FEDERAL RESERVE SYSTEM
[Docket No. OP-1165]
Federal Reserve Bank Services

AGENCY: Board of Governors of the Federal Reserve System.

ACTION: Notice.

SUMMARY: The Board has approved the 2004 fee schedules for Federal Reserve priced services and electronic connections and a private-sector adjustment factor (PSAF) for 2004 of $179.7 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. The Board has also approved changing the earnings credit rate on clearing balances from the federal funds rate to 90 percent of the three-month Treasury bill rate, and changing the limit on the frequency of changes to contracted clearing balances from once per month to as often as each maintenance period.

DATES: The new fee schedules become effective January 2, 2004. The change in the earnings credit rate on clearing balances, and the change to how often depository institutions can change contracted clearing balances becomes effective January 8, 2004.

FOR FURTHER INFORMATION CONTACT: For questions regarding the fee schedules: Jack K. Walton II, Assistant Director, (202/452-2660); Gregory E. Cannella, Financial Services Analyst, (202/530-6214), Division of Reserve Bank Operations and Payment Systems. For questions regarding the PSAF and earnings credits on clearing balances: Lezell Murphy, Senior Financial Analyst, (202/452-3758); or Brenda Richards, Senior Financial Analyst, (202/452-2753); or Gregory Evans, Manager, Financial Accounting, (202/452-3945), Division of Reserve Bank Operations and Payment Systems. For users of Telecommunications Device for the Deaf (TDD) only, please call 202/452-3544. Copies of the 2004 fee schedules for the check service are available from the Board, the Federal Reserve Banks, or the Reserve Banks' financial services web site at www.frbservices.org.

SUPPLEMENTARY INFORMATION:

I. PRICED SERVICES

A. Discussion – From 1993 through 2002, the Reserve Banks recovered 98.8 percent of their total costs for providing priced services, including special project costs, imputed expenses, and targeted after-tax profits or return on equity (ROE).[1]

Table 1 summarizes the priced services' actual, estimated, and budgeted cost recovery rates for 2002, 2003, and 2004, respectively. Cost recovery is estimated to be 85.6 percent in 2003 and budgeted to be 93.6 percent in 2004. The aggregate cost recovery rates are heavily influenced by the performance of the check service, which accounts for approximately 83 percent of the total cost of priced services. The electronic services (FedACH, Fedwire funds

[1] These imputed expenses, such as taxes that would have been paid, and the return on equity that would have to be earned had the services been furnished by a private business firm, are referred to as the private-sector adjustment factor (PSAF). The ten-year recovery rate is based upon the pro forma income statements for Federal Reserve Banks' priced services published in the Board's *Annual Report*. Beginning in 2000, the PSAF has included additional financing costs associated with pension assets attributable to priced services. This ten-year cost recovery rate has been computed as if these costs were not included in the PSAF calculations prior to 2000. If these costs were included in the calculations, and assuming that the Reserve Banks would not have made any contemporaneous cost or revenue adjustments, the 10-year recovery rate would be 97.8 percent.

and national settlement (NSS), and Fedwire securities) account for approximately 17 percent of costs, while noncash and special cash services represent a *de minimis* amount.

Table 1

Pro Forma Cost and Revenue Performance
($ millions)

Year	1[a] Revenue	2[b] Total expense	3 Net income (ROE) [1-2]	4[c] Target ROE	5 Recovery rate after target ROE [1/(2+4)]
2002	918.3	891.7	26.6	92.5	93.3%
2003 (Estimate)	889.0	933.4	-44.4	104.7	85.6%
2004 (Budget)	934.5	886.3	48.2	112.4	93.6%

[a] Revenue includes net income on clearing balances (NICB). For 2002 and 2003, clearing balances, net of imputed reserve requirements and balances used to finance priced services assets, are assumed to be invested in three-month Treasury bills. For 2004, net clearing balances are assumed to be invested in a broader portfolio of investments. Based on the historical average return on the portfolio, income is imputed as a constant return over the rate used to determine the cost of clearing balances. NICB equals the imputed income from these investments less earnings credits granted to holders of clearing balances. For 2002 and 2003, the cost of clearing balances was based on the federal funds rate and for 2004 the cost is based on the discounted three-month Treasury bill rate.
[b] The calculation of total expense includes operating, imputed, and other expenses. Imputed and other expenses include taxes, FDIC insurance, Board of Governors' priced services expenses, and the cost of float and interest on imputed debt, if any. Credits or debits related to the accounting for pensions under FAS 87 are also included.
[c] Target ROE is the after-tax ROE included in the PSAF.

Table 2 presents an overview of the 2002, 2003 budget, 2003 estimate, and 2004 budget cost recovery performance by category of major priced service.

Table 2

Priced Services Cost Recovery
(percent)

Priced service	2002	2003 Budget	2003 Estimate	2004 Budget
All services	93.3	93.7	85.6	93.6
Check	91.7	92.5	83.2	91.9
FedACH	104.1	100.3	101.6	101.8
Fedwire funds & NSS	99.6	101.8	98.0	103.3
Fedwire securities	100.1	100.6	106.0	104.7
Noncash collection	100.6	110.9	118.9	113.3
Special cash	94.8	77.3	71.9	n.a.

n.a. – Not applicable

1. <u>2003 Estimated Performance</u> – In 2003, the Reserve Banks estimate that they will recover 85.6 percent of the costs of providing priced services, compared with the budgeted recovery rate of 93.7 percent. The Reserve Banks do not expect to recover fully actual and imputed expenses, incurring an overall net loss of $44.4 million, which is $87.3 million less than the budgeted net income of $42.9 million. This shortfall is largely driven by lower-than-expected net income from clearing balances (NICB) and increased pension costs, as well as

lower-than-expected check service revenues and one-time costs associated with check restructuring.[2]

Two primary factors are contributing to the check service's underrecovery. First, higher-than-anticipated volume declines, as well as a shift by customers to lower priced check products as a result of low interest rates, have resulted in check service operating revenues in 2003 running $26.9 million below budget. The Federal Reserve System's recent retail payments research, along with more recent anecdotal information from the industry, indicates that check use in the United States is continuing to decline.[3] The deterioration in the Reserve Banks' check volume is consistent with this nationwide trend. Second, while the Reserve Banks have reduced operating costs in response to the volume declines, one-time costs associated with the check restructuring initiative have contributed to significantly lower-than-budgeted check service cost recovery.

2. <u>2004 Projected Performance</u> − For 2004, the Reserve Banks project a priced services cost recovery rate of 93.6 percent, with net income of $48.2 million, as compared to target net income of $112.4 million. The primary factors affecting 2004 cost recovery are the one-time costs associated with planned and potential further restructuring of the Reserve Banks' check operations and the continued decline in check volume.

The primary risks to the Reserve Banks' ability to achieve their budget targets are greater-than-expected costs associated with the restructuring initiative and a steeper decline in the Reserve Banks' check volume than the projected 8.9 percent decrease. Additionally, the Check Clearing for the 21st Century Act (Check 21) presents risk to existing volumes, pricing, and product strategies. To address the continuing decline in check volumes, the Reserve Banks will continue to implement a business and operational strategy that will improve efficiency, reduce excess capacity and other costs, and position the service to achieve its financial and payment system objectives over the long term.

3. <u>2004 Pricing</u> − The following summarizes the Reserve Banks' changes in fee structures and levels for priced services in 2004, along with an indication of overall experience with prices in each service line since 1996:[4]

Check

- The Reserve Banks will raise fees for forward-collection check products 5.8 percent, return check products 6.1 percent, and payor bank check products 0.7 percent compared with January 2003 fees.

- The price index for the check service has increased about 37 percent since 1996.

FedACH

- The Reserve Banks will reduce the input file processing fee from $5.00 to $3.75, and will retain all other fees at their current levels.

---

[2] The Reserve Banks' check restructuring initiative will reduce Federal Reserve check processing locations from 45 to 32 sites and will streamline check adjustments by 2004. (See www.frbservices.org/Retail/pdf/CheckRestructure-CustomerLetter.pdf.)

[3] See Gerdes, Geoffrey R. and Jack K. Walton II, "The Use of Checks and Other Noncash Payment Instruments in the United States," Federal Reserve Bulletin, August 2002, pp. 360-374. (See www.federalreserve.gov/pubs/bulletin/default.htm.)

[4] Data elements used in calculating the price index for 2002 and prior years include explicit fee revenue from priced services and volumes associated with those services. For 2003 and 2004, the year-over-year percentage changes are based on comparisons of the 2002 results, 2003 estimates, and 2004 projections.

- The price index for the FedACH service has decreased about 66 percent since 1996.

Fedwire funds and national settlement

- The Reserve Banks will retain fees at their current levels.

- The price index for the Fedwire funds and national settlement service has decreased about 62 percent since 1996.

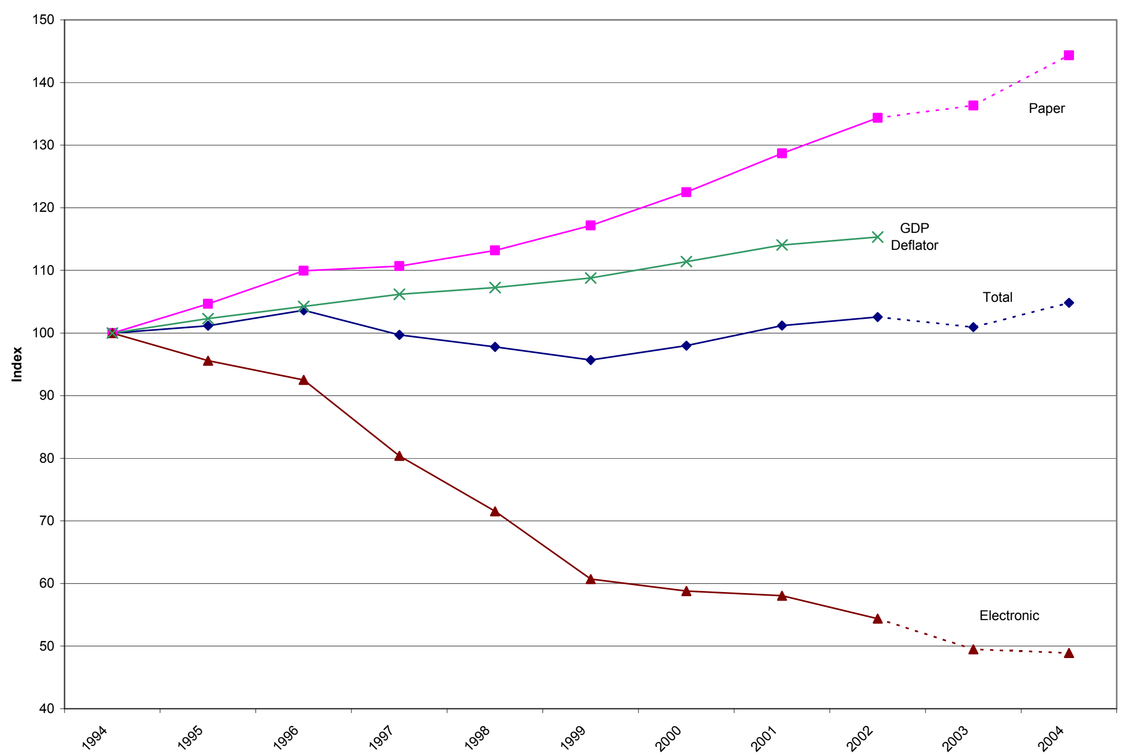
Fedwire securities

- The Reserve Banks will reduce the on-line transfer origination and receipt fee from $0.40 to $0.32 and will reduce the claim adjustment fee from $0.38 to $0.30. The Reserve Banks will increase the off-line surcharge from $25 to $28 and will increase the joint custody surcharge from $22 to $30. The Reserve Banks will retain all other fees at their current levels.

- The price index for the Fedwire securities service has decreased about 39 percent since 1996.

4. 2003 Price Index − Figure 1 compares indices of fees for the Federal Reserve's priced services with the GDP price deflator. Since 1995, the price index for all priced services has increased a total of about 3.6 percent. The price index for electronic payment services (FedACH, Fedwire funds and national settlement, Fedwire securities, and electronic check products), as well as electronic access to Federal Reserve Banks' priced services, is projected to decrease 1.2 percent in 2004. The price index for paper-based payment services (check and noncash collection) is expected to increase about 5.9 percent in 2004. Compared with the price index for 2003, the price index for all Federal Reserve Bank priced services is projected to increase approximately 3.9 percent in 2004.

FIGURE 1
PRICE INDICES FOR FEDERAL RESERVE PRICED SERVICES



B. Earnings Credits on Clearing Balances – The Board has approved changing the rate used in calculating earnings credits on clearing balances from the federal funds rate to 90 percent of the three-month Treasury bill rate, effective January 8, 2004. The "marginal reserve requirement" adjustment in the earnings credit calculation will continue to be made using the federal funds rate.

Clearing balances were introduced in 1981, as a part of the Board's implementation of the Monetary Control Act, to facilitate the access to Federal Reserve priced services by institutions that either did not have an account at a Reserve Bank or did not have a sufficient required reserve balance to support the settlement of their payment transactions. Reserve Banks have calculated earnings credits based on the effective federal funds rate since the inception of the clearing balance program over twenty years ago. Earnings credits can be used only to offset charges for priced services, are calculated monthly, and expire if not used within one year.[5]

The most common practice at private-sector correspondent banks is to calculate earnings credits on compensating balances using a rate discounted from the lagged three-month Treasury bill rate. Discounts are expressed either as a percentage reduction or a level (basis-point) reduction from the base rate. Even so, almost one-quarter of large correspondent banks no longer explicitly tie the earnings credit rate to an external benchmark. Correspondent banks generally do not establish required compensating balance levels and they generally do not allow earning credits to accumulate to future months, like the Federal Reserve.[6] Earnings credits on balances held at correspondent banks generally must be used in the month earned.

Under current procedures, the earnings credits on clearing balances held at the Federal Reserve are based on the average effective federal funds rate, the average clearing balance maintained, the imputed reserve requirement adjustment, and the marginal reserve requirement. These two adjustments are applied so that the return on clearing balances at the Federal Reserve is comparable to what the depository institution would have earned had it maintained the same balance at a private-sector correspondent.[7]

---

[5] A band is established around the contracted clearing balance to determine the maximum balance on which credits are earned as well as any deficiency charges. The clearing balance allowance is 2 percent of the contracted amount, or $25,000, whichever is greater. Earnings credits are based on the period-average balance maintained up to a maximum of the contracted amount plus the clearing balance allowance. Deficiency charges apply when the average balance falls below the contracted amount less the allowance, although credits are still earned on the average maintained balance.

[6] A minimum balance may be established in specific cases, depending on the creditworthiness of the customer.

[7] The "imputed reserve requirement" adjustment is made because a private-sector correspondent would be required to hold reserves against the respondent's balance with it. As a result, the correspondent would reduce the balance on which it would base earnings credits for the respondent because it would be required to hold a portion, determined by its marginal reserve ratio, in the form of non-interest-bearing reserves. For example, if a depository institution held $1 million in clearing balances with correspondent bank and the correspondent had a marginal reserve ratio of 10 percent, then the correspondent bank would be required to hold $100,000 in reserves, and it would grant credits to the respondent based on 90 percent of the balance, or $900,000. This adjustment imputes a marginal reserve ratio of 10 percent to the Reserve Bank.

The "marginal reserve requirement" adjustment accounts for the fact that the respondent can deduct balances maintained at a correspondent, but not the Federal Reserve, from its reservable liabilities. This reduction has value to the respondent when it frees up balances that can be invested in interest-bearing instruments, such as a federal funds. For example, a respondent placing $1 million with a correspondent rather than the Federal Reserve would free up $30,000 if its marginal reserve ratio were 3 percent.

The formula used by the Reserve Banks to calculate earnings credits can be expressed as

$$e = [\, b * (1\text{-}FRR) * r] + [\, b * (MRR) * f]$$

where e is total earnings credits, b is the average clearing balance maintained, FRR is the assumed Reserve Bank marginal reserve ratio (10 percent), r is the earnings credit rate (currently equal to f), MRR is the marginal reserve ratio of the depository institution holding the balance (either 0 percent, 3 percent, or 10 percent) and f is the average federal funds rate. A depository institution that meets its reserve requirement entirely with vault cash is assigned a marginal reserve requirement of zero.

By using the federal funds rate, the Reserve Banks are calculating earnings credits using a rate that is higher than typical market practice. The Reserve Banks could better align their rates with those of the marketplace and lower their cost of clearing balances, which must be recovered via fees, by changing to a Treasury-bill-based rate. The Board has approved that the earnings credit rate be changed to 90 percent of a rolling 13-week average of the annualized coupon equivalent yield of three-month Treasury bills in the secondary market to better align Federal Reserve policy with market practice.

The Board also approved changing its policy on the frequency with which depository institutions can change their contracted clearing balances. The new policy will permit changes more frequently, as often as each maintenance period. Under this new policy, any change would still need to be made before the beginning of the reserve maintenance period to which it applies. Advance agreement on the amount of the contracted balance ensures that variations in contracted clearing balances are not a source of uncertainty for the conduct of open market operations during a reserve maintenance period. Depository institutions, through the Reserve Banks, have expressed interest over the years in being able to make more frequent changes to their contracted level.

C. Check − Table 3 below shows the 2002, 2003 estimate, and 2004 budgeted cost recovery performance for the check service.

Table 3

Check Pro Forma Cost and Revenue Performance
($ millions)

Year	1 Revenue	2 Total expense	3 Net income (ROE) [1-2]	4 Target ROE	5 Recovery rate after target ROE [1/(2+4)]
2002	760.9	751.2	9.7	78.2	91.7%
2003 (Estimate)	744.5	805.8	-61.2	89.4	83.2%
2004 (Budget)	776.1	751.1	25.0	93.6	91.9%

1. 2002 Performance − The check service recovered 91.7 percent of total costs in 2002, including imputed expenses, and a portion of targeted ROE, which was less than the targeted recovery rate of 95.5 percent. The volume of checks collected decreased 1.9 percent from 2001, consistent with nationwide trends away from the use of paper checks and toward greater use of electronic payment methods. Revenue fell from 2001 levels primarily due to declining volume combined with a customer shift to lower priced products. Customer demand for these lower priced products grew and the value of premium priced accelerated availability products diminished as interest rates declined. Revenue was $44.3 million less than budget. Costs were $13.6 million less than budget due to local cost reductions, which were largely offset by lower-than-budgeted pension credits.

2. 2003 Estimate − Through August 2003, the check service has recovered 84.3 percent of total costs, including imputed expenses, and targeted ROE. For the full year, the Reserve Banks do not expect to recover fully their costs of providing check services. Specifically, the Reserve Banks estimate that the check service will recover 83.2 percent of its total costs for the full year compared with the budgeted 2003 recovery rate of 92.5 percent, for an operating loss of $61.2 million. The lower-than-budgeted recovery rate is driven by lower-than-anticipated NICB and pension credits, which account for $59.4 million of the financial

shortfall. Additional contributing factors include costs of $39.0 million associated with the check restructuring and check modernization initiatives that were not included in the original budget, and less-than-budgeted operating revenue of $26.9 million.[8] The service revenue shortfall reflects a continued trend of customers towards the use of lower priced products, which are more attractive in a low interest rate environment. The budget variances are summarized in table 4.

Table 4

Check 2003 Budget vs. 2003 Estimate
(millions of dollars)

	BUDGET	ESTIMATE	VARIANCE
Operating revenue	772.4	745.5	-26.9
NICB	8.6	-1.0	-9.6
Total revenue	**781.0**	**744.5**	**-36.5**
Check restructuring	0.0	32.6	32.6
Check modernization	100.5	106.9	6.4
Other operating costs	665.5	666.1	0.6
Pension credits	-41.0	8.8	49.8
Other imputed costs	29.7	-8.6	-38.3
Total cost	**754.7**	**805.8**	**51.1**
Net Income	**26.3**	**-61.2**	**-87.6**
Target ROE	89.4	89.4	
Recovery rate	92.5%	83.2%	

The volume of checks handled by the Reserve Banks has declined (as shown in table 5), reflecting the broader market trend in which the use of checks continues to decline. Forward-collection check product volume through August, excluding electronic fine sort volume, declined 4.8 percent.[9] For the full year 2003, the Reserve Banks estimate that forward-collection volume will decline 4.8 percent, compared with a budgeted decline of 1.9 percent. Return check volume has increased 0.4 percent through August 2003. The Reserve Banks, however, anticipate that return check volume will decline 0.2 percent for the full year, compared with a budgeted decline of 3.3 percent.

[8] The check modernization initiative, which is largely completed, is comprised of four individual projects to standardize the Reserve Banks' hardware and software platforms for check processing and adjustments, for check imaging and archiving, and to develop a web-based delivery platform.

[9] Two Reserve Banks offer an electronic fine-sort product, which allows depository institutions to exchange fine-sort information electronically between themselves with paper checks to follow.

Table 5

Paper Check Product Volume Changes
(percent)

	BUDGETED 2003 CHANGE	YEAR-TO-DATE CHANGE THROUGH AUGUST 2003	ESTIMATED 2003 CHANGE
Total forward-collection[a]	-1.9	-4.8	-4.8
Forward-processed	-2.3	-4.4	-4.3
Fine-sort [a]	4.0	-15.8	-12.0
Returns	-3.3	1.0	-0.2

[a] These rates exclude electronic fine-sort volume. Including the electronic fine-sort product, fine-sort volume growth was budgeted to increase 5.1 percent in 2003 and is now estimated to increase 3.8 percent.

Electronic check presentment volumes are projected to decline for full-year 2003, as summarized in table 6. Reserve Banks provide paying banks with electronic check data or images for approximately 40 percent of the checks they collect. Image volumes are projected to increase 8.8 percent to approximately 1.5 billion check images, which represent about 9.8 percent of all checks collected by the Reserve Banks. While the total number of images increased, the increase was below the budgeted growth rate of 14.9 percent.

Table 6

Electronic Check Product Share and Volume Changes

	VOLUME CHANGE THROUGH AUGUST 2003 (PERCENT)	ESTIMATED 2003 CHANGE (PERCENT)	SHARE OF CHECKS COLLECTED THROUGH AUGUST 2003 (PERCENT)
Electronic Check Presentment[a]	-0.6	-1.9	24.0
Truncation	0.1	-1.2	5.6
Non-Truncation	-0.8	-2.2	18.4
Electronic Check Information	-6.9	-3.4	6.2
Images	8.8	8.8	9.8

[a] ECP consists of truncated and non-truncated checks. Non-truncated checks include checks presented through the MICR presentment and MICR presentment plus products.

3. <u>2004 Projection</u> − For 2004, the Reserve Banks will focus largely on opportunities to streamline further check processing and adjustment activities across the System. The multi-year check modernization project will be largely completed by the end of 2003 and will result in a standard operating platform in all remaining Reserve Bank check processing offices. In 2004, the Reserve Banks plan to reduce check costs by $21.2 million as the check modernization management and implementation teams are phased out. As the Reserve Banks complete their transitions to the standard check platform, they will reduce operating costs further. For example, through August 2003, the Reserve Banks have reduced check operating costs $13.2 million because of the greater efficiencies resulting from the check modernization projects. In addition to these anticipated cost savings, the transition to a common operating platform also will enable the Reserve Banks to improve their operating efficiency further by providing them with additional flexibility to adjust their check processing infrastructure.

Check restructuring allows the Reserve Banks to address ongoing volume changes by reducing excess capacity across the Federal Reserve System. The Reserve Banks will begin implementing the restructuring initiative this year and will continue the restructuring through 2004. While most of the one-time costs for this initiative will be accrued in 2003, significant costs also will be incurred in 2004. Check restructuring is expected to improve Reserve Bank cost effectiveness over the long term, with the current initiative reducing steady-state production costs by $60 million in 2005. The Reserve Banks will continue to assess the potential for further changes to their check processing infrastructure. Given the expected continued volume decline in the interbank check collection market and the industry's excess processing capacity, the Reserve Banks anticipate further changes to their infrastructure in 2005. As a result, the Reserve Banks' 2004 budget includes the accrual of expenses associated with further changes in their check processing infrastructure in 2005, and potential expenses for operational changes related to Check 21 in 2004. The Reserve Banks are currently developing products as well as making changes to operational workflows to address Check 21.

In addition to the operational initiatives for improving efficiency and reducing ongoing costs, the Reserve Banks will modify the price of selected products in 2004 to enhance service revenue. The Reserve Banks will increase certain fees to collect and return checks drawn on depository institutions that are distant from Federal Reserve check processing offices to reflect the Reserve Banks' costs more accurately in providing these products. Most of the price increases are targeted at markets that have become increasingly costly for the Reserve Banks to service. Depository institutions collecting checks drawn on and returning checks to depository institutions located in these markets may see a substantial increase in their check collection and return fees.

There is also a significant effort in 2004 to continue setting fees to achieve greater pricing consistency for key products across the Reserve Banks. In addition, a number of high-value products have been selected for moderate price increases for 2004. The fee changes will enhance the Reserve Banks' ability to recover costs, while maintaining the competitiveness of these products.

For 2004, the Reserve Banks are targeting an overall price increase of 5.2 percent, as shown in table 7. This increase consists of a 5.8 percent increase in forward check-collection fees, comprised of a 6.9 percent increase in forward cash letter fees and a 5.4 percent increase in per-item fees. Fees for return services will increase by 6.1 percent, which is composed of a 7.5 percent increase in return cash letter fees and a 5.1 percent increase in per-item fees. The average volume-weighted fees for payor bank services will increase 0.7 percent compared with current fees.

Table 7

2004 Fee Changes
(percent)

PRODUCT	FEE CHANGE
Total check service	5.2
Forward-collection	5.8
Returns	6.1
Payor bank services	0.7

Table 8 below summarizes ranges of selected check fees for 2003 and 2004, and shows 2004 price changes in bold type.

Table 8

Selected Check Fees

Items:	Current fee ranges (per item)		2004 fee ranges (per item)	
Forward-processed				
City	$0.005 to 0.080		$0.005 to **0.078**	
RCPC	$0.003 to 0.340		$**0.005** to 0.340	
Forward fine-sort				
City	$0.005 to 0.021		$0.005 to **0.018**	
RCPC	$0.005 to 0.036		$0.005 to 0.036	
Qualified returned checks				
City	$0.08 to 0.80		$0.08 to 0.80	
RCPC	$0.10 to 1.10		$0.10 to **1.15**	
Raw returned checks				
City	$1.50 to 5.00		$**1.60** to 5.00	
RCPC	$1.30 to 5.00		$1.30 to 5.00	
Consolidated shipment [a]	$0.004 to $0.036		$0.004 to $0.036	
Cash letters:	(per cash letter)		(per cash letter)	
Forward-processed [b]	$2.00 to 37.00		$**1.50** to 37.00	
Forward fine-sort	$6.00 to 14.00		$**5.50** to **15.00**	
Returned checks: raw/qualified	$2.00 to 16.00		$2.00 to **17.00**	
Payor bank services:	(Fixed)	(per item)	(Fixed)	(per item)
MICR information	$5-15	$0.0030-0.0150	$5-15	$0.0030-0.0150
Electronic presentment	$2-15	$0.0005-0.0110	$**5**-15	$**0.0017**-0.0110
Truncation	$2-7	$0.0020-0.0180	$**5-8**	$0.0020-0.0180
Image capture	$2-15	$0.0020-0.0150	$2-**8**	$0.0020-0.0150
Image delivery	Varies[c]	$0.0020-0.0080	Varies[c]	$0.0020-**0.0070**
Image archive	n.a.	$0.0007-0.0060	n.a.	$0.0007-**0.0070**
Image retrieval	n.a.	$0.30-5.00	n.a.	$0.30-5.00

n.a. – Not applicable

[a] Per-item fees for consolidated shipments include a half mill surcharge due to higher fuel costs. Consolidated shipments are shipments of checks on Check Relay by depository institutions directly to the paying bank's Reserve Bank office.

[b] Cash letter fees for forward-processed items transported by the Reserve Banks include a fifty-cent surcharge due to higher fuel costs.

[c] Fixed fee varies by media type.

4. 2004 Cost Recovery − For 2004, the Reserve Banks project that the check service will recover 91.9 percent of total costs, including imputed expenses, and targeted ROE. The Reserve Banks expect to recover all direct and indirect operating costs and all imputed costs of providing check services, but only a portion of the targeted return on equity.

Total adjusted costs before taxes are projected to decrease approximately $87.1 million, or 9.1 percent, from estimated 2003 expenses. The largest factor contributing to the decline is local operating costs, which are expected to decrease by $64.9 million, or 11.4 percent. This decline reflects significant reductions in personnel costs and partial year savings associated with discontinuing the processing of checks at thirteen Federal Reserve offices. Additional reductions include lower check modernization expenses and the consolidation of some local administrative functions into national support centers.

Total check revenue is projected to increase $31.6 million, or 4.2 percent, compared with the 2003 estimate. The revenue growth is driven largely by a $44.6 million increase in NICB. This increase associated with the change in methodology to calculate imputed investment income and payments of earnings credits to depository institution holders of clearing balances. Partially offsetting this increase is a projected $15.2 million, or 2.1 percent, decline in service revenue. This decline is largely attributable to a projected acceleration of the downward trend in the Reserve Banks' check volumes. The price changes will partially offset the effect of volume losses on check revenue.

In 2004, forward-processed check volume is projected to be 12.8 billion, a decrease of 8.9 percent compared with the 2003 estimate. The overall decline of paper check volume in the United States is the predominant factor for the loss of forward volume; however, the Reserve Banks also are projecting volume losses resulting from check restructuring (which accounts for 2 percentage points of that decline) and price increases. Fine-sort check volume is expected to decline by 8.1 percent from the 2003 estimate. Return volume is projected to decrease by 7.0 percent compared with the 2003 estimate, a somewhat slower rate than forward volume. The difference in the rates of decline for forward and return volumes is a result of an increase in the Reserve Banks' share of the market for returned check processing in 2003 that is expected to continue into 2004.

The Reserve Banks expect a slight decrease in payor bank service volumes. Electronic presentment volume is expected to decline 0.8 percent in 2004. Image volume is projected to grow 5.1 percent in 2004, compared with estimated 2003 volumes. Image volume growth is expected to be driven by the increased functionality of FedImage services (for example, electronic access to archived check images using web technology).

The Board believes that the greatest risks to achieving the projected cost recovery rate for the check service are volume declines and associated revenue losses beyond System budget projections, and greater-than-expected costs associated with the check restructuring initiative.

The Board believes that the cost, volume, and revenue projections are reasonable and has approved the price changes for the Reserve Banks' check service.

D. <u>Automated Clearinghouse (FedACH)</u> – Table 9 below shows the 2002, 2003 estimate, and 2004 budgeted cost recovery performance for the commercial FedACH service.

Table 9

FedACH Pro Forma Cost and Revenue Performance
($ millions)

Year	1 Revenue	2 Total expense	3 Net income (ROE) [1-2]	4 Target ROE	5 Recovery rate after target ROE [1/(2+4)]
2002	71.8	62.5	9.3	6.5	104.1%
2003 (Estimate)	68.6	60.0	8.6	7.5	101.6%
2004 (Budget)	74.8	64.5	10.2	8.9	101.8%

1. <u>2002 Performance</u> – In 2002, the FedACH service recovered 104.1 percent of total costs, including imputed expenses, and targeted ROE, compared with a targeted recovery

rate of 101.4 percent. The greater-than-budgeted cost recovery was due mainly to higher-than-expected volume. The commercial ACH origination volume processed by the Reserve Banks was 12.1 percent higher than in 2001, compared with the 7.3 percent decrease reflected in the 2002 budget. This reflects lower-than-expected volume shift to a private-sector ACH operator.

2. <u>2003 Estimate</u> – The Reserve Banks estimate that the FedACH service will recover 101.6 percent of total expenses in 2003, compared with the budgeted recovery rate of 100.3 percent. The greater-than-budgeted cost recovery is attributable mainly to lower-than-expected information technology support costs. Although the Reserve Banks estimate that 2003 volume will be 13.7 percent higher than in 2002, they estimate that revenue will be $3.2 million lower, primarily because of price reductions that became effective January 2, 2003. Through August 2003, the Reserve Banks' FedACH volume has increased 13.2 percent over the same period in 2002.

3. <u>2004 Pricing</u> – The Reserve Banks project that the FedACH service will recover 101.8 percent of its costs in 2004, including imputed expenses, and targeted ROE. The Reserve Banks are keeping fees unchanged except for a decrease in the input file processing fee from $5.00 to $3.75. *Ceteris paribus*, the lower per-file fee would reduce the Reserve Banks' FedACH revenue by about $4 million annually. The budgeted $6.2 million increase in revenue reflects 8.7 percent growth in anticipated FedACH processed origination volume, increased electronic connection revenue, and increased NICB as a result of the Reserve Banks' change in the NICB computation methodology. The year-over-year cost increase is due primarily to projects related to FedLine® for the Web and to the development of new FedACH services, including risk management and international ACH services. The Reserve Banks generally believe that nationwide ACH volume will grow somewhat faster than FedACH volume as large depository institutions continue to shift their volume to the other ACH operator.

The Board believes that the cost, volume, and revenue projections are reasonable and has approved the price changes for the Reserve Banks' FedACH service.

E. <u>Fedwire Funds and National Settlement Service</u> – Table 10 below shows the 2002, 2003 estimate, and 2004 budgeted cost recovery performance for the Fedwire funds and national settlement service.

Table 10

Fedwire Funds and National Settlement Service Pro Forma Cost and Revenue Performance
($ millions)

Year	1 Revenue	2 Total expense	3 Net income (ROE) [1-2]	4 Target ROE	5 Recovery rate after target ROE [1/(2+4)]
2002	58.7	53.5	5.2	5.5	99.6%
2003 (Estimate)	51.3	47.0	4.3	5.4	98.0%
2004 (Budget)	59.5	50.8	8.7	6.8	103.3%

1. <u>2002 Performance</u> – The Fedwire funds and national settlement service recovered 99.6 percent of total costs in 2002, including imputed expenses, and targeted ROE, less than the budgeted recovery rate of 101.1 percent. Expenses for 2002 were $3.6 million more than original budget projections, primarily because of unbudgeted costs associated with the

FedLine for the Web project and a FedLine for Windows write-off. Service revenue was $2.6 million greater than budget.

2. <u>2003 Estimate</u> – For 2003, the Reserve Banks estimate that the Fedwire funds and national settlement service will recover 98.0 percent of total expenses, including imputed expenses, and target ROE, compared with a budgeted recovery rate of 101.8 percent. The underrecovery is attributed primarily to significantly lower-than-expected pension credits. Funds transfer volume through August 2003 has increased 9.4 percent relative to the same period in 2002. For the full year, the Reserve Banks estimate that volume will increase 7.3 percent compared with 2002, based on the expectation that volume growth will be flat for the remainder of the year. The Reserve Banks had originally projected zero volume growth for 2003, which was based on historical growth levels combined with anticipated losses of volume to a competitor. This shifting of volume to the competitor, however, did not materialize and, in fact, the Reserve Banks gained market share in 2003. With respect to the national settlement service, the Reserve Banks estimate that 2003 volume will be less than budget due to continued consolidations among check clearinghouses.

3. <u>2004 Pricing</u> – The Reserve Banks are keeping fees for the Fedwire funds and national settlement service unchanged from 2003.

The Reserve Banks project that the Fedwire funds and national settlement service will recover 103.3 percent of total costs in 2004, including imputed expenses, and targeted ROE. Total costs, including imputed expenses, and targeted ROE are expected to increase $5.2 million from the 2003 estimate because of higher costs related to the FedLine for the Web project, higher data communications costs, and a higher PSAF. Funds transfer volume for 2004 is expected to increase 6.8 percent compared with the 2003 estimate. National settlement volume is expected to remain flat. The Reserve Banks project total revenue to increase by $8.2 million over the 2003 estimate primarily because of continued strong volume growth, an increase in NICB attributable to the change in the calculation methodology, and higher electronic access revenue.

The Board believes that the cost, volume, and revenue projections are reasonable and has approved the price changes for the Reserve Banks' Fedwire funds and national settlement service be approved.

F. <u>Fedwire Securities Service</u> – Table 11 below shows the 2002, 2003 estimate, and 2004 budgeted cost recovery performance for the Fedwire securities service.[10]

[10] The Reserve Banks provide transfer services for securities issued by the U.S. Treasury, 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 U.S. Treasury assesses fees for the securities transfer component of the service. The Reserve Banks assess a fee for the funds settlement component of a Treasury securities transfer; this component is not treated as a priced service.

Table 11

Fedwire Securities Service Pro Forma Cost and Revenue Performance
($ millions)

YEAR	1 REVENUE	2 TOTAL EXPENSE	3 NET INCOME (ROE) [1-2]	4 TARGET ROE	5 RECOVERY RATE AFTER TARGET ROE [1/(2+4)]
2002	23.8	21.5	2.3	2.2	100.1%
2003 (Estimate)	21.8	18.4	3.4	2.2	106.0%
2004 (Budget)	22.3	18.4	3.9	2.9	104.7%

1. 2002 Performance – The Fedwire securities service recovered 100.1 percent of total costs in 2002, including imputed expenses, and targeted ROE. Total costs and service revenue for 2002 were greater than budget by $1.1 million and $1.0 million, respectively.

2. 2003 Estimate – Through August 2003, the Fedwire securities service recovered 107.4 percent of total costs, including imputed expenses, and targeted ROE. For full-year 2003, the Reserve Banks estimate that the Fedwire securities service will recover 106.0 percent of total costs, compared with a budgeted recovery rate of 100.6 percent. The overrecovery is attributed primarily to higher-than-expected volume growth.

Through August 2003, total Fedwire securities transfer volume has increased 23.7 percent relative to the same period in 2002.[11] For the full year, the Reserve Banks estimate that total Fedwire securities volume will increase 21.9 percent from 2002, compared with a budgeted 4.3 percent increase. The significantly higher-than-expected volume growth is due primarily to the continued strength of the residential mortgage financing market. The Reserve Banks expect that volume growth experienced year-to-date will level off in the remaining months of the year.

3. 2004 Pricing – The Reserve Banks are reducing the on-line transfer origination and receipt fees from $0.40 to $0.32 and reducing the claim adjustment fee from $0.38 to $0.30.[12] The Reserve Banks will increase the off-line surcharge from $25 to $28 and increasing the joint custody surcharge from $22 to $30. The Reserve Banks will retain all other fees at their current levels.

The Reserve Banks project that the Fedwire securities service will recover 104.7 percent of costs in 2004, including imputed expenses, and targeted ROE. Total costs, including imputed expenses, and targeted ROE are expected to increase $0.7 million from the 2003 estimate.

The Reserve Banks project that total securities volume in 2004 will increase 6.8 percent from the 2003 estimate. Total revenue is projected to increase slightly from the 2003

[11] Part of this increase is due to the full-year effect of the addition of Ginnie Mae securities to the Fedwire Securities Service, which was completed in March 2002.

[12] In 2002, the Reserve Banks implemented a new automated claim adjustment feature for mortgage-backed securities. The automated claim adjustment process (ACAP) supports the settlement of claims related to failed securities transactions, interim accounting for securities with an accrual date different than the record date, and repurchase agreements. ACAP allows participants to add information to transfer messages that the Fedwire securities service can use to calculate cash payments owed to counterparties involved with related transfers.

estimate, as the expected decrease in revenue from price reductions is offset by a higher NICB attributable to the changes in calculation methodology.

The Board believes that the cost, volume, and revenue projections are reasonable and has approved the price changes for the Reserve Banks' Fedwire securities service.

G. Noncash Collection – Table 12 below shows the 2002, 2003 estimate, and 2004 budgeted cost recovery performance for the noncash collection service.

Table 12

Noncash Collection Pro Forma Cost and Revenue Performance
($ millions)

YEAR	1 REVENUE	2 TOTAL EXPENSE	3 NET INCOME (ROE) [1-2]	4 TARGET ROE	5 RECOVERY RATE AFTER TARGET ROE [1/(2+4)]
2002	1.7	1.5	.2	.2	100.6%
2003 (Estimate)	2.3	1.8	.5	.2	118.9%
2004 (Budget)	1.8	1.4	.4	.2	113.3%

1. 2002 Performance – The noncash collection service recovered 100.6 percent of total expenses in 2002, including imputed expenses, and targeted ROE, exceeding the budgeted recovery rate of 94.3 percent. Volume for 2002 declined 19.2 percent from 2001 levels, as expected.

2. 2003 Estimate – Through August 2003, the noncash collection service recovered 131.5 percent of its costs. For full-year 2003, the Reserve Banks estimate that the noncash collection service will recover 118.9 percent of costs, including imputed expenses, and targeted ROE, compared with the budgeted recovery rate of 110.9 percent. This overrecovery is attributed to higher-than-expected revenues, as volume has not decreased from 2002 as much as anticipated. Noncash volume through August has decreased 13.1 percent compared with volume during the same period in 2002. For the full year, the Reserve Banks estimate that 2003 volume will decrease 18.9 percent from 2002, compared with a budgeted decline of 21.0 percent.

3. 2004 Pricing – The Reserve Banks are keeping fees for the noncash collection service unchanged from 2003. As the number of outstanding physical municipal securities continues to decline, the volume of coupons and bonds presented for collection also will decline. New issues of bearer municipal securities effectively ceased in 1983 after the Tax Equity and Fiscal Responsibility Act of 1982 removed tax advantages for investors. In 2004, the Reserve Banks project that the noncash collection service will recover 113.3 percent of total costs, including imputed expenses, and targeted ROE. The Reserve Banks project that volume will decrease 18.9 percent from the 2003 estimate.

The Board believes that the cost, volume, and revenue projections are reasonable and has approved the price changes for the Reserve Banks' noncash collection service.

H. Special Cash – Special cash services represent a *de minimis* portion (less than one tenth of one percent) of overall priced services provided by the Reserve Banks to depository institutions. In 2002, special cash services included wrapped coin, nonstandard packaging of currency orders and deposits, and, for part of the year, registered mail shipments of currency and coin. The offices that offered registered mail shipments discontinued this service in mid to late 2002. In 2003, special cash services consisted of wrapped coin for half of the year and nonstandard packaging of currency. The Helena office discontinued its wrapped coin service in June 2003, and the Seventh District will discontinue its nonstandard packaging service in December 2003. With the Helena office and the Seventh District exiting these businesses, the Reserve Banks will not provide any special cash services in 2004. Table 13 below shows 2002 and estimated 2003 cost recovery performance for special cash services.

Table 13

Special Cash Pro Forma Cost and Revenue Performance
($ millions)

YEAR	1 REVENUE	2 TOTAL EXPENSE	3 NET INCOME (ROE) (1-2)	4 TARGET ROE	5 RECOVERY RATE AFTER TARGET ROE [1/(2+4)]
2002	1.401	1.403	-0.003	0.074	94.8%
2003 (estimate)	0.409	0.485	-0.076	0.084	71.9%

1. 2002 Performance – Special cash services recovered 94.8 percent of total expenses, including imputed expenses, and targeted ROE in 2002, compared with a targeted recovery rate of 103.4 percent. The underrecovery was due primarily to the Kansas City District and the Helena office discontinuing registered mail shipments of currency earlier than budgeted in 2002, but continued to incur support charges throughout the year.

2. 2003 Estimate – Through August 2003, special cash services has recovered 72.1 percent of total expenses, including imputed expenses, and targeted ROE. For full-year 2003, the Reserve Banks project that special cash services will recover 71.9 percent of costs, compared with a targeted recovery rate of 77.3 percent. Compared with 2002, total expenses are projected to decrease $0.9 million, or 65.6 percent, and revenue is expected to decrease $1.0 million, or 70.5 percent.

3. 2004 Pricing – There is no special cash service planned for 2004, and no costs will be allocated to this service.

II. PRIVATE-SECTOR ADJUSTMENT FACTOR

A. Background – Each year, as required by the Monetary Control Act of 1980, the Reserve Banks set fees for priced services provided to depository institutions. These fees are set to recover, over the long run, all direct and indirect costs and imputed costs, including financing costs, taxes, and certain other expenses that would have been incurred, as well as return on equity (profit) that would have been earned, if a private business firm provided the services. These imputed costs are based on data developed in part from a model comprising consolidated financial data for the nation's fifty largest bank holding companies (BHCs).[13] The imputed costs and imputed profit are collectively referred to as the PSAF. In a comparable

[13] The peer group of the fifty largest bank holding companies is selected based on total deposits.

fashion, investment income is imputed and netted with related direct costs associated with clearing balances to estimate NICB.[14]

The method for calculating the financing and equity costs in the PSAF requires determining the appropriate levels of debt and equity to impute and then applying the applicable financing rates. This process requires developing a pro forma priced services balance sheet using actual Reserve Bank assets and liabilities associated with priced services and imputing the remaining elements that would exist if the Reserve Banks' priced services were provided by a private-sector business firm.

The amount of the Reserve Banks' assets that will be used to provide priced services during the coming year is determined using Reserve Bank information on actual assets and projected disposals and acquisitions. The priced portion of mixed-use assets is determined based on the allocation of the related depreciation expense. The priced portion of actual Reserve Bank liabilities consists of balances held by Reserve Banks for clearing priced services transactions (clearing balances), estimated based on historical data, and other liabilities such as accounts payable and accrued expenses.

Long-term debt is imputed only when core clearing balances and long-term liabilities are not sufficient to fund long-term assets or if the interest rate risk sensitivity analysis indicates that estimated risk will exceed a change in cost recovery of more than two percentage points.[15] Short-term debt is imputed only when short-term liabilities and clearing balances not used to fund long-term assets, together, are not sufficient to fund short-term assets. Equity is imputed to meet the FDIC definition of a well-capitalized institution, which is currently 5 percent of total assets and 10 percent of risk-weighted assets.

1. Financing Rates – Equity financing rates are based on the average of the return on equity (ROE) results of three economic models using data from the BHC model.[16] For simplicity, given that federal corporate tax rates are graduated, state tax rates vary, and various credits and deductions can apply, a specific tax rate is not calculated for Reserve Bank priced services. Instead, the use of a pre-tax ROE captures imputed taxes. The resulting ROE influences the dollar level of the PSAF and Federal Reserve price levels because this is the return a shareholder would expect in order to invest in a private business firm. The use of the pre-tax ROE assumes 100 percent recovery of expenses, including the targeted ROE. The recommended PSAF is, therefore, based on a matching of revenues with actual and imputed costs and imputed profits. Should the pre-tax earnings be less than the targeted ROE, as projected, imputed expenses would be adjusted for the tax savings associated with the adjusted recovery. The imputed tax rate is the median of the rates paid by the BHCs over the past five years adjusted to the extent that BHCs have invested in municipal bonds.

---

[14] See the companion notice, Federal Reserve Bank Services, elsewhere in today's Federal Register on the change to the imputed investment income on clearing balances method for 2004. Using the average spread of 35 basis points over the three-month Treasury bill rate, applied to the clearing balance levels and rate assumptions used in the 2004 pricing process, NICB is projected to be $52.7 million.

[15] A portion of clearing balances is used as a funding source for priced services assets. Long-term assets are partially funded from core clearing balances, currently $4 billion. Core clearing balances are considered the portion of the balances that has remained stable over time without regard to the magnitude of actual clearing balances. The PSAF methodology includes an analysis of interest rate risk sensitivity, which compares rate-sensitive assets with rate-sensitive liabilities and measures the effect on cost recovery of a change in interest rates of up to 200 basis points.

[16] The pre-tax return on equity (ROE) is determined using the results of the comparable accounting earnings model (CAE), the discounted cash-flow model (DCF), and the capital asset pricing model (CAPM). Within the CAPM and DCF models, the ROE is weighted based on market capitalization, and within the CAE model, the ROE calculation is equally weighted. The results of the three models are averaged to impute the PSAF pre-tax ROE. When needed, to impute short- and long-term debt, the debt rates are derived based on the short-term debt and long-term debt elements in the BHC model.

2. Other Costs – The PSAF also includes the estimated priced services-related expenses of the Board of Governors and imputed sales taxes based on Reserve Bank expenses. An assessment for FDIC insurance, when required, is imputed based on current FDIC rates and projected clearing balances held with the Federal Reserve.

B. Discussion – The increase in the 2004 PSAF is primarily due to a significant increase in clearing balances on which investments are imputed and the resulting increase in total assets. Because required imputed equity is based on five percent of total assets, priced services equity and cost of equity increased.

1. Asset Base – The total estimated cost of Federal Reserve assets to be used in providing priced services is reflected in table 14. Total assets have increased $1,704.6 million, or 11.0 percent from 2003. Growth of $1,283.0 million in imputed investments, growth of $131.8 million in imputed reserve requirements, which are based on the level of clearing balances, and an increase of $308.4 million in cash items in process of collection explains the majority of this increase. As shown in table 15, the assets financed through the PSAF have decreased, primarily due to the decrease in prepaid pension costs. Short-term assets funded with short-term payables and clearing balances total $102.0 million. This amount represents a decrease of $1.8 million, or 1.7 percent, from the short-term assets funded in 2003. Long-term assets funded with long-term liabilities, equity, and core clearing balances are projected to total $1,520.6 million. This amount represents a decrease of $16.8 million, or 1.1 percent, from the long-term assets funded in 2003. A decrease of $17.8 million in prepaid pension costs explains the majority of the decrease. The decrease of $15.0 million in furniture and equipment is offset by an increase in bank premises and leasehold improvements and long-term prepayments of $3.9 million and $12.1 million, respectively.

2. Debt and Equity Costs and Taxes – As previously mentioned, core clearing balances are available as a funding source for priced services assets. Table 15 shows that $407.2 million in clearing balances are used to fund priced services assets in 2004. The interest rate sensitivity analysis in table 16 indicates that the ratio of rate-sensitive assets to rate-sensitive liabilities and the effect on cost recovery of an increase in interest rates of 200 basis points produces a decrease in cost recovery of 1.3 percentage points. The established threshold for change to cost recovery is two percentage points; therefore, interest rate risk associated with using these balances is within acceptable levels and no long-term debt is imputed.

Table 17 shows the imputed PSAF elements, the pre-tax ROE, and other required PSAF recoveries for 2003 and proposed for 2004. The significant increase in clearing balances from which the investments are imputed increases total assets. An increase in total assets, and the resulting increase in imputed equity, increases targeted ROE. Although the pre-tax ROE rate decreased from 19.4 percent for 2003 to 18.6 percent for 2004, with increased imputed equity, the pre-tax ROE increased $9.6 million. As indicated previously, the pre-tax ROE is calculated using the combined results of three models. The effective tax rate used in 2004 also decreased to 29.8 percent from 30.4 percent in 2003. Sales taxes decreased $2.8 million from $14.8 million in 2003 to $12.0 million in 2004. Offsetting this is a $1.2 million increase in Board of Governors expenses.

3. Capital Adequacy and FDIC Assessment – As shown in table 14, the amount of equity imputed for the proposed 2004 PSAF is $860.8 million, an increase of $85.2 million from imputed equity of $775.6 million in 2003. As noted above, equity is based on 5 percent of total assets, as required by the FDIC for a well-capitalized institution in its definition for purposes of assessing insurance premiums. In both 2004 and 2003, the capital to risk-weighted asset ratio and the capital to total assets ratio both exceed regulatory guidelines. As a result, no FDIC assessment is imputed for either year.

III. ANALYSIS OF COMPETITIVE EFFECT

All operational and legal changes considered by the Board that have a substantial effect on payments system participants are subject to the competitive impact analysis described in the March 1990 policy statement, "The Federal Reserve in the Payments System."[17] Under this policy, the 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 deriving from such legal differences. If the change creates such an effect, the Board must further evaluate the change to assess whether its benefits — such as contributions to payment system efficiency, payment system integrity, or other Board objectives — can be retained while minimizing the adverse effect on competition.

The 2004 fees result in a projected ROE less than the target established using a model that is based on the consolidated results over time of the largest fifty BHCs. To the extent that these BHCs expect a mature declining business, such as check processing, to have the same ROE as the organization as a whole, the Reserve Banks' failure to set fees to achieve the target ROE could adversely affect the ability of other service providers to compete with the Reserve Banks. Based upon discussions with the industry and other anecdotal information, the Board does not believe that BHCs have such an expectation. Moreover, given the current market environment, greater fee increases are not likely to improve the Reserve Banks' cost recovery materially and might even reduce the revenue that the Reserve Banks receive as depository institutions seek lower cost alternatives. Overall, the Board believes that the fee changes and the changes to earnings credits on clearing balances are reasonable.

[17] Federal Reserve Regulatory Service (FRRS) 9-1558.

Table 14
Comparison of Pro Forma Balance Sheets
for Federal Reserve Priced Services
(millions of dollars – average for year)

	2004	2003
Short-term assets		
Imputed reserve requirement on clearing balances	$ 1,175.6	$ 1,043.8
Receivables	74.0	77.4
Materials and supplies	2.6	3.0
Prepaid expenses	25.4	23.4
Items in process of collection	4,244.7	3,936.3
Total short-term assets	5,522.3	5,083.9
Imputed investments	$ 10,172.9	$ 8,889.9
Long-term assets		
Premises[18]	433.7	429.8
Furniture and equipment	173.3	188.3
Leasehold improvements and long-term prepayments	95.4	83.3
Prepaid pension costs	818.2	836.0
Total long-term assets	1,520.6	1,537.4
Total assets	$17,215.8	$15,511.2
Short-term liabilities[19]		
Clearing balances and balances arising from early credit of uncollected items	$11,887.1	$10,508.5
Deferred credit items	4,113.3	3,865.4
Short-term payables	61.7	77.0
Total short-term liabilities	16,062.1	14,450.9
Long-term liabilities[19]		
Postemployment/retirement benefits	292.9	284.7
Total liabilities	16,355.0	14,735.6
Equity	860.8	775.6
Total liabilities and equity	$17,215.8	$15,511.2

[18] Includes allocations of Board of Governors' assets to priced services of $1.7 million for 2004 and $1.5 million for 2003.

[19] No debt is imputed because clearing balances are used as an available funding source.

Table 15
Portion of Clearing Balances used
to Fund Priced Services Assets
(millions of dollars)

	2004		2003	
A. Short-term asset financing				
Short-term assets to be financed:				
Receivables	$ 74.0		$ 77.4	
Materials and supplies	2.6		3.0	
Prepaid expenses	25.4		23.4	
Total short-term assets to be financed	$102.0		$103.8	
Short-term funding sources:				
Short-term payables	61.7		77.0	
Portion of short-term assets funded with clearing balances[20]		$ 40.3		$ 26.8
B. Long-term asset financing				
Long-term assets to be financed:				
Premises	$433.7		$429.8	
Furniture and equipment	173.3		188.3	
Leasehold improvements and long-term Prepayments	95.4		83.3	
Prepaid pension costs	818.2		836.0	
Total long-term assets to be financed	$1,520.6		$1,537.4	
Long-term funding sources:				
Postemployment/retirement benefits	292.9		284.7	
Imputed equity[21]	860.8		775.6	
Total long-term funding sources	$1,153.7		$1,060.3	
Portion of long-term assets funded with core clearing balances[20]		$366.9		$477.1
C. Total clearing balances used for funding priced-services assets		$407.2		$503.9

[20] Clearing balances shown on table 14 are available for funding priced-services assets. Using these balances reduces the amount available for investment for the net income on clearing balances calculation. Long-term assets are funded with long-term liabilities and with core clearing balances; a total of $4 billion in balances is available for this purpose. Short-term assets are funded with clearing balances not used to fund long-term assets. No short- or long-term debt is imputed.

[21] See table 17 for calculation of required imputed equity amount.

Table 16
2004 Interest Rate Sensitivity Analysis[22] (millions of dollars)

	Rate sensitive	Rate insensitive	Total
Assets			
Imputed reserve requirement on clearing balances		$1,175.6	$1,175.6
Imputed investments	$10,172.9		$10,172.9
Receivables		74.0	74.0
Materials and supplies		2.6	2.6
Prepaid expenses		25.4	25.4
Items in process of collection[23]	131.4	4,113.3	4,244.7
Long-term assets		1,520.6	1,520.6
Total assets	$10,304.3	$6,911.5	$17,215.8
Liabilities			
Clearing balances and balances arising from early credit of uncollected items[24]	$9,710.8	$2,176.3	$11,887.1
Deferred credit items		4,113.3	4,113.3
Short-term payables		61.7	61.7
Long-term liabilities		292.9	292.9
Total liabilities	$9,710.8	$6,644.2	$16,355.0

Rate change results	**108 basis point[25] decrease in rates**	**200 basis point increase in rates**
Asset yield	$(77.3)	$ 143.3
Liability cost	(96.1)	160.2
Effect of 108 basis point decrease or 200 basis point Increase	$ 18.8	$ (16.9)
2004 budgeted revenue	$934.5	$934.5
Effect of change	18.8	(16.9)
Revenue adjusted for effect of interest rate change	$953.3	$917.6
2004 budgeted total expenses	886.3	886.3
2004 budgeted target ROE	112.4	112.4
Tax effect of interest rate change ($ change x 29.8%)	5.6	(5.0)
Total recovery amounts	$1,004.3	$993.7
Recovery rate before interest rate change	93.6%	93.6%
Recovery rate after interest rate change	94.9%	92.3%
Effect of interest rate change on cost recovery[26]	1.3%	-1.3%

[22] The interest rate sensitivity analysis evaluates the level of interest rate risk presented by the difference between rate sensitive assets and liabilities. The analysis reviews the ratio of rate-sensitive assets to rate-sensitive liabilities and the effect on cost recovery of an increase or decrease in interest rates of up to 200 basis points.
[23] The amount designated rate sensitive represents the amount of cash items in process of collection that have been credited to customers prior to collection.
[24] The amount designated rate insensitive represents clearing balances on which earnings credits are not paid.
[25] The reduction is limited to the Treasury bill rate assumed in the 2004 NICB of 1.08 percent based on 2003 rates.
[26] The effect of a potential change in rates is less than a 2 percentage point change in cost recovery; therefore, no long-term debt is imputed for 2004.

Table 17
Derivation of the 2004 and 2003 PSAF
(millions of dollars)

		2004			2003	
A. Imputed elements						
Short-term debt[27]		$ 0.0			$ 0.0	
Long-term debt[28]		$ 0.0			$ 0.0	
Equity						
Total assets from table 14	$17,215.8			$15,511.2		
Required capital ratio[29]	5%			5%		
Total equity		$860.8			$775.6	
B. Cost of capital						
1. Financing rates/costs						
Short-term debt		N/A			N/A	
Long-term debt		N/A			N/A	
Pre-tax return on equity[30]		18.6%			19.4%	
2. Elements of capital costs						
Short-term debt			$ 0.0			$ 0.0
Long-term debt			0.0			0.0
Equity	$860.8 x	18.6% =	160.1	$775.6 x	19.4% =	150.5
			$160.1			$150.5
C. Other required PSAF recoveries						
Sales taxes		$12.0			$14.8	
Federal Deposit Insurance assessment		0.0			0.0	
Board of Governors expenses		7.6			6.4	
			19.6			21.2
D. Total PSAF recoveries			$179.7			$171.7
As a percent of assets		1.0%				1.1%
As a percent of expenses[31]		23.1%				22.4%
E. Tax rates		29.8%				30.4%

[27] No short-term debt is imputed because clearing balances are used as a funding source for those assets that are not funded with short-term payables.
[28] No long-term debt is imputed because clearing balances are used as a funding source.
[29] Based on the Federal Deposit Insurance Corporation's definition of a well-capitalized institution for purposes of assessing insurance premiums.
[30] One component of the pre-tax 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. The final pre-tax rate of return on equity is determined averaging the result from this component (22.3%), along with results from a capital asset pricing model (12.2%), and a discounted cash flow model (21.3%).
[31] System 2004 budgeted priced services expenses less shipping are $779.3 million.

Table 18
Computation of 2004 Proposed Capital Adequacy
for Federal Reserve Priced Services
(millions of dollars)

	Assets	Risk weight	Weighted assets
Imputed reserve requirement on clearing balances	$1,175.6	0.0	$0.0
Imputed investments:			
Fed Funds[32]	10.2	0.2	2.0
1 – Year Treasury note[32]	5,043.3	0.0	0.0
Commercial paper (3 months)[32]	3,527.3	1.0	3,527.3
Short term corporate bond (Aa3)[33]	30.5	1.0	30.5
Money market mutual fund[33]	1,081.1	1.0	1,081.1
GNMA mutual fund[33]	480.5	0.2	96.1
Total imputed investments	$10,172.9		
Receivables	74.0	0.2	14.8
Materials and supplies	2.6	1.0	2.6
Prepaid expenses	25.4	1.0	25.4
Items in process of collection	4,244.7	0.2	848.9
Premises	433.7	1.0	433.7
Furniture and equipment	173.3	1.0	173.3
Leases, leasehold improvements & long-term prepayments	95.4	1.0	95.4
Prepaid pension costs	818.2	1.0	818.2
Total	$17,215.8		$7,149.3

Imputed equity for 2004	$860.8
Capital to risk-weighted assets	12.0%
Capital to total assets	5.0%

[32] The imputed investments are assumed to be similar to those for which rates are available on the Federal Reserve's H.15 report, which can be located at http://www.federalreserve.gov/releases/h15/data.htm.

[33] The imputed mutual fund investments are based on Vanguard's S/T Corporate Inv, Prime MMF, and Fund Investor Shares funds, which were chosen based on the investment strategies as articulated in their prospectuses. These fund returns can be located at http://flagship4.vanguard.com/VGApp/hnw/FundsByFundType#Bond_Funds.

AUTOMATED CLEARINGHOUSE FEDACH FEE SCHEDULE

EFFECTIVE JANUARY 2, 2004. BOLD INDICATES CHANGE FROM 2003 PRICES.

	Fee
Origination (per item or record):[34]	
Items in small files	$0.0030
Items in large files	$0.0025
Addenda record	$0.0010
Input file processing fee (per file):	**$3.75**
Receipt (per item or record):[35]	
Item	$0.0025
Addenda record	$0.0010
Monthly fee (per routing number):	
Account servicing fee[36]	$25.00
FedACH settlement[37]	$20.00
Information extract file	$10.00
FedLine for the Web return item/notification of change (NOC) fee:[38]	$0.50
Voice response return item/NOC fee:[39]	$2.00
Nonelectronic input/output fee:[40]	
Tape input/output	$25.00
Paper output	$15.00
Facsimile return/NOC[41]	$15.00
Canadian Cross-border fee:	
Cross-border item surcharge[42]	$0.039
Same-day recall of item at receiving gateway operator	$3.50
Same-day recall of item not at receiving gateway operator	$5.00
Item trace	$5.00
Microfiche	$3.00

[34] Small files contain fewer than 2,500 items and large files contain 2,500 or more items. These origination fees do not apply to items that the Reserve Banks receive from other operators.

[35] Receipt fees do not apply to items that the Reserve Banks send to other operators.

[36] The account-servicing fee applies only to routing numbers that have received or originated transactions that are processed by the Reserve Banks. Institutions that receive only U.S. government transactions or that elect to use another operator exclusively are not assessed the account-servicing fee.

[37] The FedACH settlement fee is applied to any routing number with activity during a month. This fee does not apply to routing numbers that use the Reserve Banks for government transactions only.

[38] The fee includes the transaction and addenda fees in addition to the channel fee.

[39] The fee includes the transaction fee in addition to the voice-response fee.

[40] These services are offered for contingency situations only.

[41] The fee includes the transaction fee in addition to the conversion fee.

[42] The cross-border item surcharge is assessed in addition to the standard item, addenda, and file-processing fees.

FEDWIRE FUNDS AND NATIONAL SETTLEMENT SERVICE FEE SCHEDULE

EFFECTIVE JANUARY 2, 2004

Fedwire Funds Service

	Fee
Basic volume-based transfer fee (originations and receipts)	
Per transfer for the first 2,500 transfers per month	$0.30
Per transfer for additional transfers up to 80,000 per month	$0.20
Per transfer for every transfer over 80,000 per month	$0.10
Surcharge	
Off-line transfer originated	$15.00

National Settlement Service

Basic	
Settlement entry fee	$0.80
Settlement file fee	$14.00
Surcharge	
Off-line surcharge	$25.00
Minimum monthly charge (account maintenance)[43]	$60.00
Special settlement arrangements[44]	
Fee per day	$100.00

[43] This minimum monthly charge will only be assessed if total settlement charges during a calendar month are less than $60.

[44] Special settlement arrangements use Fedwire funds transfers to effect settlement. 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.

FEDWIRE SECURITIES SERVICE FEE SCHEDULE (NON-TREASURY SECURITIES)

EFFECTIVE JANUARY 2, 2004. BOLD INDICATES CHANGE FROM 2003 PRICES.

	Fee
Basic transfer fee	
Transfer or reversal originated or received	**$0.32**
Surcharge	
Off-line transfer or reversal originated or received	**$28.00**
Monthly maintenance fees	
Account maintenance (per account)	$15.00
Issues maintained (per issue/per account)	$0.40
Claim adjustment fee	**$0.30**
Joint custody fee	**$30.00**

NONCASH COLLECTION FEE SCHEDULE

EFFECTIVE JANUARY 2, 2004

Coupon collection:	Fee
Cash letters fee	$13.00
Coupon envelopes	$4.50
Return items	$35.00
Bond collection (per bond):[45]	$55.00

[45] Plus actual shipping costs.

Electronic Connection Fee Schedule

There are four types of electronic connections through which depository institutions access the Reserve Banks' priced services: FedLine®, FedMail®, FedPhone®, and computer interface (mainframe to mainframe).[46] The Reserve Banks allocate costs and revenues associated with these electronic connections to the various priced services.

In 2004, the Reserve Banks are offering a new bundled electronic access package for a monthly fee of $150 that includes one DOS-based FedLine dial connection and one FedLine for the Web institution-level connection with three digital certificates for individual subscriptions. This package supports the Reserve Banks' strategic direction of moving to web-based electronic access, consistent with, and in response to, customers' preferences. The Reserve Banks are increasing the monthly fee for additional DOS-based FedLine dial connections from $75 to $100. This increase, the first since 1993, reflects the cost of maintaining and updating FedLine connectivity. The Reserve Banks are retaining the connection fees for FedLine for the Web access and the other existing connection fees at current levels.

ELECTRONIC CONNECTION FEE SCHEDULE

EFFECTIVE JANUARY 2, 2004. BOLD INDICATES CHANGE FROM 2003 PRICES.

FedLine® Access Package (monthly)	**$150.00**
Includes: One Dial – DOS-based FedLine	
One FedLine for the Web Institution-level	
Three individual subscriptions	
FedLine® for the Web:	
Setup fee (one time)	$50.00
Institution-level fee (monthly)	$25.00
Individual subscriber fee (monthly)	$10.00
Additional Dial – DOS-based FedLine (monthly)	**$100.00**
FedMail® Fax (monthly per fax line)[47]	**$15.00**
Frame relay network (monthly):[48]	
Frame Relay- Less than 56 kbps	$500.00
Frame Relay-Computer Interface (CI) @ 56 kbps	$1,000.00
Frame Relay-CI @ 256 kbps	$2,000.00
Frame Relay-CI T1	$2,500.00

[46] These connections may also be used to access non-priced services provided by the Reserve Banks. No fee is assessed if a particular connection is used only to access non-priced services.

[47] FedMail Email is a free option.

[48] Some large Computer Interface customers may be required to ensure that their contingency connections to the Federal Reserve are diversely routed, and they will be expected to defray the costs incurred by the Federal Reserve of providing this network diversity. Depending on the cost of providing specific circuits, one of five tiered price points would apply: $250/$500/$1,000/$2,000/$2,500 per month.

Test and contingency options:

Connection type	Full circuit backup[49]	Frame connection only[50]	Redundant component Set[51]
FedLine Less than 56 kbps	$500	$420	n.a.
FedLine Less than 56 kbps Spare Part Set	n.a.	n.a.	$155
CI @ 56 kbps	$845	$765	n.a.
CI @ 256 kbps	$1,750	$1,585	n.a.
CI T1	$2,230	$2,010	n.a.

n.a. – Not applicable

[49] Applies to production and test systems, or production and contingency systems, that are located at separate facilities, including another bank office or a third-party contingency site. This option replicates full production technology and costs; only one set of equipment components is provided. Prices shown are for full-circuit backup only located at the customer site. Multiple customers sharing a single disaster-recovery connection at a third-party provider require custom implementations.

[50] Applies to production and test systems, or production and contingency systems, that are located at separate facilities. The institution uses a frame relay link connection with no ISDN dial-up backup. Only one set of equipment components is provided. Prices shown are for frame connection only located at the customer site. Multiple customers sharing a single disaster recovery connection at a third-party provider require custom implementations.

[51] Includes a Cisco router, a digital service unit, and a link encryptor.

By order of the Board of Governors of the Federal Reserve System, October 22, 2003.

Jennifer J. Johnson (signed)
Jennifer J. Johnson
Secretary of the Board.