

**FEDERAL RESERVE BANK  
OF NEW YORK**

[ Circular No. **10730** ]  
August 24, 1994 ]

**PROPOSAL TO CHANGE THE METHOD FOR  
IMPUTING INCOME ON CLEARING BALANCES  
FOR PRICED SERVICES**

*Comments Requested by September 21, 1994*

*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 requested public comment on a proposal to modify the methodology for imputing clearing balance income to more closely parallel the practices of a private sector provider.

Comment is requested by September 21, 1994.

Specifically, the Board is requesting comment on changing the rate used to impute clearing balance income from the 90-day Treasury bill coupon equivalent yield to a longer term Treasury rate based on the earning asset maturity structure of the largest bank holding companies (BHCs).

The intended effect of the proposal is to promote competitive equity with private sector practices by matching the maturity structure for investment of clearing balances to the structure revealed in bank holding company data on investments.

The Monetary Control Act requires the Federal Reserve Banks to establish fees for their services similar to those of private-sector service providers. In establishing fees, the Board considers the objectives of fostering competition, improving the efficiency of the payments mechanism, and providing financial services nationwide.

Printed on the following pages is the text of the Board's official notice in this matter, which was published in the *Federal Register* of August 19. Comments thereon should be submitted by September 21, and may be sent to the Board of Governors, as specified in the notice, or to our Management Information Department.

WILLIAM J. McDONOUGH,  
*President.*



10/730

Constitution Avenue, N.W., Washington, D.C. 20551. Comments also may be delivered to Room B-2222 of the Eccles Building between 8:45 a.m. and 5:15 p.m. weekdays, or to the guard station in the Eccles Building courtyard on 20th Street NW. (between Constitution Avenue and C Street) at any time. Comments may be inspected in Room MP-500 of the Martin Building between 9:00 a.m. and 5:00 p.m. weekdays, except as provided in 12 CFR 261.8 of the Board's rules regarding availability of information.

**FOR FURTHER INFORMATION CONTACT:** Greg Evans, Manager (202/452-3945), or Gwen Mitchell, Senior Accounting Analyst (202/452-3841), Division of Reserve Bank Operations and Payment Systems, Board of Governors of the Federal Reserve System. For the hearing impaired *only*: Telecommunications Device for the Deaf, Dorothea Thompson (202/452-3544).

**SUPPLEMENTARY INFORMATION:** The Monetary Control Act (MCA) requires the Federal Reserve Banks to establish fees for their services on a basis similar to private sector service providers. In establishing fees, the Board considers objectives of fostering competition, improving the efficiency of the payments mechanism, and providing financial services nationwide.

Accordingly, the Federal Reserve imputes costs in the private sector adjustment factor (PSAF) that are intended to mirror private sector sales taxes, income taxes, cost of funds, and FDIC assessments. Capital structure, equity and debt rates, and an income tax rate are derived from a model of the largest (in asset size) 50 bank holding companies. The Federal Reserve uses the bank holding company model to place Reserve Bank payment service costs on an equal footing with those costs incurred by the private sector. The banking industry has accepted the BHC model as a proxy for determining Federal Reserve imputed costs.

In February 1981, the Federal Reserve established procedures to assist depository institutions with clearing arrangements at Reserve Banks, recognizing that the maintenance of an account relationship is necessary for (a) depository institutions that do not maintain reserve accounts but desire direct access to some or all Federal Reserve priced services and (b) depository institutions that do maintain a reserve account but find the reserve balance inadequate for their transactions.

Because clearing balances were established as a result of depository institutions wanting access to Federal

Reserve priced services, it was determined that investment earnings attributable to clearing balances should be ascribed to the System's priced service operations, comparable to the use of these balances by other service providers. The 1982 annual financial report of the Federal Reserve reflected these earnings.

This priced service revenue factor, net income on clearing balances (NICB), is the difference between the income the Federal Reserve imputes on clearing balances held with the Federal Reserve System, less imputed reserve requirements, and the priced services cost of earnings credits granted to depository institutions, net of expired earnings credits. (Appendix A illustrates the current NICB calculation.) The private sector recognizes revenue from these balances in a similar way.

In 1982, under its delegated authority rules, the Board approved a rate of return equivalent to the yield on the short-term assets included in the System Open Market Account portfolio for calculating clearing balance income. The Federal Reserve selected the 90-day Treasury bill coupon equivalent yield to impute income on clearing balances.

A primary benefit of the 90-day Treasury rate, which is still used today, is that its yield is equivalent to the yield on short-term assets currently included in the Federal Reserve's System Open Market Account (SOMA) portfolio. Additionally, use of the short-term 90-day rate was viewed as more closely approximating what would have been realized had clearing balance funds been held and invested by a private business firm. Lastly, Treasury yield data are available to the public. This allows the earnings calculation to be replicated by the private sector.

The Reserve System recently reviewed the methodology used to impute income on clearing balances to determine the comparability of Federal Reserve practices in this area with practices of correspondent banks. A telephone survey of bank holding companies was conducted to determine the types of assets in which correspondent banks invest clearing balance funds.

Survey results showed that, although correspondent banks pay earnings credits based on a short-term rate (90-day Treasury bill), their investment of clearing balance funds is determined by the economic environment, their risk policies, and investment opportunities available. The survey participants identified a range of investment options including, loans, securities, and overnight funds.

## FEDERAL RESERVE SYSTEM

[Docket R-0846]

### Federal Reserve Bank Services: Imputed Income on Clearing Balances

**AGENCY:** Board of Governors of the Federal Reserve System.

**ACTION:** Request for comment.

**SUMMARY:** The Board is requesting comment on a proposal to modify the methodology for imputing clearing balance income to more closely parallel the practices of a private sector service provider. Specifically, the Board is requesting comment on a proposal to change the rate used to impute clearing balance income from the 90-day Treasury bill coupon equivalent yield to a longer term Treasury rate based on the earning asset maturity structure of the largest bank holding companies (BHCs). The intended effect of the proposal is to promote competitive equity with private sector practices by matching the maturity structure for investment of clearing balances to the structure revealed in bank holding company data on investments.

**DATES:** Comments must be submitted on or before September 21, 1994.

**ADDRESSES:** Comments, which should refer to Docket No. R-0846, may be mailed to William W. Wiles, Secretary, Board of Governors of the Federal Reserve System, 20th Street and



It was observed that correspondent banks may exercise a broad range of investment opportunities whereas the Federal Reserve has adopted a more restrictive practice. Since Reserve Bank imputed investments do not reflect correspondent bank practices, the approach is inconsistent with other areas of priced service accounting. Other areas of priced service accounting either draw on actual Reserve Bank costs, or are imputed based on BHC data. More important, over time, by computing clearing balance income in the current fashion, the Federal Reserve may be understating clearing balance revenue, increasing costs of Federal Reserve priced services, and setting prices higher than necessary to promote effective competition and efficient payment services.

The proposal under consideration by the Board of Governors is to determine the maturity structure of short-, intermediate-, and long-term securities assets from the BHC model and impute income based on published matching term Treasury yields. The Board is considering the BHC structure/Treasury yields method because it promotes competitive equity with private sector practices by matching the maturity structure for investment of clearing balances to the structure revealed in bank holding company data on investments.

One problem with attempting to match the earnings realized by bank holding companies is that the risk premium for the private sector is difficult to manage and approximate. Also, the Federal Reserve could not determine administrative costs from available data. Therefore, the Board believes that the Treasury rate provides a reasonable proxy for the actual rate realized by bank holding companies on clearing balances, without the risk premium associated with holding company investments and administrative costs incurred managing portfolio risk. Bank holding company maturity structures and Treasury yields are publicly available so that the NICB calculation can be replicated by the private sector. The recommended approach provides longer term investments, which would produce higher earnings, assuming an upward sloping yield curve.

**Proposed NICB Computation**

An estimate of NICB is prepared annually. Under the recommended methodology, selected earning assets include Federal funds, repurchase agreements, and securities. These investments were chosen because they most closely represent the Treasury

function investments of the private sector. The earning assets maturity structure of the BHC model would be defined as follows: less than one year (short-term), one -to -five years (intermediate-term) and greater than five years (long-term). The maturity structure would be calculated from the most recent four quarters of Y9 data. The Y9 is a quarterly BHC report filed with the Federal Reserve and is generally available to the public 50 to 60 days after the close of the quarter. For example, four quarters for 1992 would be used for the 1994 earnings rate estimate, which would be calculated in the fall of 1993. Similarly, 1992 BHC data are used for the 1994 PSAF calculation. Historical rates are used because the Board has decided in previous instances to avoid the appearance of forecasting interest rates.

Published matching-term Treasury yields would be applied to the maturity percentages and summed to develop the earnings rate. The Board intends initially to use shorter term Treasury rates. In this regard, a three-month Treasury yield would be used for the short-term rate maturity portion. A one-year Treasury yield would be used for the intermediate-term, and a five-year Treasury yield would be applied for the long-term portions. Current year-to-date (approximately four months) week-ending average Treasury yields from the Federal Reserve H.15 Statistical Release would be used for the estimate. The recommended maturity structure and applicable Treasury yields are shown below.

BHC maturity structure (A)	Treasury yield (B)	Weighted average rate (AxB)
% Investment < 1 year.	Three-month .....	%
% Investments 1-5 years.	One-year .....	%
% Investment 5+ years.	Five-year .....	%
Total .....	.....	Weighted average estimated rate.

Actual NICB results are imputed monthly. Under the recommended methodology, the maturity structure developed in the calculation of the estimate would be held constant for the year; however, current monthly Treasury yields would be applied to the percentages to develop the weighted average earnings rate. The week-ending average yields, as published in the Federal Reserve H.15 Statistical Release, would be used to calculate the monthly rate.

The following table illustrates the result of this recommendation compared with the current methodology using 1994 projections.

1994 NICB ESTIMATE (\$ MILLIONS)

	Current Method	BHC structure and treasury yield
Clearing balance income:		
Investable funds	\$5,417.8	\$5,417.8
Earnings rate .....	3.0877%	4.1109%
Earnings on invested portion of clearing balances .....	167.3	222.7
Cost of earnings credits:		
Cost (Fed funds rate) .....	3.0079%	3.0079%
Net cost of earnings credits ....	141.9	141.9
Net Income on clearing balances .....	\$25.4	\$80.8

Had the recommended approach been in place for the 1994 estimate, clearing balance earnings would have increased \$55.4 million or 33.1 percent, from \$167.3 million using the current method to \$222.7 million. This is due to a 102 basis points increase in the earnings rate, from 3.0877 percent in the current method to 4.1109 percent<sup>1</sup>. NICB would have increased from \$25.4 million in the current method to \$80.8 million.

Moreover, the Board believes that investment decisions made by BHCs are not static. Instead, these decisions are the result of several considerations, including the economic environment, their risk policies, and investment opportunities available. Consequently, the Board recognizes that the recommended methodology may require further adjustment based on economic situations or new investment opportunities. Prudent private sector investors would be aware of changing variables and would make the necessary investment changes to reflect market conditions.

Accordingly, the Board would propose to make such adjustments, without public comment, unless the adjustment entails a change in the methodology. Therefore, imputed investment income would be subject to the Board's approval as are fee schedules for Federal Reserve priced services and the PSAF.

<sup>1</sup> The imputed weighted average earnings rate is derived as follows (short, intermediate, and long-term, respectively): ((32.67% \* 3.0877%) + (27.58% \* 3.3889%) + (39.75% \* 5.4526%)) = 4.1109%



10730

In summary, the current short term nature of Federal Reserve clearing balance income is not representative of the behavior of most correspondent banks. Although the recommended methodology still does not purely match BHC activity, the Board believes that it more closely parallels the practices of a private sector service provider. The recommended methodology also complies with Federal Reserve pricing principles. The Board also believes that

the Treasury rate provides a reasonable proxy for the actual rate realized by bank holding companies on clearing balances. The Treasury rate is simpler to administer because it does not incorporate a risk premium or administrative costs of managing portfolio risk. The Board requests comments on the proposal to: (a) change the methodology for imputing clearing balance income to more closely parallel the practices of a private sector service

provider and (b) change the rate used to impute clearing balance income from the 90-day Treasury bill coupon equivalent yield to a longer term Treasury rate based on the earning asset maturity structure of the largest BHCs.

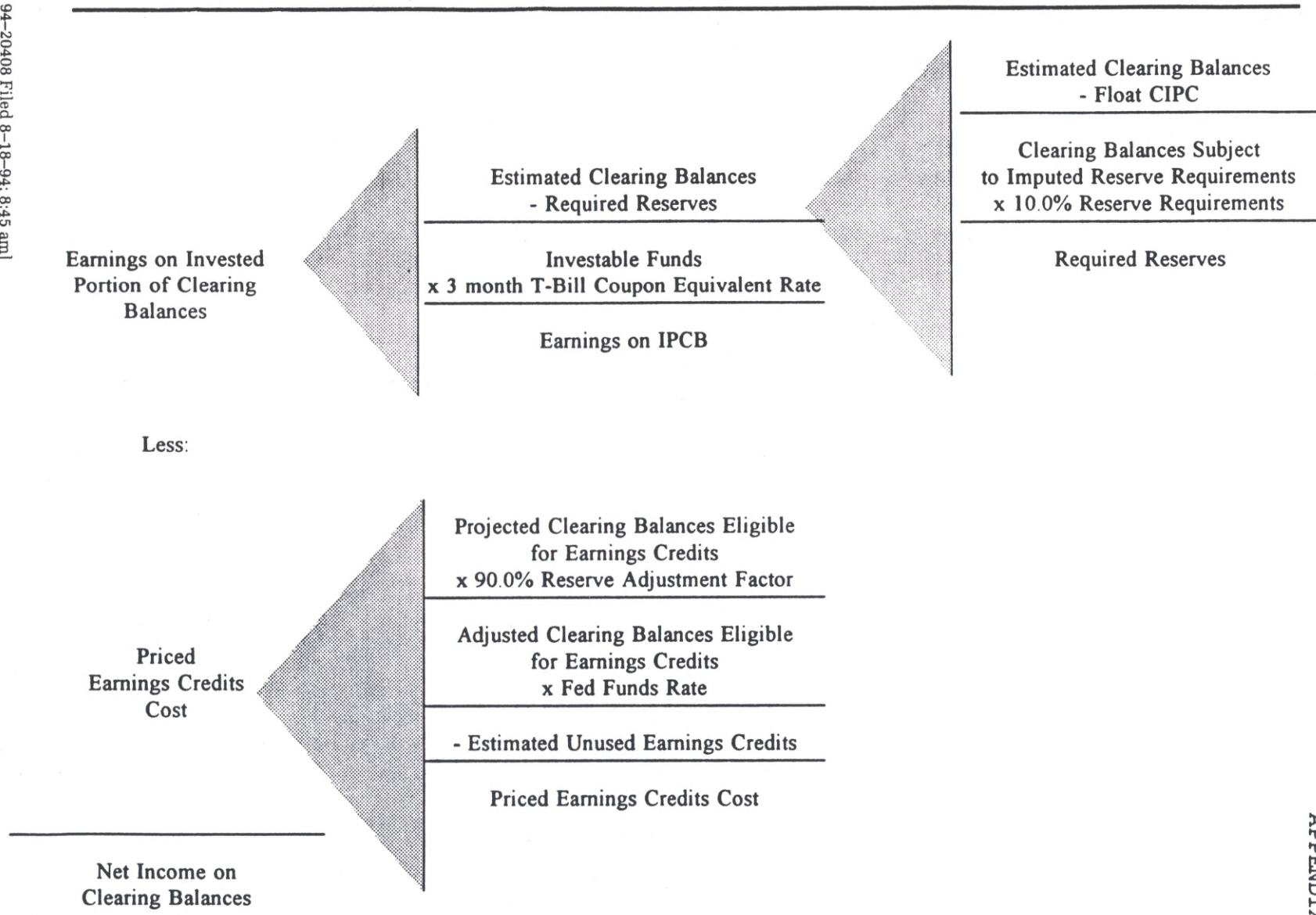
By order of the Board of Governors of the Federal Reserve System, August 12, 1994.

**William W. Wiles,**  
*Secretary of the Board.*

BILLING CODE 6210-01-P

# NICB ESTIMATION CALCULATION

[FR Doc. 94-20408 Filed 8-18-94; 8:45 am]  
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