FEDERAL RESERVE SYSTEM
[Docket No. OP-1216]
Federal Reserve Bank Services

AGENCY: Board of Governors of the Federal Reserve System.

ACTION: Notice.

SUMMARY: The Board has approved the 2005 fee schedules for Federal Reserve priced services and electronic access and a private-sector adjustment factor (PSAF) for 2005 of $161 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 90 percent of the three-month Treasury bill rate to 80 percent of the three-month Treasury bill rate.

DATES: The new fee schedules become effective January 3, 2005, except Fedwire funds transaction fees, which become effective July 1, 2005. The change in the earnings credit rate on clearing balances becomes effective January 6, 2005.

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: Gregory L. Evans, Manager, Financial Accounting, (202/452-3945); or Brenda Richards, Financial Project Leader, (202/452-2753); or Jonathan Mueller, Financial Analyst, (202/530-6291), Division of Reserve Bank Operations and Payment Systems. For users of Telecommunications Device for the Deaf (TDD) only, please call 202/263-4869. Copies of the 2005 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 1994 through 2003, the Reserve Banks recovered 97.8 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 2003 actual, 2004 estimated, and 2005 budgeted cost recovery rates for priced services. Cost recovery is estimated to be 94.6 percent in 2004 and

[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 ten-year recovery rate would be 96.9 percent.

budgeted to be 100.1 percent in 2005. The performance of the check service heavily influences the aggregate cost recovery rates, and accounts for approximately 80 percent of the total cost of priced services. The electronic services (FedACH, Fedwire® funds and national settlement (NSS), and Fedwire® securities) account for approximately 20 percent of costs, while the noncash collection service represents a *de minimis* amount.

Table 1

Pro Forma Cost and Revenue Performance[a]
($ millions)

YEAR	1[b] REVENUE	2[c] TOTAL EXPENSE	3 NET INCOME (ROE) [1-2]	4[d] TARGET ROE	5 RECOVERY RATE AFTER TARGET ROE [1/(2+4)]
2003[e]	881.7	931.3	-49.6	104.7	85.1%
2004 (Estimate)	910.8	850.6	60.2	112.4	94.6%
2005 (Budget)	900.6	796.9	103.7	102.9	100.1%

[a] Calculations in this table and subsequent pro forma cost and revenue tables may be affected by rounding.
[b] Revenue includes net income on clearing balances (NICB). For 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 and 2005, net clearing balances are assumed to be invested in a broader portfolio of investments. Based on the historical average return on the broader 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 2003, the cost of clearing balances was based on the federal funds rate, and for 2004 and 2005 the cost is based on the discounted three-month Treasury bill rate.
[c] 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, 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.
[d] Target ROE is the after-tax ROE included in the PSAF.
[e] 2003 calculations include special cash services, which are no longer offered by the Reserve Banks.

Table 2 presents an overview of the 2003 actual, 2004 budget, 2004 estimate, and 2005 budget cost recovery performance by priced service.

Table 2

Priced Services Cost Recovery
(percent)

PRICED SERVICE	2003	2004 BUDGET	2004 ESTIMATE	2005 BUDGET [a]
All services	85.1	92.9	94.6	100.1
Check	82.7	91.5	93.5	100.0
FedACH	100.3	99.7	101.0	100.4
Fedwire funds & NSS	97.4	100.9	98.1	100.0
Fedwire securities	106.1	104.0	102.4	102.3
Noncash collection	123.1	112.0	110.2	76.0

[a] 2005 budget figures reflect the latest data from Reserve Banks. Reserve Banks will report final budget data to the Board by the end of November 2004.

1. <u>2004 Estimated Performance</u> – In 2004, the Reserve Banks estimate that they will recover 94.6 of the costs of providing priced services, including imputed expenses and

targeted ROE, compared with a targeted recovery rate of 92.9 percent, as shown in table 2. The Reserve Banks exceeded the 2004 budget targets for the check and FedACH services. The 98.1 percent estimated recovery rate for the Fedwire funds and national settlement service, however, is below the targeted recovery rate of 100.9 percent. This difference is due to both lower revenue, associated with less-than-anticipated volume growth, and greater costs, associated with a movement to an Internet-based distribution channel for these and other electronic services. While achieving full cost recovery, the Fedwire securities and noncash collection services' shortfalls relative to the budgeted recovery rates are primarily attributed to lower-than-expected volume. Although the estimated 2004 overall recovery rate for priced services is below 100 percent, the Reserve Banks estimate that they will fully recover actual and imputed expenses and earn net income of $60.2 million compared with a targeted ROE of $112.4 million. This ROE shortfall is largely driven by the accrual of one-time costs associated with the second round of Reserve Banks' check restructuring efforts, lower-than-expected check service revenues due to a greater-than-anticipated decline in check volumes, and by lower-than-expected net income from clearing balances (NICB).[2]

Recent anecdotal information from the industry suggests that check use in the United States continues to decline.[3] Additionally, an increasing proportion of checks are being converted to automated clearinghouse transactions at retail lockboxes, which results in fewer interbank checks. As a result of these factors, check volume processed by the Reserve Banks has declined about 10 percent year-to-date. In response to volume declines, the Reserve Banks have continued to restructure their check processing operations and in 2004 incurred additional one-time costs associated with further restructurings in 2005. This initiative will provide ongoing operational and cost efficiencies for the Reserve Banks and is expected to enable the Reserve Banks to achieve full cost recovery in 2005.

2. <u>2005 Projected Performance</u> – For 2005, the Reserve Banks project a priced services cost recovery rate of 100.1 percent. The 2005 fees for priced services are projected to result in a net income of $103.7 million or $0.8 million above the targeted ROE. The primary risks to the Reserve Banks' ability to achieve their budget targets are (1) greater-than-expected costs associated with the check restructuring initiatives, (2) a greater falloff in the Reserve Banks' check volume than the projected 15.8 percent decrease, and (3) a greater-than-expected shift from higher margin products to lower margin products. In light of these risks and the changing payments landscape, the Reserve Banks will continue to modify their business and operational strategies to improve efficiency, reduce excess capacity and other costs, and position themselves to achieve their financial and payment system objectives and statutory requirements over the long term.

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[2] The first round of the Reserve Banks' check restructuring initiative will have reduced Federal Reserve check processing locations from 45 to 32 sites and streamlined check adjustments functions by the end of 2004. Additionally, in August 2004, the Reserve Banks announced further changes to increase the efficiency of their check processing operations and will reduce further the number of check operations from 32 to 23 sites by early 2006. (See www.federalreserve.gov/boarddocs/press/other/2004/20040802/default.htm)

[3] The Federal Reserve's 2001 retail payments research indicated that check use began declining in the mid 1990s. 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.) This study is being updated and the results are forthcoming by early December 2004.

3. 2005 Pricing – The following summarizes the changes in the Reserve Banks' fee structures and levels for priced services in 2005, and indicates the overall experience with prices in each service line since 1996:[4]

Check

- The Reserve Banks will raise fees for forward-collection check products 7.9 percent, return-check products 8.1 percent, and payor bank check products 2.8 percent compared with January 2004 fees.

- With the 2005 fee changes, the price index for the check service will have increased 40 percent since 1996.

FedACH

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

- With the 2005 fee changes, the price index for the FedACH service will have decreased 66 percent since 1996.

Fedwire funds and national settlement

- The Reserve Banks will increase Fedwire funds per transfer fees by one cent in all volume tiers, effective July 1, 2005.

- With the 2005 fee changes, the price index for the Fedwire funds and national settlement service will have decreased 59 percent since 1996.

Fedwire securities

- The Reserve Banks will increase the off-line surcharge from $28 to $33 per transfer and increase the joint custody surcharge from $30 to $35. The Reserve Banks will retain all other fees at their current levels.

- With the 2005 fee changes, the price index for the Fedwire securities service will have decreased 43 percent since 1996.

4. 2005 Price Index – Figure 1 compares indexes of fees for the Federal Reserve's priced services with the GDP price deflator. Compared with the price index for 2004, the price index for all Federal Reserve Bank priced services is projected to increase 7.3 percent in 2005. 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 increase 2.6 percent in 2005. The price index for paper-based payment services (check and noncash collection) is expected to increase 7.9 percent in 2005. Since 1996, the price index for all priced services has increased a total of 10.6 percent.

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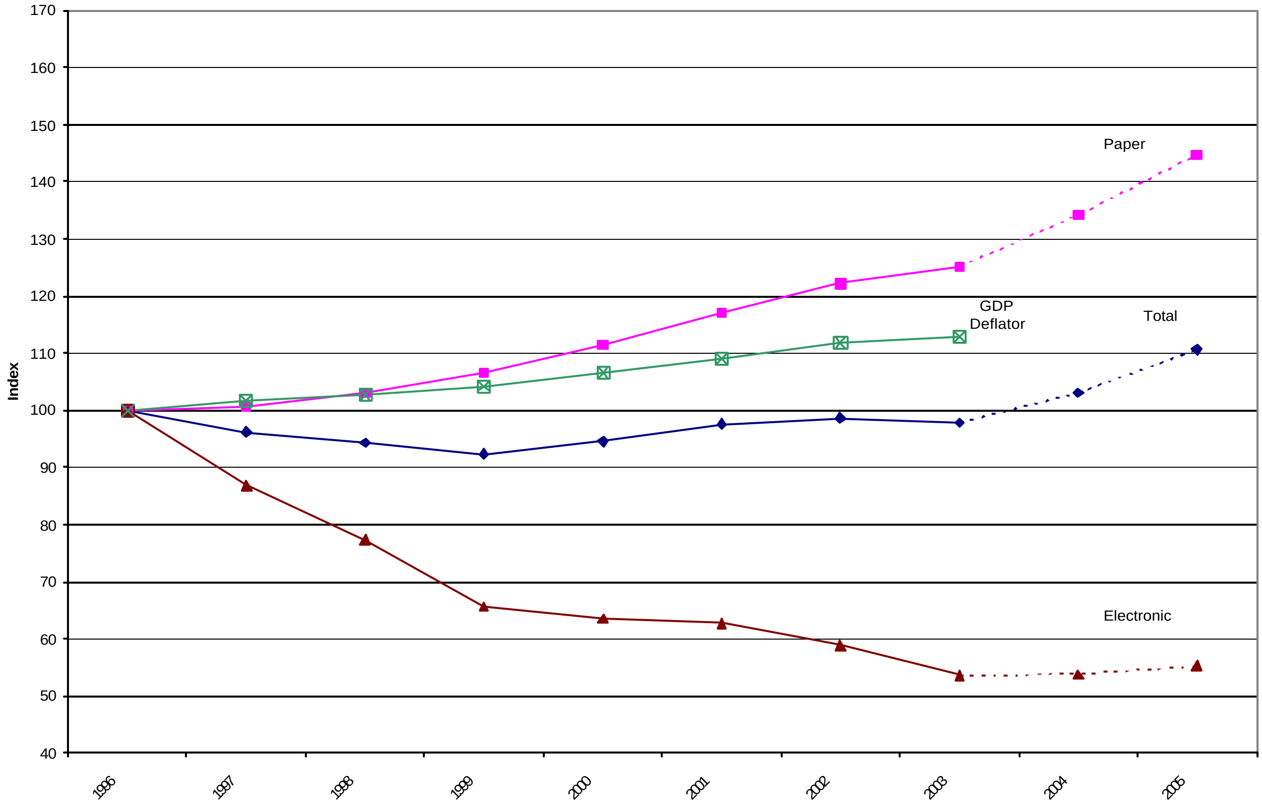
[4] Data elements used in calculating the price index for 2003 and previous years include explicit fee revenue from priced services and volumes associated with those services. For 2004 and 2005, the year-over-year percentage changes are based on comparisons of the 2003 results, 2004 estimates, and 2005 projections.

FIGURE 1
PRICE INDEXES 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 90 percent of the three-month Treasury bill rate to 80 percent of the three-month Treasury bill rate, effective January 6, 2005.[5] This change will lower the Reserve Banks' cost of clearing balances.

Clearing balances were introduced in 1981, as a part of the Board's implementation of the Monetary Control Act, to facilitate access to Federal Reserve priced services by institutions that did not have sufficient reserve balances to support the settlement of their payment transactions. Beginning in 2004, the earnings credit calculation was changed from using the federal funds rate to using a percentage discount on a rolling thirteen-week average of the annualized coupon equivalent yield of three-month Treasury bills in the secondary market. Earnings credits can be used only to offset charges for priced services, are calculated monthly, and expire if not used within one year.[6]

C. Check – Table 3 below shows the 2003, 2004 estimate, and 2005 budgeted cost recovery performance for the check service.

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[5] Two adjustments are applied to the earnings credit rate 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 balances at a private-sector correspondent. 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 a 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 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, 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.

[6] 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.

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)]
2003	737.9	803.2	-65.3	89.4	82.7%
2004 (Estimate)	756.0	714.9	41.1	93.6	93.5%
2005 (Budget)	731.6	649.2	82.4	82.0	100.0%

1. 2004 Estimate – For 2004, the Reserve Banks estimate that the check service will recover 93.5 percent of total expenses, including imputed expenses, and targeted ROE, compared with the budgeted recovery rate of 91.5 percent (see table 4). Through August 2004, the check service has recovered 94.3 percent of total costs, including imputed expenses, and targeted ROE. For the full year, the Reserve Banks expect to recover all actual and imputed expenses of providing check services and earn net income of $41.1 million, representing a portion of the targeted ROE.

Table 4

Check 2004 Budget vs. 2004 Estimate (millions of dollars)			
	2004 BUDGET	2004 ESTIMATE	VARIANCE
Service revenue	727.1	718.1	-9.0
NICB	43.6	37.9	-5.7
Total revenue	**770.7**	**756.0**	**-14.7**
Local operating costs	506.7	472.0	-34.7
Other operating costs	224.7	225.3	0.6
RPO initiatives[a]	29.0	24.0	-5.0
Pension credits	-11.4	-6.4	5.0
Total expense	**749.0**	**714.9**	**-34.1**
Net Income	**21.7**	**41.1**	**19.4**
Target ROE	93.6	93.6	
Recovery rate (percent)	91.5	93.5	

[a] These are primarily check restructuring and Check 21-related expenses.

The higher-than-budgeted cost recovery is the result of lower-than-anticipated costs of $34.1 million that were partially offset by revenue shortfalls of $14.7 million. The lower costs were largely due to Reserve Banks reducing local operating costs by $34.7 million. The shortfall in revenue is due to lower-than-anticipated service revenue and NICB. Service revenue is estimated to be $9.0 million below budget due to a greater-than-anticipated decline in check volumes.

The volume of checks handled by the Reserve Banks has declined (as shown in table 5), reflecting broader market trends including alternative clearing methods and less frequent use of checks. Forward-collection check volume through August, excluding electronic fine sort volume, declined 10.5 percent.[7] For full-year 2004, the Reserve Banks estimate that forward-collection volume will decline 10.1 percent, compared with a budgeted decline of 8.9 percent. Return check volume has declined 11.7 percent through August 2004. The Reserve Banks expect that return check volume will decline 8.3 percent for the full year, compared with a budgeted decline of 7.0 percent. The Reserve Banks anticipate higher forward and return volume growth for the remainder of the year based additional new customer volumes. Board staff believes that these volume expectations for full-year 2004 may be somewhat optimistic.

Table 5

Paper Check Product Volume Changes
(percent)

	Budgeted 2004 change	Year-to-date change through August 2004	Estimated 2004 change
Total forward-collection[a]	-8.9	-10.5	-10.1
Forward-processed	-8.9	-9.9	-9.7
Fine-sort [a]	-8.1	-19.6	-16.7
Returns	-7.0	-11.7	-8.3

[a] These rates exclude electronic fine-sort volume. Including the electronic fine-sort product, fine-sort volume was budgeted to decline 32.9 percent in 2004 and is now estimated to decline 11.3 percent.

Electronic check presentment volumes are estimated to decline for full-year 2004, as summarized in table 6. Reserve Banks provide paying banks with electronic check data or images for approximately 41 percent of the checks they collect. Image volumes are estimated to decline 4.7 percent to approximately 1.4 billion check images, which represent about 10.7 percent of all checks collected by the Reserve Banks. The aggregate decline in electronic check data and image volumes is less than that of check volume more generally, and as a proportion of total check volume, the use of electronic check data and images is growing.

Table 6

Electronic Check Product Share and Volume Changes

	Volume change through August 2004 (percent)	Estimated 2004 change (percent)	Share of checks collected through August 2004 (percent)
Electronic check presentment[a]	-10.2	-8.3	24.2
Truncation	-11.1	-9.9	5.7
Non-truncation	-9.9	-7.7	18.6
Electronic check information	-12.7	-11.2	6.4
Images	-1.6	-4.7	10.7

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

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[7] 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.

2. <u>2005 Projection</u> – The Reserve Banks are planning to return to full cost recovery in 2005 by focusing on further opportunities to streamline check processing and administrative activities across the System, as well as expanding their Check 21-related product offerings. A number of cost reduction initiatives have been identified and are currently in various stages of implementation. In 2005, the service will achieve the full cost savings with the decisions made in 2003 and 2004 to discontinue processing checks at thirteen sites nationwide. The Reserve Banks will eliminate nine more processing sites by early 2006, reducing excess processing capacity and lowering ongoing operating costs by $14 million. Additionally, the Reserve Banks are in the process of centralizing their float management function and their pricing and product management activities.

The Reserve Banks plan to offer a comprehensive suite of Check 21-related products in 2005. These products will include image cash letter receipt and delivery products as well as substitute check printing. The pricing of these products will reflect the value to customers of later deposit deadlines and improved availability. The Reserve Banks will also modify the pricing structure of existing paper products to encourage the use of the new Check 21-related products. As the Check 21-related products mature, the pricing of paper products will be strategically raised to encourage adoption of electronic collection and presentment alternatives.

There is also a continuing effort in 2005 to set fees to achieve greater pricing consistency across Reserve Bank product lines. Reserve Banks will also increase prices of selected products in 2005 to enhance service revenue. Most of the price increases are targeted at markets that are costly for the Reserve Banks to serve. Fees to present and return checks to depository institutions that are distant from Federal Reserve check processing offices will be increased to better align with the Reserve Banks' costs to deliver checks to these institutions. The fee changes will enhance the Reserve Banks' ability to recover costs, while maintaining the competitiveness of these products.

For 2005, the Reserve Banks are targeting an overall price increase of 7.9 percent, as shown in table 7. This increase consists of a 7.9 percent increase in forward check-collection fees, composed of a 7.6 percent increase in forward cash letter fees and a 7.9 percent increase in per-item fees. Fees for return services will increase by 8.1 percent, which is composed of a 4.8 percent increase in return cash letter fees and an 8.7 percent increase in per-item fees. The average volume-weighted fees for payor bank services will increase 2.8 percent compared with current fees.

Table 7

2005 Fee Changes (percent)	
PRODUCT	FEE CHANGE
Total check service	**7.9**
Forward-collection	**7.9**
Cash letter	7.6
Item	7.9
Returns	**8.1**
Cash letter	4.8
Item	8.7
Payor bank services	**2.8**

3. 2005 Cost Recovery – For 2005, projected cost recovery will be 100.0 percent of total costs, including imputed expenses, and targeted ROE.

Table 8

Check 2004 Estimate vs. 2005 Budget
(millions of dollars)

	2004 ESTIMATE	2005 BUDGET	VARIANCE
Service revenue	718.1	681.9	-36.2
NICB	37.9	49.7	11.8
Total revenue	**756.0**	**731.6**	**-24.4**
Local operating costs	472.0	349.9	-122.1
Other operating costs	225.3	295.6	70.3
RPO initiatives[a]	24.0	10.0	-14.0
Pension credits	-6.4	-6.3	0.1
Total expense	**714.9**	**649.2**	**-65.7**
Net Income	**41.1**	**82.4**	**41.3**
Target ROE	93.6	82.0	
Recovery rate (percent)	93.5	100.0	

[a] These are primarily check restructuring and Check 21-related expenses.

Total expenses are projected to decrease approximately $65.7 million, or 9.2 percent, from the 2004 estimate. The decrease owes largely to the decline in local operating costs, which are expected to decrease $122.1 million, or 25.9 percent. This decline reflects significant reductions in personnel costs, full-year savings associated with discontinuing the processing of checks at thirteen Federal Reserve offices as well as partial-year savings associated with discontinuing the processing of checks at six offices, and a shift of adjustment costs resulting from a transition to the national management of the adjustments function. Additional reductions include centralizing float management and check product development and pricing activities.

Total check revenue is projected to decline $24.4 million, or 3.2 percent, compared with the 2004 estimate. The revenue decline is driven by a $36.2 million, or 5.0 percent, reduction in service revenue, largely attributable to a continued downtrend in the Reserve Banks' check volumes due to the nationwide decline in check use. The price changes will somewhat attenuate the effect of volume losses on check revenue. Also partially offsetting the decline in service revenue is a projected $11.8 million increase in NICB.

In 2005, forward-processed check volume is projected to be 10.6 billion, a decrease of 15.8 percent compared with the 2004 estimate. The decline in the volume of checks is attributed to the continued decline in the use of paper checks in the United States, the increasing use of the ACH to collect payments that were previously processed as checks, price increases, and the reduction in the number of check processing sites. Fine-sort check volume is expected to decline 16.7 percent from the 2004 estimate. Total return volume is projected to decrease 10.1 percent compared with the 2004 estimate.

The Reserve Banks expect payor bank volumes to decrease. Electronic presentment volume is expected to decline 6.1 percent in 2005. Image volume is projected to decline 1.8 percent in 2005, compared with estimated 2004 volumes. The proportion of processed checks that the Reserve Banks provide to paying banks with electronic data or images is projected to rise in 2005 to about 47 percent.

The primary risks to the Reserve Banks' ability to achieve their budget targets are (1) greater-than-expected costs associated with the restructuring initiatives, (2) a steeper decline in the Reserve Banks' check volume than the projected 15.8 percent decrease, and (3) a greater-than-expected shift from higher margin products to lower margin products.

D. Automated Clearinghouse (FedACH) – Table 9 below shows the 2003, 2004 estimate, and 2005 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)]
2003	68.2	60.5	7.7	7.5	100.3%
2004 (Estimate)	74.9	65.2	9.7	8.9	101.0%
2005 (Budget)	82.1	71.8	10.3	10.0	100.4%

1. 2004 Estimate – For 2004, the Reserve Banks estimate that the FedACH service will recover 101.0 percent of total expenses, including imputed expenses, and targeted ROE, compared with the budgeted recovery rate of 99.7 percent. Both ACH revenue and cost estimates were better than budgeted. Total revenue is estimated to be $0.1 million greater than

budgeted, and total expenses are lower than budgeted by about $0.9 million. Through August 2004, origination volume was 3.1 percent higher than budgeted.

2. <u>2005 Pricing</u> – The Reserve Banks project that the FedACH service will recover 100.4 percent of costs in 2005, including imputed expenses, and targeted ROE. The Reserve Banks' fees for the FedACH service will remain unchanged. The Reserve Banks consider continued price stability important to remaining competitive in the ACH market.

Total revenue is budgeted to increase $7.2 million over the 2004 estimate, reflecting an increase in electronic access fees and service revenues. Total expenses, including imputed expenses, and targeted ROE are budgeted to increase $7.6 million over the 2004 estimate because of an increase in the cost of national support projects, specifically costs associated with the movement to the Intenet-based distribution channel. In addition, the Reserve Banks have budgeted increased costs for product development and service initiatives, including FedACH International and FedACH risk-management services.

The Reserve Banks estimate that national ACH volume will grow 20 percent in 2005. This growth is largely attributable to new one-time ACH debit transactions, such as check conversion and Internet-initiated payments. The Reserve Banks, however, generally believe that FedACH origination volume will grow at a slower rate of 7.7 percent as a greater proportion of volume shifts to the private-sector ACH operator.

E. <u>Fedwire Funds and National Settlement Service</u> – Table 10 below shows the 2003, 2004 estimate, and 2005 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)]
2003	51.1	47.1	4.0	5.4	97.4%
2004 (Estimate)	57.5	51.8	5.7	6.8	98.1%
2005 (Budget)	64.2	56.3	7.9	7.9	100.0%

1. <u>2004 Estimate</u> – For 2004, the Reserve Banks estimate that the Fedwire funds and national settlement service will recover 98.1 percent of total expenses, including imputed expenses, and targeted ROE, compared with a 2004 budgeted recovery rate of 100.9 percent. The underrecovery is primarily attributed to lower-than-expected on-line funds transfer volume. Funds transfer volume through August 2004 has increased 0.2 percent relative to the same period in 2003. The Reserve Banks had originally projected a 6.8 percent growth in on-line funds volume for 2004, which was based on historical volume growth. Volume growth has been weaker than expected, and the Reserve Banks experienced a slight loss of market share in 2004 to a competitor. For the full year, the Reserve Banks estimate that volume will increase 2.0

percent compared with 2003. With respect to the national settlement service, the Reserve Banks estimate that the volume of settlement entries processed during 2004 will be slightly higher than the 2004 budget projection.

2. <u>2005 Pricing</u> – The Reserve Banks will increase on-line transfer fees for each Fedwire funds service price tier $0.01, effective July 1, 2005. The surcharge for off-line Fedwire funds transfers and fees for the national settlement service will remain unchanged.

The Reserve Banks project that the Fedwire funds and national settlement service will recover 100.0 percent of total costs in 2005, including imputed expenses, and targeted ROE. Total costs for 2005, including imputed expenses, and targeted ROE are expected to increase $5.6 million from the 2004 estimate primarily because of rising national costs associated with a movement to an Internet-based distribution channel, as well as a higher PSAF. Funds transfer volume for 2005 is expected to increase 2.8 percent compared with the 2004 estimate. National settlement volume for 2005 is expected to remain flat compared with the 2004 estimate. The Reserve Banks project 2005 total revenue to increase by $6.7 million over the 2004 estimate primarily because of mid-year price increases, modest volume growth, increased NICB, and higher electronic access revenue.

F. <u>Fedwire Securities Service</u> – Table 11 below shows the 2003, 2004 estimate, and 2005 budgeted cost recovery performance for the Fedwire securities service.[8]

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)]
2003	21.8	18.3	3.4	2.2	106.1%
2004 (Estimate)	20.7	17.3	3.4	2.9	102.4%
2005(Budget)	21.4	18.1	3.3	2.9	102.3%

1. <u>2004 Estimate</u> – For 2004, the Reserve Banks estimate that the Fedwire securities service will recover 102.4 percent of total expenses, including imputed expenses, and targeted ROE, compared with a 2004 budgeted recovery rate of 104.0 percent. Through August 2004, the Fedwire securities service recovered 100.6 percent of total costs, including imputed expenses, and targeted ROE. The lower-than-budgeted recovery is primarily attributed to lower-than-expected revenue from transfer volume. Through August 2004, total Fedwire securities transfer volume has decreased 8.8 percent relative to the same period in 2003. For the full year,

[8] 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.

the Reserve Banks estimate that total Fedwire securities volume will decrease 8.8 percent from 2003, compared with a 2004 budget estimate of 6.8 percent volume growth. The lower-than-expected volume growth is primarily attributed to the slowdown in the growth of the mortgage financing market.

2. 2005 Pricing – The Reserve Banks will raise the off-line transfer origination and receipt surcharge from $28 to $33 and raise the joint custody origination surcharge from $30 to $35. The Reserve Banks will retain all other fees at their current levels. The surcharge increases will more closely align the fee with the costs of these transactions.

The Reserve Banks project that the Fedwire securities service will recover 102.3 percent of costs in 2005, including imputed expenses, and targeted ROE. Total costs, including imputed expenses, and targeted ROE are expected to increase $0.8 million from the 2004 estimate. The Reserve Banks project that total securities volume in 2005 will increase 2.0 percent from the 2004 estimate. Total revenue is projected to increase $0.8 million from the 2004 estimate primarily due to projected modest volume increases, as well as higher NICB.

G. Noncash Collection – Table 12 below shows the 2003, 2004 estimate, and 2005 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)]
2003	2.3	1.7	.6	.2	123.1%
2004(Estimate)	1.7	1.4	.3	.2	110.2%
2005 (Budget)	1.3	1.5	-.2	.2	76.0%

1. 2004 Estimate – For 2004, the Reserve Banks estimate that the noncash collection service will recover 110.2 percent of costs, including imputed expenses, and targeted ROE, compared with the budgeted recovery rate of 112.0 percent. This lower-than-budgeted recovery is due to higher-than-expected volume declines. Through August 2004, noncash collection volume decreased 24.3 percent compared with volume during the same period in 2003, and the service recovered 126.4 percent of its costs. For the full year, the Reserve Banks estimate that 2004 volume will decrease 28.2 percent from 2003, compared with a 2004 budgeted decline of 18.9 percent.

2. 2005 Pricing – The Board recently requested comment on a proposal to withdraw from the noncash collection service at year-end 2005(69 FR 60496, October 19, 2004). The Reserve Banks' fees for the noncash collection service will remain unchanged from 2004. 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. As the number of outstanding physical municipal securities continues to decline, the volume of coupons and bonds presented for collection also will decline. The Reserve Banks project that volume will decrease 31.8 percent from the 2004 estimate. In 2005, the Reserve Banks project that the noncash collection service will recover 76.0 percent of total costs, including imputed expenses, targeted ROE, and costs associated with exiting the business.

H. Electronic Access – There are four types of electronic access options through which depository institutions can access the Reserve Banks' priced services: FedLine®, FedMail®, FedPhone®, and computer interface (mainframe to mainframe).[9] The Reserve Banks allocate the costs and revenues associated with these electronic access options to the Reserve Banks' priced services.[10] For 2005, the Reserve Banks will change the FedLine connection fees only. Depository institutions currently use DOS-based terminals with either a dial connection or a frame relay connection to access the Reserve Banks' services. The Reserve Banks are in the process of migrating their customers to a tiered web-based access. This migration is scheduled to be completed by mid-year 2006. At that time, FedLine customers will only be able to access services via web-based applications.

In the interim, those customers that have not yet migrated to the web-based access can continue to use DOS-based terminals. For customers selecting a dial connection, the Reserve Banks bundle a FedLine DOS connection and web-based access into a single FedLine Select package, which includes one DOS-based FedLine dial connection and FedLine Web institution-level access with three digital certificates for individual subscribers. In this arrangement, customers will use their DOS-based connection to access transaction services and FedLine Web to access information services. The Reserve Banks will increase the FedLine Select fee from $150 to $200. For customers selecting a frame relay connection, the Reserve Banks will raise the connection fee from $500 to $825.

Those customers using the tiered web-based access can choose either FedLine Web to access information services or FedLine Advantage to access both transaction services and information services. The Reserve Banks will increase the standalone FedLine Web fee from $25 to $50 per month. FedLine Advantage offers customers access to value-transaction applications.[11] A FedLine Advantage subscription will include the FedLine Advantage institution fee and three FedLine Advantage digital certificates for individual subscribers. The Reserve Banks will introduce FedLine Advantage at a monthly fee of $250. FedLine Select and FedLine Advantage support the Reserve Banks' strategic direction of moving to web-based electronic access, consistent with and in response to customers' preferences.

[9] 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.

[10] The remaining costs are allocated to non-priced services that use electronic access options.

[11] FedLine Advantage offers customers access to the Reserve Banks' value-transaction applications: FedACH, the Fedwire funds and the national settlement service, and the Fedwire securities 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, 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).[12] The imputed costs and imputed profit are collectively referred to as the PSAF. In a comparable fashion, investment income is imputed and netted with related direct costs associated with clearing balances to estimate net income on clearing balances (NICB).

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 estimated 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 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), projected 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, which measures the interest rate effect of the difference between interest rate sensitive assets and liabilities, indicates that a 200 basis point change in interest rates would change cost recovery more than two percentage points.[13, 14] Short-term debt is imputed only when short-term liabilities and clearing balances not used to finance long-term assets are insufficient 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.

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

[13] 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.

[14] The PSAF methodology includes an analysis of interest rate risk sensitivity, which compares rate-sensitive assets with rate-sensitive liabilities and measures the change in cost recovery of a change in interest rates of up to 200 basis points.

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 peer group.[15, 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, imputed taxes are captured using a pre-tax ROE. 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 return on equity assumes 100 percent recovery of expenses, including imputed costs and the targeted return on equity. The PSAF is, therefore, based on a matching of revenues with actual and imputed costs. If the pre-tax earnings are less than the targeted ROE, imputed expenses are 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 tax-free municipal bonds.

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 estimated expenditures. An assessment for FDIC insurance, when required, is imputed based on current FDIC rates and projected clearing balances held with the Federal Reserve.

B. Net Income on Clearing Balances – The NICB calculation is made each year along with the PSAF calculation and is based on the assumption that Reserve Banks invest clearing balances net of imputed reserve requirements and balances used to finance priced-services assets. Based on these net clearing balance levels, Reserve Banks impute a constant spread, determined by the return on a portfolio of investments, over the three-month Treasury bill rate.[17, 18] The calculation also involves determining the priced services cost of earnings credits (amounts available to offset future service fees) on contracted clearing balances held, net of expired earnings credits, based on a discounted Treasury bill rate. Beginning in 2005, rates and clearing balance levels used in the NICB estimate are based on the most recent rates and clearing balance levels. Recent clearing balance levels are adjusted using historical data on depository institution clearing balance management in a changing interest rate environment and applying the constant spread to the most recent three-month Treasury bill rate prior to the

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[15] The pre-tax 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.

[16] 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 peer group.

[17] The investment portfolio is composed of investments comparable to a BHC's investment holdings. In 2005, these investments were limited to federal funds, Treasury securities, government agency securities, commercial paper, municipal bonds, and money market and mutual funds.

[18] The 2004 constant spread was revised from 35 basis points to 30 basis points after correcting an error in the NICB portfolio model. The revised constant spread decreased the projected 2004 final NICB from $52.7 million to $47.6 million. Using the average spread of 29 basis points over the three-month Treasury bill, applied to the clearing balance levels and rate assumptions used in the 2005 pricing process, NICB is projected to be $61.3 million for 2005.

calculation date.[19] Because clearing balances are held for clearing priced services transactions or offsetting priced services fees, they are directly related to priced services. The net earnings or expense attributed to the imputed Treasury-bill investments and the cost associated with holding clearing balances, therefore, are considered net income for priced services activities.

C. Discussion – The decrease in the 2005 PSAF is primarily due to a decrease in clearing balances on which investments are imputed and the resulting decrease in total assets. Since required imputed equity is based on five percent of total assets, priced services equity and the cost of equity also decreased proportionally.

1. Asset Base – The estimated Federal Reserve assets in 2005 to provide priced services, reflected in table 13, have decreased $1,056.0 million, or 6.1 percent. The decline in total assets is primarily a result of a decrease in imputed investments in marketable securities of $1,064.3 million and a decrease in imputed reserve requirements of $119 million. These elements are imputed based on the estimated level of clearing balances. As a result of consolidation and restructuring of several System functions, Bank premises assets are projected to decrease $38.8 million and leasehold improvements and long-term prepayments are projected to decrease $15.7 million. Offsetting these decreases in assets is an increase in items in process of collection of $201.1 million based on higher estimated float receivables.

As shown in table 14, the assets financed through the PSAF have decreased. Short-term assets funded with short-term payables and clearing balances total $38.9 million. This amount represents a decrease of $1.4 million, or 3.5 percent, from the short-term assets funded in 2004. Long-term assets funded with long-term liabilities, equity, and core clearing balances are projected to total $361.7 million. This amount represents a decrease of $5.2 million or 1.4 percent from the long-term assets funded in 2004.

2. Debt and Equity Costs and Taxes – As previously mentioned, core clearing balances are available as a funding source for priced service assets. Table 14 shows that $400.6 million in clearing balances is used to fund priced services assets in 2005. The interest rate sensitivity analysis in table 15 indicates that a 200 basis point decrease in interest rates affects the ratio of rate-sensitive assets to rate-sensitive liabilities and produces a decrease in cost recovery of 0.8 percentage points, while an increase of 200 basis points in interest rates increases cost recovery by 0.7 percentage points. The established threshold for a change in 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 16 shows the imputed PSAF elements, the pre-tax ROE, and other required PSAF recoveries for 2004 and 2005. The decrease in clearing balances from which investments are imputed decreases total assets. The decrease in total assets, and the resulting decrease in imputed equity, decreases the estimated cost of equity in 2005. As indicated previously, the pre-tax return on equity is calculated using the combined results of three models. Contributing to the decrease in the overall imputed cost of equity is a decrease in the DCF component of the ROE

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[19] Previously, the projected balances were based on the average of the most recent six months of data prior to NICB calculation date and the projected T-bill rate was the rolling 13-week average of the three-month T-bill rate.

calculation, resulting in the pre-tax ROE decreasing from 18.6 percent in 2004 to 18.1 percent in 2005. Sales taxes decreased from $12.0 million in 2004 to $8.2 million in 2005. The effective income tax rate used in 2005 also decreased to 29.6 percent from 29.8 percent in 2004. The priced service portion of the Board's expenses decreased $1 million from $7.6 million in 2004 to $6.6 million in 2005.

3. Capital Adequacy and FDIC Assessment – As shown in table 13, the amount of equity imputed for the 2005 PSAF is $808.0 million, a decrease of $52.8 million from imputed equity of $860.8 million in 2004. As noted above, equity is based on 5 percent of total assets, as required by the FDIC for a well-capitalized institution, as defined for purposes of assessing insurance premiums. In both 2005 and 2004, 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."[20] 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 Board believes that the 2005 fees and changes to the earnings credits on clearing balances will not 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. The changes will permit the Federal Reserve Banks to earn an ROE similar to that earned by the fifty largest BHCs.

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

Table 13
Comparison of Pro Forma Balance Sheets
for Federal Reserve Priced Services
(millions of dollars – average for year)

	2005	2004	Change
Short-term assets			
Imputed reserve requirement on clearing balances	$ 1,056.6	$ 1,175.6	$ (119.0)
Receivables	64.9	74.0	(9.1)
Materials and supplies	1.7	2.6	(.9)
Prepaid expenses	28.5	25.4	3.1
Items in process of collection[21]	4,445.8	4,244.7	201.1
Total short-term assets	5,597.5	5,522.3	75.2
Imputed investments	$ 9,108.6	$ 10,172.9	$ (1,064.3)
Long-term assets			
Premises [22]	394.9	433.7	(38.8)
Furniture and equipment	173.1	173.3	(.2)
Leasehold improvements and long-term prepayments	79.7	95.4	(15.7)
Prepaid pension costs	806.0	818.2	(12.2)
Total long-term assets	1,453.7	1,520.6	(66.9)
Total assets	$ 16,159.8	$ 17,215.8	$ (1,056.0)
Short-term liabilities[23]			
Clearing balances and balances arising From early credit of uncollected items	$ 10,620.6	$ 11,887.1	$ (1,266.5)
Deferred credit items[21]	4,391.0	4,113.3	277.5
Short-term payables	56.2	61.7	(5.5)
Total short-term liabilities	15,067.8	16,062.1	(994.3)
Long-term liabilities[23]			
Postemployment/retirement benefits	284.0	292.9	(8.9)
Total liabilities	15,351.8	16,355.0	(1,003.2)
Equity	808.0	860.8	(52.8)
Total liabilities and equity	$ 16,159.8	$ 17,215.8	$ (1,056.0)

[21] Represents float that is directly estimated at the service level.
[22] Includes allocations of Board of Govemors' assets to priced services of $1.4 million for 2005 and $1.7 million for 2004.
[23] No debt is imputed because clearing balances are used as an available funding source.

Table 14
Portion of Clearing Balances used
to Fund Priced Services Assets
(millions of dollars)

	2005		2004	
A. Short-term asset financing				
Short-term assets to be financed:				
Receivables	$ 64.9		$ 74.0	
Materials and supplies	1.7		2.6	
Prepaid expenses	28.5		25.4	
Total short-term assets to be financed	$ 95.1		$ 102.0	
Short-term funding sources:				
Short-term payables	56.2		61.7	
Portion of short-term assets funded with clearing balances[24]		$ 38.9		$ 40.3
B. Long-term asset financing				
Long-term assets to be financed:				
Premises	$ 394.9		$ 433.7	
Furniture and equipment	173.1		173.3	
Leasehold improvements and long-term prepayments	79.7		95.4	
Prepaid pension costs	806.0		818.2	
Total long-term assets to be financed	$ 1,453.7		$ 1,520.6	
Long-term funding sources:				
Postemployment/retirement benefits	284.0		292.9	
Imputed equity[25]	808.0		860.8	
Total long-term funding sources	$ 1,092.0		$ 1,153.7	
Portion of long-term assets funded with core clearing balances[24]		$ 361.7		$ 366.9
C. Total clearing balances used for funding priced-services assets		$ 400.6		$ 407.2

[24] Clearing balances shown on table 13 are available for financing priced-services assets. Using these balances reduces the amount available for investment in Treasury bills for the net income on clearing balances calculation. Long-term assets are financed 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 financed with clearing balances not used to finance long-term assets. No short - or long-term debt is imputed.
[25] See table 16 for calculation of required imputed equity amount.

Table 15
2005 Interest Rate Sensitivity Analysis[26]
(millions of dollars)

	Rate sensitive	Rate insensitive	Total
Assets			
Imputed reserve requirement on clearing balances		$ 1,056.6	$ 1,056.6
Imputed investments	$ 9,108.6		9,108.6
Receivables		64.9	64.9
Materials and supplies		1.7	1.7
Prepaid expenses		28.5	28.5
Items in process of collection[27]	54.8	4,391.0	4,445.8
Long-term assets		1,453.7	1,453.7
Total assets	$ 9,163.4	$ 6,996.4	$ 16,159.8
Liabilities			
Clearing balances and balances arising from early credit of uncollected items[28]	$ 8,685.1	$ 1,935.5	$ 10,620.6
Deferred credit items		4,391.0	4,391.0
Short-term payables		56.2	56.2
Long-term liabilities		284.0	284.0
Total liabilities	$ 8,685.1	$ 6,666.7	$ 15,351.8

Rate change results	**200 basis point decrease in rates**	**200 basis point increase in rates**
Asset yield ($9,163.4 x rate change)	$ (183.3)	$ 183.3
Liability cost ($8,685.1 x rate change)	(173.7)	173.7
Effect of 200 basis point change	$ (9.6)	$ 9.6
2005 budgeted revenue	$ 900.6	$ 900.6
Effect of change	(9.6)	9.6
Revenue adjusted for effect of interest rate change	$ 891.0	$ 910.2
2005 budgeted total expenses	$ 796.9	$ 796.9
2005 budgeted target ROE	102.9	102.9
Tax effect of interest rate change ($ change x 29.6%)	(2.8)	2.8
Total recovery amounts	$ 897.0	$ 902.6
Recovery rate before interest rate change	100.1 %	100.1%
Recovery rate after interest rate change	99.3 %	100.8%
Effect of interest rate change on cost recovery[29]	(0.8)%	0.7%

[26] 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 a change in interest rates of up to 200 basis points.
[27] The amount designated rate sensitive represents the amount of cash items in process of collection that have been credited to customers prior to settlement.
[28] The amount designated rate insensitive represents clearing balances on which earnings credits are not paid.
[29] 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 2005.

Table 16
Derivation of the 2005 and 2004 PSAF
(millions of dollars)

		2005			**2004**	
A. Imputed elements						
Short-term debt[30]		$ 0.0			$ 0.0	
Long-term debt[31]		$ 0.0			$ 0.0	
Equity						
Total assets from table 13	$ 16,159.8			$ 17,215.8		
Required capital ratio[32]	5%			5%		
Total equity		$ 808.0			$ 860.8	
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						
CAE[33]	22.2%			22.3%		
CAPM	12.3%			12.2%		
DCF	19.7%			21.3%		
Average pre-tax return on equity		18.1%			18.6%	
2. Elements of capital costs						
Short-term debt			$ 0.0			$ 0.0
Long-term debt			0.0			0.0
Equity	$ 808.0 x	18.1% =	146.2	$ 860.8 x	18.6% =	160.1
			$ 146.2			$ 160.1
C. Other required PSAF recoveries						
Sales taxes		$ 8.2			$ 12.0	
Federal Deposit Insurance assessment		0.0			0.0	
Board of Governors expenses		6.6			7.6	
			14.8			19.6
D. Total PSAF			$ 161.0			$ 179.7
As a percent of assets		1.0%			1.0%	
As a percent of expenses[34]		22.2%			23.1%	
E. Tax rates		29.6%			29.8%	

[30] No short-term debt is imputed because clearing balances are used as a funding source for those assets that are not financed with short-term payables.
[31] No long-term debt is imputed because clearing balances are used as a funding source.
[32] Based on the Federal Deposit Insurance Corporation's definition of a well-capitalized institution for purposes of assessing insurance premiums.
[33] 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.
[34] System 2005 budgeted priced services expenses less shipping are $724.8 million.

Table 17
Computation of 2005 Capital Adequacy
for Federal Reserve Priced Services
(millions of dollars)

	Assets	Risk weight	Weighted assets
Imputed reserve requirement on clearing balances	$ 1,056.6	0.0	$ 0.0
Imputed investments:			
1 – year Treasury note[35]	3,727.1	0.0	0.0
Commercial paper (3 months)[35]	5,044.7	1.0	5,044.7
GNMA mutual fund[36]	336.8	0.2	67.4
	$ 9,108.6		$ 5,112.1
Receivables	64.9	0.2	13.0
Materials and supplies	1.7	1.0	1.7
Prepaid expenses	28.5	1.0	28.5
Items in process of collection	4,445.8	0.2	889.2
Premises	394.9	1.0	394.9
Furniture and equipment	173.1	1.0	173.1
Leases, leasehold improvements & long-term prepayments	79.7	1.0	79.7
Prepaid pension costs	806.0	1.0	806.0
Total	$ 16,159.8		$ 7,498.2

Imputed equity for 2005	$ 808.0
Capital to risk-weighted assets	10.8 %
Capital to total assets	5.0 %

[35] 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

[36] The imputed mutual fund investment is based on Vanguard's GNMA Fund Investor Shares fund, which was chosen based on the investment strategies articulated in its prospectuses. The fund returns can be located at http://flagship4.vanguard.com/VGApp/hnw/FundsByType.

FEDERAL RESERVE
AUTOMATED CLEARINGHOUSE FEDACH FEE SCHEDULE

EFFECTIVE JANUARY 3, 2005. THERE ARE NO CHANGES FROM 2004 PRICES.

	Fee
Origination (per item or record):[37]	
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):[38]	
Item	$0.0025
Addenda record	$0.0010
Monthly fee (per routing number):	
Account servicing fee[39]	$25.00
FedACH settlement[40]	$20.00
Information extract file	$10.00
FedLine Web return item/notification of change (NOC) fee:[41]	$0.50
Voice response return item/NOC fee:[42]	$2.00
Nonelectronic input/output fee:[43]	
Tape input/output	$25.00
Paper output	$15.00
Facsimile return/NOC[44]	$15.00
Canadian cross-border fee:	
Cross-border item surcharge[45]	$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

[37] 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.

[38] Receipt fees do not apply to items that the Reserve Banks send to the other ACH operator.

[39] 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 the other operator exclusively are not assessed the account-servicing fee.

[40] 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.

[41] The fee includes the transaction and addenda fees.

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

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

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

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

Mexico service fee:	
Cross-border item surcharge[46]	$0.67
Return received from Mexico	$0.69
Item trace	$11.50
Transatlantic service fee:	
Cross-border item surcharge[47]	
Austria	$2.00
Germany	$2.00
The Netherlands	$2.00
Switzerland	$2.00
United Kingdom	$2.00
Return received from[48]	
Austria	$5.00
Germany	$8.00
The Netherlands	$5.00
Switzerland	$5.00
United Kingdom	$8.00

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

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

[48] This per-item surcharge is in addition to the standard receipt fees.

FEDERAL RESERVE
FEDWIRE FUNDS AND NATIONAL SETTLEMENT SERVICE FEE SCHEDULE

EFFECTIVE JULY 1, 2005. BOLD INDICATES CHANGES FROM 2004 PRICES.

Fedwire Funds Service

	Fee
Basic volume-based transfer fee (originations and receipts)	
Per transfer for the first 2,500 transfers per month	**$0.31**
Per transfer for additional transfers up to 80,000 per month	**$0.21**
Per transfer for every transfer over 80,000 per month	**$0.11**
Surcharge	
Off-line transfers (originations and receipts)	$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)[49]	$60.00
Special settlement arrangements[50]	
Fee per day	$100.00

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

[50] 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.

FEDERAL RESERVE
FEDWIRE SECURITIES SERVICE FEE SCHEDULE
(NON-TREASURY SECURITIES)

EFFECTIVE JANUARY 3, 2005. BOLD INDICATES CHANGES FROM 2004 PRICES.

	Fee
Basic transfer fee	
Transfer or reversal originated or received	$0.32
Surcharge	
Off-line transfer or reversal originated or received	**$33.00**
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	**$35.00**

FEDERAL RESERVE
NONCASH COLLECTION FEE SCHEDULE

EFFECTIVE JANUARY 3, 2005. THERE ARE NO CHANGES FROM 2004 PRICES.

Coupon collection:	Fee
Cash letters fee	$13.00
Coupon envelopes	$4.50
Return items	$35.00
Bond collection (per bond):[51]	$55.00

[51] Plus actual shipping costs.

FEDERAL RESERVE
ELECTRONIC ACCESS FEE SCHEDULE

EFFECTIVE JANUARY 3, 2005. BOLD INDICATES CHANGES FROM 2004 PRICES.

FedLine

FedLine® Select Package (monthly)		**$200.00**
Includes:	One dial – DOS-based FedLine One FedLine Web institution fee Three individual subscriptions	
	Additional FedLine Web individual subscriber fee (monthly)	**$15.00**
	Additional DOS-based FedLine – Dial (monthly)	$100.00
	Additional DOS-based FedLine – Frame Relay less than 56 kbps (monthly)	**$825.00**
	Test and Contingency Options for Frame Relay:	
	Full Circuit Backup[52] – less than 56 kbps (monthly)	**$825.00**
	Frame Connection Only[53] – less than 56 kbps (monthly)	**$693.00**
	Redundant Component Set[54] – less than 56 kbps (monthly)	$155.00
FedLine® Web (monthly)		**$50.00**
	Set-up fee (one time)	$50.00
	Individual subscriber fee (monthly)	**$15.00**
FedLine® Advantage (monthly)		**$250.00**
Includes:	One FedLine Advantage institution fee Three FedLine Advantage individual subscriber digital certificates	
	Set-up fee (one time)	**$400.00**
	VPN (monthly)	**$50.00**
	Individual subscriber fee beyond first three (one time)	**$100.00**
	Individual subscriber fee (monthly)	**$20.00**

FedPhone & FedMail

FedMail® Fax (monthly per fax line)[55]	$15.00

[52] This option applies to test systems or contingency systems that are located at separate facilities, including another bank office or a third-party contingency site. 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.

[53] This option applies to test systems or contingency systems that are located at separate facilities. The institution uses a frame relay link connection with no ISDN dial-up backup. 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.

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

[55] FedPhone and FedMail e-mail are free options.

Computer Interface[56]

Frame Relay-Computer Interface (CI) @ 56 kbps (monthly)	$1,000.00
Frame Relay-CI @ 256 kbps (monthly)	$2,000.00
Frame Relay-CI T1 (monthly)	$2,500.00

Test and Contingency Options for Frame Relay:

CONNECTION TYPE	FULL CIRCUIT BACKUP[52]	FRAME CONNECTION ONLY[53]
CI @ 56 kbps	$845	$765
CI @ 256 kbps	$1,750	$1,585
CI T1	$2,230	$2,010

[56] 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. Additionally, a group of the Reserve Banks' largest frame relay customers will incur a $1,000 per circuit supplemental fee to recover the additional costs associated with this effort. The Reserve Banks began charging this select group on September 30, 2004.

By order of the Board of Governors of the Federal Reserve System, November 4, 2004.

Jennifer J. Johnson
Secretary of the Board.