will support the Reserve Banks' strategic check automation project. Table 3 shows the assignment of corporate overhead costs for the years 1998-2000.

Year	Check	ACH	Funds transfer	Book-entry	Noncash collection	Special cash	Total
1998 Actual	27.3	0.0	17.4	0.0	0.1	0.2	45.0
1999 (Est)	38.8	3.7	5.9	0.0	0.1	0.2	48.7
2000 (Bud)	36.1	8.2	4.6	1.2	0.1	0.1	50.4

3. 1999 Estimated Performance — The Reserve Banks estimate that priced services will yield a net income of \$80.0 million in 1999, compared with a targeted ROE of \$56.0 million. In 1999, the Reserve Banks estimate that they will recover 102.8 percent of the costs of providing priced services, including imputed expenses, all remaining automation consolidation special project costs, and targeted ROE, compared with a targeted recovery rate of 101.0 percent.⁶ The Reserve Banks recovered a larger-than-expected percentage of costs primarily because of increased revenues associated with higher-than-expected volumes for most priced services, substantial midyear price increases within the check service, and reductions in operating costs in the funds transfer service.

4. 1998 Performance — In 1998, the Reserve Banks' priced services revenue yielded a net income of \$70.8 million, compared with a targeted ROE of \$52.3 million. The Reserve Banks recovered 102.3 percent of total expenses, including imputed expenses, automation consolidation special project costs budgeted for recovery, and targeted ROE, compared with a targeted recovery rate of 100.8 percent. The Reserve Banks recovered a larger-than-expected percentage of costs primarily because of higher

⁵ Corporate overhead costs include all or portions of the following activities: Reserve Bank and System administrative functions, central mail operations, legal, budget preparation and control, expense accounting, records management and contingency planning, motor vehicles, and audit.

⁶ Through October 1999, the Reserve Banks recovered 103.6 percent of total priced services expenses, including imputed expenses, automation consolidation special project financing, and targeted ROE.

revenues from larger-than-anticipated increases in volume across most services, midyear price increases in the check service, operational cost reductions in the funds transfer service, and lower-than-anticipated support costs in ACH.

C. Check —Table 4 presents the actual 1998, estimated 1999, and projected 2000 cost recovery performance for the check service.

TABLE 4. -- CHECK PRO FORMA COST AND REVENUE PERFORMANCE								
[\$ millions]								
Year	1 Revenue	2 Operating Costs & Imputed Expenses	3 Special Project Costs Recovered	4 Total Expense [2+3]	5 Net Income (ROE) [1-4]	6 Target ROE	7 Recovery Rate after Target ROE [1/(4+6)]	8 Special Project Costs Deferred & Financed
1998	651.8	601.7	5.7	607.5	44.4	40.9	100.5%	0.0
1999 (Est)	708.9	653.5	0.0	653.5	55.4	45.1	101.5%	0.0
2000	768.0	684.4	13.2	697.6	70.4	80.8	98.7%	0.0

1. 1998 Performance — The check service recovered 100.5 percent of total expenses in 1998, including imputed expenses, the completion of debt retirement related to automation consolidation special project costs, and targeted ROE. Substantial volume growth at most Reserve Banks and midyear price increases helped actual cost recovery to exceed the targeted rate of 100.4 percent. The volume of checks collected increased 5.3 percent from 1997 levels because of several factors, including (1) the exit of several correspondent banks from the interbank check market; (2) the introduction of new check products; (3) the acquisition of new customers beyond those gained from the exit of correspondent banks; and (4) the increased reliance on Reserve Bank check processing by some banks during merger-and-acquisition-related operational changes.

2. 1999 Performance — Through October 1999, the check service has recovered 102.4 percent of total expenses, including imputed expenses, and targeted ROE. The Reserve Banks estimate that the check service will recover 101.5 percent of its costs for the full year compared with the targeted 1999 recovery rate of 100.5 percent. The higher recovery rate reflects improved income from higher than expected volumes, midyear 1999 price increases, and higher than expected pension credits.

Volume growth within paper check products has been higher through October 1999 than originally budgeted at all Reserve Banks, largely because of increases in the number of forward-processed items at one Reserve Bank as a major regional bank exited the local correspondent banking business. Table 5 summarizes the year-to-date and currently estimated growth rates for all paper check products for the entire year.

TABLE 5. -- PAPER CHECK PRODUCT GROWTH RATES			
Check Product or Service	Budgeted 1999 Growth	Volume Growth through October 1999	Estimated 1999 Growth
Total Forward Collected	1.4%	3.0%	3.9%
Forward-processed	3.1%	4.6%	5.5%
Fine Sort	-9.5%	-6.0%	-9.0%
Returns	2.2%	-1.9%	-9.7%

The Board considers the Reserve Banks' 1999 volume estimates for forward-processed items to be slightly optimistic given current trends. Because of the current volume growth rates and the apparent effects of midyear price increases on these product lines, the Board also expects a much less dramatic reduction in fine sort and return volumes for the full year than that in the Reserve Banks' estimate. The Board believes cost recovery for the full year will likely remain closer to its current level of 102.4 percent than to the 101.5 percent estimated by the Reserve Banks.

The Reserve Banks also have seen steadily increasing demand for some electronic check products. Electronic check presentment (ECP) and check image products have seen approximately 15 percent and 36 percent growth rates, respectively, in 1999. Reserve Banks now provide paying banks with electronic check data or images for approximately 32 percent of Reserve Bank-collected checks, or about 4.5 billion items, up from about 27 percent of all Reserve Bank-collected checks in 1998. Growth and penetration rates for electronic check products are summarized in table 6.

TABLE 6. -- ELECTRONIC CHECK PRODUCT PENETRATION AND GROWTH RATES (versus net checks collected)			
	Penetration Rate through October 1999	Year-over-Year Growth through October 1999	Estimated 1999 Growth
Electronic Check Presentment	18.7%	15.3%	5.2%
Truncation	4.9%	22.3%	25.4%
Non-truncation	13.8%	13.0%	-1.5%
Electronic Check Information	8.0%	-3.4%	-15.6%
Images	5.0%	36.2%	31.9%

The Reserve Banks' growth estimates for 1999 appear to underestimate the growth rates for all electronic check products, except ECP with truncation, when compared with the year-to-date growth rates. The primary reason for this difference appears to be the Reserve Banks' expectation that the current freeze on adding new customers during the months surrounding the century rollover will have a significant effect on volume growth. The Board does not agree with this conclusion and believes that volume growth from current customers will enable the Reserve Banks to sustain growth rates for the full year similar to those seen through October.

3. 2000 Pricing—For the coming year, the Reserve Banks have developed national product and pricing strategies and committed to major infrastructure investments to improve check services, reduce costs, and respond to structural changes, such as mergers and bank operations consolidation, that are occurring in the financial services industry. To serve a growing number of national and interregional customers while still providing flexible and quality service to meet the needs of local customers, the Reserve Banks are establishing a series of national product lines and prices. In 2000, standard national products and price ranges for payor bank services are being initiated.⁷ The Reserve Banks expect to establish similar standard products and price ranges for paper check products in the future.

The Reserve Banks also have several major automation initiatives that will affect 2000 expenses, including a critical effort to standardize check processing platforms and software, a national effort to standardize check adjustments software, and several check imaging projects. These automation initiatives are expected to reduce costs and improve service over the long term. For example, the Reserve Banks expect pilot image projects in Montana and Utica, N.Y., to identify operational, legal, and customer service benefits and drawbacks associated with using images and electronic information instead of physical items for processing and collecting checks.

⁷ These services include electronic information, electronic check presentment, truncation, image products, large dollar return notifications, and other services.

In 2000, the total forward check collection volume (processed and fine sort) is projected to increase 3.0 percent, reflecting a projected increase of 3.5 percent in processed volume and a decrease of 1.9 percent in fine sort volume. Returned check volume is projected to decrease by half a percent. With respect to payor bank services, volumes for electronic check presentment with paper checks subsequently delivered, electronic presentment of truncated checks, and check imaging are expected to grow 17.2 percent, 12.0 percent, and 50.3 percent, respectively. Electronic check information volume is expected to decline 4.2 percent as volume continues to shift to electronic check presentment products.

In response to the rising costs associated with large infrastructure investments and short-term operational inefficiencies stemming from recent, unanticipated volume increases, the Reserve Banks have modified their pricing strategies to focus upon improving the check service's net revenue position. To that end, the Reserve Banks are establishing more substantial and widespread fee and pricing structure changes in 2000. Table 7 provides details on the 2000 price changes.⁸

TABLE 7. -- 2000 PRICE CHANGES (Percent Change)		
Products	2000 vs. January 1, 1999 Fees	2000 vs. Current 1999 Fees
Total Paper Products	7.1%	3.3%
Forward-processed	7.2%	3.5%
Fine Sort	8.9%	4.4%
Returns	6.5%	2.1%
Payor Bank Services	14.8%	11.0%
Electronic Check Presentment	2.6%	-1.4%

The Reserve Banks will increase fees for paper-based check products on a volume-weighted basis 7.1 percent compared with fees at the beginning of 1999 (3.3 percent compared with current prices). The substantial increase in paper check prices in 2000 result from (a) the initiation of several major projects requiring significant infrastructure investments; (b) short-term operational inefficiencies within the Reserve Banks' check processing operations as a result of significant volume increases, shifts in the quality and product mix of items being processed, and local market labor constraints; and (c) a revised private sector adjustment factor (PSAF) method. There are no planned changes to Check Relay's consolidated shipment surcharges in 2000.

⁸ Table 7 shows volume-weighted calculations for 2000 based on a comparison of January 1, 1999, or current transaction fees with the 2000 fees for check products weighted by the 2000 volumes for those services. These volume-weighted calculations summarize changes in specific check product transaction fees while an aggregate price index would include the all-in cost to a customer of purchasing a market basket of Federal Reserve check products. The market basket would include, for example, the effect of changing transaction fees, electronic connection fees, and imputed income.

Prices for payor bank services will increase 14.8 percent in 2000 compared with fees at the beginning of 1999 (11.0 percent compared with current fees) as standard national pricing ranges and product structures and definitions are introduced. Instead of bundled services with a daily minimum fee plus a per-item fee, the new structure includes national, unbundled products with fixed and per-item fee components. For example, customers formerly purchasing a bundled check image product with a single daily minimum and per-item fee will be charged the sum of the individual fixed fees for each part of the unbundled service, such as image capture, retrieval, and archiving, and the individual per-item fees for those services. Under this new structure, fixed fees will generally tend to decrease in 2000 compared with 1999 price levels, while most per-item fees will increase. These changes are part of a longer-term strategy to enhance payor bank services' net revenue contribution to the check service.

The Board supports the Reserve Banks' new focus on improving net revenue in the check service through price increases on highly demanded forward check products. The Board also supports the Reserve Banks' continuing efforts to standardize and unbundle payor bank services and to continue this effort with forward and return products in the future. Table 8 summarizes ranges of key check fees for 2000.

TABLE 8. -- SELECTED CHECK FEES				
Products	1999 Price Ranges		2000 Price Ranges	
Items:	(per item)		(per item)	
Forward-processed				
City	\$0.004 to 0.081		\$0.004 to 0.079	
RCPC	\$0.004 to 0.180		\$0.003 to 0.200	
Fine Sort				
City	\$0.004 to 0.015		\$0.004 to 0.017	
RCPC	\$0.0025 to 0.018		\$0.003 to 0.018	
Qualified returned checks				
City	\$0.17 to 1.11		\$0.17 to 1.15	
RCPC	\$0.21 to 1.75		\$0.21 to 1.50	
Raw returned checks				
City	\$1.00 to 5.50		\$1.00 to 5.50	
RCPC	\$1.00 to 5.50		\$1.00 to 5.50	
Cash letters:	(per cash letter)		(per cash letter)	
Forward-processed	\$1.75 to 9.25		\$1.75 to 10.25	
Forward fine sort	\$3.00 to 14.00		\$3.00 to 14.00	
Returned checks: raw/qualified	\$1.75 to 14.00		\$1.75 to 14.00	
Payor bank services:	(min.)	(per item)	(Fixed)	(per item)
MICR information	\$5-\$30	\$0.001-0.0060	\$2-\$15	\$0.0013-0.0060
Electronic presentment	\$3-\$14	\$0.001-0.0045	\$2-\$11	\$0.0010-0.0120
Truncation	\$3-\$25	\$0.004-0.0170	\$2-\$10	\$0.0060-0.0200
Image			\$2-\$15	\$0.0010-0.0200

For 2000, the Reserve Banks project that the check service will recover 98.7 percent of total costs, including imputed expenses, costs associated with the check automation standardization special project, and targeted ROE. The check service is projected to have expenses totaling \$697.6 million and a targeted ROE of \$80.8 million. Total expenses, including targeted ROE, are projected to increase approximately \$79.3 million, or 11.4 percent, from estimated 1999 expenses. These incremental expenses for 2000 include \$35.2 million additional ROE, \$29.6 million for automation initiatives, and \$14.5 million for other expenses, such as recruitment and retention of staff and new equipment purchases to process increasing check volumes.

Total expenses for 2000 include approximately \$81.5 million for check automation initiatives (check standardization, check image projects, and check adjustments standardization), an increase of \$29.6 million or 56.9 percent over 1999 estimated expenses for those same projects. Of that total in 2000, approximately \$34 million is budgeted for standardizing check processing platforms and software, of which \$13.2 million in priced services costs has been budgeted as a special project. Excluding these automation initiatives and the imputed tax effect, total expenses in 2000 would increase \$14.5 million or 2.4 percent (\$23.6 million or 3.8 percent when the resulting tax effect is imputed) versus \$44.1 million or 6.8 percent with the automation initiatives.

The check service is projected to have revenue in 2000 totaling \$768.0 million from forward collection and return item processing (75.6 percent), payor bank services (12.2 percent), and other operating and imputed revenues (12.2 percent). Total revenue is expected to increase approximately \$59.1 million, or 8.3 percent, in 2000, as a result of increased forward check-collection revenue (\$30.2 million), returned check revenue (\$6.6 million), payor bank services revenue (\$17.6 million), and other operating and imputed revenues (\$4.7 million).

Two important risks to the Reserve Banks' ability to realize their cost recovery projections lies in meeting float, volume, and national cost targets and in retaining customers and revenue during a period of substantial price increases. Risks regarding the costs of check automation initiatives and operational risks may also materially affect the check service's cost recovery in 2000.

External challenges that may affect the Reserve Banks' volumes and cost recovery include interstate branch banking and the level of continued competition in the interbank check collection market. Although interstate branch banking may eventually reduce the size of the interbank check collection market, Reserve Bank check collection volumes may increase in 2000 as banks face merger-related operational challenges, exit the correspondent check-clearing business, or outsource their check-processing operations. In addition to increased volumes, some Reserve Banks face a changing mix and quality of processed items that are more costly to process and more complex to price. Many Reserve Banks also face tight local labor markets that have made it increasingly difficult to recruit and retain employees, creating pressures on operational costs, productivity, and quality. To help address these labor-related concerns, the Reserve Banks are identifying and implementing appropriate human resources strategies and programs.

The Board believes that projected 2000 volume increases for paper-based products are reasonable compared with current volume growth rates and the potential negative effect of next year's planned price increases. The Board views the Reserve Banks' projection of substantially increased volumes and revenue for payor bank services to be optimistic given the implementation of a new standardized product structure and its accompanying pricing structure. It also is not clear whether, as the Reserve Banks believe, customers will begin to move aggressively to electronics following the century rollover.

Should the Reserve Banks gain higher-than-projected processing volumes, short-term operational costs associated with adjusting to those new levels may rise faster than their associated revenues. In that case or if the Reserve Banks are unable to manage their internal costs or achieve expected revenue levels, they may have to consider further price increases during the year. The Reserve Banks, however, may have limited opportunities for further price increases during 2000, given the delayed effective date of April 3 for implementing the 2000 price and price structure changes.

To address this concern, the Reserve Banks are working to improve their market intelligence capabilities and operational efficiency to minimize any adverse effects of unexpected volume increases. The Reserve Banks are also examining other areas for improving net revenue to address any unanticipated volumes or other exigencies during the coming year. The Board supports the Reserve Banks' 2000 prices while underlining the need for continual vigilance to effectively manage the check service and to address quickly any unanticipated complications that may arise during the year.

D. Automated Clearinghouse (ACH) —Table 9 presents the actual 1998, estimated 1999, and projected 2000 cost recovery performance for the commercial ACH service.

TABLE 9. -- ACH PRO FORMA COST AND REVENUE PERFORMANCE								
[\$ millions]								
Year	1 Revenue	2 Operating Costs & Imputed Expenses	3 Special Project Costs Recovered	4 Total Expense [2+3]	5 Net Income (ROE) [1-4]	6 Target ROE	7 Recovery Rate after Target ROE [1/(4+6)]	8 Special Project Costs Deferred & Financed
1998	68.4	52.2	8.2	60.4	8.0	4.0	106.3%	0.0
1999 (Est)	68.6	56.4	0.0	56.4	12.2	4.5	112.6%	0.0
2000 (Bud)	70.4	62.5	0.0	62.5	8.0	8.0	100.0%	0.0

1. 1998 Performance — The ACH service recovered 106.3 percent of total expenses, including imputed expenses, automation consolidation special project costs, and targeted ROE, in 1998. Commercial ACH volume in 1998 was 13.9 percent higher than 1997 volume, less than the 15.4 percent increase originally projected. The lower-than-expected volume level resulted from consolidation within the industry.

2. 1999 Performance — Through October 1999, the ACH service recovered 112.1 percent of total expenses, including imputed expenses and targeted ROE. For the full year, Reserve Banks estimate that the service will recover 112.6 percent of total expenses compared with the targeted 1999 recovery rate of 104.5 percent. The estimated overrecovery is due to higher revenues (\$3.2 million), primarily because possible changes in the pricing structure for products offered to private sector operators were not implemented this year, and due to a reduction in support costs of \$2.9 million. During the year, ACH lowered all origination fees an additional \$0.0005.

Through October 1999, commercial ACH volume has increased 12.7 percent over the same period in 1998. For the full year, Reserve Banks expect commercial volume to increase 12.7 percent, compared with the 12.0 percent increase originally projected for 1999.

3. 2000 Pricing — After several years of significant price reductions, Reserve Banks will make further price reductions effective April 3, 2000, in the fees for originated ACH items (see table 10). The Reserve Banks will reduce the fee for items originated in small and large files by one mill, generating \$3.0 million in aggregate savings to depository institutions next year at projected 2000 volumes. (Including the reductions for 2000, the price index for ACH items has decreased 46 percent since 1996.) These price decreases support the System’s strategic direction to encourage the migration from a paper-based to a more electronic payments system and are possible because of ongoing scale efficiencies of centralized ACH processing.

TABLE 10. -- 2000 PRICE CHANGES		
Fee category ⁹	Current fee	2000 fee
Item originated in small file	\$0.0065	\$0.0055
Item originated in large file	\$0.0055	\$0.0045

The Reserve Banks project that the ACH service will recover 100.0 percent of its costs in 2000, including imputed expenses and targeted ROE. Total expenses are projected to increase \$6.1 million, or 10.8 percent, from the 1999 estimate due to increased joint priced corporate overhead and higher funding for ACH promotion and education programs. Total revenue in 2000 is projected to be \$70.4 million, or 2.7 percent higher than the 1999 estimate. The higher revenue is attributable to projected commercial volume growth but also includes a placeholder revenue reduction for possible

⁹ Small files contain fewer than 2,500 items; large files contain 2,500 items or more.

price and price structure changes associated with resolution of the outstanding issues related to transactions involving private-sector operators.

A risk to the 2000 revenue and cost projections lies in the uncertain effect of potential changes in price and service levels for ACH volume received from or sent to private sector ACH operators. The Board requested comment on potential changes to the Reserve Banks' ACH prices and service level practices with regard to private sector ACH operators (64 FR 27793, May 21, 1999). The Board is evaluating comments on the benefits and drawbacks of modifying the Reserve Banks' pricing practices and deposit deadlines for ACH transactions that they exchange with private sector ACH providers.

ACH volume in 2000 is projected to increase 13.9 percent over 1999 estimates. The 2000 volume estimate assumes the same rate of growth as in 1998 and is higher than the 1999 estimate of 12.7 percent. The Board believes that given the overall anticipated growth rate in the ACH industry and the uncertain effects of potential changes in price and service levels that may affect ACH operators and their customers, the projected 2000 volumes are reasonable.

E. Funds Transfer and Net Settlement — Table 11 presents the actual 1998, estimated 1999, and projected 2000 cost recovery performance for the funds transfer and net settlement services.

TABLE 11. -- FUNDS TRANSFER AND NET SETTLEMENT PRO FORMA COST AND REVENUE PERFORMANCE								
[\$ millions]								
Year	1 Revenue	2 Operating Costs & Imputed Expenses	3 Special Project Costs Recovered	4 Total Expense [2+3]	5 Net Income (ROE) [1-4]	6 Target ROE	7 Recovery Rate after Target ROE [1/(4+6)]	8 Special Project Costs Deferred & Financed
1998	94.5	79.4	0.2	79.6	14.9	6.2	110.2%	0.0
1999 (Est)	70.7	61.9	0.0	61.9	8.9	5.2	105.5%	0.0
2000 (Bud)	66.0	58.2	0.0	58.2	7.8	7.5	100.5%	0.0

1. 1998 Performance — For 1998, the funds transfer and net settlement services recovered 110.2 percent of total expenses, including imputed expenses, automation consolidation special project costs, and targeted ROE, compared with a targeted recovery rate of 102.8 percent. Service revenue for 1998 was approximately \$5.9 million, or 6.7 percent, greater than original budget projections due to higher-than-expected transaction volume. Funds transfer on-line origination volume increased 9.6 percent over the 1997 level, compared with expected near-zero growth.

2. 1999 Performance — Through October 1999, the funds transfer and net settlement services recovered 103.8 percent of total expenses, including imputed expenses and targeted ROE. For full-year 1999, the Reserve Banks estimate that the funds transfer and net settlement services will recover 105.5 percent of total expenses, compared with a targeted recovery rate of 102.0 percent. The higher-than-budgeted recovery rate is attributable to cost reductions of \$2.6 million, or 3.7 percent, primarily in the areas of support, overhead, and personnel. In particular, the Reserve Banks achieved cost reductions of \$1.1 million in 1999 from the consolidation of their off-line processing functions to the Federal Reserve Banks of Boston and Kansas City.

On-line funds transfer volume through October 1999 has increased 4.4 percent relative to the same period in 1998. For the full year, the Reserve Banks expect on-line volume to increase 5.4 percent from the 1998 level, more than the originally budgeted 3.5 percent growth rate. In the first year of the tiered price structure for the Fedwire funds transfer service, there was a greater percentage of total volume in the high-volume, low-price tier than the Reserve Banks had anticipated. The Reserve Banks project that the movement of volume to the low-price tier may be even more pronounced in 2000.

3. 2000 Funds Transfer Pricing — The Reserve Banks will reduce the per-transfer fees charged within all three volume categories and maintaining the current thresholds for volume-based discounts. The Reserve Banks will offer the following per-transfer prices for 2000:

TABLE 12

Volume Category	Current Fee	2000 Fee
First 2,500 transfers per month	\$0.34	\$0.33
Additional transactions up to 80,000 per month	\$0.27	\$0.24
Additional transactions over 80,000 per month	\$0.21	\$0.17
Average (volume-weighted) price paid ¹⁰	\$0.262	\$0.231

In addition, the Reserve Banks will increase the off-line surcharge from \$13 to \$15 to reflect more accurately the cost of processing an off-line funds transfer.

Reserve Banks project that the Fedwire funds transfer service will recover 100.5 percent of total expenses, including imputed expenses and targeted ROE, in 2000. Total costs are expected to decline \$3.7 million, or 6.0 percent, from the 1999 estimate, due in part to a decrease in total operating costs and a reduction in corporate overhead costs.

¹⁰ Based on 1999 estimated and 2000 projected volume distributions across depository institution customers.

On-line funds transfer volume is expected to increase 6.0 percent over 1999 estimated levels. Despite this anticipated volume growth, service revenue is projected to decline \$4.7 million, or 6.6 percent, in 2000 compared with the 1999 estimate because of the lower transfer fees.

4. 2000 Net Settlement Pricing— The Reserve Banks will retain the net settlement per-entry and file fees at their current levels and increase the off-line settlement surcharge from \$13 to \$15 per transaction to reflect more accurately the costs of off-line processing. Fees for the Fedwire-based settlement service will remain unchanged for 2000.¹¹

In March 1999, the Reserve Banks implemented an enhanced net settlement service that allows participants in settlement arrangements to submit settlement files to them via a computer interface connection or a Fedline terminal. The Reserve Banks continue to offer the current “settlement sheet” and Fedwire-based settlement services.¹² The settlement sheet service, however, will be phased out, and all participating arrangements will need to migrate to the enhanced service by year-end 2001. Overall use of the net settlement services is not projected to change significantly in 2000.

F. Book-Entry Securities¹³ -- Table 13 presents the actual 1998, estimated 1999, and projected 2000 cost recovery performance for the book-entry securities service.¹⁴

¹¹ Participants in arrangements and settlement agents are also charged the applicable Fedwire funds transaction fee for each transfer into and out of the settlement account.

¹² The settlement sheet service refers to the transmission to a Reserve Bank of settlement information that is then posted to participants' accounts via the Reserve Banks' accounting system.

¹³ Includes purchase and sale activity. All volume comparisons prior to 1999 consist of on-line origination volume only, as the Reserve Banks did not charge a fee for the on-line receipt of a transfer until then.

¹⁴ The Reserve Banks provide securities transfer services for securities issued by the U.S. Treasury Department, federal government agencies, government-sponsored enterprises, and certain international institutions. The priced component of this service, reflected in this memorandum, consists of revenues, expenses, and volumes associated with the transfer of all non-Treasury securities. For Treasury securities, the Reserve Banks act as fiscal agents for the United States on behalf of the Treasury Department, which assesses fees for the securities transfer component of the service. The Reserve Banks assess a fee for the money settlement component of a Treasury securities transfer; this component is not treated as a priced service.

TABLE 13. -- BOOK-ENTRY SECURITIES TRANSFER PRO FORMA COST AND REVENUE PERFORMANCE
[\$ millions]

Year	1 Revenue	2 Operating Costs & Imputed Expenses	3 Special Project Costs Recovered	4 Total Expense [2+3]	5 Net Income (ROE) [1-4]	6 Target ROE	7 Recovery Rate after Target ROE [1/(4+6)]	8 Special Project Costs Deferred & Financed
1998	18.8	14.8	1.6	16.4	2.4	1.0	107.8%	1.6
1999 (Est)	17.4	13.3	1.7	15.0	2.3	1.0	108.1%	0.0
2000 (Bud)	17.0	14.9	0.0	14.9	2.1	1.9	101.2%	0.0

1. 1998 Performance — The book-entry securities service recovered 107.8 percent of total expenses in 1998, including imputed expenses, automation consolidation special project costs budgeted for recovery, and targeted ROE. On-line origination volume increased 24.6 percent from the 1997 level, compared with an expected decrease of 4.5 percent, due mainly to an exceptionally high level of repackaging and new issuance of mortgage-backed securities.

2. 1999 Performance — Through October 1999, the book-entry securities service recovered 107.0 percent of total expenses, including imputed expenses, automation consolidation special project costs, and targeted ROE. For full-year 1999, the Reserve Banks estimate that the book-entry securities service will recover 108.1 percent of total costs compared with a targeted recovery rate of 105.2 percent. This higher-than-budget recovery rate comprises revenue that is 4.3 percent above budget and expense growth that is 1.5 percent above budget. The Reserve Banks expect revenue to be higher than projected due to higher-than-anticipated on-line transaction and monthly maintenance revenue. Costs are expected to be higher than budgeted because the level of government agency securities transfers as a percentage of total book-entry securities transfers processed by the Reserve Banks was higher than anticipated. This resulted in a higher-than-expected allocation of costs to the priced portion of the book-entry securities service.

Book-entry securities transfer on-line origination volume has increased 5.5 percent through October 1999 compared with the same period in 1998 because of continued growth in the level of repackaging and new issuance of mortgage-backed securities. The Reserve Banks expect this growth rate to level off substantially, however, reducing the full-year growth rate to 2.8 percent, compared with the projected 6.1 percent volume decline originally forecast at the beginning of the year.

In March 1999, the Reserve Banks completed the consolidation of their off-line processing functions to the Federal Reserve Banks of Boston and Kansas City. Thus far, the consolidation of these functions has reduced costs approximately \$1.6 million.

3. 2000 Pricing — The Reserve Banks will reduce the on-line transfer fee to \$0.70 on each side of the transaction from the current \$0.85 per side to better reflect the costs of processing on-line transfers of securities. This 17.6 percent decrease in the fee builds upon last year's 24.4 percent fee decrease; combined, these price decreases will make the 2000 fee for a book-entry securities transfer 37.8 percent lower than the 1998 fee.

The Reserve Banks also will increase the off-line surcharge to \$18 from \$13 to better reflect the costs of providing the off-line service for book-entry securities. Other fees related to book-entry securities will remain the same.

The purchase and sale service represents less than 2 percent of the costs and revenues of the book-entry securities service line. Provision of the service, which facilitates the purchase and sale of Treasury and government agency securities by depository institutions on the secondary market, is consolidated at the Federal Reserve Bank of Chicago. The Reserve Banks will maintain the \$40 transaction fee for securities purchases and sales.

The Reserve Banks project that the book-entry securities service will recover 101.2 percent of costs in 2000, including imputed expenses and targeted ROE. Total expenses are projected to decrease \$0.1 million, or 0.7 percent, from the 1999 estimate.

G. Noncash Collection — Table 14 lists the actual 1998, estimated 1999, and projected 2000 cost recovery performance for the noncash collection service.

TABLE 14. -- NONCASH COLLECTION PRO FORMA COST AND REVENUE PERFORMANCE								
[\$ millions]								
Year	1 Revenue	2 Operating Costs & Imputed Expenses	3 Special Project Costs Recovered	4 Total Expense [2+3]	5 Net Income (ROE) [1-4]	6 Target ROE	7 Recovery Rate after Target ROE [1/(4+6)]	8 Special Project Costs Deferred & Financed
1998	3.6	2.6	0.0	2.6	1.0	0.2	130.9%	0.0
1999 (Est)	3.0	2.0	0.0	2.0	1.0	0.1	140.2%	0.0
2000 (Bud)	2.0	1.7	0.0	1.7	0.3	0.2	107.6%	0.0

1. 1998 Performance — The noncash collection service recovered 130.9 percent of total expenses in 1998 (including imputed expenses and targeted ROE) compared with a target recovery rate of 126.8 percent. Volume for 1998 decreased 14.8 percent from 1997 volumes. This is smaller than the budgeted 19.7 percent reduction.

2. 1999 Performance — Through October 1999, the noncash collection service recovered 141.2 percent of its costs. For full-year 1999, the Reserve Banks estimate that the noncash collection service will recover 140.2 percent of costs, including imputed expenses and targeted ROE, compared with the projected recovery rate of 118.6 percent. The higher recovery rate is attributable to higher-than-expected revenue from additional called-bond activity and higher-than-budgeted coupon volume. Through October, volume had decreased 21.7 percent compared with the same period in 1998. The Reserve Banks estimate that full-year 1999 volume will decline 21.4 percent from 1998 levels compared with a 26.0 percent budgeted decline.

3. 2000 Pricing — The Reserve Banks will reduce two fees relative to 1999 fee levels. Specifically, the Reserve Banks will decrease the fee for bond collections from \$50.00 per bond to \$40.00 per bond and the per-envelope fee for deposits containing six to fifty coupon envelopes from \$3.00 to \$2.50. Even with these decreases, the Reserve Banks project that the noncash collection service will recover 108.4 percent of total costs, including imputed expenses and targeted ROE, in 2000. Total expenses are projected to decline approximately \$0.3 million, or 13.3 percent, in 2000, due to a projected volume decline of 29.3 percent. Total revenues are projected to decline approximately \$1.0 million, or 33 percent, because of the projected volume decline and the fee reductions. Volume declines will continue as the number of bearer municipal securities declines. New issues of bearer municipal securities effectively ceased in mid-1983 when the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA) removed the tax advantage for investors.

H. Special Cash — Table 15 presents the actual 1998, estimated 1999, and projected 2000 cost recovery performance for the special cash service.

TABLE 15. -- SPECIAL CASH PRO FORMA COST AND REVENUE PERFORMANCE								
[\$ millions]								
Year	1 Revenue	2 Operating Costs & Imputed Expenses	3 Special Project Costs Recovered	4 Total Expense [2+3]	5 Net Income (ROE) [1-4]	6 Target ROE	7 Recovery Rate after Target ROE [1/(4+6)]	8 Special Project Costs Deferred & Financed
1998	2.7	2.5	0.0	2.5	0.1	0.1	102.9%	0.0
1999 (Est)	2.9	2.6	0.0	2.6	0.2	0.0	106.2%	0.0
2000 (Bud)	2.1	2.0	0.0	2.0	0.1	0.1	101.8%	0.0

Priced special cash services represent a very small portion (less than one percent) of overall cash services provided by the Reserve Banks to depository institutions. Special cash services include wrapped coin, packaging of nonstandard currency orders and deposits as well as coin deposits, and registered mail shipments of currency and coin.

1. 1998 Performance — In 1998, the special cash service recovered 102.9 percent of total expenses (including imputed expenses and targeted ROE) compared with a targeted recovery rate of 103.1 percent. In May 1998, the uniform cash access policy was implemented. Due to the governmental nature of this function, the costs and revenue associated with nonstandard access are now treated as a nonpriced service.

2. 1999 Performance — Through October 1999, the special cash service recovered 103.6 percent of total expenses, including imputed expenses and targeted ROE. For full-year 1999, the Reserve Banks estimate that the special cash service will recover 106.2 percent of total expenses, compared with a targeted recovery rate of 105.8 percent. Revenue in 1999 is estimated to increase approximately \$.2 million, or 7.4 percent from 1998 levels, due mainly to stronger-than-anticipated volume in coin-wrapping in the Helena office and the entrance of the Chicago office in the business of nonstandard packaging of currency orders and deposits.

3. 2000 Pricing — For 2000, the Reserve Banks project that the special cash service will recover 101.8 percent of costs, including imputed expenses and targeted ROE. Total costs in 2000 are projected to decline \$.6 million, or 21.6 percent, from the 1999 level. Revenue in 2000 is expected to decline \$.8 million, or 27.6 percent, from the 1999 level.

The Fourth District's decision to exit the coin-wrapping business in April 2000 is the primary factor in both the overall anticipated revenue reduction and cost reduction for the year. With Cleveland's departure from coin wrapping, registered mail is likely to constitute approximately 65 percent of special cash revenue.

The Helena office will reduce the fee per box of wrapped coin from \$2.50 to \$2.25, and the nonstandard packaging fee per coin bag deposited from \$3.00 to \$2.00.

Changes to surcharges for registered mail shipments of currency reflect a System effort to standardize the method for pricing this product. To that end, the El Paso office will reduce the registered mail surcharge from \$80.00 to \$31.00, while the Helena office will increase the surcharge from \$8.50 to \$14.00, and the Tenth District will increase the surcharge for all offices from \$12.00 to \$13.00. The San Antonio office discontinued registered mail service in April 1999.

II. PRIVATE SECTOR ADJUSTMENT FACTOR

A. Overview—As required by the Monetary Control Act, the Reserve Bank's 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 method 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.

B. Discussion — The PSAF for 2000 of \$192.6 million represents an increase of \$76.8 million, or 66 percent, from the PSAF of \$115.8 million for 1999. 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.¹⁵ 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. 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 ten-year cost recovery amount for 1989-1998 would have been 99.9 percent rather than the 100.7 percent originally calculated. In the future, cost recovery percentages that incorporate these additional financing costs for each rolling ten-year period will be cited.

1. Asset Base — The total estimated value of Federal Reserve assets to be used in providing priced services in 2000 is reflected in table 16. Table 17 shows that the assets assumed to be financed through 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 17. More than three quarters of this increase results from including net pension assets (prepaid costs less postretirement/ postemployment liabilities) of \$361.5 million in priced assets to be financed through the PSAF, with building projects in two Districts and check standardization and imaging initiatives accounting for the remaining increase.

¹⁵ 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.

2. Cost of Capital, Taxes, and Other Imputed Costs—Table 17 also shows the financing and tax rates and the other required PSAF recoveries for 2000 and compares the 2000 rates with the rates used for developing the PSAF for 1999. The pretax return on equity rate decreased slightly from 23.5 percent for 1999 to 23.3 percent for 2000. The decrease is a result of lower 1998 BHC financial performance included in the 2000 BHC model relative to the 1993 BHC financial performance used in the 1999 BHC model.

3. Capital Adequacy —As shown in table 18, the amount of capital imputed for the 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 exceed regulatory guidelines for adequately capitalized institutions and the BHCs.

III. ANALYSIS OF COMPETITIVE EFFECT — All operational and legal changes considered by the Board that have a substantial effect on payment system participants are subject to the competitive impact analysis described in the March 1990 policy statement “The Federal Reserve in the Payments System.”¹⁶ Under this policy, Board assesses whether the change would have a direct and material adverse effect on the ability of other service providers to compete effectively with the Federal Reserve in providing similar services because of differing legal powers or constraints or because of a dominant market position of the Federal Reserve deriving from such legal differences. If the fees or fee structures create such an effect, the Board must further evaluate the changes to assess whether their benefits — such as contributions to payment system efficiency, payment system integrity, or other Board objectives — can be retained while reducing the hindrances to competition.

The Board does not believe that the fees and fee structures will have a direct and material adverse effect on the ability of other service providers to compete effectively with the Federal Reserve in providing similar services. Assuming the Reserve Banks’ volume and cost projections are accurate, the fees are set to provide the Federal Reserve a return on equity similar to that earned on average by large bank holding companies during the past five years. Moreover, the recommended 2000 fee schedules will enable the Reserve Banks to continue to recover all actual and imputed costs of providing priced services over the long run. The Board, however, is evaluating changes to certain price and service levels that affect private-sector ACH operators and their customers to determine whether such changes may better promote competition within the market for ACH services (64 FR 27793, May 21, 1999).

¹⁶ FRRS 7-145.2.

TABLE 16
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 ¹⁷	74.2	69.1
Materials and supplies ¹⁷	3.4	4.1
Prepaid expenses ¹⁷	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 ^{17, 18}	411.7	386.6
Furniture and equipment ¹⁷	180.1	150.3
Leasehold improvements and long-term prepayments ¹⁷	64.2	21.1
Prepaid Pension Costs ¹⁷	<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 ¹⁹	<u>99.0</u>	<u>93.4</u>
Total short-term liabilities	11,524.9	11,141.4
Long-term liabilities		
Postemployment/retirement benefits ¹⁷	238.3	-----
Long-term debt ¹⁹	<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 ¹⁹	<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.

¹⁷ Financed through PSAF; other assets are self-financing.

¹⁸ Includes allocations of Board of Governors' assets to priced services of \$0.5 million for 2000 and \$0.4 million for 1999.

¹⁹ Imputed figures represent the source of financing for certain priced services assets.

TABLE 17
Derivation of the 2000 and 1999 PSAF
(millions of dollars)

	<u>2000</u>	<u>1999</u>
A. Assets to be financed ²⁰		
Short-term	\$ 99.0	\$ 93.4
Long-term ²¹		<u>1,017.5</u>
<u>558.1</u>	\$1,116.5	\$651.4
B. Weighted average cost		
1. Capital Structure ²²		
Short-term debt	9.0%	14.8%
Long-term debt	35.8%	31.7%
Equity	55.1%	53.5%
2. Financing rates/costs ²²		
Short-term debt	5.1%	5.1%
Long-term debt	6.6%	6.6%
Pre-tax equity ²³	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% = 143.7	350.5 x 23.5% = 82.4
	<u>\$ 175.2</u>	<u>\$ 100.8</u>
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>
	<u>17.4</u>	<u>14.9</u>

²⁰ Priced service asset base is based on the direct determination of assets method.

²¹ Consists of total priced long-term assets less postretirement/postemployment benefit liabilities (for 2000 only).

²² 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.

²³ 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.

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 ²⁴	28.5%	18.2%
E. Tax rate	31.5%	32.0%

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

²⁴ Systemwide 2000 budgeted priced service expenses less shipping are \$675.0 million.

TABLE 18
 Computation of 2000 Capital Adequacy
 for Federal Reserve Priced Services
 (millions of dollars)

<u>Assets</u>	<u>Assets</u>	<u>Risk Weight</u>	<u>Weighted</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.

Automated Clearinghouse Fee Schedule²⁵

	<u>Fees</u>
Origination (per item or record):	
Items in small files ²⁶	\$0.0055
Items in large files ²⁷	\$0.0045
Addenda record	\$0.002
Receipt (per item or record):	
Item	\$0.007
Addenda record	\$0.002
Input file processing fees (per file):	
Small file	\$1.75
Large file	\$6.75
Monthly fees:	
Account servicing fee (per routing number)	\$25.00
Information extract file	\$10.00
Return item/notification of change (NOC) fees ²⁸ :	
Voice response return/NOC ²⁹	\$2.00
Nonelectronic input/output fees ³⁰ :	
Tape input/output	\$25.00
Paper output	\$15.00
Diskette output	\$15.00
Facsimile return/NOC ³¹	\$15.00

²⁵ The Reserve Banks will delay implementing the coming year's price and service level changes until April 3, 2000. The delay is intended to minimize changes during the period surrounding the century rollover. Current Reserve Bank prices and products will remain applicable through the first quarter of next year.

²⁶ Small files contain fewer than 2,500 items.

²⁷ Large files contain 2,500 or more items.

²⁸ The Reserve Banks also assess a \$15 fee for every government paper return/NOC they process. This service is not considered a priced service. The fee includes the transaction fee in addition to the conversion fee.

²⁹ The fee includes the transaction fee in addition to the voice-response fee.

³⁰ These services are offered in contingency situations only.

³¹ The fee includes the transaction fee in addition to the conversion fee.

Funds Transfer and Net Settlement Fee Schedule³²

Funds transfer:	<u>Fees</u>
Volume-based pricing fees (originations and receipts)	
Per transfer for the first 2,500 transfers per month	\$0.33
Per transfer for additional transfers up to 80,000 per month	\$0.24
Per transfer for every transfer over 80,000 per month	\$0.17
Surcharge	
Off-line transfer originated	\$15.00
Telephone notification	\$15.00
Net settlement:	
Basic fee	
Settlement charge per entry	\$0.95
Settlement file charge	\$12.00
Surcharge	
Off-line origination per file ³³	\$15.00
Telephone notification per file	\$15.00
Minimum monthly fee	\$60.00
Fedwire-based, small-dollar arrangement per settlement day ³⁴	\$100.00
Fedwire-based, large-dollar arrangement per settlement day ³⁴	\$100.00 - \$175.00

³² The Reserve Banks will delay implementing the coming year's price and service level changes until April 3, 2000. The delay is intended to minimize changes during the period surrounding the century rollover. Current Reserve Bank prices and products will remain applicable through the first quarter of next year.

³³ The off-line origination surcharge will be waived by Reserve Banks that do not provide an electronic submission capability for the settlement sheet service.

³⁴ Participants in arrangements and settlement agents are also charged the applicable Fedwire funds transfer fee for each transfer into and out of the settlement account.

Book-Entry Securities Fee Schedule³⁵

Book-entry securities transfer:	<u>Fees</u>
Basic transfer fee	
Transfer originated	\$0.70
Transfer received	\$0.70
Reversal originated	\$0.70
Reversal received	\$0.70
Surcharge	
Off-line transfer originated or received	\$18.00
Off-line reversal originated or received	\$18.00
Monthly maintenance fees	
Account maintenance (per account)	\$15.00
Issues maintained (per issue/per account)	\$0.45
Purchase & sale:	
Transaction fee	\$40.00

³⁵ The Reserve Banks will delay implementing the coming year's price and service level changes until April 3, 2000. The delay is intended to minimize changes during the period surrounding the century rollover. Current Reserve Bank prices and products will remain applicable through the first quarter of next year.

Noncash Collection Fee Schedule³⁶

Coupon collection:	<u>Fees</u>
Cash letters:	
with five or fewer coupon envelopes	\$7.50
with six to fifty coupon envelopes	\$15.00
Coupon envelopes:	
with five or fewer coupon envelopes	\$4.75
with six to fifty coupon envelopes	\$2.50
Return items	\$15.00
 Bond collection (per bond):	 \$40.00³⁷

³⁶ The Reserve Banks will delay implementing the coming year's price and service level changes until April 3, 2000. The delay is intended to minimize changes during the period surrounding the century rollover. Current Reserve Bank prices and products will remain applicable through the first quarter of next year.

³⁷ Plus actual shipping costs.

Special Cash Services Fee Schedule³⁸

	<u>Fee</u>																					
Wrapped Coin (per box³⁹)																						
All Fourth District offices.....	Discontinued April 2000																					
Helena office	\$2.25																					
Nonstandard Packaging																						
All Seventh District offices (per currency order or deposit)	\$12.00⁴⁰																					
Helena office (per coin bag deposited)	\$2.00																					
El Paso office (Express Cash Orders)	\$60.00⁴¹																					
Registered Mail Fees⁴²																						
	<table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 15%;"></th> <th style="text-align: center; width: 15%;"><u>Surcharge</u></th> <th style="text-align: center; width: 15%;"><u>Insurance Fee⁴³</u></th> </tr> </thead> <tbody> <tr> <td style="padding-left: 20px;">First District</td> <td style="text-align: center;">\$30.00</td> <td style="text-align: center;">\$0.80</td> </tr> <tr> <td style="padding-left: 20px;">Helena office⁴⁴</td> <td style="text-align: center;">\$14.00</td> <td></td> </tr> <tr> <td style="padding-left: 20px;">All Tenth District offices</td> <td style="text-align: center;">\$13.00</td> <td style="text-align: center;">\$0.27</td> </tr> <tr> <td style="padding-left: 20px;">El Paso office</td> <td style="text-align: center;">\$31.00</td> <td style="text-align: center;">\$0.26</td> </tr> <tr> <td style="padding-left: 20px;">San Antonio office</td> <td colspan="2" style="text-align: center;">Discontinued April 1999</td> </tr> <tr> <td style="padding-left: 20px;">All Twelfth District offices</td> <td style="text-align: center;">\$14.00</td> <td style="text-align: center;">\$0.20 (Cont. U.S.) \$0.30 (Other)</td> </tr> </tbody> </table>		<u>Surcharge</u>	<u>Insurance Fee⁴³</u>	First District	\$30.00	\$0.80	Helena office ⁴⁴	\$14.00		All Tenth District offices	\$13.00	\$0.27	El Paso office	\$31.00	\$0.26	San Antonio office	Discontinued April 1999		All Twelfth District offices	\$14.00	\$0.20 (Cont. U.S.) \$0.30 (Other)
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³⁸ The Reserve Banks will delay implementing the coming year's price and service level changes until April 3, 2000. The delay is intended to minimize changes during the period surrounding the century rollover. Current Reserve Bank prices and products will remain applicable through the first quarter of next year.

³⁹ There are fifty rolls of coin in each box.

⁴⁰ This service only applies to the \$1 through \$20 denominations.

⁴¹ El Paso's Express Cash Order Fee applies only to orders that need same day preparation and delivery.

⁴² Depository institutions also pay any postage fees incurred for registered mail. Postage fees are billed separately from Federal Reserve Bank surcharges and insurance fees.

⁴³ Insurance fees are per \$1,000 shipped via the registered mail service in excess of the first \$25,000, which is covered by the U.S. Postal Service.

⁴⁴ The Helena office only ships registered mail packages valued up to \$25,000, so no additional insurance is needed in excess of the \$25,000 covered by the U.S. Postal Service.

Electronic Connection Fee Schedule^{45, 46}

The Reserve Banks charge fees for the electronic connections used by depository institutions to access priced services and allocate the cost and revenue associated with electronic access to the various priced services. At this time, electronic access fees for 2000 remain at their 1999 levels.

Connection types:	Fees
Dial - receive and send (FedLine)	\$75.00 per month
Link encrypted dial	\$200.00 per month
High-speed dial @ 56 kbps	\$350.00 per month
Multidrop leased line	\$450.00 per month
Dedicated leased line (to 9.6 kbps)	\$750.00 per month
High-speed leased line @ 19.2 kbps	\$850.00 per month
High-speed leased line @ 56 kbps	\$1,000.00 per month
High-speed leased line @ 128 kbps	\$1,800.00 per month
High-speed leased line @ 256 kbps	\$2,000.00 per month
Cross-district	Actual cost ⁴⁷

Contingency testing options: ⁴⁸	
Premium dedicated dial test connection	\$500.00 per month
Basic dedicated dial test connection	\$250.00 per month
Shared dial test connection	\$150.00 per month
Third-party contingency site dial test connection	\$45.00 per month

⁴⁵ Installation, training, contingency hardware, and software certification are not considered priced services, and the fees for these services are not listed here. For a copy of the full electronic access fee schedule, contact the local Federal Reserve Bank.

⁴⁶ The Reserve Banks will delay implementing the coming year's price and service level changes until April 3, 2000. The delay is intended to minimize changes during the period surrounding the century rollover. Current Reserve Bank prices and products will remain applicable through the first quarter of next year.

⁴⁷ The customer pays the actual costs of the circuit and a monthly surcharge to cover an equitable share of expenses associated with customer support, depreciation of hardware (that is, link encryption units), and other overhead expenses. At a minimum, this fee must be equivalent to the standard fee for the particular type of leased line connection.

⁴⁸ Use of Dial Test connections should not exceed 60 hours per month for the Premium service and 120 hours per year for the Basic and Shared services. Customers exceeding this guideline should establish a Dedicated Leased Line connection for testing.

The Reserve Banks anticipate introducing frame relay as an electronic access service during the second half of 2000. Frame relay will provide higher throughput and enhanced security to leased-line customers. With the deployment of frame relay, the Reserve Banks will develop an additional fee schedule for those customers wanting to migrate to the new network, while still providing access through the current system at the fee levels for those that do not.

By order of the Board of Governors of the Federal Reserve System,
December 28, 1999.

Jennifer J. Johnson,
Secretary of the Board.