FEDERAL RESERVE BANK
OF NEW YORK

[Circular No. **9659**
March 27, 1984]

PRIVATE SECTOR ADJUSTMENT FACTOR

Revised Procedure for Calculating the PSAF

*To All Depository Institutions in the Second
Federal Reserve District, and Others Concerned:*

The following statement has been issued by the Board of Governors of the Federal Reserve System:

The Federal Reserve Board has approved revisions to its procedure for calculation of the private sector adjustment factor (PSAF). The PSAF is an allowance for the taxes that would have been paid and the return on capital that would have been provided had the Federal Reserve's priced services been furnished by a private sector firm.

The revisions to the procedure used in calculating the PSAF for 1984 will be as follows:

- Expansion of the sample used to calculate the PSAF from the 12 to the 25 largest bank holding companies. The bank holding companies with the highest and the lowest return on equity in the sample will be excluded.
- Employment of the direct determination methodology for establishing the asset base used for computing the PSAF.
- Inclusion of the net effect of those assets expected to be acquired and disposed of during 1984 in the priced services asset base.
- Recovery of the estimated sales taxes that would have been paid on the purchases of certain goods and services if the Reserve Banks were subject to such taxes.
- Inclusion of those portions of expenses and fixed assets of the Board of Governors related to the development of priced services.
- Inclusion of an imputation for FDIC insurance assessment.
- Removal of the financing costs of net adjustment float from the asset base because such float is now priced explicitly.

In addition, the tax rate used in the PSAF calculation will be based on the ratio of current Federal, state, and local income taxes to total taxable income of the bank holding companies included in the sample.

Enclosed, for depository institutions in this District, is a copy of the Board's official notice in this matter. It will be printed in the *Federal Register*; single copies will be furnished to others upon request directed to our Circulars Division. Questions thereon may be directed to Robert M. Abplanalp, Vice President (Tel. No. 212-791-5349).

ANTHONY M. SOLOMON,
President.

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FEDERAL RESERVE SYSTEM

[Docket No. R-0485]

Private Sector Adjustment Factor

AGENCY: Board of Governors.

ACTION: Approval of methodology for calculating the Private Sector Adjustment Factor for 1984.

SUMMARY: The Board has approved the methodology for calculating the Private Sector Adjustment Factor (PSAF) for 1984. The PSAF is a recovery of the imputed costs which takes into account the taxes that would have been paid and the return on capital that would have been provided had the Federal Reserve's priced services been furnished by a private business firm. The estimated recovery through the PSAF in 1984 will be $58.8 million.

EFFECTIVE DATE: January 1, 1984

FOR FURTHER INFORMATION CONTACT: David L. Robinson, Associate Director (202/452-3806) or Earl G. Hamilton, Assistant Director (202/452-3874), Division of Federal Reserve Bank Operations; Gilbert T. Schwartz, Associate General Counsel (202/452-3625), Daniel L. Rhoads, Attorney (202/452-3711), or Robert G. Ballen, Attorney (202/452-3265), Legal Division, Board of Governors of the Federal Reserve System, Washington, D.C. 20551.

SUPPLEMENTARY INFORMATION: <u>Background</u>. The Monetary Control Act of 1980 (Title I of Pub. L. 96-221) provides that over the long run, fees for the Federal Reserve's priced services are to be based upon costs, including the "taxes that would have been

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paid and the return on capital that would have been provided had the services been furnished by a private business firm." The Private Sector Adjustment Factor ("PSAF") is the vehicle that facilitates the imputation of these taxes and capital costs to the Federal Reserve.

In October 1983 the Board requested comment on a proposal to revise the methodology used to calculate the PSAF for 1984. The proposed revisions included:

- Use of the direct determination method for establishing the asset base used for computing the PSAF.
- Expansion of the sample used to calculate the PSAF from the 12 to the 25 largest bank holding companies.
- Calculation of the Federal Reserve's asset base to reflect the value of assets expected to be acquired and disposed of in 1984.
- Removal of the financing costs of net adjustment float from the asset base because such float is priced explicitly.
- Recovery of the estimated sales taxes that would have been paid on the purchases of certain goods and services if the Reserve Banks were subject to such taxes.
- Recovery of expenses incurred by Board staff working directly on the development of priced services and inclusion of the portion of the Board assets employed in this specific activity in the PSAF asset base.
- Capitalization of Federal Reserve leases that become effective on or after January 1, 1984, that meet the criteria for capitalization as set forth in FASB Statement 13.

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In addition to these revisions, the Board requested comment on an alternative method of determining the income tax rate used in calculating the PSAF. It was estimated that the net effect of these proposed changes would be to require a recovery of approximately $56.2 million through the PSAF in 1984. The Board also requested comment on a proposed adjustment to the method for calculating earnings credits on clearing balances to take into account reserve requirements the Reserve Banks would be subject to if they were subject to reserve requirements.

Analysis of Comments. A total of 45 commenters responded to the Board's request for comment, including seven Reserve Banks. Of the 38 non-Reserve Banks comments, 32 were received from banks and bank holding companies, and four from banking industry trade groups. Responses were also received from one thrift institution and one congressman. A majority of the commenters discussing specific issues agreed that the proposals concerning the use of the direct determination method, calculation of the Federal Reserve's asset base to reflect the value of assets to be acquired and disposed of in 1984, recovery of estimated sales taxes, recovery of estimated expenses incurred by Board staff working directly on the development of priced services, and the inclusion of capitalized leases in the asset base used to calculate the PSAF were appropriate. The majority of commenters also supported the exclusion of shipping expenses from the PSAF calculation. Commenters were divided on the issues of the bank holding

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company model and its expansion from the twelve to the 25 largest bank holding companies, the tax rate methodology, the continued use of book values as the basis of asset base calculation, and the exclusion of net adjustment float from the short-term asset base.

Objections to the proposal stemmed mainly from opposition to the Federal Reserve's use of bank holding companies as the model for estimating an imputed cost of capital, tax rate, and the short term assets to be included in the PSAF calculation.

A. Choice of Model - Thirty-four commenters discussed the Board's proposal to continue using large bank holding companies as the model upon which to construct the PSAF and to expand the sample size from the twelve largest bank holding companies to the 25 largest bank holding companies. Seventeen commenters supported the use of the bank holding company model on the basis that the model represented those institutions that the Federal Reserve directly competed with in the provision of priced services. Several commenters supported expanding the sample size from the 12 largest bank holding companies to the 25 largest bank holding companies, stating that the expansion would present a more accurate representation of the market.

Seventeen commenters were opposed to the use of bank holding companies as the model and stated that data processing corporations were the most appropriate model. These commenters

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believe that the priced service business of the Federal Reserve Banks most closely resembles the services offered by data processing corporations. They also believe that using a large bank holding company model is inappropriate because the large majority of a bank holding company's activities are unrelated to the services the Federal Reserve Banks offer. Many of the commenters who opposed the proposal stated that if the Federal Reserve was going to continue the use of bank holding companies as the model, it would have to include more assets like cash and cash items in the process of collection to make the pro forma balance sheet of the Federal Reserve System consistent with consolidated bank holding company balance sheets.

The Board carefully considered alternative models such as utilities, bank holding companies, and data processing companies. Determining whether the cost of capital that the Federal Reserve would actually incur in the market would be higher or lower than that associated with bank holding companies, or any other industry model, involves the consideration of a number of factors, particularly in view of the Federal Reserve's unique blend of public and private characteristics. The Board believes that an analysis of all reasonable alternatives strongly reinforces the view that the bank holding company model is the most reasonable and logical choice.

The Board recognizes, as some commenters pointed out, that bank holding companies engage in numerous activities other

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than correspondent bank services. However, the correspondent services of bank holding companies most closely resemble the priced services activities of the Federal Reserve, and large banking organizations are the major -- and for many services virtually the only -- direct competitors of the Federal Reserve. Therefore, since the correspondent operations of a bank holding company have the same cost of capital that accrues to the bank holding company as a whole, the Board believes it is appropriate to impute capital costs to the Federal Reserve based on the capital costs and structure of bank holding companies.

Certain aspects of the Federal Reserve's provision of priced services are more analogous to utilities or government-sponsored enterprises, which have a lower cost of capital than that implied by the bank holding company model. The Federal Reserve was directed by the Congress to provide an adequate level of service nationwide and must, therefore, serve all depository institutions regardless of size or location. Moreover, reflecting the Federal Reserve's public role, it should not be an aggressive, high growth, profit maximizing entity. It should, of course, earn a reasonable rate of return -- a test that seems more than adequately provided for in the use of the bank holding company model.

The principal alternative to the bank holding company model suggested by a number of commenters is the use of a model based on data processing companies. The argument that nonbank

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data processors would provide a better model than bank holding companies rests on two major assumptions: first, these firms provide payments services that are similar to those of the Reserve Banks; and, second, a stand-alone Federal Reserve priced service entity would have the financial characeristics of those data processing companies.

Given the disparities between the services of data processing companies and the services provided by the Federal Reserve, data processors are not the appropriate model for the PSAF. A thorough review of the activities of six data processors suggested by some of the commenters clearly indicates that the assertion of similar activities is not supported by the facts. All six of these firms provide a wide variety of computer-related services in many fields unrelated to the financial industry. As a result, the fortunes of these data processors are tied to developments in activities far removed from the Federal Reserve. Moreover, the data processors incur none of the basic costs associated with the business of banking, such as the cost of associated vault space or protection equipment for securities safekeeping operations or the cost of specialized equipment and transportation necessary for processing and delivering checks.

To the very limited extent that the activities of the data processors are at all comparable to those of the Federal Reserve, they generally only perform a portion of the services provided by the Federal Reserve. For example, the data

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processors perform only one step in the payments process -- the recording and transfer of payments information. The Federal Reserve, in contrast, performs many, and in some cases all, of the steps that take place as payments are made. The large banks that are subsidiaries of bank holding companies, either directly or through joint ventures, provide virtually every service offered by the Federal Reserve.

Finally, the six data processors specifically suggested by some commenters apparently do not subscribe to the view that their activities are similar to those of the Federal Reserve. None of these six firms includes the Federal Reserve as a competitor in the discussion of competitors section of its Form 10-K filed with the Securities and Exchange Commission. Further, only one of the six has ever commented on a single occasion on any of the Federal Reserve's pricing proposals, with that comment limited to a narrow point unrelated to the PSAF. Finally, no data processor commented on the proposed 1984 PSAF methodology. The one bank service corporation that commented on the proposal supported the use of large bank holding companies as the appropriate model.

The second argument for the data processing company model is that the capital structure and returns of these companies should constitute the Federal Reserve's financial operating targets. It is clear that these firms are high-growth, technologically oriented operations -- a fact suggested by the variability of their stock prices relative to

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stock prices generally. However, the Board does not believe that it should be the objective of the Federal Reserve to mirror the performance of these specialized firms; to suggest that the Federal Reserve should conduct its priced services with a view toward achieving financial objectives of that nature would seem to be in conflict with the very essence of the Federal Reserve's historical and public interest payments mechanism operations.

With regard to the application of the bank holding company model, twelve commenters supported expanding the model size to include the 25 largest bank holding companies, but some suggested that the sample include those bank holding companies that are most heavily involved in the correspondent banking business. An analysis indicates that the use of a sample comprised of the 25 largest correspondent banks ranked by "due to" balances has virtually no impact on the PSAF.

Another issue raised by some commenters stems from the fact that the market price of the stock of certain bank holding companies used in the model is well below the book value of such stock. As a result, suggestions have been made that the return on equity implied for the Federal Reserve by this model is too low. Specifically, some commenters argued that pre-tax and after-tax income targeted by the Federal Reserve should result from an income stream that would be large enough to equate market and book value of stock.

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In response to this comment, the cost of equity component of the PSAF was calculated for several samples of bank holding companies with differing relationships of market value to book value for their stock. The calculations indicate that the holding companies with the highest market-to-book ratios had higher returns on equity than the companies with the lowest ratios. Overall, however, the absolute amount of the differences were relatively small. In order to create a more regionally diverse sample and avoid distortions in the PSAF calculation due to institutions at the extremes, the Board believes it is reasonable to use the sample of the 25 largest bank holding companies. However, to avoid unusual distortions, the bank holding companies with the lowest and the highest returns on equity will be eliminated from the 25 company sample before the actual calculations are made. Should changing market-to-book relationships imply any material affect on PSAF recoveries, the choice of the 25 largest bank holding companies as the basis for the PSAF calculation will be reevaluated.

There are other factors that constrain the income stream generated by the Federal Reserve's priced service operations. The most significant of these is that the Federal Reserve does not have the same "profit maximization" objectives as a private firm. For example, the Federal Reserve's priced service operations have limited investment opportunity. Specifically, the Federal Reserve's investments are, by assumption, limited to Treasury bills, whereas any profit

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maximizing firm would hold a substantial portion of its investments in higher yielding instruments.

B. Book Value of Physical Assets - Twenty-five commenters discussed the use of book value of physical assets in the calculation of the PSAF. Thirteen commenters supported the use of book value to determine the value of physical assets as being consistent with the practices in the private sector and among bank holding companies.

Twelve commenters opposed the use of book value and supported the use of current market value to determine the value of physical assets, many stating that a book value system used for accounting or tax purposes is inappropriate for pricing, investment, or production decisions. Several commenters noted that the use of book value causes geographic distortions between Federal Reserve Districts with new buildings and those with old buildings, and suggested that the Federal Reserve follow Financial Accounting Standards Board (FASB) Statement number 33 which requires reporting of assets at current value.

The Board continues to believe that the practice of using book value for physical asset valuation is appropriate. The practice of using book value for property, plant, and equipment is consistent with banking industry practice and with generally accepted accounting principles. Moreover, establishing financial performance standards based upon historical costs is a prevalent practice throughout the private sector. Furthermore, under the provisions of FASB Statement

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number 33 (the accounting profession's current methodology for supplementary disclosure of inflation-adjusted financial data), if assets were revalued to reflect market value rather than book value, an adjustment would also have to be made in income. Finally, since a market value accounting system does not exist, the Federal Reserve -- like all other entities -- has no practical choice other than the use of net book values.

The use of market valuation of physical assets has theoretical appeal because the use of net book value by the Federal Reserve or the banking industry could result in distortions and inefficiencies if book values were far removed from market values. Such does not appear to be the case with respect to the Federal Reserve.

Approximately one-third of the physical assets used by the Federal Reserve in the provision of priced services is equipment. The great bulk of such assets is computers and related equipment for which the market value does not appear greater than its book value -- in fact, the book value appears to be much greater than market value for this equipment. For example, there are two computer models owned by the Federal Reserve that, as a result of technological innovation, have a market value that is $9-10 million less than their book values.[1/]

1/ The Reserve Banks intend to use this equipment for the length of time originally contemplated in the depreciation schedules.

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With respect to Reserve Bank buildings, the best proxy for market value available to the Federal Reserve is the alternative use of space; that is, what rent could the Federal Reserve obtain for its space or what would the Federal Reserve have to pay if the priced service operations were moved out of a Federal Reserve Bank's building to other comparable space. The Federal Reserve faces a practical problem, however, when making comparisons of book and market values of its space because, in general, only a portion of a Reserve Bank's facility is used for priced service operations and space costs are charged through the Federal Reserve's Planning and Control System (PACS) at one rate for all activities -- priced and nonpriced within a building -- regardless of location. Thus, prime space, which is typically not used for priced services, may tend to be undervalued whereas less than prime space for priced service activities may tend to be overvalued.

Analysis of the space costs[2/] the Federal Reserve imposes on its internal operations (based on PACS standard rates) and prevailing commercial space rentals in all cities in which the Federal Reserve maintains operations shows that there are Reserve offices with PACS space costs above and below local market rates. However, on an overall weighted average cost basis, the PACS charge (including PSAF) per square foot

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2/ Cost of space to be recovered through pricing includes utilities, depreciation, taxes, housekeeping and building maintenance labor, the supervision of that labor, and the PSAF.

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for Reserve Banks is $16.83, well within the weighted average market range of $13.41 to $20.90. Further, of the nearly one million square feet in the Federal Reserve devoted to check operations, approximately 30 percent is rented -- primarily for RCPC's -- thus explicitly reflecting the market rate in these locations. It therefore appears that continued use of book value for calculating the PSAF is reasonable. Board staff will continue to monitor this matter closely.

C. Income Taxes - The Board requested public comment on whether to use an income tax rate based on taxes actually paid, or a tax rate which takes into account deferred taxes, for the income tax rate used in the PSAF calculation.[3/] Three commenters supported the Board's present methodology. Ten commenters supported inclusion of deferred taxes as being a better representation of the tax liability of a private company, if effective tax rates for bank holding companies were used. Twenty-three commenters stated that marginal tax rates were more appropriate.

Deferred taxes arise principally from accelerated depreciation. Including the effect of deferred taxes would

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3/ In the past, the tax rate used in the PSAF calculation was based on the ratio of current income taxes (Federal, state, and local) to total income of the bank holding companies included in the sample. Deferred taxes were excluded from this ratio. An adjustment was made to the tax rate to exclude any benefits that banks derive from holding tax exempt state and local government securities.

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increase the tax rate used for purposes of the PSAF in some years and decrease the tax rate in other years. (The effect of excluding deferred taxes for 1984 is to increase the dollars to be recovered through the PSAF by $1.3 million). Over time, it is likely that the effect of using deferred taxes would balance out. Because it is administratively complex to include deferred taxes in the PSAF calculation, (e.g., separate depreciation schedules would have to be developed), it is reasonable that the PSAF computation not take into account deferred taxes.

With regard to the use of marginal tax rates, the taxes actually paid by the bank holding companies in the model -- or by most other firms -- are not at the maximum marginal tax rate. Therefore, while the Federal Reserve would use the marginal tax rate for prospective investment analysis purposes, it would not be appropriate to use the marginal tax rate for purposes of calculating the PSAF.

In order to judge the reasonableness of the tax rate developed from the model, the income taxes the Federal Reserve would actually pay in 1984 if the Federal Reserve was subject to income taxes was approximated. This analysis suggests that even without the benefits of (1) investment tax credits from any year other than the year for which taxes are being calculated, (2) tax benefits from accelerated depreciation applicable to the Federal Reserve, and (3) the normal tax minimization efforts that businesses follow, a 38.6 percent tax rate appears appropriate. If any allowance for the three

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factors cited above were made, the actual tax rate might be considerably lower than 38.6 percent.

Some commenters suggested the Federal Reserve look at domestic tax rates of bank holding companies for purposes of determining its assumed tax liability because the Federal Reserve's priced services are entirely domestic. A study on financial institutions prepared by staff of the Joint Committee on Taxation showed that, for 20 large commercial banks, the average U.S. effective tax rate for the most recent year studied, 1981, was 2.7 percent.[4/] The corresponding foreign and worldwide average effective rates were 38.1 and 24.5 respectively. The 2.7 percent and 24.5 percent effective tax rates are significantly lower than the 38.6 percent effective tax rate in the PSAF calculation.

D. Direct Determination of Assets - Seventeen commenters supported the proposal to replace the expense ratio method for asset determination with the direct determination method based on PACS, stating that it would be a more precise measurement of the assets used in the production of priced services. Concern was expressed by six commenters over the data structure of PACS, and the allocations of assets between priced and non-priced services. These commenters urged the

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4/ Staff of Joint Committee on Taxation, Committee on Finance, Taxation of Banks and Thrift Institutions, 12 (Joint Comm. Print, March 11, 1983).

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Board to make available to the public details of the asset allocation between priced and non-priced services embodied in PACS. One commenter opposed the proposal stating that PACS would underallocate assets to the priced services.

The original PSAF methodology apportioned all long-term assets, and certain short-term assets such as materials and supplies, deferred charges and other receivables on the basis of the ratio of operating expenses for priced services (less shipping) to total priced and non-priced operating expenses (less shipping). This approach resulted in apportioning approximately 40 percent of the total book value of assets to the priced service asset base to be financed via the PSAF.

It is important, however, that shared (joint-purpose) assets and single-purpose assets be precisely linked to priced services so that a priced service asset base accurately and fully identifies assets employed in the provision of priced services. The direct determination method relies essentially on PACS cost accounting to link single-purpose assets directly to priced and non-priced services, thus determining more precisely the priced service asset base. In addition, PACS provides the same information for assets, such as buildings and centralized computers, that are used jointly in the provision of priced and non-priced services. For example, depreciation is included in total occupancy costs, which are redistributed to all PACS activities. Because depreciation is linked

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directly to assets carried on the Federal Reserve's balance sheet, the assets can be linked to the production of priced and non-priced services.

For illustrative purposes, the check processing operation currently occupies approximately 13 percent of total System floor space. Therefore, 13 percent of the net book value of buildings is directly attributable to the check service. In addition, the amount of space occupied by each support activity and each overhead service whose costs are redistributed or allocated to the check service is known. Since the percentage of expenses that each support and each overhead service redistributed or allocated to check as a percentage of total expenses is also known, that percentage rate can be used to determine the additional building values to be attributable to the check service. As a result, a total of 22 percent of the net book value of building assets can be attributed to the check service and included in the priced service asset base. Similar calculations are made for other long-term assets. This process, followed for each of the Federal Reserve's priced services, ultimately produces a priced service asset base that includes all assets directly identified with a priced service and the appropriate portion of shared assets that relate to priced services.

E. Board of Governors Assets and Expenses - The Board proposed that expenses incurred by Board staff in the development of prices be subject to recovery. Nineteen

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commenters supported this proposal. Eight of these commenters stated that the allocation should also include expenses and assets indirectly related to priced services, such as planning, budgeting, review, monitoring, policy making and control. Several commenters noted that the proposal paralleled private sector practices.

The Board believes it is appropriate to include expenses incurred by Board staff working on the development of priced services ($1.9 million) in the expense subject to recovery and the Board assets employed in this activity ($.5 million) in the PSAF asset base, beginning in 1984. However, the Board believes it would be inappropriate to impose expenses associated with the Board's supervisory responsibilities over Reserve Banks when the Federal Reserve does not assess charges on member banks and bank holding companies for other types of supervisory activities.

F. Sales Taxes - Twenty-seven comments were received on the proposal to include in the PSAF an estimate of sales taxes that would have been paid by the Reserve Banks had they not had a statutory exemption. Twenty-five commenters supported the proposal. Two commenters opposed including sales taxes on the basis that sales tax is not a cost incurred by Reserve Banks.

The Board believes that an allowance for sales taxes the Federal Reserve Banks would have paid were they subject to such taxes should be included as a cost of providing priced

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services. For 1984, the total Federal Reserve sales tax attributed to priced services is approximately $4.9 million.

G. Shipping Expenses - Thirteen commenters discussed the proposal to exclude shipping expenses from the PSAF calculation. Eleven commenters supported the exclusion of shipping expenses, and two commenters stated that shipping expenses should be included.

The assets employed in the production of shipping services are not Federal Reserve assets, but rather are owned by the various carriers with whom the Reserve Banks deal. When priced service assets are determined directly instead of on an expense ratio basis, the removal of shipping expenses from the calculation has no effect on total recoveries. Staff expenses of managing shipping services are recovered through overhead allocations as well as direct allocations to priced service activities. Accordingly, the Board determined not to include shipping expenses in the calculation of the PSAF.

H. Date for the Asset Base Estimate - Eighteen respondents discussed the Board's proposal that the asset base for the year in which the PSAF would apply be adjusted to reflect the value of the assets expected to be acquired and disposed of in that year. Seventeen commenters supported the proposal, stating that it would be an improvement over the current method of using the average asset base from the previous year and would be more consistent with private sector practices. Two commenters opposed the proposal; one commenter

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stated it was inconsistent with cost theory used in the private sector.

The Board has determined that adjusting the asset base used in applying the PSAF for the value of assets expected to be acquired or disposed of in the year for which the PSAF would apply better reflects the actual assets used to provide priced services. Further, it appears that this modification would parallel private sector practices. Accordingly, the Board has adopted the procedure as proposed.

I. Leased Assets - Fourteen commenters supported the proposal that all leases becoming effective on or after January 1, 1984, and meeting criteria of FASB Statement number 13 be capitalized for purposes of determining the PSAF. Several commenters stated the proposal was in accord with industry practice and generally accepted accounting standards. Other commenters discussed leased assets in terms of the impact of leases on capital structure. They stated that leased assets do not appear on the Federal Reserve's books, but, that if a private entity were to issue debt, lenders would regard lease obligations as if they were debt and adjust that entity's capital structure accordingly. In their opinion, high levels of leases preclude high levels of debt.

The Board has determined to include the value of all Federal Reserve leases that become effective on or after January 1, 1984, that meet the criteria for capitalization as set forth in FASB Statement number 13 in the calculation of the

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PSAF. This amount is expected to be $1.5 million. Of this amount, it is anticipated that $0.9 million is related to priced service activities. Since the financing costs (interest payments) associated with these leases are explicitly reflected in the operating expenses to be recovered through pricing, there would be no effect upon the PSAF or the costs to be recovered if these leases were capitalized. Furthermore, these leases would not affect the Federal Reserve's debt/equity ratio as asserted by some of the commenters in view of the <u>de</u> <u>minimus</u> level of capitalized leases. The amount of leases entered into prior to January 1, 1984, that satisfy the requirements of FASB Statement number 13 is small and no adjustments appear necessary.

J. <u>Short-Term Assets</u> - 1. <u>Float</u>. Sixteen commenters discussed the proposal to remove the financing costs of net adjustment float from the asset base used for the PSAF calculation. Ten commenters supported the proposal in view of the fact that the value of all Federal Reserve check float will be recovered through service fees in 1984. Six commenters were opposed to the proposal. A few commenters suggested that float be financed at either the short-term rate applicable to the bank holding companies in the model or the rate equivalent to the imputed weighted average cost of capital computed in the PSAF calculation.

The Board determined that it is appropriate to remove the financing costs of net adjustment float from the asset base

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to be financed via the PSAF since the value of Federal Reserve check float will be recovered fully through explicit pricing in 1984. In view of the self-financing characteristics inherent in recovering float value through explicit pricing, inclusion of financing costs for net adjustments float in the Federal Reserve's asset base would result in a double recovery. With regard to the suggestion that float be financed by alternative rates, the MCA requires interest on items credited prior to collection to be charged at the Federal funds rate.

2. Cash Items. Several commenters stated that the level of short-term assets was too low and that a large short-term asset, cash items in the process of collection (CIPC), has been omitted from the pro forma balance sheet. These commenters also tied the inclusion of CIPC to the requirement that commercial banks must maintain 5 percent of assets as capital, stating that a bank holding company model, if applied consistently, would require the Federal Reserve to comply with capital guidelines established by the Federal Reserve and the Comptroller of the Currency for large banks and bank holding companies.

The Federal Reserve, by virtue of its check processing operations, has large amounts of cash items in the process of collection each day. The difference between cash items in the process of collection and deferred availability items is float, the value of which must be recovered under the Monetary Control Act. Cash items in the process of collection that are offset

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by deferred availability items are costless and thus need not be financed by the PSAF or otherwise. Therefore, insofar as the Federal Reserve's overall net income is concerned, the only "cost" associated with cash items in the process of collection arises from the net balances created which, in accordance with the MCA, are effectively priced at the Federal funds rate.

As several commenters stated, the gross amount of cash items typically is included on the balance sheet of a commercial bank, and a commercial bank's gross cash items are subject to regulatory capital guidelines. By extension, it was suggested that a five percent primary capital ratio, if applied to a Federal Reserve balance sheet that included the gross amount of cash items, would require considerably more capital than provided for in the PSAF calculation.

The Federal Reserve does not believe this conclusion is warranted. First, cash items are not a risk asset -- a fact that is implicitly recognized in the development of regulatory capital guidelines. Second, cash items represent only 4 percent of the total assets of the banking organizations in the sample. If these items were removed from the total assets of commercial banks, the resulting primary capital ratio guideline would be increased to about 5.2 percent. The comparable ratio of equity to total assets on the Federal Reserve's pro forma balance sheet is about 9 percent. Consequently, when the primary capital ratio is adjusted to take account of cash items in the process of collection, it appears that the Federal

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Reserve's capital provided for in the PSAF calculation is reasonable.

3. Clearing Balances. The Board also had proposed to adjust the method for calculating earnings credits on clearing balances to take into account reserve requirements applicable had similar balances been held at a correspondent bank. Thirteen commenters supported the proposal.

If a respondent's balance is maintained at a correspondent bank, the correspondent would be required to maintain reserves on the balances held. In most cases, the correspondent would be at a marginal reserve requirement ratio of 12 percent. Generally, the correspondent bank takes its marginal reserve requirement into account when it calculates the earnings credit on the respondent's balances. The respondent, however, would receive an additional benefit from being able to deduct balances held at the correspondent from its reservable transaction accounts. Accordingly, it is appropriate to take this into account in calculating earnings credits on clearing balances.

The Board has determined to adjust the method used for calculating earnings credits to reflect the reserve requirements that would apply if the balances had been held with a correspondent bank. Each respondent's balance would be reduced by an imputed net interbank reserve requirement. This would be calculated as the 12 percent requirement that a correspondent would be subject to, less the reserve saving to

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the respondent if it could deduct the balance from reservable transaction accounts. Preliminary estimates indicate that this would reduce the rate at which depository institutions are paid earnings credits on clearing balances by about 7 percent. At the same time, an imputed reserve burden of 12 percent would be imposed upon the Federal Reserve's revenues from clearing balances.

K. District vs. National PSAF -- Three commenters advocated that the Federal Reserve use a district rather than a national PSAF. These commenters argued that such a policy would more directly and fully recognize differences in costs among Reserve cities, and thus help to promote a more competitive environment.

The Federal Reserve believes that a national PSAF is appropriate for several reasons. First, the Federal Reserve's electronic payment services are priced on a national basis to recognize the national nature of such services. This approach has broad support among private banking organizations. Thus, a district PSAF would be incompatible with the underlying nature of these services and the current approach to the pricing of such services.

Second, while check processing and definitive securities operations are priced at the district level, even these services are, in many ways, national in nature. For example, almost 50 percent of the checks and 70 percent of the

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coupons processed by the Federal Reserve are handled by more than one office.

Third, where district prices are used, such prices already reflect the effect of local costs for wages, utilities, property taxes, and other factors of production. Moreover, the costs of capital to the Federal Reserve (as, for example, the interest rates it would pay on debt) would be uniform and national. Thus, the use of a district PSAF would, as a practical matter, mean only that the distribution of the quantity of capital among Federal Reserve Districts would change. Such a change would not have a material impact on actual prices but would introduce a major element of complexity into pricing and price schedules. Indeed, under this approach, the quantity of capital first would have to be divided among national and district services and then, for district services, be determined for each of the Federal Reserve's 48 offices. The result would be a massive matrix of PSAFs, which would be an administrative nightmare.

Fourth, as best can be judged, private organizations -- including banks -- typically do not vary their prices on the basis of the specific capital resources used to produce a specific service at a specific location. The fees for a checking account, for example, generally do not vary depending on whether the account is held at a very high-rent central city location or a suburban or rural branch. Thus, the local PSAF would imply a standard of performance in the Federal Reserve

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which appears to be at odds with conventional business practices.

Finally, the characteristics of many capital assets used by Federal Reserve Banks are fixed by national policies and standards. For example, security standards for buildings, automation standards, and standards calling for redundant back-up operating systems influence the capital base at all Federal Reserve offices in ways that result in capital resources that are different than might be the case if each Federal Reserve office were a stand-alone entity. In short, because the Federal Reserve Banks are part of a national system, many of their activities are national in scope and are influenced by national policies. Consequently, reflecting this reality, it is appropriate to have a single, uniform PSAF for all Reserve Banks.

L. FDIC Insurance -- Several commenters expressed the view that the PSAF should include the Federal deposit insurance assessment that would apply to the Federal Reserve if its deposits were Federally insured. A review of the pro forma balance sheet for Federal Reserve priced service operations shows that approximately $1.7 billion of clearing balances would be subject to the Federal deposit insurance assessment if the Federal Reserve were a member of the FDIC. Because virtually all correspondent banks are members of the FDIC, it is reasonable for the Federal Reserve to add to the PSAF the deposit insurance expense that otherwise would have been incurred by the Federal Reserve.

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Applying the formula for calculating the Federal deposit insurance assesssment based on the Federal Reserve's pro forma balance sheet results in a Federal deposit insurance assessment of $1.2 million.

Board Action

After analysis of the comments received on the proposed modifications to the methodology for calculating the PSAF for 1984, the Board has determined that the most appropriate model from which to impute taxes and the costs of capital for Reserve Banks consists of a sample of large bank holding companies. The Board has also decided to expand the sample size of the model from the 12 largest bank holding companies to the 25 largest bank holding companies. However, to prevent distortions, the Board has determined that the best performing bank holding company and the worst performing bank holding company of the 25 in the sample should be excluded from the calculations.

The Board has also approved the following adjustments to the methodology for calculating the PSAF:

- Employ the direct determination methodology for establishing the asset base used for computing the PSAF.
- Include in the priced services asset base for 1984 the net effect of those assets expected to be acquired and disposed of during the year.
- Recover the estimated sales taxes that would have been paid on the purchases of certain goods and services were Reserve Banks subject to such taxes.

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- Include those portions of expenses and fixed assets of the Board of Governors related to the development of priced services.
- Include an imputation for FDIC insurance assessment.
- Remove the financing costs of net adjustment float from the asset base because such float is now priced explicitly.

As a result of these changes, the estimated dollars to be recovered through the PSAF in 1984 will be $58.8 million. If the current methodology were used for 1984, the PSAF recovery would be $53.6 million.

The Board has also adopted the proposed adjustment to the method for calculating earnings credits on clearing balances to take into account reserve requirements the Reserve Banks would be subject to if they were subject to reserve requirements. This adjustment, however, will require substantial modifications to Reserve Banks' existing software. Therefore, implementation of this action will take place when the necessary modifications have been made later this year.

Factors bearing on the calculation of the PSAF such as capital structure changes in the large bank holding companies or changes in their cost of capital will be closely monitored and changes to the methodology for calculating the PSAF to take such changes into account will be considered where appropriate.

By order of the Board of Governors of the Federal Reserve System, March 20, 1984.

(signed) William W. Wiles

William W. Wiles
Secretary of the Board

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Table 1

Summary of Changes from Proposed 1984 PSAF

Total PSAF Recoveries - October public comment	$56.2
Change Due To:	
-- Reclassification of Board of Governors expenses	+1.9
-- Inclusion of Federal deposit insurance assessment	+1.2
-- Updating prospective evaluation of assets for 1984	+0.2
-- Change in treatment of leasehold improvements	+0.1
-- Inclusion of prepaid expenses other	+0.4
-- Change in value of materials and supplies	+0.3
-- Updating capital structure	-0.8
-- Updating financing rates through 3rd Quarter 1983	-0.7
PSAF Recoveries For 1984	$58.8

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Table 2

Derivation of the 1984 PSAF

A. Assets to be Financed 1/

Short-Term	$ 32.3		
Long-Term	273.8 2/		
Total			$306.1

B. Weighted Average Cost of

1. Capital Structure 3/

Short-Term Debt	10.6%
Long-Term Debt	28.4%
Equity	61.0%

2. Financing Rates/Costs 3/
Average rates paid by the bank holding companies included in the sample

Short-Term Debt	9.23%
Long-Term Debt	10.14%
Pre-Tax Equity 4/	20.90%

3. Elements of Capital Costs

Short-Term Debt	$ 32.3	x 9.23% =	$ 3.0	
Long-Term Debt	87.1 3/	x 10.14% =	8.8	
Equity	186.7 3/	x 20.90% =	39.0	
			$ 50.8	

C. Other Required PSAF Recoveries

Sales Taxes	4.9	
Federal Deposit Insurance Assessment	1.2	
Board of Governors Expenses	1.9	8.0

D. Total PSAF Recoveries $58.8

As a percent of capital	19.21
As a percent of expenses 5/	15.25

1/ Priced service asset base is based on direct determination of assets method.
2/ Consists of total long-term assets less capital leases which are self-financing.
3/ All short-term assets are assumed to be financed by short-term debt. Of the total long-term assets, 31.8 percent are assumed to be financed by long-term debt, and 68.2 percent by equity.
4/ The pre-tax rate of return on equity is based on average after-tax rates of return on equity for the bank holding company sample, adjusted by the effective tax rate to yield the pre-tax rate of return on equity.
5/ Systemwide 1984 budgeted priced service expenses less shipping were $385.6 million.

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Table 3

1984 PSAF

	Revised	Preliminary
I. Assets to be Financed (million)		
Current	$ 32.3	$ 27.1
Long-term	$ 273.8	$ 270.9
II. Cost of Capital		
Short-Term Debt Rate	9.23%	9.48%
Long-Term Debt Rate	10.14%	10.01%
Pre-Tax Equity Rate	20.90%	21.25%
Weighted Average Cost of Capital	16.61%	17.20%
III. Tax Rate	38.6%	35.8%
IV. Capital Structure		
Short-Term Debt	10.6%	9.1%
Long-Term Debt	28.4%	26.5%
Equity	61.0%	64.4%
PSAF		
Recovery	$58.8	$56.2
As Percent of Capital	19.21%	18.86%
As Percent of Expenses	15.25%	14.51%

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Table 4

Changes between 1984 Preliminary and 1984 Revised Balance Sheet

	Revised 1984		Preliminary 1984	
Short-term assets				
Imputed reserve requirements on clearing balances	$147.4		$ ---	
Investment in marketable securities	1,080.6		1,000.0	
Receivables	23.7		23.6	
Materials and supplies	4.3		1.9	
Prepaid expenses	4.3		1.6	
Net items in process of collection (float)	477.0		---	
Total short-term assets		$1,737.3		$1,027.1
Long-term assets				
Premises 1/	176.7		183.2	
Furniture and equipment	95.6		87.7	
Leases and leasehold improvements	2.4		---	
Total long-term assets		274.7		270.9
Total assets		$2,012.0		$1,298.0
Short-term liabilities				
Clearing balances	1,228.0		1,000.0	
Balances arising from early credit of uncollected items	477.0		---	
Short-term debt 2/	32.3		27.1	
Total short-term liabilities		1,737.3		1,027.1
Long-term liabilities				
Obligation under capital leases	0.9		---	
Long-term debt 2/	87.1		79.1	
Total long-term liabilities		88.0		79.1
Total liabilities		1,825.3		1,106.2
Equity 2/		186.7		191.8
Total liabilities and equity		$2,012.0		$1,298.0

1/ Includes an allocation of $ 0.5 million in Board of Governors' assets to priced services.

2/ Imputed figures representing the means through which certain priced service assets are financed.

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