FEDERAL RESERVE SYSTEM

[Docket No. R-1095]

Federal Reserve Bank Services

Private Sector Adjustment Factor

AGENCY: Board of Governors of the Federal Reserve System.

ACTION: Notice with request for comments.

SUMMARY: The Board requests comment on a proposal to modify the method for calculating the private sector adjustment factor (PSAF). The PSAF imputes the costs that would have been incurred and profits that would have been earned had the Federal Reserve Banks' priced services been provided by a private firm. The Monetary Control Act of 1980 (MCA) requires that the Federal Reserve set fees for its services to recover, over the long term, its actual costs of providing the services, as well as these imputed costs and profits. The Board reviews its method for calculating the PSAF periodically to assess whether it is still appropriate in light of the changing environment.

Specifically, the Board requests comment on a proposal to modify the current method for imputing debt and equity, to enhance the method for determining the target rate of return on equity, and to continue using the fifty largest bank holding companies' financial data as a proxy for Federal Reserve priced-services activities. If adopted, the changes would be effective for the 2002 PSAF and fees for Federal Reserve priced services.

DATES: Comments must be submitted on or before April 6, 2001.

ADDRESSES: Comments, which should refer to Docket No. R-1095, may be mailed to Ms. Jennifer J. Johnson, Secretary, Board of Governors of the Federal Reserve System, 20th and C Streets, NW, Washington, DC 20551 or mailed electronically to regs.comments@federalreserve.gov. Comments addressed to Ms. Johnson also may be delivered to the Board's mail room between 8:45 a.m. and 5:15 p.m. and to the security control room outside of those hours. Both the mail room and the security control room are accessible from the courtyard entrance on 20th Street between Constitution Avenue and C Street, NW. Comments may be inspected in Room MP-500 between 9:00 a.m. and 5:00 p.m. weekdays, pursuant to § 261.12, except as provided in § 261.14 of the Board's Rules Regarding Availability of Information, 12 CFR 261.12 and 261.14.

FOR FUTHER INFORMATION CONTACT: Gregory L. Evans, Manager (202/452-3945); Brenda Richards, Sr. Financial Analyst (202/452-2753); or Rebecca Kenyon, Financial Analyst (202/452-2974), Division of Reserve Bank Operations and Payment Systems. For users of Telecommunication Device for the Deaf (TDD) only, please contact Janice Simms, (202/872-4984). Copies of a research paper describing the theoretical basis and detailed application of each of the proposed models ("The Federal

Reserve Banks' Imputed Cost of Equity Capital") may be obtained from the Board through the Freedom of Information Office (202/452-3684) or at the Board's web site at www.federalreserve.gov by accessing the press release for this proposal.

SUPPLEMENTARY INFORMATION:

I. Background

The MCA requires Federal Reserve Banks to establish fees for "priced services" provided to depository institutions at a level necessary to recover all direct and indirect costs actually incurred and imputed costs. Imputed costs include financing costs, return on capital (also referred to as profit), taxes, and certain other expenses that would be incurred if a private business firm provided the services. In establishing fees, the Board considers the objectives of fostering competition, improving the efficiency of the payments mechanism, and providing an adequate level of services nationwide. The imputed costs and imputed profit are collectively referred to as the private sector adjustment factor (PSAF).

The methodology underlying the PSAF is reviewed periodically to ensure that it is still appropriate in light of changes that may have occurred in Reserve Bank priced-service activities, accounting standards, finance theory and regulatory practices, and banking activity.

A. Private Sector Adjustment Factor

The current method for calculating the PSAF involves determining the value of Federal Reserve assets to be used in providing priced services during the coming year, the financing mix used to fund them, and the rates used to impute financing costs. Assets are determined using Reserve Bank information on actual assets and projected disposals and acquisitions. The priced-services portion of mixed-use assets is determined based on the allocation of related depreciation expense. Historically, short-term assets are assumed to be financed with short-term liabilities and long-term assets are assumed to be financed with a combination of long-term debt and equity. The financing rates and the combination of financing types are based on data developed from the "bank holding company (BHC) model," a model that contains consolidated financial data for the nation's fifty largest (asset size) BHCs.

Imputed taxes are captured using a pre-tax return on equity (ROE). The use of the pre-tax ROE assumes that a 100 percent recovery of expenses, including the targeted ROE, will be achieved. Should the pre-tax earnings be more or less than the targeted ROE, the PSAF is adjusted ("variable PSAF") for the tax expense or savings associated with the adjusted recovery. The variable PSAF tax rate is the median of the rates paid by the BHCs over the past five years adjusted to the extent that the BHCs are invested in municipal bonds.

In addition, the PSAF includes the estimated priced-services expenses of the Board of Governors, imputed sales taxes, and an assessment for FDIC insurance,

imputed based on current FDIC rates and projected clearing balances (deposits) held with the Reserve Banks.

B. Net Income on Clearing Balances (NICB)

Depository institutions may hold both reserve and clearing balances with the Federal Reserve Banks. [1] Reserve balances are held pursuant to a regulatory requirement and are separate from the Reserve Banks' priced-services activities. Clearing balances, based on contractual agreements with Reserve Banks, are held to settle transactions arising from use of Federal Reserve priced services. In some cases, depository institutions hold clearing balances in excess of the contractual agreements.

The NICB calculation assumes that the Reserve Banks invest the clearing balances net of imputed reserves, and imputes an equal investment in three-month Treasury bills. The calculation also determines the actual 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 the federal funds rate. Because they are held for clearing priced-services transactions, clearing balances are directly related to priced services. Therefore, the net earnings or expense attributable to the imputed Treasury-bill investments and clearing balances are considered income or expense for priced-services activities.

II. Proposed Methodology Changes

Since the adoption of the PSAF and NICB framework, certain finance theories have gained industry acceptance and the levels of clearing balances held by depository institutions with the Reserve Banks have increased significantly. In addition, mergers, acquisitions, and the expansion of allowable BHC activities may alter the comparability of the top fifty BHCs to the Reserve Bank priced-services activities. The criteria used for evaluating alternatives proposed for various components of the calculation were based on the conceptual framework of the PSAF and its relationship to private-sector practice. As a result, the Board requests comment on a proposal that seeks to create a priced-services balance sheet that resembles that of a private business firm, using real assets and liabilities, imputing liabilities and equity only to the extent necessary, and more appropriately reflecting the risk inherent in priced-service activity.

A. Imputed Debt and Equity

The current method for computing the PSAF and NICB unnecessarily imputes larger amounts of certain assets and liabilities and the related income and expenses to priced services. Considering the growth in the size of clearing balances since the inception of the NICB and the stable nature of the majority of the balances, it is likely that rather than incur additional debt costs, a private business firm would use a portion of these balances to finance its capital needs. Assuming a sensible business use of clearing balances is necessary to provide an appropriate cost comparison between Reserve Bank

[1] *Clearing balances*, unless otherwise indicated, refers to contracted and excess clearing balances held by depository institutions with the Federal Reserve Banks.

and private-sector service providers. For the Federal Reserve, such an assumption requires the integration of the PSAF and NICB computations to effectively eliminate imputed debt and reduce imputed investments in Treasury securities. Essentially, the Reserve Bank priced-services activity will forgo earnings at the Treasury-bill rate to reduce long-term and short-term debt expenses. Under the proposal, a portion of the contracted clearing balances would be considered "core deposits," that is, deposits that will remain stable without regard to the magnitude of actual clearing balances. This use is consistent with a banking organization's use of deposits. Banking and regulatory practice recognizes that core deposits, while technically short-term, are largely stable over time. This stability provides confidence that a substantial portion of the balances can appropriately be used to fund longer-term assets.

1. Imputed Debt

When the PSAF methodology was established, clearing balances were new, quite small, and did not offer a significant source of funding. Since 1992 the balances have not fallen below $4 billion. This proposal recommends that $4 billion of clearing balances (out of more than $7 billion clearing balances currently maintained) could initially be considered available to finance long-term assets. The Board considers this a conservative level of core balances. Based on the current level of priced-services assets, an insubstantial part of these balances would actually be used for financing. The Board expects that the definition of core deposits may be adjusted over time to consider clearing balance trends.

The Board requests comment on the benefits and drawbacks of using core clearing balances as a source of financing long-term assets. The Board is also interested in commenters' opinions on whether establishing an initial level of core balances of $4 billion is reasonable. If commenters have an opinion on how the core balance should be determined, the Board would be interested in learning the details of that method.

2. Imputed Equity

Another important aspect of the PSAF calculation is determining an appropriate level of equity from which to impute a target ROE. The proposal's use of clearing balances to determine the appropriate amount of imputed debt, rather than using a debt-to-equity ratio from the BHC model, requires a new method of imputing equity.[2] A private business firm would generally maintain equity, an expensive financing source, at the minimum level necessary to finance assets, to manage risk, and to meet regulatory requirements. The current PSAF method for imputing equity is not based on these considerations and imputed equity has historically been either more or less than regulatory requirements, depending on the BHC model debt-to-equity ratio. The Board proposes targeting an equity level sufficient to satisfy the FDIC requirement for a well-capitalized institution, which is currently 5 percent of total assets and 10 percent of risk-

[2] The BHC model debt-to-equity ratio is currently used to determine imputed debt and equity necessary to finance long-term priced-services assets.

weighted assets. [3] This proposal is consistent with how the Board believes rational bank management would target its equity level. The Board requests comment on whether basing priced-services equity on regulatory requirements is a reasonable method.

B. Imputed Return on Equity

The Board proposes that the target ROE used for the PSAF be calculated using a combination of the current comparable accounting earnings model and two additional economic models, a capital asset pricing model and a discounted cash flow model. [4]

1. Current Method

The target return on equity for Reserve Bank priced services is calculated using BHC data taken from publicly available audited financial statements. The PSAF BHC equity cost of capital, or ROE, is calculated as an average of the ratios of the BHCs' net income and average book value of equity. As an example of a comparable accounting earnings (CAE) model, the BHC model can be duplicated and is readily accepted in industry practice. Its shortcomings are that it uses historical data from the two to seven years before the target year to predict future earnings and is based on book rather than market values. [5]

2. Capital Asset Pricing Model (CAPM)

The CAPM approach estimates the imputed BHC ROE from the return on a stock portfolio of the fifty largest (asset size) BHCs over a one-year period. The ROE estimated using this approach is the sum of a measure of the one-year risk-free rate and an equity risk premium for the BHC sample. This risk premium is the product of the sensitivity of the specified portfolio of BHC sample stocks to the overall stock market (the portfolio's beta) plus a historical measure of the one-year stock market return relative to the risk-free rate. As proposed, the portfolio weights are based on BHC equity market capitalization. This model provides a strong theoretical framework for addressing risk and its effect on the required rate of return.

The CAPM requires judgment in determining the risk-free rate, the average risk premium for the market, and the data used for measuring beta. The Board proposes using the three-month Treasury-bill rate as the risk-free rate and a standard data series on returns for the stock market from 1927 (earliest available data) forward using a

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[3] The FDIC requirements for a well-capitalized financial institution are 1) a ratio of total capital to risk-weighted assets of 10 percent or greater; and 2) a ratio of Tier 1 capital to risk-weighted assets of 6 percent or greater; and 3) a leverage ratio of Tier 1 capital to total assets of 5 percent or greater. The Federal Reserve priced-services balance sheet total capital has no components of Tier 1 or total capital other than equity; therefore, requirements 1 and 2 are essentially the same measurement.

[4] A research paper ("The Federal Reserve Banks' Imputed Cost of Equity Capital") describing the theoretical basis and detailed application of each of the models is available at the Board's web site at www.federalreserve.gov by accessing the press release for this proposal.

[5] The target ROE for 2001, for example, is calculated using data from BHC financial statements for the years 1995 to 1999.

rolling ten-year period to determine the average risk premium for the market. The proposed beta compares the returns based on BHC data with the stock market as a whole.

The Board requests comment on whether the three-month Treasury-bill rate is an appropriate Treasury maturity for use as the risk-free rate in the CAPM, if stock market activity since 1927 is an appropriate source for data in determining the average risk premium for the market, and whether using a rolling ten-year average of BHC data provides a reasonable beta.

3. Discounted Cash Flow Model (DCF)

The DCF model assumes that a firm's stock price is equal to the present discounted value of all expected future dividends. If the stock price and expected future dividends are known, the implied discount rate for the firm can be calculated and is considered to be the firm's equity cost of capital. The DCF approach requires as inputs the BHC stock prices as well as forecasts of their future dividends and long-term dividend growth rates. As proposed, consensus forecasts of future dividends and long-term growth rates would be transformed into earnings forecasts by multiplying them by the BHC's dividend pay-out ratios. The equity costs of capital for the individual BHCs are then combined into a single measure using a weighted average, in which the weights are proposed to be based on the BHC equity market capitalization.

The Board proposes using commercially available consensus forecasts, such as those published by Institutional Brokers Estimate System (I/B/E/S). Academic studies have found consensus forecasts to be more accurate than individual forecasts.

The Board requests comment on whether commercially available consensus forecasts are an appropriate measure of future dividends and long-term growth rates.

4. Combining the Models

Unlike the CAE, the CAPM and DCF use data that predict future earnings and reflect current academic practice. All three models are widely used in industry and in regulatory consideration of an appropriate rate of return. For example, for several years the New York State Public Service Commission has used a weighted average of different ROE measures in determining its allowed cost of equity capital for the utilities it regulates.

Academic studies have demonstrated that use of multiple models can improve estimation techniques when each model provides new information. The CAE, CAPM, and DCF models each use different data and examine different factors. The Board proposes to calculate the target ROE for Reserve Bank priced services as a simple average of the results from the three models. This combination will incorporate additional data and conceptual frameworks into the current practice and will minimize the impact of outlying observations to provide a more predictable series over time.

The Board requests comment on the economic models and whether the three economic models are theoretically sound and should be used to calculate the PSAF. The Board also requests comment on the appropriateness of using a simple average of the three models.

5. Weighting the Data

Currently, the PSAF ROE is calculated by taking an equally-weighted average of the BHC ROEs from the CAE. The weighting used in the CAE model has the practical benefit of avoiding illogical results such as a negative target ROE in a year when a large bank holding company encounters financial difficulties. How observations are weighted in the models is relevant because the bank holding companies in the peer group are imperfect proxies, that is, they engage in a wider spectrum of activities than the range of Reserve Bank payment services for which the PSAF methodology is used to estimate an appropriate cost of equity capital.

Alternative weighting schemes can be constructed. One alternative would be to take a value-weighted average of the ROEs by multiplying each BHC's ROE by that company's market valuation and then dividing the sum of these weighted returns by the total market valuation of the fifty BHCs. Such market weighting places more emphasis on large BHCs and reflects current academic and industry practice when applying it to the CAPM and DCF models. The Board proposes to use a market capitalization weight to determine the CAPM and DCF ROEs while retaining the commonly used equal weighting of BHC ROEs under the CAE. The Board requests comment on the appropriateness of this proposal.

Other methods for weighting BHC data in the three models were considered, such as weighting based on balances due to depository institutions. Such weighting attempts to measure the significance of a BHC's correspondent banking activities to the total bank holding company activities and as a result, gives BHCs with the largest corespondent-banking business lines greater weight. Deposits due to depository institutions are not typically reported separately in BHC annual reports but are reported at the commercial bank level in publicly available Call Report data. The Board requests comment on BHC weighting based on due-to balances to determine the ROEs.

C. Peer Group

The Board considered whether organizations other than the top fifty BHCs would provide a better basis for imputing the costs that would have been incurred and the profits that would have been earned had the Reserve Banks' priced-services activities been provided by a private-sector firm. Specifically, the consideration included whether segment data from BHC financial reports could be used to match more closely the BHC capital structure to the System's priced-services activity, or whether service bureaus should be used as proxy for private-sector firms engaged in priced-services activity.

Bank holding company activities are far more diverse than Reserve Bank priced-services activities and payment services are generally a small segment of BHC activities. For this reason, BHCs are not a precise counterpart, but they do provide the

most reasonable alternative available as a peer group given the similarity of services provided, the competition between BHCs and the Reserve Banks, and the availability of useful financial data. Service bureaus are also diverse; they do not provide settlement or other services comparable to those of Reserve Banks, and they do not generally view the Reserve Banks as primary competitors. Therefore, the Board does not believe service bureaus to be a preferred substitute for the BHCs in the PSAF model. Maintaining the BHC sample size at fifty encompasses the majority of banking assets nationwide and minimizes the effects of any one BHC's financial performance on the data.

The Board considered using BHC segment data in order to exclude the effect of BHC non-comparable activities on the PSAF. Although these data increasingly are included in financial reports, the Board identified several obstacles to using segment data. There is no standard definition of "segment" for use in financial reporting. Segments may be reported based on any combination of customer type, product, or service provided and compilation of specific segment data may reflect a total return on equity that is greater or less than the return on equity for the entity as a whole. It is often impossible, with the data available, to determine in which BHC segments activities comparable to priced-services activities are included to ensure inclusion of those that are related to Reserve Bank priced services and exclusion of those that are not. As a result, information is not reliable, complete, or consistent across BHCs or even within one BHC over time.

The Board requests comment on whether the fifty largest (in asset size) bank holding companies continue to be a reasonable data peer group for Reserve Bank priced-services activities. Further, the Board would like commenters' views on whether there are ways to adjust BHC data to resemble more closely the Federal Reserve Banks' priced-services activities.

D. Pension Financing Costs

The Board considered the current treatment for pension accounting, financing the pension assets net of the retirement liabilities, and concluded that it is consistent with that at BHCs and other firms, follows current rules for recognizing increases in pension assets, and is theoretically sound.

E. Priced-Services Balance Sheet

Table 1 represents the elements of the priced-services balance sheet and how they will be derived under the proposal. All actual assets and liabilities presented on the priced-services balance sheet are based on projected average daily balances.

Table 1 - Priced-Services Balance Sheet

Assets	Type	Description	Method for Computing
Required reserves	Imputed	Intended to simulate commercial bank reserve requirements.	10 percent of total clearing balances.
U.S. Treasury securities	Imputed	Represents the portion of clearing balances not required for reserves or to finance other actual or imputed priced-service assets.	Total liabilities plus equity less other assets.
Short-term assets	Actual	Receivables, prepaid expenses, materials and supplies reported on the Federal Reserve Banks' balance sheets that are attributed to priced services.	
Cash items in process of collection	Actual	Transactions credited to the accounts of depository institutions but not yet collected by the Federal Reserve Banks that are attributed to priced services.	
Pension assets	Actual	The amount of prepaid pension costs reported on the Federal Reserve Banks' balance sheets that are attributed to priced services.	
Long-term assets	Actual	The amount of premises, furniture and equipment, leases, and leasehold improvements that are reported on the Federal Reserve Banks' and Board of Governors balance sheets that are attributed to priced services.	

Table 1 - Priced-Services Balance Sheet – continued

Liabilities & Equity	Type	Description	Method for Computing
Core clearing balances	Actual	The portion of clearing balances considered stable and available to finance long-term priced-service assets.	Estimated amount of actual contracted clearing balances that have historically been stable. Initially set at $4 billion.
Non-core clearing balances	Actual	Deposits of financial institutions maintained at Federal Reserve Banks for clearing transactions. Available to finance short-term priced service assets.	Equal to total clearing balances less core clearing balances.
Short-term payables	Actual	The portion of sundry items payable, earnings credits due depository institutions and accrued expenses unpaid reported on the Federal Reserve Banks' balance sheets that is attributed to priced services.	
Deferred credits	Actual	The value of checks deposited with the Federal Reserve Banks but not yet credited to the accounts of the Reserve Banks' depositors.	
Postemployment/ postretirement liability	Actual	The portion of post-retirement benefits due reported on the Federal Reserve Banks' balance sheets that is attributed to priced services.	
Long-term debt	Imputed	An amount imputed when equity and core clearing balances are not sufficient to finance long-term priced-services assets.	Equal to the larger of zero or long-term and pension assets less postemployment/ postretirement liability, core clearing balances, and equity.
Equity	Imputed	The minimum amount of equity necessary to meet FDIC requirements for a well-capitalized institution.	The greater of five percent of total assets or 10 percent of risk-weighted assets.

F. Effects of Proposal

The combination of the current equally-weighted CAE and the proposed market-weighted DCF and CAPM models produces the following pre-tax ROE based on the BHC performance data used for the 2001 PSAF:

Table 2 – Pre-tax Return on Equity

CAE	DCF	CAPM	Combined
24.0	21.6	23.7	23.1

From year to year, the proposed combined model for calculating ROE can yield a target ROE that is higher or lower than the current method. On the average during the period from 1983 to 2001, the combined model yielded a pre-tax ROE that is 230 basis points higher than the current method.

Using core clearing balances as a source of financing for actual priced-services assets reduces imputed short- and long-term debt and imputed investments in marketable securities. As a result, the income and expenses associated with these imputed elements is reduced as well. Establishing equity at the level required by FDIC requirements for a well-capitalized bank results in setting equity equal to five percent of total assets, which is a slight reduction from the level planned in 2001 under the current methodology (5.3 percent). Applying the proposed changes to the 2001 priced-services balance sheet would reduce PSAF costs $53.3 million or 26 percent and would reduce net income on clearing balances $33.8 million or 90 percent. This result is a net reduction of costs to priced services of $19.5 million or slightly more than 2 percent of total actual and imputed costs, including the target ROE of $138.2 million.[6] Table 3 illustrates the effects of the proposal on the various elements of the PSAF and NICB calculations.

[6] Under this proposal, priced-services revenue would be $944.7 million and expenses would be $951.5 million, resulting in cost recovery of 99.3 percent as compared to 98 percent under the 2001 prices.

Table 3
2001 Comparison Data
($ millions)

Balance Sheet	Current	Proposed	Change
Required Reserves	$742.4	$742.4	$0.0
U.S. Treasury Securities	6,681.9	6,117.8	(564.1)
Short Term Assets	104.3	104.3	0.0
CIPC	3,606.7	3,606.7	0.0
Pension Assets	718.5	718.5	0.0
Long Term Assets	676.9	676.9	0.0
Total Assets	$12,530.7	$11,966.6	($564.1)
Clearing Balances	$7,424.3	$7,424.3	$0.0
Short-Term Payables	85.4	85.4	0.0
Short-Term Liabilities	18.9	0.0	(18.9)
Deferred Credits	3,606.7	3,606.7	0.0
Postemployment/retirement Liability	251.9	251.9	0.0
Long-Term Liabilities	479.1	0.0	(479.1)
Equity	664.4	598.3	(66.1)
Total Liabilities & Equity	$12,530.7	$11,966.6	($564.1)
Capital to Risk-Weighted Assets	30.8%	27.7%	
Capital to Total Assets	5.3%	5.0%	

PSAF	Current	Proposed	Change
Target Pre-Tax ROE	24.0%	23.1%	-0.9%
Cost of			
Equity	$159.5	$138.2	($21.3)
Long-term Debt	31.1	0.0	(31.1)
Short-term Debt	0.9	0.0	(0.9)
FDIC Insurance	0.0	0.0	0.0
Sales Taxes	10.5	10.5	0.0
BOG Oversight	4.9	4.9	0.0
Total PSAF	$206.9	$153.6	($53.3)

NICB	Current	Proposed	Change
Return on Investment	$399.6	$365.8	($33.8)
Cost of Earning Credits	(361.9)	(361.9)	0.0
NICB	$37.7	$3.9	($33.8)

Net Effect of New Methodology	Current	Proposed	Change
PSAF	$206.9	$153.6	($53.3)
NICB	37.7	3.9	(33.8)
Net Cost	**$169.2**	**$149.7**	**($19.5)**

Details may not add to totals due to rounding.

III. Competitive Impact Analysis

All operational and legal changes considered by the Board that have a substantial effect on payment system participants are subject to the competitive impact analysis described in the March 1990 policy statement "The Federal Reserve in the Payments System."[7] 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 of the Federal Reserve deriving from such legal differences. If the fees or fee structures create such an effect, the Board must further evaluate the changes to assess whether their benefits – such as contributions to payment system efficiency, payment system integrity, or other Board objectives – can be retained while reducing the hindrances to competition.

Because the PSAF includes costs that must be recovered through fees for priced services, changes made to the PSAF may have an effect on fees. This proposal is intended to refine the PSAF to more closely mirror the costs and profits of other service providers as required by the MCA. By mirroring these costs and profits, the fees adopted by the Reserve Banks should be based on the types of costs and expected profits that are more comparable to those of other providers. Accordingly, the Board believes this proposal 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.

IV. Summary of Comments Requested

The Board believes the proposed changes to the PSAF methodology are consistent with the requirements of the MCA. The Board evaluated each alternative proposed for various components of the PSAF calculation based on the following framework principles: 1) to provide a conceptually sound basis for economically efficient pricing in the market for payments processing and collection services; 2) to maintain consistency with actual Reserve Bank financial information and practice; 3) to maintain consistency with private-sector practice; and 4) to use data in the public domain so others could replicate the PSAF calculation.

To assist commenters in the preparation of their responses to this notice, the Board requests comment on the following questions:

A. Overall Proposal

1. Are the proposed changes in the PSAF methodology appropriate?

B. Imputation of Investments, Debt and Equity

1. Is the use of core clearing balances as a source of financing long-term assets a reasonable use of these actual liabilities?

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[7] FRRS 7-145.2.

2. Is an initial core clearing balance of $4 billion reasonable? If not, what would be a reasonable amount and what would be the best method for determining it?

3. Is basing priced-services equity on regulatory requirements a reasonable method?

C. Imputed Return on Equity

1. Are the CAE, DCF, and CAPM economic models theoretically sound and should they be used to calculate the PSAF?

2. Is the three-month Treasury-bill rate an appropriate Treasury maturity for use as the risk-free rate in the CAPM?

3. In determining the average risk premium for the market in the CAPM model, is stock market activity since 1927 an appropriate source for data?

4. Does using a rolling ten-year average of bank holding company data provide a reasonable beta for use in the CAPM?

5. Are commercially available consensus forecasts an appropriate measure of future dividends and long-term growth rates for use in the DCF economic model?

6. Does a simple average of the results of the three economic models provide an appropriate ROE?

D. Weighting the Data

1. Does an equally-weighted average of the results of the CAE result in a reasonable ROE?

2. Does a market-weighted average of the results of the CAPM result in a reasonable ROE?

3. Does a market-weighted average of the results of the DCF result in a reasonable ROE?

4. Would weighting the BHCs by balances due to other banks provide a more reasonable PSAF ROE than the market capitalization method proposed?

E. Peer Group

1. Do the fifty largest (in asset size) bank holding companies provide a reasonable data peer group for Reserve Bank priced-services activities?

2. Are there ways to adjust BHC data to more closely resemble the Federal Reserve System's priced services activities?

By order of the Board of Governors of the Federal Reserve System, December 21, 2001.

(signed) Jennifer J. Johnson
Jennifer J. Johnson,
Secretary of the Board.
Billing code 6210-01-P