# FEDERAL RESERVE SERVICES

## HEARINGS

BEFORE THE

## COMMITTEE ON

## BANKING, HOUSING, AND URBAN AFFAIRS

## UNITED STATES SENATE

NINETY-FIFTH CONGRESS

FIRST SESSION

ON

OVERSIGHT ON THE PAYMENTS MECHANISM, THE FEDERAL RESERVE'S ROLE IN PROVIDING PAYMENTS SERVICES, AND THE PRICING OF THOSE SERVICES

OCTOBER 10 AND 11, 1977

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## COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS

# CONTENTS

## LIST OF WITNESSES

MONDAY, OCTOBER 10



TUESDAY, OCTOBER 11



ADDITIONAL STATEMENTS AND DATA SUPPLIED FOR THE RECORD

# FEDERAL RESERVE SERVICES

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**MONDAY, OCTOBER 10, 1977**

U.S. SENATE,
COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS,
*Washington, D.C.*

The committee met at 10 a.m., in room 5302, Dirksen Senate Office Building, Senator William Proxmire, chairman of the committee, presiding.

Present: Senators Proxmire, Riegle, Lugar, and Schmitt.

## OPENING STATEMENT OF CHAIRMAN PROXMIRE

Other Senators will be here shortly. Monday morning we are always a little late in getting started.

Today the Banking Committee begins 2 days of oversight hearings on the payments mechanism, the Federal Reserve's role in providing payments services, and the pricing of those services. With the coming of the new electronic funds transfers and the likely spreading of NOW accounts nationwide for both banks and thrift institutions, the questions that shall be raised in these hearings are extremely important. And so are the answers.

I am particularly interested in the notion of pricing of the payments services that the Federal Reserve supplies to member banks without charge. In 1976, the cost of payments services approached $400 million or almost 60 percent of the Federal Reserve's entire operating budget. These services are in some sense paid for by the reserve member banks maintained at the Fed, but the payment is hidden. Moreover, there is no limit to the amount of services a member bank may obtain. Such an arrangement tends to cause inefficiencies both in the provision and in the use of services.

In the last several months, this committee has heard a great deal about "unbundling" of services and the imposition of service charges. The NOW account legislation, which has been sent to the Senate by this committee, would have the effect of placing bankers in a position where they would be induced to "unbundle" the services provided to "checking" account users—they would pay interest on NOW balances and would charge for services rather than giving them away in lieu of paying interest. Treasury Secretary Blumenthal described the introduction of service charges and interest payment on balances as a positive step, when he said:

> The low-balance, high-turnover customers will probably not choose NOW accounts unless they are willing to economize on check usage. Otherwise, service costs would outweigh the interest earned. In a broad economic sense, however, these service charges reflect a healthy development. As institutions begin to price

services to reflect true costs, an efficient allocation of resources is promoted. In this way customers are able to weigh the personal value of a service against its actual price and make a more informed choice.

In the recent hearings on banking practices some irregular banking practices clearly involved the use of correspondent balances. The committee was told that the typical correspondent banking arrangement involved correspondent balances that serve the purpose of compensating for services. The balances earn only an implicit rate of return because explicit interest payment is prohibited. This has led to a situation where the services are not often priced explicitly by the correspondent bank. Thus, in most cases the respondent banker may not know whether he is receiving a fair amount of services in return for his balances. In some cases, there are abuses and questionable practices, such as the establishment of correspondent relationships so that a loan is granted to a bank official, who of course is responsible for establishing that correspondent relationship and also for the size of the correspondent balance. The payment of interest in interbank bank balances and the unbundling of services would be a logical way to bring correspondent banking relationships out into the open, where competition would work to prevent abuses of any type.

The logical extension, of course, is to have the Federal Reserve unbundle its services, to charge for them on an explicit, rational, competitive basis and to supply them to any institution willing to pay the established prices. With the establishment of NOW accounts and other money substitutes and the development of EFT, the demand for Fed services by nonmember institutions will grow. Equitable treatment requires open access to Fed services for all institutions, and pricing of services could provide the mechanism for this.

The obstacle to this, of course, is the issue of membership in the Federal Reserve System. This is also an issue of equity, and the Fed is very reluctant to price its services and provide open access for fear of exacerbating the membership problem. In his June 20 appearance before the Subcommittee on Financial Institutions, Chairman Burns stated that

> The Board is considering—and must consider further—alternative systems for collection charges for services, such as requiring balances or fees from all depository institutions.

Dr. Burns further indicated that unless the Federal Reserve received rather broad authority to compensate members for their idle reserves, adoption of a pricing schedule for payments services would be delayed. I noticed one witness this morning calls on us for a time schedule which I think makes a great deal of sense, that the Congress should establish for the Federal Reserve in setting its unbundling and its pricing of services. I think that would be one way of assuring that some action would be taken or at least we would know why not.

I believe the key element that the Congress eventually must consider fully is the structure of reserve requirements. There too a need to unbundle is present, for currently, required reserves can be considered to consist of two components: One component plays the role of a clearing and compensatory balance for payments services, while the other component primarily plays an important role in monetary policy. Logic would suggest a separation of these components. If that were done, I would support the payment of explicit interest on a compensatory balance for payments services provided that there is no revenue loss to the Treasury. I am confident that such a system could be devised where services would be priced, balances would be maintained for clearing and to compensate for those services actually used, and an explicit rate of interest would be paid on those balances. Membership attrition would not be exacerbated because actual required reserves for policy purposes would initially be reduced. This is one option that makes sense. The Board, I am sure, is considering others.

Our hearing will focus on four major questions which I requested the witnesses to comment on.

First, is the provision of payments services a necessary and appropriate function for the Federal Reserve; that is, do we need a Federal Government monopoly in all parts of the payments mechanism?

Second, on what basis should all depository institutions have access to Federal Reserve services?

Third, what are the potential benefits and costs that the economy would obtain from explicit pricing of Fed services?

Fourth, what are the effects of the Federal Reserve's current role in the payments mechanism on correspondent banking, on the efficiency of the payments mechanism, and on private marketplace incentives to provide payments services?

We are honored to have a distinguished group of witnesses today and tomorrow. I might add that one point I didn't stress in my opening remarks that I think is of considerable importance is the fact that we have an onrushing technology here in the EFT and if we aren't aware of that and the prospects that opens up for a free market, competitive provision of services, we are going to have, in the judgment of some witnesses I notice this morning, and certainly in my judgment—we are likely to have the Federal Reserve simply to usurp, move into an area that we hadn't intended because the reach of EFT expands the kind of services that the Federal Reserve provides and it seems to me that rather than at taxpayers' expense it ought to be provided on the basis of a free open market system, and I'm delighted to see so many witnesses agree with that.

Our first two witnesses are Dr. Almarin Phillips, of the School of Public and Urban Policy of the University of Pennsylvania, a member of the EFT Commission, and one of the directors of the Hunt Commission; and Mr. George Oram, director of the Board's Office of Information Systems and Administration. We are honored to have you lead off our hearings this morning, and unless Senators Lugar or Schmitt or Riegle have opening remarks they would like to make, then Dr. Phillips, I'm going to ask you to limit your presentation to 10 minutes. We have six witnesses this morning. We have a new system of lights to help you. The green light will be on for 9 minutes. Then the yellow light for 1 minute. At 10 minutes the red or stop light goes on, and we would appreciate your not running our red light. Go right ahead.

## STATEMENT OF ALMARIN PHILLIPS, DEPARTMENT OF ECONOMICS AND SCHOOLS OF LAW AND PUBLIC AND URBAN POLICY, UNIVERSITY OF PENNSYLVANIA; PUBLIC REPRESENTATIVE OF THE NATIONAL COMMISSION ON ELECTRONIC FUNDS TRANSFERS

Mr. PHILLIPS. Thank you, Mr. Chairman. I'm sure that my remarks will not occasion even the yellow light going on. I hope to keep them very brief.

A couple of preliminary remarks, if I may, Mr. Chairman and members of the committee. I am, as you indicate, a public member of the National Commission of Electronic Funds Transfers. Mr. Oram is on the Commission also, and I suspect that I speak for him, too. My remarks should be regarded as my own view and not those of the Commission. The Commission will be reporting later.

Second, Mr. Chairman, your committee has been investigating possible reorganization of the Federal regulatory organizations recently. My views on the Fed's role in EFT are quite consistent with my general view with respect to reorganization of the Federal regulatory agencies which, in brief, boils down to the fact that the Fed should retain and strengthen its role as a central bank but should absolve itself from regulatory and examining responsibilities in the context of payments mechanisms. Unless there's clear and compelling evidence to the contrary it should not go beyond the present role which it has in clearing through its support of ACHs, through the provision of the Bankwire and so forth.

As a central bank the Federal Reserve clearly needs to worry about reserve requirements and bank reserve positions. The reasons for the attention to reserves, as you indicated, Mr. Chairman, are control of interest rates, monetary policy, inflation, unemployment and so forth. That's a far cry from asking it to take on very complex regulatory functions in the payments mechanism area.

I believe that nondiscriminatory access to ACHs and other elements of EFT types of clearing as well as nondiscriminatory access to paper-based clearing mechanisms is absolutely essential. In the present period of technological change, where deposit institutions other than commercial banks are rapidly moving into the payments area, it's particularly important that the nonbank depository institutions—the savings and loans, mutual savings banks and the credit unions—be able to access the system on a nondiscriminatory basis.

As you have indicated and as my prepared remarks indicate, there is a severe pricing problem. There is no way, Mr. Chairman and members of the committee, that a rational and explicit pricing system for payments services can be evolved in the absence of provision for payment on reserve balances kept at the Federal Reserve. Without that, unbundling is impossible and nondiscriminatory pricing is impossible. It will be difficult practically to enforce such a provision, but to the extent that the Federal Reserve is involved in clearing either through the Fedwire or through its limited role in automated clearinghouses, and if interest were paid on reserve balances, one could restrict the Fed's activities in clearing mechanism to those which bear explicit prices which are at least equal to the direct cost involved in the provision of those services. This would afford an opportunity for private enterprise to come in. This would improve the access problem as well as help to allocate resources efficiently.

Agreeing with the views you expressed in your preliminary remarks, I think unbundling is essential. One should not tie the clearance services of the Fed or indeed clearance services provided by private organizations with the maintaining of a balance at the Fed or with those organizations. There should be unbundling, with financial institutions being able to use whatever mix of balances and clearing services and other services at appropriate prices those institutions deem appropriate.

At the moment the focus of the Fed seems to be on the ACH problems. My formal remarks note that it's a little bit difficult to distinguish clearly between what's an ACH-type switch and other type switches. The clearing is complex. Sometimes what is a terminal for one purpose is a clearing mechanism for another. I mention that principally because increased involvement of the Fed with respect to ACH's could quite clearly lend to increased involvement in other types of switching and payment services which I believe are unnecessary and undesirable for the Fed to undertake.

I think that as a general principle, Mr. Chairman and members of the committee, that I would like to repeat what I said to begin with—what we need is not rules with respect to where the Fed should become involved with ACH–POS terminals and so forth, but the general guiding principles that unless it's clearly demonstrable that the Federal Reserve needs to enter into new functions or to enlarge existing functions in the clearing mechanism it should not do so. I believe that in terms of cost and benefits that this kind of approach, which allows the market mechanism to act to the maximum extent possible, is clearly desirable. It will provide for efficiency from a cost point of view and hopefully for increased competition which would bring about appropriate prices as well as opportunities for technological change.

Thank you very much.

The CHAIRMAN. Before we go on, I might say that this is a very, very technical area compared to what we usually deal with. We are all laymen, the four of us committee members who are here this morning. None of us are technicians. So I think it would be helpful if you took just an extra minute with the sufferance of the committee, to explain several terms.

We would like you to explain the ACH. We would like you to explain the POS. We would like you to explain very briefly the major uses of wire transfer so the committee can understand what they are.

Senator SCHMITT. And unbundling.

The CHAIRMAN. Unbundling sounds very interesting, like what they did in the colonial times, but I'm afraid it's not that.

Senator SCHMITT. I would like to know the banking definition.

Mr. PHILLIPS. Other witnesses will be testifying and I will be brief and not go into details.

The ACH is an automated clearinghouse. Essentially what it is is not the bricks and mortar type clearinghouse that we have thought of in the past. It's a computer with the appropriate software so that someone who wishes to make a payment, order a payment on say bank A and the payee is banking in bank B, that electronically a message can go through that computer and the computer system can transfer funds from bank A to bank B, which I have ordered to be the recipient of the payment. There are 29 of them I believe currently in operation and perhaps a dozen or so more presently being planned. But it is computer software and whereas it may be relatively new before your committee, Senator, the notion of the automated clearinghouse goes back very close to a decade now to early experiments in California. The possibility has been recognized for a long time.

POS is just point of sale terminal. It comes under a variety of other rubrics. The point of sale terminal is a way that at a retail establishment a consumer can make payment by having electronically funds transferred from his account in the bank to the retailer's account and very frequently make deposits or make withdrawals at that terminal. I can't give you a present estimate of the number of those now, but it's in the high tens of thousands and perhaps hundreds of thousands or so POS terminals.

Automated teller devices I suspect everybody is familiar with. They are ordinarily installed by a bank on bank premises or in shopping centers and so forth for deposit and withdrawal purposes, primarily for cashing checks, but may also be upgraded to provide the type of payment services that the POS terminal would provide.

I would like to emphasize, as long as I'm explaining this, that all of these functions went on when we were using checks and to some extent when we used cash, because there has to be a transfer of an asset of some person into the asset of somebody else. It's just a question of how it's done.

On bundling and unbundling, I think probably the easiest way to explain it is with reference to a rather famous somewhat humorous but important article published by George Stigler of the University of Chicago, entitled "Getting Gertie's Garter." The gist of the story was an exhibitor of motion pictures had a double feature problem where there were some people who wanted to come and see a rather unartful movie called "Getting Gertie's Garter." He was wondering whether he might also show "Gone With The Wind," and what the advantages and disadvantages were of selling only a one price ticket to come into the theater whether you wanted to see "Getting Gertie's Garter," "Gone With the Wind," or both. If they are bundled together, what you have is a same double feature price.

In this context, bundling for financial services would be where you can use clearing services but you must also maintain a balance at zero interest, for example, at the Federal Reserve bank; or, yes, you can buy my mimeograph but you have to use my ink and stencils along with it. That is, unbundling would be to have explicit pricing for all elements to it as much as possible. Surely you don't want to unbundle an automobile and have pricing for the carburetor and the engine and so forth. They are inherently a package.

There's nothing inherent about the fact of maintaining a balance and paying for payment services. They are not tied together by the nature of a technology as in the case of the automobile. Is that sufficient?

The CHAIRMAN. That's fine, very helpful. The staff wanted to hear more about "Gertie's Garter."

Mr. PHILLIPS. Well, the important conclusion, of course, is by tying them together the movie got a good deal more revenue than if they were sold separately.

Senator SCHMITT. Under the other definition of bundling you can get more than you bargain for also.

The CHAIRMAN. You can, or less.

[Complete statement of Mr. Phillips follows:]

FOR PRESENTATION ON OCTOBER 10, 1977

STATEMENT OF DR. ALMARIN PHILLIPS, PROFESSOR OF ECONOMICS, LAW AND PUBLIC POLICY, UNIVERSITY OF PENNSYLVANIA, TO THE COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS, UNITED STATES SENATE.

Mr. Chairman and members of the Committee. I appreciate your invitation to discuss the role of the Federal Reserve System in the provision of payments mechanism services.

Some preliminary remarks are necessary. First, I am a public member of the National Commission on Electronic Fund Transfers. The Report of that Commission will appear later this month and will address some of the issues being raised in these hearings. The views expressed here are my own and should not be regarded as those of the Commission or any of its members or staff.

Second, your Committee has been investigating organizational reform of the Federal bank regulatory agencies. Since my positions on the role of the Federal Reserve System in payments mechanism services are related to my views of the appropriate general regulatory functions of the System, the latter needs some explication.

Regulatory reform in the banking area is a highly desirable, although not an immediately essential, step for the Congress to undertake. With some modification, I favor the type of reform suggested by the Commission on Financial Structure and Regulation, more popularly known as the Hunt Commission, in 1971. That Commission recommended separate administrators for the examination and supervision of state chartered and national banks, retention of the Federal Home Loan Bank Board (with chartering power for mutual savings banks) and the National Credit Union Administration and the creation of a deposit insurance organization covering all types of deposit institutions and directed by the heads of the several administrations for banks, savings and loans, mutual savings banks and credit unions.

Under the proposals of the Hunt Commission, the Federal Reserve System would lose its functions as an examiner and regulator except for those assigned by the Bank Holding Company Act and the Edge Act, and except for others that might be required for the control of international banking. In my view, it would be preferable to place both the bank holding company and bank merger questions with the Antitrust Division of the Department of Justice, thereby removing all of the bank regulatory agencies from the consideration of issues relating to the maintenance of competition. I would apply the standards of the Sherman and Clayton Acts to financial markets and abolish the so-called "banking factors" as legal criteria. In short, the Federal Reserve System should be concerned with domestic and international monetary policy and should not be directly involved in unrelated examination and supervisory regulatory functions.

Extended to the issues raised by these hearings, it does not appear that the Federal Reserve System needs to take on new or enlarged functions in the provision of payments mechanism services. Changes in the payments mechanism which will occur because of the evolution of electronic fund transfers will require some modification in the operation of the System in its central banking role; they will not require incursion by the System into new dimensions of payments services.

As the Committee is aware, the Federal Reserve has been involved in the development of automated clearing houses. All of the current 29 operational ACH's except for those in Chicago and New York are located on Federal Reserve premises. A dozen or so new ACH's are planned, and many of these will not be so located. Because the bulk of early EFT payments are disbursements of the Treasury through Federal Reserve Banks, the Treasury and the System have established rules and procedures which are reflected in the software packages utilized by ACH's. It is to be anticipated that these packages will establish early standards for EFT payments, but this does not mean that the System has, will, or should mandate such standards. The private associations forming ACH's ultimately set the full complex of rules and regulations, including the setting of fee schedules for services.

Nondiscriminatory access to ACH services by all banks, savings and loans, mutual savings banks and credit unions is essential. The relevant criteria are those of the antitrust laws. The Department of Justice has been active on the question of access. The imposition of additional rules by the Federal Reserve is not necessary. Further, banks and other deposit institutions should be free to establish their own clearing systems, with the ability to access the full system which ties to the Federal Reserve and the Treasury. With access, the development and entry costs of private subsystems of ACH's are not high, and the subsystems provide a vehicle for the promotion of price, service and technological rivalry.

Nonetheless, a pricing problem is created by the Federal Reserve's involvement in ACH's. The same problem exists in the computer and delivery services of the System in clearing checks. No rational and efficient pricing of payments services is possible without the payment of interest on reserve balances. If members and non-members were charged the same explicit prices for these services, the members would be at a disadvantage because of the "tax" they pay for having to forego interest on reserves. If no charges were made to either members or non-members and the latter had free access, the members would be "subsidizing" the non-members through this "tax." If members were charged less than non-members as a recognition of the "tax" from non-interest bearing reserves, the incremental cost for providing services to the customers of the member banks - including services for non-member banks - would be lower for members than for non-members, giving the former a market advantage. If non-members were forced to access the Federal Reserve service through a member bank, the non-members would suffer similar discrimination.

In earlier hearings before the Subcommittee on Financial Institutions, I urged that the System pay interest on reserve balances. The reason given then was not that this would prevent further attrition in membership, but rather that it provided a new monetary policy instrument. The payment of interest on reserves would also help in setting efficient prices for clearing services. Institutions - any of the deposit institutions - that keep balances with the System would receive interest on those balances. They would also be charged for clearing services rendered by the Federal Reserve. The two should not be "tied", however, Any institution should be permitted to keep a balance with the Fed, but to use other clearing services as offered; any institution should be allowed to use the clearing services of the Fed at announced fees, but not keep a balance with the Fed; an institution should be able to use whatever mix of Fed balances and clearing services was best from the view of its own operations.

If the System operates properly in its monetary policy role, it would not raise the rates paid on balances above those consistent with its overall interest rate goals. Thus, cross-subsidization of services from this source should not be a major problem. The System, however, is unique compared to other financial institutions in that market pressures do not require competitively based levels of earnings. It could subsidize service offerings from its "profits", forcing other private institutions out of all or part of their service offerings. In view of this, the System would have to be required to price non-discriminatorily at levels no lower than its own direct costs. This would at once provide efficiency in monetary policy and efficiency in the payments mechanism. It would retain marketplace incentives for the provision of payment services, with private institutions performing those functions for which they have the lower costs or better services.

The ACH's, it should be noted, parallel the payments services for paper-based funds transfers. The total mechanism is a highly complex one, with some payments being effected internal to a single institution, some being made bilaterally between two institutions, some being made multilaterally among several institutions through local and regional clearing associations, some being made multilaterally through a bank which acts as a clearing institution, and some being made multilaterally through Federal Reserve facilities.

Clearing, whether for paper or electronic transfers, is a "switching" operation, with one account - of a person, business, financial institution, or government - being debited or credited and another being credited or debited. The "switching" occurs at various levels depending on the type of the transaction, the size of the transaction and the location of the payor and payee. Movements of the orders to "switch" are handled by personal delivery, mail, private courier, verbal telephonics, digital wire message, etc., and regardless of the method there may be several "switching steps" in the process. An hierarchical network of lines and switches is involved.

The hierarchical character of clearing networks makes it impossible to distinguish precisely between classes of "switches." An automated teller machine may in some cases complete a transaction. It is the only switch. So may a point of sale terminal. Yet in other instances, the ATM or POS is nothing more than the terminal device to get a series of transactions started. The ATM's and POS's are also parallel to paper-based terminals. A check written by me on my bank for cash, for example, can be handled right at the teller's window, with appropriate debits and credits on the bank's accounts and mine. That is the end. But a check written by me for, say, income tax payments goes through a more intricate pattern of accounts involving me, my bank, possibly other banks, the Treasury and the Federal Reserve. A number of "switchings" occur, some involving institutions which may clear among themselves electronically for my tax payment and which certainly clear electronically for other kinds of payments.

To say arbitrarily that the Federal Reserve should be restricted to, say, the ACH part of the payments process clearly misses the point that for some transactions the P.O.S. terminal acts like an ACH. Also, POS terminals will have to switch among themselves. Is the interbank POS switch an ACH? Well, yes and no.

What we need is a guiding principle for Fed involvement. That principle, in my view, is that unless there is a clearly demonstrable need for the central bank to enter a new function, it should not do so. The early development of the ACH's needed and received Federal Reserve support. The paper-based system was incurring high costs, yet private associations would have had problems unless there were some standards set for software, easy interfaces among differing computer systems, and an assurance of adequate usage to cover costs. Capital costs were not prohibitive, but there was no system to hook into. It would have been somewhat akin to a person buying a telephone without knowing how to link in with others who might be using different numbering systems, incompatible electronics, or who were not hooked into the same system at all.

To say that early intervention by the Fed is sometimes needed is far different from saying that continuing dictation of systems configurations and expanding intervention towards the "switches" of payors and payees is needed. It is different, too, from arguing that, once started, private incentives will work adequately. Evidence to date is that the private sector is rapidly moving into the EFT mode and does not require or want the Fed to interfere.

This brings us back to my initial views. The Federal Reserve System should concentrate on its monetary policy and central banking functions. Unless there is evidence not now present - evidence which, I believe is unlikely to come forth in the near future - to the effect that some areas of the payments system require Federal Reserve actions beyond those mentioned above, the best policy is to let the markets change and grow through private incentives.

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The CHAIRMAN. Go right ahead, Mr. Oram.

## STATEMENT OF GEORGE S. ORAM, JR., EXECUTIVE ASSISTANT TO THE CHAIRMAN, FEDERAL HOME LOAN BANK BOARD, ACCOMPANIED BY DANIEL GOLDBERG, GENERAL COUNSEL

Mr. ORAM. Good morning, Mr. Chairman.

I am accompanied by the Board's General Counsel, Dan Goldberg.

Before I get into a quick summary of the Board's testimony, I wanted to say another word on what is an ACH and why access to ACH's became such a hot issue in the past few years.

The primary use to date of automated clearing houses is the distribution of Federal recurring payments such as social security payments to beneficiaries. Obviously financial institutions, whether they are commercial banks, savings banks or savings and loan associations, wish to receive these direct deposits for their customers.

When ACH's were first started sometime ago (I think it was about 1971 when the problem first came to our attention) ACH membership was not open to savings and loan associations. It was only open to commercial banks, and so whatever payment was ordered—and there are payments going through ACH's other than Federal recurring payments—could only be delivered directly to an account holder of a commercial bank. That has since been solved but ACH's are a very, very important way right now for the Federal Government to reduce its cost of distributing social security payments, in addition to the primary use the Federal Reserve and others had in trying to invent them, which was to cut down on the volume of paper transfers and to increase the number of electronic transfers which presumably would be less expensive to process.

Now with regard to the Board's remarks, I will simply summarize some of the highlights of the remarks.

[Complete statement of Mr. Oram and additional information follows:]

TESTIMONY OF

GEORGE S. ORAM

DIRECTOR OF THE OFFICE OF MANAGEMENT

SYSTEMS AND ADMINISTRATION

OF THE

FEDERAL HOME LOAN BANK BOARD

Good morning. My name is George Oram, and I am the Director of the Federal Home Loan Bank Board's Office of Management Systems and Administration.

Your invitation to testify at these hearings to explore the role of the Federal Reserve in providing payments mechanism services indicated four issues that the Committee wishes to study. The Bank Board's prepared statement addresses each of the four questions raised.

1. <u>Is the provision of payments mechanism services a necessary and appropriate function for the Federal Reserve in its capacity as the nation's central bank?</u>

When the Federal Reserve System was established in 1913, the Federal Reserve Board was empowered to regulate the transfer of funds and charges therefor in the Federal Reserve System. Furthermore, it could act as a clearing house for the Federal Reserve Banks or designate one of them to exercise that function. Finally, it could require each Federal Reserve Bank to act as a clearing house for member banks. (12 U.S.C. §248(o)).

Before enactment of the Federal Reserve Act, there was no centralized mechanism for the clearing and settling of checks. This lack of uniform authority over the check clearing process led to great disparity in the servicing of checks. In many cases out-of-town checks were encumbered with exchange charges by drawee banks or were greatly delayed in clearing because banks sent them on roundabout routes to avoid the added fees.

Clearly, enabling the Federal Reserve System to provide uniform and reliable clearing house services was necessary if the widespread use of checks were to continue. In addition, during recent times the continued improvement in the servicing of this payment mechanism has greatly shortened the period of the float so that as a result the Federal Reserve has increased, in the short run, its control over the nation's money supply.

In order to determine the necessity and appropriateness of the Federal Reserve performing this clearing house function, the Bank Board examined the circumstances under which any governmental entity should perform a role which the private sector might be able to handle. The Bank Board believes there are at least three occasions when the government might be expected to provide services:

a) First, when a public benefit is demanded and, because of economies of scale, only one entity should provide the service;

b) Second, when private enterprise fails to provide services to a sector of the population because of remoteness or economic infeasibility; and

c) Third, when a public need has been identified but methods for serving that need have not been invented or adequately pursued by private enterprise.*

The clearing house services historically performed by the Federal Reserve fit all three categories.

The Federal Reserve's check clearing service is a public good because its speed, dependability and inexpensiveness are felt far beyond those who are directly affected by the Federal Reserve's operations. Moreover, the combination of the continuing increase in the use of paper-based transactions and of the Federal Reserve's regionally interconnected delivery system (Regional Check Processing Centers) has resulted in an obvious economy of scale per unit transaction, as well as the assurance that remote or economically impractical outposts are adequately served. Furthermore, the Federal Reserve has foreseen the inherent limitations of paper-based money transfers and so has innovatively adapted some of the developing communication technologies to streamline its own payments mechanism services.

The Bank Board has observed that the private sector is beginning to show an active interest in providing some of the services currently available through the Federal Reserve. The Board favors the entry of private enterprise in this area because it sees the resulting competition among entrants

*However, as discussed later, the Bank Board believes that whenever a governmental entity provides services, it should endeavor to price those services so that private enterprise has an opportunity to compete.

as a way of assuring that customer needs will be adequately met. However, the Board is also aware that the continued growth of private sector involvement in particular payments mechanism services requires the Federal Reserve to price explicitly its comparable services. The Bank Board is mindful that in order to unbundle Federal Reserve services many considerations must be taken into account and that such action will have far-reaching implications. Nevertheless, the Board believes that such a pricing policy must be considered if private enterprise is to develop alternatives which may improve upon existing clearing house mechanisms.

2. <u>On what basis should all depository institutions have access to the Federal Reserve services?</u>

At the present time, direct access to Federal Reserve paper payments services is available only to member banks of the Federal Reserve System. Thus, non-member commercial banks and thrift institutions are excluded from direct access. In order for thrift institutions to gain access, they must establish a correspondent relationship with a member bank.

The need for thrift institutions, and in particular, for savings and loan associations, to participate in the settlement and clearing process is a recent one. It has resulted from the authority given to some S&Ls to offer paper-based third party payment services, in the form of NOW or checking accounts, as well as from the ability of S&Ls to provide certain types of electronic funds transfer system transactions. In the case of Federal S&Ls, Bank Board regulations permit a broad range of pre-authorized payments mechanisms, and the use, on an experimental basis, of electronic funds transfer service terminals.

The Bank Board does not believe that the inability of S&Ls to have direct access to Federal Reserve clearing and settlement processes without use of a correspondent bank has caused problems in the area of paper-based third party payment services. As you know, the NOW account, which is the major form of S&L participation in paper-based third party payment services, is essentially a savings account although it has certain characteristics of a checking account. Those S&Ls that offer NOW accounts have the settlement and clearing process carried out through a correspondent commercial bank with the complete cooperation of the Federal Reserve. The Bank Board is not aware of any problems that S&Ls have had in obtaining correspondent bank access to settlement and clearing transactions at a reasonable cost. Likewise, those State-chartered S&Ls that can offer checking accounts are in the same position as non-member commercial banks in that they usually deal through a correspondent bank in order to obtain check clearing services outside of their local banking market. Within their local market they may clear checks through a correspondent bank, directly with individual banks and S&Ls, or through participation in local clearing houses.

The Bank Board is aware that one of the obstacles to direct access to Federal Reserve check clearing and settlement services is that such an arrangement for services is a non-pecuniary form of payment designed to offset, in part, the costs that go with membership in the Federal Reserve System. The cost of membership results from the fact that some assets must be held in the form of non-interest bearing reserves at Federal Reserve Banks. The ability of member banks to avail themselves of services provided by the Federal Reserve Banks, at best, only partially offsets the interest foregone on required reserves. The exodus of some State-chartered commercial banks from the Federal Reserve System indicates that some members apparently do not regard Federal Reserve services as equal in value to the interest they lose on required reserves. If the Federal Reserve System were to make its paper payment services available readily to non-member depository institutions under the present institutional structure, the result could well be an even greater exodus of State-chartered banks from the system. As long as member banks continue to receive no interest on required reserves held at Federal Reserve Banks, it will be difficult, if not impossible, for the Federal Reserve to make its paper payments mechanism services available directly to non-member depository institutions without further aggravating its membership problem.

While the Bank Board appreciates the problems that the Federal Reserve has in making its paper payments mechanism services available to non-member institutions, nevertheless, it wants to ensure that S&Ls and thrift institutions generally are not impeded by their lack of direct access to Federal

Reserve services in competing for business with respect to third party payment services, both of a paper-based nature and in the form of EFTS.

A serious issue that has been publicized for some years has been the question of access for thrift institutions to automated clearing houses. Although such clearing houses are privately organized, they depend heavily upon Federal Reserve facilities, and most also make use of Federal Reserve computers. In the Board's opinion, the ability of thrift institutions to compete in the third party payments area depends upon their gaining membership in private automated clearing houses on the same basis and with the same rights as commercial banks.

Since private ACHs are clearly deriving advantages from their ability to use Federal Reserve facilities and are thus, to some extent, being subsidized by the System, the Federal Reserve has a strong responsibility to see that thrift institutions are not barred from membership in such associations. And, the Federal Reserve Board has used moral suasion to obtain access for thrift institutions in private automated clearing houses. Also, there are pending antitrust suits brought by the Justice Department against a number of automated clearing houses dealing with this subject. As a result of all of these efforts, many private automated clearing houses have already permitted thrift institution membership. The Bank Board anticipates that the situation will resolve itself, but, nevetheless, will be watching the outcome carefully.

3. <u>What are the potential benefits & costs that the economy would obtain from explicit pricing of Federal Reserve services?</u>

The Bank Board's position on the potential benefits and costs that the economy would gain from explicit pricing of Federal Reserve services follows from its position described above. It recognizes the difficulties the Federal Reserve would face in unbundling its services and pricing them explicitly. Furthermore, unbundling could well aggravate the Federal Reserve's membership problem without being particularly beneficial to thrift institutions since the latter merely require some type of access to Federal Reserve payments mechanism services even if the access is indirect.

The Bank Board does not believe that it is in a position to weigh the potential benefits and costs to the economy which would result from the explicit pricing of Federal Reserve services. Nonetheless, there is little doubt that such a policy could lead to a more rational use of Federal Reserve services. Also, it could facilitate the development of private interregional payments services that, in turn, could compete with the Federal Reserve. However, if explicit pricing is not to aggravate the membership problem and put national banks, which must be members of the Federal Reserve System, at a competitive disadvantage, it will be necessary to introduce explicit pricing throughout the Federal Reserve System. This means that some reasonable explicit interest rate -- i.e., in the form of monetary payments rather than non-pecuniary services -- would have to be paid on reserves. In turn, however, this could undermine the present ban on the payment of explicit interest on demand deposits. Depository institutions that presently offer demand deposits are able to give implicit interest on such deposits by providing services or by imposing little or no fees to cover the servicing of such accounts. This situation parallels the relationship the Federal Reserve has with its member banks. As you know, there is a pending Senate bill that would authorize interest-paying NOW accounts for all depository institutions and permit the payment of interest on reserves held at Federal Reserve Banks. The Bank Board has supported these provisions.

4. What is the impact of the Federal Reserve's current role in the payments mechanism on correspondent banking, on the efficiency of the payments mechanism and on private marketplace incentives to provide payments services?

With regard to the impact of the Federal Reserve's current role in the payments mechanism on correspondent banking, there is no doubt that the lack of direct access to the Federal Reserve by non-members has necessitated the establishment of correspondent relationships. Direct access for all depository institutions would diminish the need for a correspondent relationship between a member and a non-member. However, as noted above, savings and loan associations have not found that the present arrangement has impeded access to the clearing and settlement process.

As for the efficiency of the payments mechanism, the current marketplace appears to have endorsed certain efficiencies of the Federal Reserve's provision of services -- most notably the delivery system. However, it may be that competition, growing from an explicit pricing policy, would result in a more efficient system or indicate that, at least given present technology, a public monopoly is most beneficial.

With respect to the question of private marketplace incentives to provide payment mechanisms, the Bank Board recognizes that explicit pricing would promote private enterprise competition with governmental entities and test whether there are, in fact, sufficient incentives for private enterprise to enter this market. However, as indicated above, the Bank Board also realizes that explicit pricing of clearing house services cannot be effectuated alone. Such action must be considered in a broader context involving the explicit pricing of all services. The Bank Board urges Congress to address this issue comprehensively so as to encourage the greatest amount of competition.

This concludes my formal statement. I would be glad to answer any questions you may have.

SENATE COMMITTEE ON BANKING,
HOUSING, AND URBAN AFFAIRS,
*Washington, D.C., September 19, 1977.*

Hon. ROBERT H. MCKINNEY,
*Chairman, Federal Home Loan Bank Board,*
*Washington, D.C.*

DEAR MR. CHAIRMAN: My letter to you of September 7 requested that you testify at the Committee's hearings on the role of the Federal Reserve in the payments mechanism to be held on October 11 and 12, 1977.

A particularly important issue to be examined at those hearings will be pricing and access to Federal Reserve supplied payments services for all depository institutions including savings and loan associations. I hope that this issue will be addressed in your testimony.

With the financial innovations and the development of EFT systems, it is possible that the Federal Home Loan Bank Board involvement in the payments mechanism may increase. I understand that the development of various types of electronic fund transfer systems, including automated clearing houses and point-of-sale systems, has been studied by the FHLB System for some time, and that the system may already be offering some types of payments services to its member institutions in certain areas. Although your participation as a supplier of payments services to member institutions is not the subject of the forthcoming hearings, the Committee's examination of the payments mechanism would be incomplete if we ignore the current and contemplated role of the Federal Home Loan Bank System in the payments mechanism.

It would be helpful for the Committee to have some background material on the FHLB System's involvement in the payments mechanism prior to the hearings. Therefore, please supply the Committee with the following information:

1. A review of the FHLB System's current and planned operations in the payments mechanism including provision of services such as wire transfer of funds, ACH services and point-of-sale services, processing NOW drafts, and any other transfer or accounting services.
2. A review of the volume and dollar amount of services provided during the past 5 years and the total and unit costs of supplying those services.
3. A review of the pricing system used by the FHLB System for the payments services it provides to member and nonmember institutions.
4. A review of the types of payment services the FHLB System is considering for possible future implementation.

The Committee would like to receive 30 copies of the requested material by Wednesday, October 5, 1977.

Sincerely,

WILLIAM PROXMIRE, *Chairman.*

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FEDERAL HOME LOAN BANK BOARD,
*Washington. D.C.*

HON. WILLIAM PROXMIRE,
*Chairman, Committee on Banking, Housing and Urban Affairs, U.S. Senate, Washington, D.C.*

DEAR MR. CHAIRMAN: In response to your September 19, 1977, request for background information on the Federal Home Loan Bank System's involvement in payment services, I am enclosing a folder containing material which addresses each of the four items specified.

Exhibit No. 1 summarizes current Bank System activity in the areas of wire transfers, demand deposit accounting, direct deposits (government recurring payments) and on-line accounting services.

Exhibit No. 2 provides a five year history, including volume and costs, of the aforementioned services. Although some of the data for the years prior to the adoption of functional accounting has been estimated, we believe the data is a reasonable estimate of the activity which took place during this period.

Exhibit No. 3 sets forth the pricing policies most widely used by the Banks. However, it should be remembered that pricing techniques differ from Bank to Bank, depending upon member needs, services and pricing policies of District Boards of Directors.

Exhibit No. 4 describes Bank System plans in the payment mechanism area.

If you need any additional information, please do not hesitate to contact me.

Respectfully,

DANIEL J. GOLDBERG,
*Acting General Counsel.*

EXHIBIT #1

TOTAL FEDERAL HOME LOAN BANK SYSTEM

SUMMARY OF PAYMENT MECHANISM ACTIVITY

| PAYMENT MECHANISM | 1972 | 1973 | 1974 | 1975 | 1976 |
|---|---|---|---|---|---|
| Wire Transfers | | | | | |
| Total Volume | 56,507 | 63,902 | 89,185 | 118,367 | 151,336 |
| Total Amount | 88,303 | 115,019 | 262,109 | 319,560 | 368,825 |
| Average Unit Cost | 2.29 | 2.31 | 2.34 | 2.40 | 2.48 |
| Demand Deposit Accounting | | | | | |
| Total Volume | 34,545,839 | 40,629,641 | 47,863,757 | 56,455,912 | 67,037,667 |
| Total Amount | 45,964 | 46,344 | 47,842 | 55,483 | 68,821 |
| Average Unit Cost | .21 | .21 | .20 | .19 | .19 |
| On-Line Account Service | | | | | |
| Total Volume | 2,350,865 | 3,819,401 | 4,917,975 | 6,171,221 | 7,450,582 |
| Average Unit Cost | 2.65 | 1.93 | 1.68 | 1.69 | 1.64 |
| Direct Deposit - Government Recurring Payments | | | | | |
| Number of Assoc. | | | | | 981 |
| Amount | | | | | 62.8 |

Note: all dollar amounts in millions; "Total Volume" represents the number of transactions.

FEDERAL HOME LOAN BANK SYSTEM
PAYMENT MECHANISM VOLUME
1972 THROUGH 1976

EXHIBIT #2, pg.1

| Payment Mechanism | | FHLB Boston | FHLB Chicago | FHLB Cincinnati | FHLB Des Moines | FHLB Atlanta | FHLB Indianapolis | FHLB Little Rock | FHLB New York | FHLB Pittsburgh | FHLB San Francisco | FHLB Seattle | FHLB Topeka |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 Wire Transfers | | | | | | | | | | | | | |
| 1972 | Volume | *1480 | *5000 | 3200 | 20860 | *3500 | *1000 | *4000 | 3506 | *3500 | *2000 | 681 | *7080 |
| | Amount | *4000 | *6000 | 900 | 41300 | *1600 | *600 | *800 | 2400 | *7000 | *22000 | *403 | *1300 |
| | Unit Cost | 5.00 | *2.00 | 1.50 | *2.00 | *2.00 | 2.00 | *2.00 | 3.03 | *2.00 | *2.00 | *2.00 | *2.00 |
| 1973 | Volume | *1480 | *6000 | 4100 | 21800 | 4390 | *1000 | *5000 | 4673 | 3640 | *3000 | 1379 | 7440 |
| | Amount | *4000 | *7000 | 1100 | 52800 | 2003 | 600 | *1200 | 3200 | 7600 | *33000 | *816 | *1500 |
| | Unit Cost | 5.00 | *2.00 | 1.50 | *2.00 | *2.00 | *2.00 | *2.00 | 3.28 | *2.00 | 2.00 | *2.00 | *2.00 |
| 1974 | Volume | *1480 | *7000 | 5500 | 23510 | 11016 | 1000 | *6000 | 5841 | 8840 | *10000 | 1098 | 7800 |
| | Amount | *4000 | *8000 | 1600 | 105700 | 4759 | 600 | *1800 | 4000 | 18200 | *111000 | *650 | *1800 |
| | Unit Cost | 5.00 | *2.00 | 1.50 | *2.00 | *2.00 | *2.00 | *2.00 | 1.64 | *2.00 | *2.00 | *2.00 | *2.00 |
| 1975 | Volume | *1480 | 7837 | 11000 | 29601 | 13380 | 1200 | 7600 | 7740 | 12480 | 11694 | 5839 | 9616 |
| | Amount | *4000 | 8822 | 2200 | 129400 | 5677 | 600 | 2100 | 5800 | 26000 | *130000 | *3456 | *2000 |
| | Unit Cost | 5.00 | *2.00 | 2.00 | *2.00 | *2.00 | *2.00 | *2.00 | 3.82 | *2.00 | *2.00 | *2.00 | *2.00 |
| 1976 | Volume | *1480 | 8618 | 14200 | 36910 | 14570 | 2200 | 11300 | 13840 | 16120 | 14224 | 8906 | 9468 |
| | Amount | *4000 | 13297 | 5100 | 131900 | 6156 | 700 | 2600 | 6600 | 33800 | *157000 | *5272 | *2400 |
| | Unit Cost | 5.00 | *2.00 | 2.00 | *2.00 | *2.00 | *2.00 | *2.00 | 4.73 | *2.00 | *2.00 | *2.00 | *2.00 |
| 2 Demand Deposit Accounting | | | | | | | | | | | | | |
| 1972 | Volume | *100000 | *4000000 | 5800072 | 3400000 | *1800000 | *2200000 | 164000 | 11300000 | *3200000 | 1206000 | 375767 | *1000000 |
| | Amount | *335 | 4810 | 10868 | 3600 | 3600 | *1800 | 3094 | 6649 | *6250 | 1800 | 2158 | 1000 |
| | Unit Cost | .65 | *.11 | .09 | .08 | *.14 | *.09 | .45 | .12 | *.23 | *.25 | .21 | *.10 |
| 1973 | Volume | *110000 | *4100000 | 7000000 | 3900000 | 1976000 | 2256000 | 408000 | 11900000 | 3614350 | 3600000 | 751521 | 1013770 |
| | Amount | *369 | 4940 | 9152 | 3800 | 3835 | 1900 | 3458 | 6994 | *6500 | 1846 | 2470 | 1080 |
| | Unit Cost | .65 | *.11 | .08 | .08 | *.14 | .09 | .40 | .13 | .23 | *.25 | .21 | *.10 |
| 1974 | Volume | *130000 | 4265300 | 8000000 | 4000000 | 2236000 | 2331444 | 736000 | 13200000 | 4025316 | 6368000 | 1291057 | 1230640 |
| | Amount | *436 | 5174 | 8060 | 4100 | 3707 | 2000 | 3796 | 7401 | *6341 | 2054 | 3016 | 1757 |
| | Unit Cost | .65 | .11 | .08 | .08 | *.14 | .09 | .34 | .14 | .26 | .25 | .17 | *.09 |
| 1975 | Volume | *140000 | 4289030 | 8300000 | 6400000 | 2347000 | 2331789 | 1241000 | 13700000 | 4513075 | 9680000 | 1387430 | 1576538 |
| | Amount | *470 | 5070 | 7540 | 5800 | 4905 | 1900 | 4624 | 8128 | *7654 | 3108 | 4316 | 1978 |
| | Unit Cost | .65 | .11 | .09 | .08 | *.15 | .11 | .18 | .15 | .28 | .11 | .22 | *.09 |
| 1976 | Volume | *160000 | 4708016 | 10600000 | 6600000 | 3487000 | 2682041 | 1985000 | 16100000 | 5309408 | 11674000 | 1682202 | 2050000 |
| | Amount | *537 | 6474 | 7280 | 6400 | 7033 | 2100 | 5694 | 9315 | *10143 | 6526 | 4810 | 2209 |
| | Unit Cost | .65 | .10 | .09 | .09 | .15 | .29 | .10 | .15 | .23 | .11 | .22 | *.09 |

*Estimated by Cincinnati Bank
(Note: all dollar amounts in millions)

FEDERAL HOME LOAN BANK SYSTEM
PAYMENT MECHANISM VOLUME
1972 THROUGH 1976

| | Payment Mechanism | FHLB Boston | FHLB Chicago | FHLB Cincinnati | FHLB Des Moines | FHLB Atlanta | FHLB Indianapolis | FHLB Little Rock | FHLB New York | FHLB Pittsburgh | FHLB San Francisco | FHLB Seattle | FHLB Topeka |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | On-Line Account Service | | | | | | | | | | | | |
| | 1972 Volume | | 744452 | 119867 | 972746 | | | | | 513800 | | | |
| | Unit Cos | | 1.63 | 5.28 | *2.24 | | | | | 1.44 | | | |
| | 1973 Volume | | 1105433 | 500088 | 1392201 | | | | | 821679 | | | |
| | Unit Cos | | 1.44 | 3.05 | *1.95 | | | | | 1.29 | | | |
| | 1974 Volume | | 1346389 | 899234 | 1704023 | | | | | 968329 | | | |
| | Unit Cos | | 1.46 | 1.80 | *1.78 | | | | | 1.64 | | | |
| | 1975 Volume | | 1606539 | 1203163 | 2146336 | | | | | 1215183 | | | |
| | Unit Cos | | 1.47 | 1.91 | *1.72 | | | | | 1.65 | | | |
| | 1976 Volume | | 1896754 | 1521609 | 2627963 | | | | | 1404166 | | | |
| | Unit Cost | | 1.65 | 1.57 | *1.61 | | | | | 1.72 | | | |
| 4 | Direct Deposit - Gov. Recurring Payments | | | | | | | | | | | | |
| | 1976 (Annualized) Assoc. | 391 | 99 | 110 | 116 | 7 | *50 | *30 | 64 | 67 | *10 | 18 | 19 |
| | Actual Amount | 11335000 | 1300000 | 7824000 | *18220000 | 2600000 | 2912000 | 960000 | 3500000 | 8400000 | *100000 | 5292000 | 360000 |

EXHIBIT #3

FEDERAL HOME LOAN BANK SYSTEM

PRICING SYSTEM

The following is a general description of the Bank Systems' approach to pricing the various services which appear in the accompanying documents. It should be noted that although the twelve Banks approach pricing with the same general philosophy, there is some variation. This reflects association needs, services offered, District Board of Directors pricing philosophy, etc.

1. WIRE TRANSFER SERVICES, RECURRING GOVERNMENT PAYMENTS AND DEMAND DEPOSIT ACCOUNTS.

   Charges for these payments mechanism services are normally recovered through the use of a compensatory balance. A monthly analysis of member balances and activity is performed with a copy provided to each member. A member maintaining an account which generates a loss is encouraged to increase the collected balance in an amount substantial enough to generate earnings to cover all expenses. When the monthly analysis consistently indicates a loss to the Bank, the services may be curtailed or discontinued.

2. PRICING PHILOSOPHY FOR ON-LINE ACCOUNTING SERVICES.

   The pricing policy of the Federal Home Loan Banks for on-line accounting services is governed by a resolution adopted by the Federal Home Loan Bank Board. The resolution states that the Banks may offer this service at prices which will make the service self-sustaining and not cause injury to private services.

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Exhibit #4

At present, the Bank System does not have any definite plans to offer new payment services. The FHLBanks have always provided services in response to the needs of their members. If electronic funds transfer services become more widespread or transaction account authorities for savings and loan associations are increased, then the development of new electronic payment mechanisms may be necessary. Currently, the Banks assist their members by giving up-to-date information on EFTS implementation and by studying costs and benefits in the payments mechanism area.

The CHAIRMAN. Thank you very much.

Mr. Phillips, you said in your statement quite emphatically the Federal Reserve should concentrate on its monetary policy and central banking functions. I think many people would applaud that, including me.

Is the provision of payment services an appropriate function for a central bank? Do you know of other central banks that are the primary providers of payment services like the Federal is?

Mr. PHILLIPS. I don't, Mr. Chairman, know of other central banks that are involved down to the point of the customer, but they are certainly involved in the payment mechanism every place you see a central bank and they should be.

My point with respect to the Federal Reserve is that to carry on its monetary policy it's clear you need to have an efficient system for payments, but from my point of view to provide an efficient system of payments does not require the incursion of the Federal Reserve into the provision of most payments mechanisms services. They can be handled quite well by the private market.

I agree with Mr. Oram that the foresight of the Fed in creating the RCPC's, which are regional check processing centers, and its aid in establishing standards and the provision of technical services was very important in setting up the early ACH's, but I don't think it follows from that that at this point in the technology, at this point in market developments, that the Federal Reserve for monetary policy purposes needs to extend its payment services elsewhere into the system. Even with respect to the services that are now provided—I think your early statement indicated the reasons for it as did Mr. Oram—that explicit pricing of those services is necessary to allow the private sector to come into those markets that they are better equipped to enter.

The CHAIRMAN. The Federal Reserve monopoly is not essential for monetary policy purposes, No. 1; and No. 2, explicit pricing in your view would not interfere with their monetary power and objectives?

Mr. PHILLIPS. No, sir; not at all.

The CHAIRMAN. Mr. Phillips, there are two parts to the transfer of funds, clearing to determine which accounts are debited and which are credited, and settlement to effectuate the movement of funds.

Does the Fed have to be involved in both clearing and settlement? Would the private sector be able to efficiently provide clearing services?

Mr. PHILLIPS. I confess I'm having difficulty with your dichotomy between settling and clearing. Let me respond this way. To make my point clear, although it may not answer your question, Senator, if I walk into my bank with a check or if I ordered my bank to pay the Philadelphia Electric Co. what I owe them electronically, that will really clear without the Fed being involved. The payment order simply doesn't need to go all the way up to the central bank.

On the other hand, if I make tax payments where the account of the Treasury is held at the Federal Reserve Bank or if I write a check to someone in California which would require interregional clearing, then up at the top of that clearing pile somebody has to take care of the interregional transfer. Now I keep using the word "transfers"—and I'm not sure of the distinction you make between settlement and clearing. I conceive of clearing as the process by which an asset which was once Mr. A's becomes Mr. B's and at that point settlement is made.

The CHAIRMAN. By clearing, I mean the processing, the determining of who gets the funds.

Mr. PHILLIPS. Yes.

The CHAIRMAN. And of course, as you said, the settelement is just the transfer of funds.

Mr. PHILLIPS. Well, it seems to me the two are just totally—when I decide that it's A who owes B the money, if that's what you mean by the clearing, then there's really bound up in that the transfer of the funds from A to B. Certainly at the automated clearing house level the Fed would be partially involved in that processing. It has to direct payment from one person to another through its clearinghouse activity.

The CHAIRMAN. Mr. Oram, in your statement you say, and I quote, "the Bank Board also realizes that explicit pricing of clearinghouse services cannot be effectuated alone," and you go on to say "Such action must be considered in a broader context involving the explicit pricing of all services."

Can you elaborate a little bit on that statement? What does the Bank Board mean by "all services"?

Mr. ORAM. Well, I'm not going to be able to sit here and list all the services that the Fed provides, but I think the thrust of our remarks is if you're going to charge for one type of service—we're getting into the general discussion of compensating—well, let me try to deal with it on an example basis. If the Fed is going to charge, say, $x$ cents a transaction for an automated clearinghouse transaction and $x$ cents for a check transaction, then those people who are members are going to be asking for credits for the amount of money they have on deposit so that they would be equal in terms of cost with those people who are nonmembers. So if you're going to do one side, you're going to do the other.

The CHAIRMAN. What concerns me about this is I have been working hard to try to persuade the committee and others to consider the possibility of lifting the prohibition against paying interest on correspondent balances and not waiting until we can completely eliminate the prohibition on all demand deposits. I would like to add that too, but to achieve all of that——

Mr. ORAM. I withdraw the word "all."

The CHAIRMAN. I wonder if you include, for instance, services at the discount window as part of the services.

Mr. ORAM. No, sir. I said that I withdraw the word "all." What we are trying to say is there's got to be a balance and you can't just start charging for the ACH's. You have got to look at the other side of the equation.

The CHAIRMAN. That's very helpful. I think I have time for maybe one more question.

Mr. Phillips, you seem to agree with me that the pricing of Fed payments services would be very beneficial. The key to getting the Fed to go along with the plans to institute pricing is the membership issue as you know, which means the reserves of the members must be recognized. Otherwise, they feel the attrition would be so great that they would completely lose their constituency.

Do you recommend payment of interest on all reserves or would it be possible to have the Fed unbundle reserves and pay interest only on a portion held for clearing purposes?

Mr. PHILLIPS. My own view, Senator, is that there should be interest paid on all reserves. Again, let me use an example outside of the Federal Reserve in the correspondent banks which you are also interested in.

If one bank maintains a correspondent balance at another bank, it is partly to meet reserve requirements, but it's also used as a clearing device so that checks that are drawn on the bank that's maintaining the deposit can be cleared by reducing its account at the other bank. I think it would be very difficult to distinguish between the amount of the deposit that the bank keeps for clearing purposes and the amount it keeps for reserve purposes. Whatever balance is there, both would qualify for reserves. The same thing is true of banks which keep balances at the Federal Reserve bank.

My own view on these were explained somewhat earlier in hearings by Senator McIntyre, that with interest paid on the reserve balances and with any financial institution being able to maintain balances with the Federal Reserve and receive interest on them, the question of the membership largely disappears. Indeed, the question of mandatory reserve requirements in the sense of having to have some particular percent against demand deposits disappear too. The membership issue will disappear if the Fed pays appropriate interest on reserve balances. Paying it on all balances, your question, would then obviate the question of how much—there would be no question of how much would be required reserves and how much was for balances.

The CHAIRMAN. My time is about up. The problem with your response to me is the possibility that this may cost the taxpayers about $2 billion. You're going to have everybody paid interest on reserves, and you do that way eliminate the membership problem all right.

Mr. PHILLIPS. Yes.

The CHAIRMAN. But the cost would be colossal.

Mr. PHILLIPS. There is that problem, Senator, but it's a question of who bears the tax. I acknowledge quite frankly that there is a tax involved in this. Presently it's being paid by the member banks and, as all taxes levied on businesses are likely to be, passed on to the customers of that organization. The consumers are ultimately the taxpayer. Then the question becomes, should that be the tax collection device or should the ordinary tax collections through personal and corporate income taxes and so forth be the device to provide the Treasury with the funds that it needs? I would prefer the latter.

The CHAIRMAN. Senator Lugar.

Senator LUGAR. Professor Phillips, in your testimony you describe clearing exercise as switching from the relatively simple exchanging of a check for cash and the transactions concluded at a window to more complex ones in which institutions may be able to clear. As I gather, at least the rationale for the Federal Reserve becoming involved in this is that, as you say, you might have a telephone but have no system, and if I gather correctly, the Federal Reserve's involvement is the linkage between various clearinghouse mechanisms or is that a fair statement? Is that the reason the Federal Reserve gets involved at all?

Mr. PHILLIPS. Certainly that is the reason that early on it did become involved, Senator Lugar, but it's not related strictly to electronic funds transfers. I guess it was a decade ago or so that the Federal Reserve, along with the American Bankers Association, decided to establish standards for magnetically encoding checks, the MICR codes that are on everybody's checks. Well, if an individual bank attempted to do it, its code would be different from somebody else's code. The establishment of standards is required so you don't need a different computer or different kind of software to read the check of one person at one bank from a check of another at a different bank. That was one of the reasons that the Federal Reserve early on got into it, for standards purposes.

It also then supported the plans of Atlanta and various other cities, certainly also on the west coast, to help develop the kind of computer software that was necessary to have a broad interconnecting system, and that is necessary again just as with the telephone. We have to have a fully interconnecting system in the sense that if I make a call from Washington to Los Angeles it doesn't automatically have to go directly from here to Los Angeles. Depending on the time of day and what circuits are busy, there are automatic switching devices that will move my call all over the place. It might go up to Canada or to Kansas City and back to Chicago and then to Los Angeles to get through that maze of switching. But in order for that to occur and to have that efficiency in getting the message through—and that's what an EFT order is, it's a message to get through—you have to be able to have all those systems interfaced with one another. They have to be compatible technologically, and the Fed, I think, thought the ACH's were very valuable.

Senator LUGAR. All right. Now, if the Fed then does bring about both the standards and the interfacing of the systems, as I gather from your testimony, you feel that it's conceivable that private institutions might take over. In other words, I'm trying to gage how the Federal Reserve gets into it, and I think you have well explained that in setting the standards and linkages, but how does the Federal Reserve get out of it. What minimum things are remaining for the Federal Reserve to do? Would it be simply a Supreme Court for standards, for size of numbers, or what sort of ink was used and that type of thing, or at what point does the Federal Reserve almost inherently stay in this thing and get bigger and, as you suggest, start pricing and unbundling and what have you?

Mr. PHILLIPS. I think a lot of that is covered in the three points for Government agency involvement which Mr. Oram has discussed. It gets out of it if with explicit pricing of its own services, based on the cost of providing those services, there is unregulated private enterprise that can do it less expensively than the Fed. Then its role begins to fade away because that's the way the market operates.

Senator LUGAR. What sort of services would be involved? If the Fed decides, as you say, what kind of digits and ink and size and all, this is a service to everybody.

Mr. PHILLIPS. Yes; it is.

Senator LUGAR. Now what sort of specific services might be provided in which there could be charges?

Mr. PHILLIPS. The specific services for which we are discussing charges are really the clearing and collection process that is involved.

Presently the Federal Reserve courier system which obviously entails costs, money costs and real resource costs, is provided free to its members. Explicit pricing would have their courier service being charged to whomever is using it on the basis of at least the direct cost of the courier service.

Now the Fed would get out of the courier service if a private organization could supply the same service for a lower price. There's the additional advantage that if numerous private organizations had the opportunity to try to do that there would be the possibility of the development of better systems as well as conceivably lower costs.

Senator LUGAR. Are private people presently not wanting to get into this?

Mr. PHILLIPS. Private people are longing to get into it and they would especially like to get into it if they were assured that the Federal Reserve wasn't going to charge zero for the same thing that they have to charge a price for. I believe that the testimony of a gentleman on the next panel on Bankwire will illustrate that point.

Senator LUGAR. Why wouldn't the Federal Reserve get out of it altogether. I'm not certain I see why they are still in it.

Mr. PHILLIPS. Ordinarily, I regard an explanation based on Parkinson's law as being not very illuminating so far as basic reasons, but I think there may be some Parkinsonian here.

Senator LUGAR. The reason I pursue this is that I have some bias that they probably ought to get out of it if in fact there is no need for them to be in it. That would obviate all the need for the hassle of trying to go through what the rules of the game are and how you discriminate against private entities and so forth if we followed that route. If we don't follow that route, then we really do get into the so-called rationalization of pricing and unbundling and this type of thing.

Mr. PHILLIPS. But only out of it in the sense of being the regulator or provider of the services, but clearly not out of it as far as being a participant in it. It's obvious that the central bank itself has to have access to the payment system.

Senator LUGAR. Sure, and the setting of standards.

May I ask Mr. Oram this question. The suggestion is that correspondent bank relationships would be much less necessary if in fact there was direct access by all sorts of banking entities to automatic systems. Try to trace that law a bit more for me if you will. In other words, obviously, one of the reasons why correspondent banking relationships are maintained is that they are important because of clearing various instruments. This committee has been discussing in another context correspondent banking relationships in the last couple of weeks or so that have led to some questions. To what extent can we once again put the very difficult problem behind us through proper movement in that area we're talking about today?

Mr. ORAM. Let me first say I'm going to be followed in subsequent panels by a lot of distinguished bankers that know an awful lot more about correspondent banking than I do. At the same time let me respond here just using the single example of the savings and loan business in New England establishing themselves in the NOW account business. They developed paper instruments with magnetic coding on the bottom that had to be cleared and these had to be cleared through a clearing system and the people that had access to the clearing system were either clearinghouses (which were run by banks) that existed in local communities or when the document had to go to another community it might tend to go through the Federal Reserve. So the savings and loans who had to have a bank anyway—any savings and loan needs to have a banking relationship—but the fact that a NOW account had to be cleared through a clearing mechanism meant that the savings and loan had to go to somebody to do it and the savings and loan was not a member of the Federal Reserve so it was required to have some sort of relationship and that relationship requires some sort of deposit.

So, yes, there is an artificiality to it that if there were complete open pricing there would be more choice, but still today, of course, central banks that perform the correspondent service compete mightily in terms of service offering if not in terms of price. So I think that you could ask that question to subsequent people and probably get some more information.

Senator LUGAR. One final question. At the bottom of page 9 of your testimony [see p. 23], you talk about efficiency of payments mechanism and then your last sentence is

> However, it may be that competition growing from an explicit pricing policy would result in a more efficient system or indicate that, at least given present technology, a public monopoly is most beneficial.

Now what did you mean by that last?

Mr. ORAM. What I mean is that if the Fed would price their services at a rate which would recover the cost of the service and several private entities tried to compete with them say in providing nationwide courier service and could not profitably compete at the price with which the Fed could cover all of its costs, why then you would have proved that the Fed would be the proper entity to provide the courier service in this particular example.

Now I, myself, believe that private enterprise can beat Government in providing a service almost every time, but you should recognize that there are going to be circumstances where a large monopoly can drive the cost down. That's what I'm referring to. But you can't tell unless you put a price on it and try.

Senator LUGAR. All right. I was not arguing the point, but I appreciate your clarification. I would suspect that you're right, that the private people would do better. On the other hand, if we were going into costing here I suppose I would add the footnote that there are some taxes paid by private people and other problems involved in private enterprise that is not involved in public enterprise, so you have to have a fair test. It's been suggested the Federal Government ought to set up yardsticks and the yardsticks are often very strange mechanisms because they just don't have the hassles that are involved in private enterprise attached to it.

Mr. ORAM. Yes, sir.

Senator LUGAR. Thank you.

The CHAIRMAN. Senator Schmitt.

Senator SCHMITT. Thank you, Mr. Chairman.

I was intrigued by your responses to Senator Lugar's questions because I had written down on my pad "regulated public utility," and it seemed to me from the descriptions of this area which is new to me that I felt as if I was back in the Commerce Subcommittee on Communication, because fundamentally, as was so well said, we are dealing with a form of communication. We are trying to transmit money or the essence of money from one point in this country to another and by explicit pricing we would seemingly create a situation where a natural monopoly might be tested. Is there in fact a natural monopoly for the transmission of the essence of money throughout the country as has been argued there is for the transmission of information of other kinds? I find the analogy almost complete that we are dealing with another form of information. The basic question comes down to what is the most efficient way to transmit that information, namely money, at the least cost to the consumer?

Do you feel—and you can answer in sequence, Mr. Phillips first—do you feel that there is in fact a natural monopoly here or is it something where competition, unbridled competition, could hold sway? That's the big argument now in the area of telecommunications. Is there a natural monopoly? If so, how large is it? What does it cover? Does it just cover the switching services and the long line services or does it cover everything? It's a very important issue in the area of communications, and I can see where we suddenly overlap right smack dab into the transfer of money.

Mr. PHILLIPS. Yes. As you point out, Senator, there is an analogy between the natural monopoly characteristics of the switching in ordinary communications networks and this kind of a network. I think that it's important in assessing that natural monopoly, though, to distinguish between the economies that may prevail with respect to a particular mode of transfer and a particular locale and the question of how much power would a private monopoly have if there were scale economies. It may very well be that within a given city the duplication of the clearing to establish a second clearing house, whether automated or other, would increase costs. In that sense, yes, there is that kind of a natural monopoly. It may be that to duplicate throughout a system which the Fed operates for interregional clearing, the regional and check processing centers, would add to costs. Again, in that sense, it's a natural monopoly.

But, especially as technology is developing, it's important to temper those thoughts with increased numbers of alternatives which exist to anybody who operates a particular mode of those. If a local clearinghouse abuses its monopoly there are easy alternatives, especially in the computer type system, to go around it. You don't need to use those services.

With reference to your former committee, it raises the MCI type problem. What I'm trying to emphasize is in funds transfer there are all sorts of people around who are willing to take on the provision of particular aspects of the services even though the whole network, if it were operated by a single entity, might look like a natural monopoly there are alternatives in the various parts of it which take away a great deal of the natural monopoly characteristics in my judgment.

Senator SCHMITT. That seems to me, at least in my opinion, what's coming out of that extensive set of hearings we have had on the telecommunications system in this country and that is there may be a very strong analogy with the highway system in that the main trunklines and the switching mechanisms off those trunklines do tend to lend themselves to a natural monopoly, whereas once you get off and into the city, with money or into the city with communications, you suddenly have a multitude of opportunities where competition can provide the consumer with a lower cost and better service than they would have if you continued to maintain the natural monopoly.

However, in the development of telecommunications in this country we have come across this degree of cross-subsidization and I'm sure that the same thing probably exists within the transfer of money. Is that true? Has the Fed cross-subsidized on its own or can we see that without pricing mechanisms existing?

Mr. PHILLIPS. There is cross-subsidization currently, if you want to call the zero interest which member banks pay on their reserves as a zero price. The Fed is offering that below the market price basis—or above—depending on what interest is. They are collecting money from their members anyway but not giving members interest.

Senator SCHMITT. That would be equivalent to your home telephone?

Mr. PHILLIPS. Yes, and there is cross-subsidization involved in the present system.

Senator SCHMITT. Where do they pick up that cost?

Mr. PHILLIPS. Well, they pick it up because the balance sheet of the Federal Reserve is one where virtually all their assets earn interest and none of their liabilities pay any interest. If you want to get into an ideal business, get one of that kind. You can hardly lose so far as making money.

Senator SCHMITT. I think you have made a point and a very good one.

Mr. Oram, would you care to comment?

Mr. ORAM. Yes. I'm delighted that you have brought up and discovered this parallel with the communications because as a member of the EFT Commission we spent a lot of time wrestling with just those points and I believe that your perceptions are right on the beam.

I myself do not believe that there are many natural monopolies to be found in the EFT area. The bank board has had experimental regulations out for a number of years so that Federal savings and loans that apply can get into fund transfers so we could see where we were. Monopoly is not needed if competition is there, and I myself feel that the explicit pricing of services such as ACH services would lead to competition and would lead to better provision and probably wider provision of services. I think you're on the right track.

Senator SCHMITT. Would it be possible, if you gentlemen had any other thoughts on this, to transmit those to the committee for our record? I think it might be very useful. It would also be very useful for me in the other discussions on the development of telecommunications and, as a matter of fact, we are headed in that direction on hard copy mail. We are headed in that direction in the transmission of hard copy mail. Because of the development of technology and modern communications we now have an opportunity with respect to the mails to find another and potentially better way of delivering the mails directly to the homes.

[The following information was received for the record:]

FEDERAL HOME LOAN BANK BOARD,
*Washington, D.C. December 2, 1977.*

Mr. EDWARD C. DICKS,
*Senate Banking Committee,*
*Dirksen Senate Office Building,*
*Washington, D.C.*

DEAR MR. DICKS: Below are some additional comments to extend my remarks in response to Senator Schmidtt's question regarding whether the Federal Reserve System should have a monopoly over money transfers. Please accept my apologies for the lateness and any confusion we created regarding the submission of this additional information.

It is my strong belief that so-called "natural monopolies" rarely exist except where government has allowed or created them. This is a concept which has been discussed at some length in EFT in the United States, the final report of the National Commission on Electronic Fund Transfers to be presented to Congress in October.

Our studies into the technology and telecommunications aspects of "EFT" have led me to the firm conclusion that competition is the tool which best serves the public interest in the provision of telecommunications services of all kinds, whether it be delivery between points of voice, video, or computer data. Monopoly is unnatural in long-distance terrestrial and space communication, in switching and routing of messages, and even in the local distribution of information. Primarily, this is because modern computer technology has made our telephone system very easily adaptable in all types of modern communication between people over wide areas.

Similarly, monopoly in the transfer of "the essence of money throughout the country", as you put it, would also disserve the public interest and tend to stifle valuable innovation. Money is already a creation of government, and its uses and transportability already governed by careful regulation. Check-clearing and wire transfers between financial institutions are already provided by privately created entities as well as by the Federal Reserve System. None of the research I have seen has convinced me that there is a necessity to create by law a monopoly over such functions for the Federal Reserve System.

Sincerely,

BRENDA SANSONE,
(FOR ROBERT O. THOMPSON,
Special Assistant).

Senator SCHMITT. My second question has to do, Mr. Phillips, with your feeling that—which I share and I think the committee generally does—that the Fed's primary responsibility has to do with monetary policy. In the testimony of the Fed before this committee one of the difficulties that they occasionally emphasize is being able to determine the velocity of money. Now I'm not an economist at all, except in terms of mineral economics which doesn't really relate to this. Do you feel there's anything to be gained in a system such as we're describing—maybe not now, but at least as it grows—of keeping track of establishing a better measure of the velocity of money within our economy?

Mr. PHILLIPS. Senator, I think the problem is not one of being able to measure the velocity more accurately, but rather to be able to predict under what circumstances velocity is likely to make changes which make monetary policy ineffective. I would be glad to send you some additional materials on this, but I think that it's easily demonstrable that in a system in which individuals receive interest on their transactions balances, either through NOW account legislation or through the repeal of the Banking Act of 1933 with respect to interest on demand deposits, and in which the Federal Reserve pays interest on reserve balances, the velocity problem disappears.

In other words, the velocity problem exists today because of existing rules and regulations where people are trying to find every way possible to move the money out of monetary transactions accounts and into interest bearing accounts. Well, another way of saying that is the turnover of the velocity of those funds increases as people increasingly search for preferred interest bearing alternatives.

Senator SCHMITT. Thank you. I see I have run the red light. Thank you.

The CHAIRMAN. Thank you. Do you have any further questions? Because I was going to move on to the other witnesses.

Senator SCHMITT. I presume the record will be open and I will have the opportunity to send some additional questions.

The CHAIRMAN. Yes, by all means. I have some questions I would like to ask, too. I wish we had more time. I want to thank both you gentlemen for your excellent testimony and for your responses. It's been very helpful.

Our next witnesses are a panel consisting of John Lee, executive vice president, New York Clearing House Association, New York; Bernhard W. Romberg, president, Payments & Telecommunications Services Corp., New York; and Virgil Dissmeyer, president, National Automated Clearing House Association, Washington, D.C. We are delighted to have you.

Mr. Lee, why don't you begin. We are going to have the same rules—9 minutes with the green light. 1 minute with the yellow light, and then the stop light goes on.

## STATEMENT OF JOHN LEE, EXECUTIVE VICE PRESIDENT, NEW YORK CLEARING HOUSE ASSOCIATION, NEW YORK, N.Y.

Mr. LEE. Thank you, Mr. Chairman, and good morning, Senators Schmitt and Lugar.

I am delighted to be here this morning to share with you our views relating to the role of the Federal Reserve System in providing payment mechanism services. I have submitted a statement with attachments and I ask that it be included in the record.

The CHAIRMAN. Yes, without objection.

[Complete statement follows:]

### TESTIMONY OF JOHN F. LEE

My name is John F. Lee. I am the Executive Vice President of the New York Clearing House Association. We appreciate the opportunity afforded me to testify on behalf of the Clearing House with respect to the role of the Federal Reserve System in providing payments mechanism services.

In view of the substantial controversy over the role of the Federal Reserve System in the nation's electronic payments mechanism, we believe that these hearings are warranted. This is a critical time in the evolution of payments systems. Decisions made now could affect the shape and composition of electronic networks for the next decade. We will discuss the issues raised in the Chairman's announcement in light of the special need for decisions to be made now.

I. Should the Federal Reserve System provide payments mechanism services?

By statute and by long established custom, the Federal Reserve System (Fed) has provided paper check clearing services. This function extends back nearly to the origin of the system in 1913. We do not assert that the Fed should discontinue that activity. Rightly or wrongly from an economic standpoint, the Fed is in that business.

That does not mean, however, that the System should continue to offer its services free, nor does it mean that new payment systems should be operated by the central bank. Substantial differences exist between forms of payment. They carry over into the payments mechanisms.

We believe a distinction must be drawn between the payment services which the Fed has been providing for an extended period of time and those which might be required for new forms of payment. There is some indication that the Fed does not make that distinction. In testimony before the National Commission on Electronic Fund Transfers (NCEFT), Federal Reserve Vice Chairman Stephen S. Garner stated that electronic funds transfers were merely an extension of the Fed's traditional check clearing mechanism.[1] He, and others at the Fed have argued that the mechanical aspects of electronic bill paying (preauthorized debits) and electronic deposits (preauthorized credits) are merely replacements for functions traditionally performed by paper checks. We disagree. We are supported by the interim report of the NCEFT and by the Privacy Protection Study Commission which concluded that electronic payments differ markedly from paper checks.[2] For one thing, electronic financial entries are expandable to cover items of information not ordinarily included on paper checks. For another, complete machine readability permits more extensive storage on computer tape.

It is reasonable to assume that Governor Gardner's view reflected an entrenched belief at the Fed that all forms of payment should be embraced within the System's clearing mechanism. Such a view would lead, and the indications are that it is leading, to an attitude there that the government's responsibilities extend universally to all payment mechanisms without distinction as to mode of payment. If this attitude stems from a perception that all forms of payment are merely paper check alternatives, it ignores the fact that the central bank has not been operationally involved with credit cards, point-of-sale (POS) systems or other payment mechanisms.

For example, the Fed as the fiscal agent for the United States Treasury Department disbursed Treasury checks through which federal payrolls were met and federal assistance programs were funded. The swelling federal payroll and the rapid proliferation of assistance programs resulted over the last decade in a dramatic increase in the number of those checks. The pure mechanical aspect of such a clearing process became increasingly expensive. As a means of cutting costs, a government electronic direct deposit program was begun in 1975. It was assumed by the Treasury Department that the Fed had the legal obligation to provide electronic direct deposit facilities. Private alternatives were not explored. The Fed computer systems had to be expanded to perform the new task.

We find no merit in the conclusion that Electronic Funds Transfer (EFT) is but an extension of the check clearing mechanism. We do not believe that the Fed is required to provide free EFT services to the Treasury Department just because it has traditionally negotiated and cleared Treasury checks. The Congress could not possibly have foreseen the need to give the Fed such responsibilities. When the law was written, electronic payments were unheard of.

Government operation usually brings with it a certain amount of rigidity. As the report of the NCEFT observed, government entry tends to freeze current technology and stifle incentives for innovation in an evolving industry.[3] A danger exists that government interference will stifle EFT much as it has affected check services. The artificially low charges for check clearings over the years has encouraged banks to promote checking account services for their customers instead of producing new types of services, such as an Automated Clearing House (ACH) and POS systems. If costs were better allocated to users of services, the realistic cost of checking accounts would have generated consumer demand for such alternatives. But, because the member banks—and indirectly their customers—bear the cost of check clearing, financial institutions continue to urge their customers to rely on checks.

We believe it was a mistake for the Fed to have established an ACH network. As of now, it is the only electronic payment mechanism being operated other than the Fed funds wire.[4] Early in the 1970's, the Fed took action to create the ACH

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[1] Testimony of Vice Chairman Stephen S. Gardner before the National Commission on Electronic Fund Transfers, November 11, 1976.

[2] "Personal Privacy in an Information Society," the report of the Privacy Protection Study Commission, July 12, 1977, p. 116.

[3] "EFT and the Public Interest," A Report of the National Commission on Electronic Fund Transfers, February, 1977, p. 77.

[4] Both the Fed and the Federal Home Loan Bank Board were urged to establish other systems but to date neither agency has done so, and we do not believe any such development is warranted. "EFT and the Public Interest." A Report of the National Commission on Electronic Fund Transfers, February, 1977, p. 72.

network by subsidizing operations, first in California and later in all regions of the country except two—New York and Chicago. This action was taken prior to a time when there was public demand for such service and before private enterprise had been stimulated in the traditional way to enter the field. Had the Fed not intruded prematurely into private sector activities, ACH services would have developed at a normal pace. Judging by efforts in other areas, private systems would have developed when the public evidenced a demand and a need. The Treasury Department requirements would have become a part of that need.

We believe that continued government operation of ACH activity is unwise. The Privacy Commission flatly recommended that the Fed begin disinvestment immediately [5] and the NCEFT implied that no further Fed involvement in EFT was warranted.[6] As we stated in our comments to the Federal Reserve Board (a copy of which is attached) in connection with proposed amendments to Regulation J:

It is our belief that the Federal Reserve System should operate payment systems only when the private sector had demonstrated an inability or an unwillingness to do so, where a demonstrated need exists for such operation and when appropriate Congressional authority has been obtained. While the Federal Reserve is charged with regulating the nation's payment systems, it is not charged with operating them.

II. Should all financial depository institutions have access to Federal Reserve services? On what basis?

Access to Fed services has been widened through the years both by statute and by the System's own initiatives. However. it is the member banks—and their customers—who "pay" for the services in the form of the reserves they must post and the capital stock they must purchase. There are few charges, direct or indirect, on nonmember banks or other institutions for the services they receive. They are, in effect, subsidized by the member banks.

The Fed has perceived the incongruity of this situation, and on several occasions it has approached the Congress with proposals to require either mandatory Fed membership or mandatory posting of reserves. These requests have been refused, but the Fed has continued to extend its services. Rather than being accused of showing favoritism to member banks, it has offered them to all banks, thus discouraging nonmember banks and thrift institutions from clearing through member banks.

In 1975 when the Fed established the nation-wide system of automated clearing houses, it concluded that all financial depository institutions, not merely member banks, should directly participate. The alternative—requiring nonmember banks and other financial depository institutions to participate directly by clearing through member banks—was rejected. In this system, computer tapes holding preauthorized debit and credit information for customers are delivered daily to the Fed operated ACHs by the various participants. Acting under the control of special computer software, in part developed by Fed systems analysts, entries on the tapes are sorted electronically by Fed computer hardware and new tapes are created for record entry at each participating institution. If an institution is incapable of receiving and processing computer tapes, an ACH prints the data out on paper advices and delivers paper instead. The tapes or paper advices are then transported in Fed courier vehicles to the various recipients. All of such services are performed free of charge whether or not the institutions are members of the Federal Reserve System.

We believe that all those who benefit from Fed services should contribute toward defraying their cost. Up until now, the Fed has declined to charge for its services because of the possibility of aggravating its membership problem. To require its member banks to fund the System and then to turn around and charge them for services would in all probability drive more banks away.

Some means must be devised to permit the Fed to afford equal access to all financial depository institutions and at the same time avoid increasing the burden to member banks. In our view, the answer is to reduce reserves to the lowest practical level and to provide for the payment of interest on them. Proper pricing of Federal Reserve services and payment of interest on reserves at market rates would not result in a significant reduction in Treasury revenues if the tax effect on additional interest payments is considered, if recovery of

[5] "Personal Privacy in an Information Society," the report of the Privacy Protection Study Commission, July 12, 1977, p. 123.
[6] "EFT and the Public Interest," A Report of the National Commission on Electronic Fund Transfers, February, 1977, p. 77.

operating costs plus a profit via pricing of services is added to the Federal Reserve money flow, and if additional reserve balances achieved through an expanded membership base are appropriately valued. In addition, there would be a nonquantifiable benefit of overall improvement in monetary control with the anticipated expansion of Federal Reserve membership.

III. Would the economy benefit from explicit pricing of Federal Reserve services?

If the burden of membership could be significantly reduced by a substantial reduction in reserve requirements and provision for the payment of interest on reserves, the means by which the Federal Reserve System provides services could be placed on a rational footing. Explicit charges could be imposed for each service offered by the Fed and those charges could reflect all of the System's expenses, including the cost of capital funds employed plus an equivalent markup to reflect the profit and tax add-ons a private sector competitor would have to realize.

The purpose of pricing Fed services should be to achieve the following specific objectives:

(1) to enhance the competitive environment.

(2) to promote efficient use of economic resources.

(3) to minimize any competitive inequality between the Federal Reserve and private banks providing correspondent bank services.

(4) to encourage the private sector to assume a greater role in the market with adequate incentives for innovation and improved technology.

The economy would greatly benefit from achievement of these objectives. No private business can compete if the government is willing to give away its products or services. Competition assures cost effective operations and a continued reevaluation of services offered. Many correspondent banks would offer services at less expensive rates and with more flexible features than those provided by the Fed.

Once explicit pricing is established which will allow the private sector to provide payment mechanism services, the Fed should withdraw from the area. The NCEFT posed the question whether ACH facilities being provided by the Fed would collapse if the Fed withdrew its support and, if so, whether such collapse would harm the national interest. The New York Clearing House has considered this question in papers submitted to the Fed and NCEFT. We believe that the private sector is best qualified to provide such services.

In fact, private industry has already constructed a multiplicity of EFT systems such as BankWire, Interbank, VISA, CHIPS (attached is a description of this system which handles an average of 58 billion dollars daily), SWIFT and two privately operated ACHs. These examples are illustrative of the private sector's interest in embarking upon such ventures without government assistance.

IV. What impact does the Federal Reserve have, because of its role in the payments mechanism, (a) on the efficiency of the payments mechanism? (b) on private market place incentives to provide payment services? (c) on correspondent banking?

The Federal Reserve System has assumed the dominant role in the United States check payment mechanism. Except in New York, all check clearing functions in the country are performed under the Fed's auspices. The Fed's operations are cost free because they are financed by funds obtained primarily from the member banks and not from the general Treasury. Payment mechanisms can be, and indeed in New York City and Chicago are being, offered by privately operated facilities. Their survival, however, depends upon the cooperation of the Fed. They must refrain from competing unfairly.

A developing situation in New York illustrates this point. When the Fed assumed the obligation to provide the electronic deposit facilities for federal recurring payments, no effort was made to seek the help of private industry to do the work, nor was the job put out for bidding. The Fed insisted that Treasury recurring payments (which make up the bulk of the ACH traffic) either flows through a Fed run ACH or that the privately operated ACH agree to handle them without charge. The latter alternative effectively required the private ACHs to pay for a government program or to forgo handling federal items altogether.

The government has the inherent power to exclude all competitors. Because of that power, when the government offers payment services, the consumer's choice of payment services is in jeopardy. The government can afford to ignore the relationship between its costs and its revenues relating to a service because it can subsidize any cost overruns. The private sector cannot. Privately operated clearing mechanisms, such as a privately owned ACH, must pay their own way, and must compete with other payment mechanisms on a service-by-service basis. They cannot subsidize services, and they cannot arbitrarily raise prices in one area to cross-subsidize in another.

New York financial institutions have consistently supported private alternatives in EFT in so far as they satisfy the operational needs of all users of banking services. We recognize that the Fed must have the means to perform its basic central banking function (e.g., the net settlement among member bank reserve accounts, the management of the nation's money stock). However, we doubt that government at any level has a legitimate role to play in the operation of most payments systems. If it does step in, it should do so only as an operator as a last resort—the entity which operates a vital system when no segment of the private sector is able or willing to do so.

In conclusion, we urge the Congress to keep the operational role of government in payment mechanisms as small as possible. The benefits of competition are too great and the burden of government intervention too heavy to permit government operation where it is not asolutely necessary. Accordingly, if the government does engage in payment systems operations, those operations ought to be confined to services that do not impinge upon or affect the relationship between private financial institutions and their customers, and which thus do not affect competition among institutions. Any greater intrusion would seriously and unnecessarily jeopardize the development of payment services geared to the needs of the public.

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New York Clearing House,
*New York, N.Y., March 18, 1976.*

*Secretary, Board of Governors, Federal Reserve System, Washington, D.C.*

Dear Sir: We refer to the revised proposal issued by the Board of Governors of the Federal Reserve Bank and dated January 12, 1976, setting forth proposed amendments to Regulation J. We are grateful for the opportunity to comment on the changes which the Board is considering making in Regulation J. In addition to those comments set out below, several Members of the New York Clearing House Association are submitting separately comments of their own.

### POLICY STATEMENT

In view of the substantial controversy over the role of the Federal Reserve System in the nation's electronic payments mechanism as evidenced by the extensive comments furnished in early 1974 by over two hundred private and governmental institutions responding to the Federal Reserve Board's original November, 1973 proposed amendments to Regulation J, we believe that the revised proposal is not only premature but inappropriate in terms of the function assigned to Federal Reserve Banks under the proposal.

A number of important developments, particularly in the consumer retail payments area have occurred in the private sector since the 1973 proposal was issued which highlight the need for a clear definition of the role of the Federal Reserve System prior to the promulgation of regulations of the type contained in proposed Subparts B and C. Among the more significant developments which have occurred or assumed increasing importance within the last two years are the following:

*Automated clearing houses*

Seventeen automated clearing houses are now operational. Our Members established the New York Automated Clearing House ("NYACH") in 1975 which is operated on our own CHIPS computer system.

*National Automated Clearing House Association*

A national framework proposed by the National Automated Clearing House Association, of which NYACH is a member, has been formed and has established national standards for the interchange of payments between automated clearing houses.

*Clearing House Interbank Payments System ("CHIPS")*

The CHIPS system, which was installed by the Members of the New York Clearing House Association in 1970 to provide an automated method of handling interbank money transfers, has been significantly expanded. In 1975, the system handled over five million transactions worth $11 trillion, twice the volume in 1973, among 61 participating New York City financial institutions.

*National bank card organizations*

The two national bank card organizations, National BankAmericard, Inc. and Interbank Card Association, operate sophisticated clearing systems for member banks with respect to credit card drafts and have announced their intentions to provide similar arrangements for debit entries.

*Bank Wire*

The Bank Wire, formerly sponsored by fourteen Chicago and New York banks, has formed a nationwide communications network, called the Payments and Administrative Communications Corporation, on the board of directors of which, banks from each of the Federal Reserve Districts are represented. The present system will be upgraded in 1977 from a telegraphic network to a computerized network having the ability to handle large dollar amount money transfers, small dollar amount batched consumer type transfers and administrative messages.

*Society for Worldwide Interbank Financial Telecommunications ("SWIFT")*

SWIFT will install a network within the next year to provide European, Canadian and American banks with an electronic system for the transmission of a wide variety of payment related transactions.

*National Commission on Electronic Funds Transfers (the "EFT Commission")*

Congress created the EFT Commission to review the present state of electronic fund transfer systems and to formulate recommendations to the Congress as to their future. As the Commission has only recently come into being, its work is in the very preliminary stages.

*Congressional hearings*

Several Congressional committees have recently commenced hearings considering the question of the regulation and reform of financial institutions generally.

In light of these developments and the attendant controversy regarding the role of the Federal Reserve System in the electronic payments mechanism, we believe that the proposed revisions to Regulation J are premature and inappropriate and that they should be withdrawn pending the evolution of existing systems, consideration by the EFT Commission and Congress of the wide range of issues involved, and the determination of the role of government, if any, in the electronic payments mechanism.

Furthermore, we believe that the private sector is the proper arena for the development of competitive electronic funds transfer systems and is demonstratings its ability in this regard in developing effective alternatives. There is no evidence at this time that there is any need for federal regulation which would have the effect of inhibiting further growth in the private sector.

SEPARATE REGULATION OF WIRE TRANSFER AND ACH TRANSACTIONS

As the proposed regulation points out, proposed Subpart B seeks to codify, in regulation form, current practices in the forwarding of credits by wire over Federal Reserve communications facilities and to establish rules for the handling of smaller dollar amount credit items contained on magnetic tape (commonly known as "ACH transactions"). Having participated in the existing Federal Reserve Communications System (the "Fed Wire"), our Member banks do not object to the concept that such system be formalized in a regulation but, for the reasons discussed below, do not agree that a single set of rules should govern both the transfer of large dollar amount money transfer type items between banks via the Fed Wire and consumer oriented transactions which involve the transfer of batched smaller dollar amount items. In addition, we believe that rules governing Fed Wire transfers are the only regulations that are feasible at this time and that rules governing consumer oriented transactions should not be promulgated by the Board of Governors.

The primary reason for encouraging separate regulation is that proposed Subpart B should govern only the transfer of funds among financial institutions While such regulation may be appropriate for the Fed Wire, it is not appropriate for ACH transactions. Many of the financial institutions who are parties to ACH transactions, are members of automated clearing houses, the operating rules of which govern not only the rights and obligations of participating financial institutions but also the rights of their depositors. Indeed, these rules regulate the movement of funds from the customer of the financial institution originating the transfer to the ultimate recipient.

It is our view that by reason of the involvement of a wide spectrum of depositors in ACH transactions, the Federal Reserve should not attempt to regulate such transactions and, in effect, regulate the relationship between a bank and its customers. We therefore urge that only one set of rules be promulgated by the Federal Reserve codifying existing Fed Wire operations since appropriate rules governing ACH transactions have already been adopted by private automated clearing house associations. This approach would not prevent, as do the interim Federal Reserve access guidelines, the clearance of ACH transactions through private non-Federal Reserve facilities, nor would it impede the further development of payment services in a competitive environment.

As written, proposed Subpart B seeks to subject two vastly different types of transfers to the same governing rules which, in many instances, do not recognize the distinctive features of each system. For example, allowing telephonic requests for the issuance of credit items as provided in Section 210.54 is appropriate in the context of the Fed Wire, but is inappropriate in the context of batched ACH transactions. Similarly, while it may be appropriate for Federal Reserve Banks to establish minimum dollar amounts of items to be transferred over the Fed Wire, ACH transactions will involve small dollar amounts and we oppose the ability afforded Federal Reserve Banks in Section 210.57(d) to exclude classes of items that are below a specified minimum from transfer in ACH media.

### EXCLUSION OF THE PRIVATE AUTOMATED CLEARING HOUSE

We must emphatically protest the total exclusion from the framework proposed by the Federal Reserve Board of privately operated non-Federal Reserve clearing facilities. As written, the proposed rules contemplate and relate solely to transactions cleared through Federal Reserve facilities. The interim guidelines announced by the Board provide that the only institutions eligible to deposit magnetic tapes with Federal Reserve Banks are members of the Federal Reserve System and depository institutions that are members of automated clearing houses. Automated clearing houses themselves are not so eligible.

If adopted, these amendments to Regulation J would automatically establish the Federal Reserve Banks as the only facilities available for clearing ACH transactions notwithstanding the fact that since the initial publication of proposed amendments to Regulation J, at least two major money centers in the United States (New York and Chicago) have organized privately operated clearing house facilities for this purpose. In the case of the New York Automated Clearing House, operated rules and procedures (copies of which are enclosed herewith) have been formulated with a view to participating in a nationwide system within the framework established by the National Automated Clearing-House Association ("NACHA"), of which the New York Automated Clearing House is a member. NACHA, in turn has promulgated rules and procedures governing the operation of such a national system. The framework proposed by the Board of Governors, however, will effectively supersede this privately developed system.

We vigorously dissent from this approach and urge that the Board of Governors allow the continued development of local and regional automated clearing houses. It is our belief that the Federal Reserve System should operate payment systems only when the private sector has demonstrated an inability or unwillingness to do so, where a demonstrated need exists for such operation by the Federal Reserve System and when appropriate Congressional authority has been obtained. While the Federal Reserve is charged with regulating the nation's payment systems, it is not charged with operating them.

### UNIFORMITY; OPERATING CIRCULARS

We note that proposed Subpart B and Subpart C both contain provisions which authorize each Federal Reserve Bank to issue operating circulars governing the details of funds transfer and debit item operations. As we believe that uniformity of operating rules and procedures governing Federal Reserve facilities with respect to matters such as net settlement is essential, we urge that specific operating rules and procedures be included in the proposed regulation. In the absence of such rules and procedures our comments are necessarily tentative and incomplete, and we would expect to have further comments when they become available. Furthermore, since certain critical matters are not included in the regulations but rather are to be covered by operating circulars, we strongly urge that affected parties be afforded the same opportunity to comment on such operating circulars as is afforded in the case of a regulation.

PRICING

With respect to the expressed intention of the Federal Reserve Board regarding pricing, we fully support the Board's publishing a pricing schedule prior to the effective date of the proposed regulation, based on fully allocated costs of providing services to the banking community, taking into account as it will the burden of required reserves maintained by member banks. To the extent that the Federal Reserve Board's consideration of the burden of required reserves maintained by member banks results in giving a credit for reserves to member banks participating in Federal Reserve operated automated clearing houses which would not be available to member banks participating in private automated clearing houses, we oppose such a result because of its inhibiting effect on the ability of private automated clearing houses to compete with Federal Reserve operated facilities. Thus, while we urge the Federal Reserve Board to adopt a pricing schedule which accommodates the burden of maintaining required reserves, we strongly urge that the Board do so in a manner that does not put a member bank at a disadvantage by participating in a private automated clearing house.

PREAUTHORIZATION OF DEBITS

While, as we have noted, we believe that regulation by the Federal Reserve of consumer oriented transactions is premature, our principal objection to proposed Subpart C as written is that its terms appear to authorize the payment of "items" without having the customer's order to pay at hand. We believe that a system allowing debits to be made by payor banks without evidence of authorization from the party to be charged is most unwise and that the legal framework of such a system should not be promulgated prior to developing the system itself.

BATCH TRANSMISSION

Finally, there is no provision in proposed Subpart B or Subpart C, as written, for batch transmission as opposed to single item transmission. We feel that batch transmission must be part of any high volume electronic payments system if such system is to be operationally effective.

As noted above, while we reserve comment on specific rules and procedures until such time as they become available and notwithstanding our view to the effect that the regulation of consumer oriented transactions by the Federal Reserve is unnecessary at this time, we feel it incumbent upon us to express the following comment on certain principal points of concern with respect to proposed Subpart B and C:

SUBPART B

(1) *Definition—Instrument for the payment of money*

In subsection (c) of section 210.51, the definition of an "instrument for the payment of money" needs further clarification. As presently written, the definition requires that such an instrument be in writing, which requirement appears inconsistent with subsequent provisions of the proposed Subpart. We therefore suggest the insertion of the words "or recording" after the words "any writing" to conform the definition to the operating details of the regulation.

(2) *Authorization of credit items*

Section 210.55(a) provides that an originator is deemed to warrant to the recipient designated in a credit item that the originator "is authorized to issue and send or request such credit item". It is not clear whether that language refers to an authorization from the customer of the originator, the beneficiary, the recipient, or to an authorization under applicable law, or other governing instrument. We recommend that this provision specify that with respect to ACH items the originator's warranty to the recipient covers not only the existence of an authorization by the beneficiary designated in the item, but also the existence of an agreement on the part of the recipient to accept such a credit item.

(3) *Indemnification of Federal Reserve banks*

The phrase "within the scope of its authority" contained in section 210.55 (b) and (c) is too broad. Specifically, the authority of Federal Reserve Banks to handle and act upon credit items deposited with them is limited to the authority specifically granted to them by originators and is defined as such in the context of the originators' warranties set forth in section 210.55(a). We therefore suggest that the last line of subsection (b) be revised to reflect the scope of authority so granted to Federal Reserve Banks in section 210.55(a) and read as follows: "In handling and acting upon the credit item in accordance with the provisions of this Subpart and the operating circulars of such Federal Reserve Bank." We suggest the same change in the third line of section 210.55(c).

(4) *Minimum and maximum dollar amounts*

The ability of each Federal Reserve Bank to establish minimum and maximum dollar amounts of items to be transferred as provided in section 210.57(d) will place a substantial burden on originators in terms of knowing the ranges of acceptable dollars amounts of the various Federal Reserve Banks throughout the country and instituting some type of system to insure that specific items outside those ranges are not forwarded to the particular Federal Reserve Bank in question.

(5) *Liability of Federal Reserve banks*

While section 210.64 limits the liability of a Federal Reserve Bank to instances in which it has failed to act in good faith or to exercise ordinary care and section 210.63 limits the liability of a Federal Reserve Bank in the event it is delayed beyond applicable time limits in taking any action with respect to a credit item because of circumstances beyond its control, section 210.57(e) apparently relieves a Federal Reserve Bank from liability for delay in the particular situation covered therein, whether or not it acts in good faith or with ordinary care. We suggest first that in section 210.64, the sole standard of conduct should be one of "ordinary care" as opposed to "good faith" or "ordinary care," and second that such standard of "ordinary care" also apply in the situation addressed in section 210.57(e).

(6) *Handling transfer items*

With regard to the handling of transfer items by the Federal Reserve Banks, section 210.58(e) provides that when a Federal Reserve Bank, after having received a transfer item, subsequently obtains knowledge that it will be unable to effectuate a transfer on the day requested, it shall, "within a reasonable time thereafter," notify the originator of the delay. We submit that the use of the phrase "reasonable time" allows too much time for an action which should be taken as soon as practicable and therefore recommend that either the word "promptly" or the word "immediately" be used instead.

(7) *Representations of Federal Reserve banks*

The language of the last sentence of subsection (b) of section 210.59 should be revised to provide that the Federal Reserve Banks shall make no representation to the effect that transfers will be consummated on the day a request is "received" rather than "requested". As presently worded, this subsection could be read to mean that no representation is to be made to the effect that transfers will be consummated on the day the transfer is requested to be made. We fail to see why a Federal Reserve Bank should not be required to make such a representation if the day the transfer is requested to be made is some time after the day upon which the request is received. Thus, we suggest that the proviso be revised as indicated above.

(8) *Time schedules*

The phrase "unless otherwise agreed" in section 210.59(b) is unclear. The only apparent method of modifying the substance of this or any other provision is by way of operating circular, and we therefore suggest that the phrase be amended to read "unless otherwise provided in its operating circulars." The words "proper action" in the same section are also ambiguous. We suggest whatever is deemed to include such action on the part of a Federal Reserve Bank be specified.

(9) *Final payment*

We suggest that the words "or makes available" be added after the word "sends" in the third line of section 210.62 in view of the fact that a Federal Reserve Bank may make credit items available to recipients otherwise than by sending the item, see e.g., section 210.58(c).

(10) *Liability of Federal Reserve banks to originators*

Section 210.64(a) limits those to which a Federal Reserve Bank may be liable in connection with matters specified under Subpart B to "its immediate originator". We recommend that Federal Reserve Banks assume responsibility for damages suffered by anyone by reason of the failure of a Federal Reserve Bank to exercise ordinary care. In the situation in which a credit item is transmitted to an office of a Federal Reserve Bank with which the originator maintains an account, and transmitted by that Bank to an office of another Federal Reserve Bank, with which the recipient maintains its account, the quoted words would appear to preclude the originator from obtaining any recovery in the event of the failure on the part of the latter Federal Reserve Bank to exercise ordinary care because the originator is not the "immediate originator" with respect to the latter Federal Reserve Bank. As a practical matter, in the credit transfer context, the person most likely to be injured through negligent action on the part of a Federal Reserve Bank is a "beneficiary".

For example, a "beneficiary" may be an employee who has authorized his employer to credit the amount of his wages to his deposit account each payday through the transfer of ACH items. If he does not receive the amount of wages on a given payday as anticipated because of the failure of a Federal Reserve Bank operating under Subpart B to exercise reasonable care in handling the credit item evidencing the amount due, the employee may well suffer injury. Whether such an employee (and other employees of the company who may be similarly injured) would be able to recover from the employer on the basis of a contractual or statutory obligation on the part of the employer to pay wages on payday is not clear, and may depend upon the laws of a particular state.

If such a suit cannot be maintained by the employee, under proposed Subpart B the employee would have no remedy for his injury against the negligent Federal Reserve Bank involved, and would probably have no recourse against any other person. If such a suit can be maintained, the employer, who was not at fault, would have no right under Subpart B to pass on the loss to the negligent Federal Reserve Bank. Whether it would have a right to pass on the loss to the "originator" would probably depend upon the agreement between the "originator" and that employer. However, it is unlikely that such a right would be provided for in such an agreement, since it may be anticipated that the "originator" would not wish to assume responsibility for the negligent acts of third parties. In short, whether or not the employee could recover for damages caused by the negligence of the Federal Reserve Bank from its employer, under proposed Subpart B, it is unlikely that any recovery could be obtained from the party which caused the loss.

We submit that such a result is inequitable, and that a Federal Reserve Bank which undertakes to handle credit items should be responsible for its failure to exercise ordinary care to any person who is injured thereby. This is particularly true since, as indicated in the explanatory material accompanying the proposed subpart, the Federal Reserve intends to establish a pricing schedule for handling such items. Accordingly, we recommend that section 210.64(a) be revised to delete the clause limiting the liability of a Federal Reserve Bank to persons other than its "immediate originator."

*(11) Liability of Federal Reserve banks for damages*

Section 210.64(c) is apparently intended to limit the liability of a Federal Reserve Bank to an originator to damages proximately caused by that Bank's failure to exercise ordinary care or to act in good faith, provided the damages result from a failure to credit the amount of a credit item to the account maintained or used by the recipient. We fail to see why the liability of a Federal Reserve Bank to an originator (or a recipient) for the Bank's failure to exercise reasonable care to act in good faith should be limited to those damages resulting from the failure to credit the amount of the credit item. Rather, a Federal Reserve Bank should be liable for damages proximately caused by that Bank's failure to exercise ordinary care "in the handling or acting upon a credit item."

### SUBPART C

*(1) Definition—Instrument for the payment of money*

The suggestion made in paragraph (1) above with respect to credit items is also applicable to the definition "instrument for the payment of money" in this Subpart.

*(2) Authorization of debit items*

The suggestions made in paragraph (2) above with respect to credit items are also applicable to the warranty of an originator to a recipient regarding the originator's authority to issue and send debit items.

*(3) Indemnification of Federal Reserve banks*

The suggestions made in paragraph (3) above with respect to credit items are also applicable to the phrase "within the scope of its authority" contained in sections 210.73 (b) and (c).

*(4) Minimum and maximum dollar amounts.*

The suggestions made in paragraph (4) above with respect to credit items are equally applicable in the case of debit items.

*(5) Liability of Federal Reserve banks.*

The suggestions made in paragraph (5) above with respect to credit items are equally applicable as to the responsibility of a Federal Reserve Bank for delay in the situation described in section 210.75(e).

*(6) Time schedules*

The suggestions made in paragraph (8) above with respect to credit items are equally applicable with respect to the phrase "unless otherwise agreed" and the words "proper action" contained in section 210.78(b).

*(7) Final payment*

We suggest that the words "before it has finally paid the debit item" be deleted from section 210.80(a) as it is uncertain whether a "debit item" under proposed Subpart C will be regarded as an "item" within the meaning of the Uniform Commercial Code and subject to Code rules relating to final payment. Under the Code or by analogy to it, the language in question might be taken to mean that a debit item is finally paid when the process of posting to an account has been completed, an uncertain standard even with respect to paper "items." We believe it preferable to utilize a more certain test for the time for returns, namely, "midnight of the business day following the business day of receipt of the item."

*(8) "Actually and finally collected funds"*

Both subsection (a) of section 210.78 and section 210.81 refer to "actually and finally collected funds." Although section 210.11(b) of present Regulation J specifies when a Federal Reserve Bank shall be deemed to have received payment for a non-cash item in "actually and finally collected funds," it is not entirely clear that that definition is appropriate for purposes of proposed Subpart C. In this regard, we suggest that either a separate definition of the above phrase be included in Subpart C itself or a statement be inserted in Subpart C to the effect that the definition in subsection (b) of section 210.11 applies as well to Subpart C.

*(9) Liability of Federal Reserve banks to originators*

The suggestions made in paragraph (10) above with respect to credit items also apply as to the liability of a Federal Reserve Bank to a recipient with respect to debit items.

*(10) Liability of Federal Reserve banks for damages*

The suggestions set forth in paragraph (11) above with respect to credit items also apply to the liability of a Federal Reserve Bank with respect to debit items.

Very truly yours,

DONALD C. PLATTEN, *Chairman.*

# CHIPS

## the Computerized Communications Network Used by the New York Clearing House Association for Interbank Payments

The Automated Clearing House in New York City

REVISED JUNE 1976

. The New York Clearing House Association's computerized communications network, called CHIPS, is currently handling interbank money transfers of $40 billion to $50 billion a day at the request of United States and foreign banks. The transfers involve approximately 125,000 separate transactions a week, an average of 25,000 each business day.

CHIPS is an acronym for Clearing House Interbank Payments System, which currently includes 250 terminal computers located in varying numbers in the 68 participant banks. Leased telephone lines link terminal computers to a Burroughs large-scale, dual processor B 6700 computer system located in the Clearing House computer center.

Most CHIPS participants are using Burroughs TC 500, TC 600 or TC 3500 terminal computers which have their own memory, logic and programs. They send and receive payment messages and other messages which are created in conjunction with the central computer and its programs. The central computer updates pertinent records in its disk and memory files as transactions and messages occur, and produces balance position reports and item-by-item detail reports at the end of the day.

Some of the participants have added peripherals such as card readers, card punches, paper tape readers and line printers.

Several banks capture Teletype messages from overseas on perforated tape, run the tape through a converter, and enter data into the central computer through a terminal. Others capture data from the Clearing House central computer on punched cards and use them as input to their own computers for updating accounts. Some banks capture outgoing payment transactions on magnetic tape cassettes and transmit data in batches to the central computer, and also record their incoming payments on tape cassettes for printing on the terminal console.

John F. Lee, Executive Vice President of the New York Clearing House Association, believes CHIPS was the first true employment of "electronic money" within the commercial banking system. CHIPS substantially eliminates checks for interbank payment transfers. It has been on-line with live transactions since April 6, 1970.

## BACKGROUND

Although terms such as the "checkless" society and the "less checks" society were the subjects of extensive conversation and work, little progress had been made toward actual implementation by the time that the New York clearing banks needed an automated method of passing interbank payments. This was partially because such systems are complicated, they require agreement among participants, and they can be accommodated only by sophisticated computer equipment and software programs.

During 1966, a special committee was appointed by the NYCHA to plan the automation of interbank payments within the immediate restricted geographic area of New York City. The committee was formed because of the pending need for such a system at the time and because it was decided that the clearing banks could not wait for the development of the "ultimate" nationwide electronic funds transfer system.

The NYCHA decided on a long-range, multi-phase program to accomplish the objective of automating interbank transfers, eliminating checks and producing day-end balances automatically.

The plan called for procedure standardization in order to provide strict controls. It also required flexibility to handle a low volume, high dollar system and differing types of transactions.

In its initial phase, CHIPS handled interbank transfers of funds for international customers of banks which were members of the New York Clearing House Association. Forty-two TC 500 terminal computers in member banks were linked to a B 3500 computer in the Clearing House. As CHIPS transactions increased, a second B 3500 computer was added. Utilizing a "store and forward" technique, the computer stored messages during the most convenient times and released them to other banks as payments were authorized. CHIPS also handled some intrabank book transfers for member banks.

Increasingly, the system was used for intrabank book transfers, which currently amount to some 8,000 transactions a day, in addition to approximately 25,000 interbank transfers a day.

During phase two, six additional banks were being served on-line, and a semi-automated payments system called Payment Exchange Paper System (PEPS) was incorporated.

CHIPS banks handled all outgoing transactions in an identical manner, whether or not the recipient bank was an on-line CHIPS bank or one of the forty-four PEPS banks. Items released to a PEPS bank were automatically captured on magnetic tape at the Clearing House. Periodically, the B 3500 printed these payments on standard PEPS payment forms for distribution to each PEPS bank's representative.

Now, there is no longer a need for the PEPS system because all institutions are connected directly on-line to the B 6700 computer.

The NYCHA has mastered the technological aspects of "electronic money" transfer and has established a foundation for the greater capacity that a larger computer system can provide. The possibility of interconnected networks for payment exchanges covering large geographic areas now exists. The larger computer will afford the ability to work with either terminal-based systems or to forward data captured on magnetic tape.

## COMPARISON OF INTERBANK PAYMENT METHODS

A comparison of the manual method of accomplishing interbank payments and the computerized CHIPS system illustrates the advancements that can be made in the payments mechanism through the use of telecommunications.

## FORMER MANUAL METHOD

A bank in Europe wanted to transfer $1,230,000 from its account in New York Bank "A," with which it had correspondent relations, to an Australian bank's account in New York Bank "B."

The European bank cabled New York Bank "A" to pay New York Bank "B" $1,230,000 for the account of the Australian bank. The cable, after being tested for authenticity and translated if necessary, was given to a typist who prepared the official check and the necessary documentation to accompany it. The check was held until the appropriate account officer approved the transfer.

Following approval, a messenger walked with the check to the Clearing House. There, at one of the five payment exchanges during the day, the check and documentation were passed to the messenger from New York Bank "B," who returned to his bank.

Upon receipt at Bank "B," the check was entered on the account ledger and a typist made up the necessary records to account for a payment received. The check was then included in the normal check clearings and passed through the Clearing House in time for settlement at 10 a.m. the next business day.

## PARTICIPATING BANKS

New York Clearing House Banks participating in CHIPS are The Bank of New York, The Chase Manhattan Bank, N.A., Citibank, N.A., Chemical Bank, Morgan Guaranty Trust Company of New York, Manufacturers Hanover Trust Company, Irving Trust Company, Bankers Trust Company, Marine Midland Bank, and National Bank of North America. Associate members are Northern Trust International Banking Corporation; American Express International Banking Corporation; Agency, Bank of Montreal; Agency, The Bank of Nova Scotia; Canadian Imperial Bank of Commerce; Standard Chartered Bank Limited; Barclays Bank International Limited; Hongkong & Shanghai Banking Corporation; Lloyds Bank International Limited; Royal Bank of Canada, New York Agency; National Westminster Bank Limited; Bank Leumi Trust Company of New York; Fidelity International Bank; Westdeutsche Landesbank Girozentrale; French American Banking Corporation; Agency, Toronto-Dominion Bank; Bank of New South Wales, New York Agency; Banco do Brasil, S.A.; Allied Bank International; Banco Real, S.A.; The Tokai Bank Limited, New York Agency; Brown Brothers Harriman & Co.; Republic National Bank of New York; Mellon Bank International; Bank of California International; Philadelphia International Bank; Wells Fargo Bank International; Crocker International Bank; M&T Bank; Nordic American Banking Corporation; Security Pacific International Bank; Girard International Bank; Harris Bank International Corporation; Bank of Boston International; Swiss Bank Corporation; Commerzbank, A.G.; Credit Lyonnais; Dresdner Bank, A.G.; Union Bank of Switzerland; Wachovia International Banking Corporation; Banco de la Nacion, Argentina; Banco do Estado de Sao Paulo, S.A., New York Agency; Banco di Roma, New York Branch; Credit Industriel et Commercial; Union Bank of Bavaria, New York Branch; Banco Urquijo, S.A., New York Agency; European-American Banking Corporation; Swiss Credit Bank; J. Henry Schroder Banking Corporation; Algemene Bank Nederland, N.V.; Bank of America; Bank of Tokyo Limited, New York Agency; European-American Bank & Trust Company; United California Bank International; Israel Discount Bank, Limited; First Chicago International Banking Corporation; Continental Bank International, and Australia & New Zealand Banking Group Limited.

While the growing proliferation of messengers caused some concern, this problem was relatively small in comparison to more critical factors. Because large sums of money were involved in interbank payments, a bank officer was constantly faced with determining the position of his accounts at the end of the day, and the need to anticipate the effect of money outflow against money transfers his bank received.

Because the books of account closed at a fixed hour each afternoon, there was particular need for good information at that time. Bank officers typically waited as late as possible before dispatching a check to the final payment clearing of the day to insure that funds would be received to cover the payment. This practice slowed the whole payments process and crowded an inordinate number of payments into the final clearing.

## CHIPS TERMINAL METHOD

With use of the computerized communications system, the typical interbank payment described earlier now occurs this way:

The tested and translated cable from the European bank is given to a terminal computer operator. Any operator can handle the cable because the Burroughs terminals have dual pin feed devices to accommodate both "sending" and "receiving" forms and have both sending and receiving buffer memories. Continuous sending forms are on the left side of the forms handler, and continuous receiving forms are on the right side.

The operator activates the sending portion of the terminal with a program key, and keys in a small amount of information. This includes codes for Bank "B" (the receiving bank), identity codes for the European bank ordering the transfer and the Australian bank receiving the transfer, and the amount of the transaction.

This information, up to a maximum of three lines of reference information and a one-character "advise" code, is transmitted to the B 6700 central computer. The B 6700 looks up names, addresses and other information in its file—including standing instructions—and creates a string of control and code numbers. Information supplied by the B 6700 is transmitted back to the terminal and is typed automatically on the sending form. At the same time, the central computer makes appropriate entries in its own files and retains the message until ordered to release it.

The typed form is proofread and is held for approval by the account officer. When approved, the form is reinserted into the forms handler. The operator depresses the "release" key and enters the message's system sequence number and message store time. This information is transmitted to the central computer. The computer, after transmitting the "release verification" message to the terminal, updates pertinent files for all accounts and sends released information to the terminal in Bank "B" (the CHIPS receiving bank).

The operator has the ability to delete any message which has not been released. This is done by depressing the "delete" key after re-insertion of the form, and entering the message system sequence number, store time and date.

At the receiving bank, no manual handling at all is required. The terminal automatically types out the information on the receiving form. The operator does not need to be present.

The "store and forward" capability has distinct advantages for the bank officer. It allows the mechanical aspects of the transaction to be completed, checked out and cleared away while judgmental aspects are reserved for a later hour.

The "store and forward" capability also provides the officer with more time in which to make decisions and to have more complete information when they are made.

A major improvement of the CHIPS system is that countless hours of difficult typing involving unfamiliar foreign account names have been eliminated.

Participating banks have agreed upon a common name and address file for approximately 10,000 accounts, principally international. Each account name has been standardized, placed in the central computer's disk file, and assigned a universal six-digit identity code known to all the CHIPS banks. These codes trigger automatic printing of the account names, account numbers and addresses, along with notification if there are instructions relevant to these accounts. If desired, the bank may use its internal account number instead of the account's universal identity code.

The majority of the names are in a foreign language (anglicized) and can be as much as 76 characters long. The automatic features of CHIPS eliminate manual typing entirely on the receiving terminal and, in large part, on the sending terminal.

A feature of the current system permits a participant to store "future" payments. In addition to the current day's work, a participant may store payments for completion on any of the subsequent four business days. As a safeguard, "futures" cannot be released until they become current. They may be deleted at any time.

Another feature of the system which proves of great value to account officers is the organization of the central computer's files. Because the files are instantly updated as transmissions occur, an account officer can make an inquiry into the status of an internal account. This inquiry provides him with the total picture of incoming and outgoing funds relevant to the account within the CHIPS system. Similarly, he can also inquire at any time to determine the status of his bank as an entity.

If a form should be damaged or misplaced, a retrieval feature permits the operator to obtain an exact copy of a previously stored or received message. The operator depresses either the "store retrieval" or the "receive retrieval" key and enters the message's system sequence number. The retrieved copy is printed on the terminal's forms handler.

At the end of the day, the central computer correlates all of the transactions, nets out the debits and credits and transmits summary reports to each participating bank. These reports show the bank's total debit and credit position with each other participant on the system and its own net balance. The Clearing House provides a copy of the balance information to the New York Federal Reserve Bank the next business day where adjustments are made on the appropriate books of account. Balances of CHIPS Associate Members are adjusted through the balance of each of their designated Clearing House members.

## CENTRAL COMPUTER

The B 6700 data processing system, the central computer in the interbank payments system, is a highly versatile large scale computer controlled by a Master Control Program.

Currently, the dual processor B 6700 computer has 2.3 million bytes of core memory and utilizes 320 million bytes of information storage in its random access disk file subsystems. Information in the disk file subsystems can be accessed in an average of 23 milliseconds. Two data communication processors, independent of the central processors, handle all of the telecommunication disciplines under the control of sophisticated Message Control Systems (MCS) and Network Definition Language (NDL). Two high-speed line printers, six magnetic tape units and other peripherals are used.

## TERMINAL COMPUTERS

The terminal computers are true computers which have their own logic and memory, and can be programmed to perform a variety of tasks. These computers use micrologic, an advanced software concept that performs the basic logic and arithmetic functions that are usually performed by hardware on other data processing equipment.

The terminals in the banks are linked to the B 6700 central computer by leased telephone lines. There are a total of 90 lines, ranging from one to five for each of the 68 banks.

In addition to the leased lines, each bank has a dial-up line which is used as a standby in case the leased line should not be available.

The banks have from two to twenty terminals connected to different leased lines. In a bank using seven terminal computers, for instance, four are connected to one line and three to another.

This arrangement, with availability of the dial-up line and the dual processor central computer system, provides continuous availability of processing and communication capability.

The central computer itself is organized to provide continuous availability of information through twin payment files, twin account files, twin audit trail magnetic tape units, twin audit trails on disk storage, and other features.

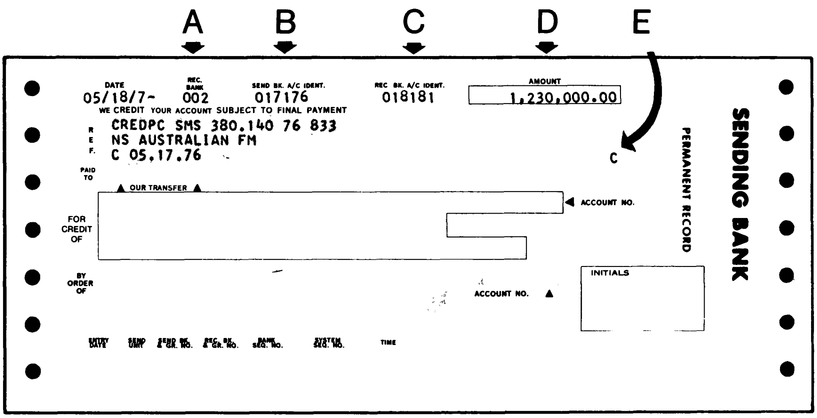
The B 6700 continuously polls the 250 terminals for messages. Since the terminals have both sending and receiving buffers, operators work at keyboards without regard to what is happening inside the terminal computers.

A magnetic tape containing all that bank's incoming and outgoing transactions is made available at the close of each business day to any bank desiring it. This tape is then used by the bank to update its demand deposit accounts, eliminating the need for manual posting or the creation of another form of machine readable input for that purpose.

* * * * * * * * * * * * * * * * *

The foregoing is a general description of CHIPS. For greater detail the following pages contain exhibits of sending and receiving forms, associated message forms, and end-of-day reports, along with commentary on the steps performed by the terminal operator and the work performed automatically by the terminal and the B 6700 central computer.

End-of-day reports are furnished on microfiche to each participant detailing individual incoming and outgoing payments. In addition, a complete historic record of the system's activity is retained on microfiche at the Clearing House.



A B C D E

DATE 05/18/7- REC. BANK 002 SEND BK. A/C IDENT. 017176 REC BK. A/C IDENT. 018181 AMOUNT 1,230,000.00

WE CREDIT YOUR ACCOUNT SUBJECT TO FINAL PAYMENT

REF. CREDPC SMS 380.140 76 833
NS AUSTRALIAN FM
C 05.17.76

C

PAID TO

OUR TRANSFER

ACCOUNT NO.

FOR CREDIT OF

BY ORDER OF

ACCOUNT NO.

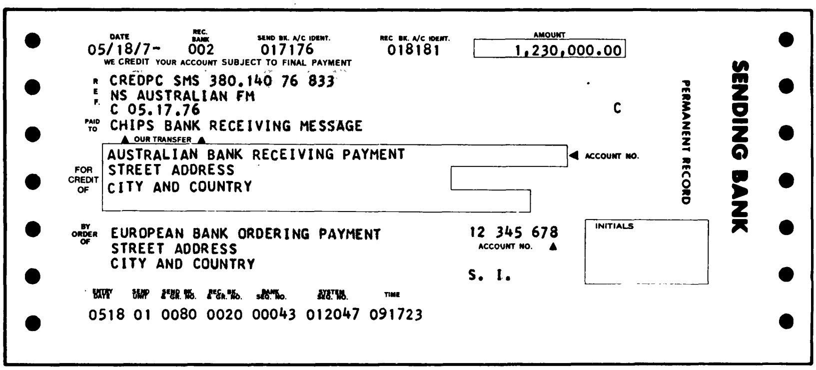
INITIALS

ENTRY DATE SEMP SEND BK. SEQ. NO. REC. BK. SEQ. NO. BANK SEQ. NO. SYSTEM SEQ. NO. TIME

PERMANENT RECORD

SENDING BANK

In the exhibit above, initial information typed by the TC 500 operator is shown. When the operator depresses the "store" key, the terminal automatically types the date, supplied by the central computer (in the case of a future payment, the operator types the date). The operator then types (A) the three-digit number for the receiving bank, (B) the six-digit universal identity number for the European bank, (C) the six-digit universal identity number for the Australian bank, and (D) the amount of the transaction. After reference information and (E) a valid type of advise code is entered, the operator touches a program key and the information is transmitted to the central computer.



DATE 05/18/7- REC. BANK 002 SEND BK. A/C IDENT. 017176 REC BK. A/C IDENT. 018181 AMOUNT 1,230,000.00

WE CREDIT YOUR ACCOUNT SUBJECT TO FINAL PAYMENT

REF. CREDPC SMS 380.140 76 833
NS AUSTRALIAN FM
C 05.17.76

C

PAID TO CHIPS BANK RECEIVING MESSAGE

OUR TRANSFER

FOR CREDIT OF AUSTRALIAN BANK RECEIVING PAYMENT
STREET ADDRESS
CITY AND COUNTRY

ACCOUNT NO.

BY ORDER OF EUROPEAN BANK ORDERING PAYMENT
STREET ADDRESS
CITY AND COUNTRY

12 345 678
ACCOUNT NO.

S. I.

INITIALS

ENTRY DATE SEMP SEND BK. SEQ. NO. REC. BK. SEQ. NO. BANK SEQ. NO. SYSTEM SEQ. NO. TIME
0518 01 0080 0020 00043 012047 091723

PERMANENT RECORD

SENDING BANK

The central processor then does a file "look up" and sends information to the terminal, which automatically prints the additional information shown on the form above. This information includes:

1. The name of the CHIPS bank receiving the message (from the number 002 on the top line).
2. The name and address of the Australian bank receiving payment (from the universal identity number on the top line).

   [If this is a book transfer (intrabank transfer from one account to another) the account number and any standing instructions for this bank will also be printed. See exhibit on Page 7.]
3. The account number, name, address and standing instructions, if any, of the European bank ordering payment (from identity number on top line).

4. An acknowledgement line containing:

   The entry date (0518).

   The number of the terminal sending the message (01)

   The number of the sending bank (0080). The first three digits identify the bank. The last digit provides for internal group identification within the bank.

   The number of the receiving bank (0020). The first three digits identify the bank. The last digit provides for internal group identification within the bank.

   The bank sequence number of the sending message (00043) assigned by the central computer sequentially within the bank.

   The system sequence number of the sending message (012047) assigned by the central computer sequentially within the system.

   The time of the transmission, in hours, minutes and seconds.

   (The word "transferred" if this is a book transfer. See exhibit.)

DATE 05/18/7- REC. BANK 008 SEND BK. A/C IDENT. 017176 REC. BK. A/C IDENT. 018181 AMOUNT 780,000.00
WE CREDIT YOUR ACCOUNT SUBJECT TO FINAL PAYMENT
REF. C 05.17.76 GAK 20161 AUSTRALIAN
BANK, NEW YORK
REF X 801 209 XYZ 48790 X
PAID TO CHIPS BANK INITIATING TRANSFER
▲ OUR TRANSFER ▲
FOR CREDIT OF AUSTRALIAN BANK RECEIVING PAYMENT 12 552 369 ◀ ACCOUNT NO.
STREET ADDRESS
CITY AND COUNTRY
C 30
BY ORDER OF EUROPEAN BANK ORDERING PAYMENT 12 345 678
STREET ADDRESS ACCOUNT NO. ▲
CITY AND COUNTRY
S. I. INITIALS
TIME
0518 03 0080 0080 01105 038234 152248 TRANSFERRED
PERMANENT RECORD
NEW YORK BANK

A book transfer (intrabank transfer) is illustrated by the form above.

DATE 05/18/7- REC. BANK 002 SEND BK. A/C IDENT. 017176 REC. BK. A/C IDENT. 018181 AMOUNT 1,230,000.00
WE CREDIT YOUR ACCOUNT SUBJECT TO FINAL PAYMENT
REF. CREDPC SMS 380.140 76 833
NS AUSTRALIAN FM
C 05.17.76 C
PAID TO CHIPS BANK RECEIVING MESSAGE
▲ OUR TRANSFER ▲
FOR CREDIT OF AUSTRALIAN BANK RECEIVING PAYMENT ◀ ACCOUNT NO.
STREET ADDRESS
CITY AND COUNTRY
BY ORDER OF EUROPEAN BANK ORDERING PAYMENT 12 345 678
STREET ADDRESS ACCOUNT NO. ▲
CITY AND COUNTRY
S. I. INITIALS
TIME
0518 01 0080 0020 00043 012047 091723
012047 091723 01 114237 RELEASED
PERMANENT RECORD
SENDING BANK

At this point, the form is removed from the terminal, is proofread and is made available for approval. When the form has been approved for release, the operator re-inserts the form in the terminal, touches the "release" program key and types in the system sequence number and the time, just as the latter two are shown on the acknowledgement line.

The central computer then causes the balance of the acknowledgement line to be printed, including the number of the terminal releasing the message, the time of release, and the word "RELEASED." The completed form, which is retained by the "sending" bank, appears as above. (Since there is only one CHIPS bank included in a book transfer, it is not necessary to perform the above. However, the message can be deleted if the bank so desires.)

RECEIVING BANK
PERMANENT RECORD

PAYING BANK: CHIPS BANK SENDING MESSAGE
PAY BANK & GROUP NO.: 008-0
RECEIVE SEQ. NO.: 00938
DATE: 05/18/7-

BY ORDER OF:
EUROPEAN BANK ORDERING PAYMENT
STREET ADDRESS
CITY AND COUNTRY

DOLLAR AMOUNT: 1,230,000.00

REFERENCE:
CREDPC SMS 380,140 76 833
NS AUSTRALIAN FM
C 05.17.76

TO:
0510 44 736 ◄ACCOUNT NUMBER CABLE ADV
AUSTRALIAN BANK RECEIVING PAYMENT
STREET ADDRESS
CITY AND COUNTRY

C 30

| REC TERM NO | SEND BANK & GROUP NO | REC BANK & GROUP NO | INPUT (STORE) SEQ NO | SYSTEM SEQ NO | TIME |
|---|---|---|---|---|---|
| 04 | 0080 | 0020 | 00043 | 012047 | 114249 |

CHECKED | APPROVED

At the receiving bank, the released message is automatically typed out on the "receiving" portion of the terminal. The central computer will choose any terminal that is available, and there is no need for an operator to be at the terminal computer. The released message at the receiving bank appears above.

---

Many kinds of reports and messages are received or sent by the terminals. Following are a few examples:

An "opening" report appears this way:

```
TIME 09:00 CHIPS SYSTEM - 05/18/7-
RESTART NOTICE FOR TERM 0030-01,
LINE 01 LAST VALID STORE SEQ NO
WAS NONE 05/18/7- LAST VALID
RECEIVE SEQ NO WAS NONE MASTER
```

If an operator attempts to release a payment message after the cutoff time, this message would appear:

```
INVALID RELEASE REQUEST - BANK 0670
TERM 01 AT 163042 PAST CUT-OFF
TIME
```

If an operator attempts to retrieve a stored message and keys incorrect information, this message would appear:

```
INVALID STORE RETRIEVAL SSN 000654
HAS INVALID BANK NUMBER OR SYSTEM
SEQ NUMBER
```

An account officer might inquire into a single account to determine stored status and receive this answer:

```
STATUS OF UNIV ID 21584
 AS OF  14:22:51  05/18/7-

 CHIPS FUNDS REPORT:
 INCOMING FUNDS
  STORED          $54,344,840.66
  TRNFRD           $2,021,000.00
  RECEIVED        $32,797,496.25
   NOT RECEIVED   $21,547,344.41

OUTGOING FUNDS
 STORED           $79,113,151.86
 TRNFRD            $3,829,870.00
 RELEASED             $58,724.83
  NOT RELEASED    $79,054,427.03

NET POSITION      $30,929,901.42  CR
```

If an account officer wants to determine the total amount of money stored for release to his bank, he can inquire and receive a report such as the following:

```
STATUS OF BANK NO. 000
 AS OF  11:39:25  05/18/7-

 CHIPS FUND REPORT:
 INCOMING FUNDS
  STORED        $1,374,768,975.91
  DELETED          $25,379,776.52
  RECEIVED        $520,374,062.08
   NOT RECEIVED   $829,015,137.31

 OUTGOING FUNDS
  STORED        $1,538,541,280.13
  DELETED          $88,388,236.03
  RELEASED        $685,842,843.17
   NOT RELEASED   $764,310,200.93

 BOOK TRNFRS       $88,240,982.69

 NET POSITION     $165,468,781.09  DB
```

BANK A — STORE MESSAGE REPORT BY RECEIVING BANK NUMBER — 05/18/7- — PAGE 007

| RECV BANK NBR | STORE UNIT NBR | SEQ NBR | SENDING BANK ACCOUNT NBR | SEND BANK ID | STORE TIME | REL/DEL TIME | REL/DEL UNIT | RECV BANK ID | RECEIVE TIME | RECV UNIT NBR | AMOUNT | DISPOSITION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 01 | 89 | | 013951 | 21:25:12 | 11:40:57 | 10 | 013951 | 11:40:59 | 12 | $35,000.00 | RELEASED |
| | 01 | 112 | | 016517 | 21:29:04 | 08:38:56 | 09 | 002155 | 08:38:58 | 04 | $908,762.22 | RELEASED |
| | 01 | 192 | | 055120 | 21:42:02 | 11:41:25 | 10 | 083391 | 11:41:27 | 09 | $408,969.50 | RELEASED |
| | 01 | 305 | | 003702 | 21:59:53 | 14:47:48 | 10 | 003702 | 14:59:14 | 04 | $600,000.00 | RELEASED |
| DELETED | 02 | 262 | DELETED | 007548 | 21:52:58 | 14:48:40 | 03 | 002337 | 15:00:15 | 11 | $500,000.00 | RELEASED |
| | 02 | 508 | | 003848 | 22:34:42 | 15:20:12 | 09 | 002337 | 15:50:16 | 01 | $20,003,451.67 | RELEASED |
| | 02 | 524 | | 014300 | 22:37:02 | 10:49:11 | 10 | | 10:49:12 | 11 | $97,621.05 | RELEASED |
| | 02 | 916 | | 003702 | 10:03:14 | 11:27:56 | 10 | 069615 | 11:27:59 | 11 | $7,000,000.00 | RELEASED |
| | 02 | 1062 | | 051339 | 10:32:37 | 13:49:16 | 10 | 024926 | 13:52:20 | 09 | $4,000,008.00 | RELEASED |
| | 02 | 1116 | | 009891 | 10:42:25 | 13:51:50 | 10 | 017031 | 13:55:00 | 04 | $125,000.00 | RELEASED |
| | 02 | 1131 | | 009891 | 10:44:18 | 13:52:17 | 10 | 016228 | 13:55:28 | 01 | $400,000.00 | RELEASED |
| | 02 | 1483 | | 016822 | 11:41:38 | 14:51:18 | 09 | 000766 | 15:03:39 | 04 | $2,000,000.00 | RELEASED |

At the end of the day, the central computer generates several reports which are furnished to each bank on microfiche.

One of the reports, the "store message report," shows all messages stored for other banks. There is a separate report for each bank, consisting of several pages of computer print-out. The messages for each bank are sorted and listed in a group.

(In the exhibit "store message report," the "receiving bank" number and the "sending bank account number" have been deleted for purposes of security.)

The information provided in this report consists of the following:

Column 1: The number of the receiving bank.
Column 2: The number of the terminal which initiated the storing request.
Column 3: The message sequence number.
Column 4: The account number of the foreign bank ordering the payment transfer.
Column 5: The foreign bank's universal identity number.
Column 6: The time the message was stored.
Column 7: The time the message was released, or deleted.
Column 8: The number of the terminal ordering the release or deletion.
Column 9: The universal identity number of the foreign bank receiving payment.
Column 10: The receiving time.
Column 11: The number of the terminal receiving the message.
Column 12: The amount of the transaction.
Column 13: The disposition of the message ("released"; "deleted"; "operator cancel"; "system cancel"; etc.).

BANK A — R E C E I V E   M E S S A G E   R E P O R T — BY SENDING BANK NUMBER — 05/18/7- — PAGE 005

| SEND BANK NBR | RECV UNIT NBR | RECV SEQ NBR | RECEIVE BANK ACCOUNT NBR | STORE SEQ NBR | STORE UNIT NBR | STORE TIME | SEND BANK ID | RECV BANK ID | REL UNIT NBR | RELEASE TIME | RECEIVE TIME | AMOUNT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 01 | 942 | | 3837 | 19 | 11:42:50 | 005208 | 043868 | 07 | 14:20:20 | 14:51:02 | $10,350,000.00 |
| | 01 | 948 | | 3668 | 08 | 11:18:07 | 069615 | 043868 | 07 | 14:21:55 | 14:52:20 | $5,000,000.00 |
| | 01 | 954 | | 3299 | 05 | 10:13:13 | 009862 | | 07 | 14:22:51 | 14:53:36 | $20,000.00 |
| | 01 | 957 | | 3329 | 05 | 10:18:36 | 009862 | 018571 | 07 | 14:23:10 | 14:54:10 | $5,000,000.00 |
| | 01 | 971 | | 3547 | 03 | 10:57:17 | 019579 | 019579 | 07 | 14:24:50 | 14:57:47 | $1,800,000.00 |
| | 01 | 980 | | 3531 | 14 | 10:54:06 | 009862 | | 07 | 14:25:53 | 15:00:22 | $25,000.00 |
| | 01 | 1057 | | 783 | 11 | 21:44:54 | 003971 | 003848 | 19 | 14:38:51 | 15:13:41 | $3,000,000.00 |
| | 01 | 1061 | | 3598 | 16 | 11:07:37 | 000766 | 023564 | 07 | 14:39:31 | 15:14:18 | $1,840,000.00 |
| | 01 | 1121 | | 3546 | 20 | 10:57:17 | 050120 | 003848 | 07 | 14:53:00 | 15:24:58 | $22,713,084.03 |
| | 01 | 1133 | | 3740 | 08 | 11:29:00 | 013711 | 013711 | 07 | 14:56:18 | 15:26:48 | $2,115,000.00 |
| DELETED | 01 | 1208 | DELETED | 3233 | 13 | 10:03:28 | 011880 | 015022 | 07 | 15:08:17 | 15:38:24 | $450,000.00 |
| | 01 | 1228 | | 2327 | 04 | 00:56:49 | 011880 | 015022 | 07 | 15:11:05 | 15:41:40 | $70,000.00 |
| | 01 | 1242 | | 4477 | 20 | 13:53:38 | 011319 | 011319 | 07 | 15:13:03 | 15:43:54 | $15,015.00 |
| | 01 | 1252 | | 4207 | 20 | 13:16:22 | 050133 | 024228 | 07 | 15:14:43 | 15:45:41 | $2,500,000.00 |
| | 01 | 1255 | | 4517 | 19 | 13:57:16 | 050133 | 019842 | 07 | 15:15:12 | 15:46:16 | $1,330.80 |
| | 01 | 1485 | | 4648 | 16 | 14:10:18 | 000555 | 000555 | 07 | 15:45:35 | 16:19:10 | $1,035,000.00 |
| | 01 | 1495 | | 3787 | 20 | 11:36:03 | 011760 | 007337 | 07 | 15:46:43 | 16:19:50 | $4,000,000.00 |
| | 01 | 1648 | | 5332 | 16 | 15:25:31 | 002788 | 014326 | 06 | 16:18:04 | 16:32:13 | $900,000.00 |
| | 01 | 1774 | | 4014 | 15 | 12:51:48 | 018646 | 003848 | 19 | 16:29:02 | 16:41:48 | $10,000,000.00 |
| | 01 | 1792 | | 5049 | 05 | 14:54:07 | 051920 | 021935 | 07 | 16:31:46 | 16:43:04 | $100,000.00 |
| | 01 | 1839 | | 5388 | 16 | 15:33:06 | 018162 | 018162 | 03 | 16:36:36 | 16:46:42 | $250,000.00 |
| | 01 | 1884 | | 4923 | 16 | 14:38:59 | 007379 | 049519 | 08 | 16:41:49 | 16:49:50 | $1,000,000.00 |
| | 01 | 1901 | | 5655 | 05 | 16:21:30 | 011760 | | 03 | 16:43:52 | 16:51:04 | $40,000.00 |
| | 01 | 1920 | | 4688 | 03 | 14:13:22 | 008299 | 021935 | 08 | 16:45:47 | 16:52:24 | $495,000.00 |

Another report received by each of the New York banks is the "receive message report," shown as the second report exhibit. The messages are grouped by the number identifying the New York banks sending messages. (As in the previous report, the digits identifying the sending banks and the foreign banks' account numbers have been deleted.)

The report contains these items of information:

Column 1: The identity number of the New York bank sending the message.

Column 2: The number of the terminal receiving the message.

Column 3: The sequence number for the message received.

Column 4: The account number of the foreign bank receiving payment.

Column 5: The bank sequence number of the stored message.

Column 6: The number of the terminal which stored the message.

Column 7: The time the message was stored.

Column 8: The universal identity number of the foreign bank making payment.

Column 9: The universal identity number of the foreign bank receiving payment.

Column 10: The number of the terminal to which the message was released.

Column 11: The time the message was released.

Column 12: The time the message was received.

Column 13: The amount of the transaction.

P O S I T I O N   R E P O R T

BANK A

DATE 05/18/7-

DELETED DELETED

| GROUP NAME | GROUP NO. | RELEASES MSGS | RELEASES AMOUNT | RECEIVES MSGS | RECEIVES AMOUNT | NET DEBIT | NET CREDIT |
|---|---|---|---|---|---|---|---|
| | | 18 | $8,847,559.20 | 13 | $25,245,820.77 | | $16,398,261.57 |
| | | 230 | $402,624,625.10 | 224 | $602,959,615.67 | | $200,334,990.57 |
| | | 103 | $184,452,251.84 | 85 | $192,473,799.86 | | $8,021,548.02 |
| | | 59 | $85,073,885.44 | 60 | $121,129,286.48 | | $36,055,401.04 |
| | | 108 | $132,868,689.47 | 113 | $206,838,329.12 | | $73,969,639.65 |
| | | 9 | $1,797,382.28 | 21 | $470,379.30 | $1,327,002.98 | |
| | | 123 | $126,321,511.96 | 163 | $212,113,766.77 | | $85,792,254.81 |
| | | 67 | $93,637,693.13 | 112 | $321,923,467.97 | | $228,285,774.84 |
| | | 33 | $50,789,625.03 | 34 | $71,794,805.71 | | $21,005,180.68 |
| | | 32 | $154,341,920.42 | 32 | $234,033,533.17 | | $79,691,612.75 |
| | | 33 | $39,860,688.11 | 19 | $22,686,832.72 | $17,173,855.39 | |
| | | 14 | $39,506,263.60 | 19 | $70,426,035.15 | | $30,919,771.55 |
| | | 10 | $10,675,607.78 | 17 | $23,800,463.36 | | $13,124,855.58 |
| | | 6 | $9,085,164.27 | 15 | $20,454,733.82 | | $11,369,569.55 |
| | | 18 | $6,006,226.95 | 0 | $0.00 | $6,006,226.95 | |
| | | 17 | $45,545,825.45 | 36 | $19,041,553.81 | $26,504,271.64 | |
| | | 20 | $45,633,801.79 | 40 | $28,363,740.69 | $17,270,061.10 | |
| | | 17 | $46,149,703.66 | 22 | $25,572,027.28 | $20,577,676.38 | |
| | | 11 | $14,721,563.33 | 22 | $100,724,282.43 | | $86,002,719.10 |
| | | 13 | $11,982,364.69 | 14 | $7,199,377.71 | $4,782,986.98 | |
| | | 28 | $39,249,172.43 | 41 | $44,022,821.56 | | $4,773,649.13 |
| | | 1 | $200,000.00 | 4 | $2,125,000.00 | | $1,925,000.00 |
| | | 2 | $2,857,601.33 | 5 | $6,542,853.25 | | $3,685,251.92 |
| | | 33 | $36,912,125.81 | 44 | $33,771,361.26 | $3,140,764.55 | |
| | | 10 | $10,074,923.63 | 12 | $13,683,893.54 | | $3,608,969.91 |

| RELEASES AMOUNT | RECEIVES MSGS | RECEIVES AMOUNT | NET DEBIT | NET CREDIT |
|---|---|---|---|---|
| $286,882.57 | 11 | $630,971.85 | | $344,089.28 |
| $0.00 | 0 | $0.00 | | $0.00 |
| $12,286,482.28 | 6 | $2,830,852.29 | $9,455,629.99 | |
| $70,406,258.86 | 10 | $74,415,341.60 | | $4,009,082.74 |
| $15,002,656.25 | 0 | $0.00 | $15,002,656.25 | |
| $24,119,200.08 | 8 | $28,757,235.47 | | $4,638,035.39 |
| $155,369,463.87 | 67 | $96,316,882.02 | $59,052,581.85 | |
| $25,941,667.56 | 5 | $18,925,407.00 | $7,016,260.56 | |
| $12,502,109.42 | 8 | $12,318,855.32 | $183,254.10 | |
| $32,549,906.79 | 32 | $22,361,276.48 | $10,188,630.31 | |
| $157,964,032.36 | 106 | $147,860,551.03 | $10,103,481.33 | |
| $53,024,194.30 | 24 | $33,050,284.05 | $19,973,910.25 | |
| $93,673,372.49 | 33 | $77,394,025.52 | $16,279,346.97 | |
| $17,917,874.32 | 9 | $12,450,601.99 | $5,467,272.33 | |
| $3,386,019.27 | 1 | $19,000.00 | $3,367,019.27 | |
| $35,429,187.08 | 17 | $41,410,752.56 | | $5,981,565.48 |
| $148,879,134.48 | 60 | $277,523,693.28 | | $128,644,558.80 |
| $3,426,580,622.07 | 2013 | $4,350,879,443.67 | $585,036,079.46 | $1,509,334,901.06 |

The central computer also generates a "position report" for each of the New York banks, showing totals of transactions with the other CHIPS banks, and showing the subject bank's net credit or debit position at the end of the day. (The banks' names and numbers in the first two columns of the exhibit have been deleted.)

R E C A P   R E P O R T

BANK A

DATE 05/18/7-

| | INTER BANK MSGS | BOOK TRANS MSGS | INTER-BANK AMOUNTS | BOOK TRANSFER AMOUNTS | AMOUNTS | |
|---|---|---|---|---|---|---|
| STORE | | | | | | |
| PREVIOUS | 0 | 0 | $0.00 | $0.00 | $0.00 | |
| CURRENT | 1927 | 183 | $3,549,515,350.41 | $253,823,450.94 | $3,803,338,801.35 | |
| FUTURE | 56 | 2 | $63,274,336.89 | $254,557.80 | $63,528,894.69 | |
| DELETED | | | | | | |
| PREVIOUS | 0 | 0 | $0.00 | $0.00 | $0.00 | |
| CURRENT | 99 | 6 | $122,934,728.34 | $4,429,058.06 | $127,363,786.40 | |
| FUTURE | 0 | 0 | $0.00 | $0.00 | $0.00 | |
| EXPIRED | | | | | | |
| PREVIOUS | 0 | | $0.00 | | | |
| CURRENT | 0 | | $0.00 | | | |
| | | | $0.00 | $0.00 | $0.00- | |
| | | | $122,934,728.34 | $4,429,058.06 | $127,363,786.40- | |
| | | | STORED + BOOK NET PREVIOUS | | $0.00 | |
| | | | STORED + BOOK NET CURRENT | | $3,675,975,014.95 | |
| TRANSFERRED | | | | | | |
| PREVIOUS | | 0 | | $0.00 | $0.00- | |
| CURRENT | | 177 | | $249,394,392.88 | $249,394,392.88- | |
| | 0 | | STORED NET PREVIOUS | | $0.00 | |
| | 1828 | | STORED NET CURRENT | | $3,426,580,622.07 | |
| RELEASED | 1828 | | | | $3,426,580,622.07 | |
| RECEIVED | 2013 | | | | $4,350,879,443.67 | |
| BALANCE | | | | | $924,298,821.60 | |
| ASSOCIATE | | | | | $56,377,085.96 | DEBIT |
| ASSOCIATE | | | | | $196,952,131.27 | CREDIT |
| ASSOCIATE | | | | | $618,074,848.63 | CREDIT |
| ASSOCIATE | | | | | $29,032,189.80 | DEBIT |
| ASSOCIATE | | | | | $21,208,619.76 | CREDIT |
| ASSOCIATE | | | | | $163,577,683.39 | DEBIT |
| ASSOCIATE | | | | | $44,549,207.09 | DEBIT |
| ASSOCIATE | | | | | $139,767,607.53 | DEBIT |
| ASSOCIATE | | | | | $21,255,623.53 | DEBIT |

DELETED

A recap report for each of the New York banks provides a net position report and a complete summary of message activity for the day, including intrabank book transfers. In the example, the net balance of each associate member bank, settling through the member bank, is shown.

BANK A BOOK TRANSFER REPORT 05/18/7- PAGE 021

| SEND SEQ NBR | STORE UNIT NBR | ACCOUNT NBR IN SENDING GROUP | SEND ACCT UID | STORE TIME | REL/DEL TIME | REL/DEL UNIT | RECV ACCT UID | AMOUNT | DISPOSITION |
|---|---|---|---|---|---|---|---|---|---|
| 435 | 07 | | 001735 | 22:22:15 | | | 001524 | $2,200,000.00 | TRANSFER |
| 454 | 08 | | 004099 | 22:26:36 | | | 013948 | $1,232,370.99 | TRANSFER |
| 472 | 02 | | 003848 | 22:29:48 | | | 005633 | $3,000,000.00 | TRANSFER |
| 476 | 01 | | 003848 | 22:30:09 | | | 005366 | $2,000,000.00 | SYS CANCEL |
| 480 | 01 | DELETED | 003848 | 22:30:56 | | | 005633 | $2,000,000.00 | TRANSFER |
| 490 | 11 | | 001524 | 22:32:23 | | | 021302 | $78,186.08 | TRANSFER |
| 801 | 05 | | 005175 | 08:53:07 | | | 014095 | $10,000.00 | TRANSFER |
| 803 | 05 | | 005175 | 08:54:00 | | | 009544 | $20,000.00 | TRANSFER |
| 805 | 10 | | 028671 | 08:54:29 | | | 041726 | $1,000.00 | TRANSFER |
| 810 | 11 | | 018980 | 08:59:04 | | | 014222 | $193,873.59 | SYS CANCEL |

In addition to recap information on book transfers, a bank performing intrabank transfers receives a full print-out on microfiche of book transfer transactions, as shown in the computer report above.

The CHAIRMAN. Thank you very much, Mr. Lee. Our next witness is Mr. Romberg.



99-446 O - 78 - 5

## STATEMENT OF BERNHARD W. ROMBERG, PRESIDENT, PAYMENTS & TELECOMMUNICATIONS SERVICES CORP., NEW YORK

Mr. Romberg. Thank you, Mr. Chairman.
[Complete statement follows:]

# THE BANKWIRE

A Private Sector Provider of
Payments Services

Testimony presented before the

United States Senate
Committee on Banking, Housing
and Urban Affairs

October 10, 1977

PAYMENT AND TELECOMMUNICATION
SERVICES CORPORATION
50 Broadway
New York, New York 10004

TABLE OF CONTENTS

# THE BANKWIRE

A Private Sector Provider of
Payments Services

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October 10, 1977

## INTRODUCTORY COMMENTS

My name is Bernhard Romberg and I am President of the Payment and Administrative Communications Corporation and its operating subsidiary, the Payment and Telecommunication Services Corporation. These corporations, also known as the BankWire, provide wire transfer funds payment services to the banking industry. I appreciate this opportunity to present the Senate Banking Committee with information related to the need for equitable pricing of operational services provided by the Federal Reserve in the payment systems area.

I will first describe the BankWire as a private sector provider of electronic funds transfer services. I will then discuss the effect of Federal Reserve activities in this area, commenting particularly on pricing and access, and the need for effective private sector capabilities in this area. My comments will focus on that segment of the payments mechanism related to wire transfers, but in closing I will comment generally on the basic issues being addressed by this Committee.

THE BANKWIRE

The BankWire is a private corporation organized as a business cooperative to provide banks with low cost and efficient funds tranfer services for inter bank payments. It operates a substantial computer-based switching system which, on an average day, handles 20,000 communications involving over 20 billion dollars in payments, thus playing an important role in the nation's payments mechanism. The BankWire's operations are financed completely through charges to its users, which are based on a standard fee of 40¢ per message.

*The BankWire is a private sector business cooperative providing wire transfer services to banks.*

As a business cooperative, the BankWire is owned and managed by its member banks. All banks using BankWire services are members of the cooperative and have a voice in the management of the organization. Of its 193 member banks, 182 belong to the Federal Reserve. The deposit assets of this membership are in excess of 470 billion dollars, or more than 60 percent of the nation's commercial bank deposits. Membership is open to any financial institution providing depository banking services.

The members elect annually a Board of Directors, who are also senior officers of member banks, in such a way that there is at least one director from each Federal Reserve District, thereby assuring nationwide representation. The BankWire's form of organization has been approved by both the Federal Reserve Board and the Comptroller of the Currency, and its cooperative status has been approved by the IRS. The important point is that the BankWire is industry owned, industry financed, and industry managed with membership open to all financial depository institutions.

*The BankWire is industry owned, financed & managed.*

The BankWire of today and its predecessor organizations have been providing wire transfer services since 1952. The present system has been in operation since late 1968. It is both reliable and economical, but no longer fully responsive to the needs of the marketplace. Accordingly, steps have been taken to develop an upgraded successor--BankWire II--which is scheduled to go operational early next year. The specifications for BankWire II were developed by representatives from banks--large and small--from all over the country. The system will feature new types of transactions and facilities for better management of funds transfer activities. It will also have a significant capability for batch transmission, which can be used for inter-ACH (Automated Clearing House) requirements as well as direct batch communications

*The BankWire has been in operation since 1952. A new system will go operational in March, 1978.*

between members. High reliability and efficiency will be achieved through the use of the latest in computer and communications technology.

BankWire II represents a major commitment--in terms of both dollars and breadth of participation--by the private sector to providing for banking's currennt and future needs in inter-bank payments mechanisms.

PRICING AND FEDERAL RESERVE
WIRE TRANSFER SERVICES

The Federal Reserve operates a major funds transfer system, generally known as the Fedwire. A major--and rapidly growing--use of this system is for third party wire transfers between commercial banks. Typically, these are transfers--or payments--made from one bank to another where the payment is to be credited to the account of a customer of the receiving bank, the so called "third party". Preliminary results of BankWire surveys show that such third party transfers represent the predominant use--between 60 percent and 80 percent--of the Fedwire by commercial banks. These are transactions made by banks on behalf of their customers and need not involve the Federal Reserve directly. The Federal Reserve is thus providing services which are comparable to those which have been provided for some time through the BankWire. Furthermore, the Federal Reserve is actively pursuing a program to expand the use of the Fedwire for third party transfers--thereby enlarging its role in an area already served by the private sector.

*The Fedwire, operated by the Federal Reserve, provides third party wire transfers in competition with the private sector. For many banks, third party funds transfers constitute the predominant use of the Fedwire.*

As for charges, the Fedwire is basically free to the banks that use it. There is a charge for the terminal equipment located on a bank's premises, and a nominal charge for those few third party transfers which are for amounts less than $1,000, but for all practical purposes there is no charge for the overwhelming bulk of usage.

This situation can be compared with the BankWire, which must recover all of its costs through its charge of 40¢ per message. As shown in Figure 1, these costs include all communication lines, the computer hardware, systems development, all salaries, general administration and overhead, working capital, as well as federal, state, and local taxes. With the Fedwire, users are not charged for any of these normal business expenses.

*There is no charge for most Fedwire transfers, whereas the BankWire charges 40¢ per transfer.*

IMPACT OF THE FEDWIRE

The activities of the Federal Reserve in providing wire transfer services through the Fedwire have a profound impact on the BankWire. Since 1974, membership in the BankWire has declined from 230 to 193 today, or a decrease of 16 percent. Of even greater impact has been the decline in average daily message traffic from 26,000 per day to the current levels of 20,000, equivalent to a 23 percent drop. At the same time, in talks given at various conferences, the Federal Reserve has reported that usage of the Fedwire is approximately 70,000 per day, and growing at a rate of 15 to 20 percent per year.

*BankWire membership and usage has declined in recent years.*

Surveys of present BankWire users, as well as in depth interviews with members who have left the system, clearly indicate the two most

FIGURE 1

COMPARISON OF BANKWIRE AND FEDWIRE CHARGES

<table>
<tr><th></th><th>COMPONENT</th><th>BANKWIRE</th><th>FEDWIRE</th></tr>
<tr><td>1.</td><td>TERMINALS</td><td>AT COST FROM VENDOR</td><td>GENERALLY AT COST FROM VENDOR</td></tr>
<tr><td>2.</td><td>COMMUNICATIONS LINES</td><td rowspan="8">INCLUDED IN STANDARD CHARGE OF 40¢ PER MESSAGE</td><td rowspan="7">NO CHARGE TO USERS</td></tr>
<tr><td>3.</td><td>COMPUTER HARDWARE</td></tr>
<tr><td>4.</td><td>OPERATIONS<br>a. PERSONNEL<br>b. SITE</td></tr>
<tr><td>5.</td><td>DEVELOPMENT/REPLACEMENT</td></tr>
<tr><td>6.</td><td>MARKETING/USER LIAISON</td></tr>
<tr><td>7.</td><td>ADMINISTRATION</td></tr>
<tr><td>8.</td><td>WORKING CAPITAL</td></tr>
<tr><td>9.</td><td>TAXES<br>a. Federal<br>b. State<br>c. Local</td><td></td></tr>
</table>

important reasons for the declining use of the BankWire. The first of these is costs; the second of these--which I will discuss shortly--is settlement. The Fedwire is free, while the BankWire costs 40¢ per message. With the continued pressure on operating costs, there is a natural and understandable inclination on the part of operating personnel to take whatever steps they can to reduce costs, and this in turn leads to the significant diversion of traffic from the BankWire to the Fedwire. Declines in traffic were a major factor in forcing the BankWire last year to increase its unit message charge from 30¢ to 40¢, which in turn leads to further traffic declines.

*One of the major reasons for these declines has been the availability of the Fedwire for no cost transfers.*

If the Fedwire were to charge properly allocated costs, including development expenses, equipment, and factors for the cost of capital, we have good reason to expect BankWire charges would be more than competitive with the Fedwire. Under such circumstances, and if the BankWire was able to provide settlement, we are confident that the BankWire would carry a major fraction of the third party wire transfers, which would assure its long term viability.

*If the Fed had to charge properly allocated costs, we are confident that the BankWire would carry a major fraction of third party transfers.*

ACCESS FOR SETTLEMENT

The second significant factor in the decreasing use of the BankWire is a difference in the settlement mechanism for funds transferred through the Fedwire as compared to those through the BankWire. Because of its unique role as a central bank, the Federal Reserve can settle transfers from one bank to another by debiting the reserve account of the sending bank and crediting the reserve account of the receiving bank. This provides "immediate availability" of the funds transferred. To be competitive from a product/service standpoint, the BankWire needs access to this settlement mechanism.

*The other major factor leading to a decline in BankWire usage has been a difference in settlement mechanisms.*

The BankWire membership has designed a highly efficient means of accomplishing settlement, known as "net settlement". With net settlement, the BankWire would accumulate totals for the funds transfers sent and received by each bank and then report this to the Federal Reserve as a single net debit or credit balance for each bank. These balances would be posted by the Federal Reserve to the member bank's reserve account on that same day. With this facility, the transfers through the BankWire would provide "same day availability" with many fewer settlement entries flowing through the

*The BankWire needs a facility for same day net settlement through reserve accounts to be able to compete on a product basis.*

central bank system. This would also simplify and facilitate present reconciliation procedures as well as reducing peak volume bottlenecks in the Fedwire. Implementation of this service requires that the BankWire have access to the Fed's settlement system. Without such access the future viability of the BankWire is in doubt.

*There is a strong industry desire for a same day net settlement capability.*

To appreciate the significance of "net settlement" I would like to report the results of a recent survey of our membership on this matter. At the request of the Federal Reserve, and with their prior review and approval of the questions and accompanying material, we sent a letter and questionnaire to the presidents of the 186 BankWire member banks who are also members of the Federal Reserve. The results of this survey are shown in Figure 2. We received responses from 80 percent of the banks surveyed. More than 85 percent of the respondents felt that such a facility should be available in the private sector and more than 75 percent declared their intention to use it.

The precedent for net settlement by posting net debits and credits to reserve accounts is already firmly established in the clearing house operations for checks and also with CHIPS, the international Payments System operated by the New York Clearing

FIGURE 2

RESULTS OF SURVEY OF BANKWIRE MEMBERS

REGARDING SETTLEMENT
(July, 1977)

| | | |
|---|---|---|
| 1. Is it desirable for BankWire II, as a private wire system alternative to the Fedwire, to include the capability for same-day funds transfers with net settlement through the Federal Reserve? | Yes 126 | No 19 |
| 2. Is there a potential for your bank to use this service? | Yes 113 | No 33 |
| 3. Do you feel the general indemnification requirements mentioned on page 3* of the attached letter would be acceptable if you eventually were to subscribe to the net settlement feature? | Yes 114 | No 25 |
| 4. If you were to subscribe to the net settlement feature, would you be willing to authorize your Federal Reserve Bank to use your reserve account in the operational manner described in item 5*, page 2? | Yes 122 | No 19 |

* Refers to material which accompanied the questionnaire.

House. Settlement on a same day basis nationwide is a service the Federal Reserve is uniquely capable of providing because of its role as the nation's central bank. Access to this capability is desired by the private sector and is essential to the viability of a competitive private sector payments system. The BankWire has been negotiating with the Federal Reserve for 18 months to acquire that access. While there has been progress, it is also necessary to recognize the economic impact of delay; at this stage each additional month costs the BankWire over $200,000.

*Access for net settlement is essential for a viable private sector payments mechanism.*

NEED FOR PRIVATE SECTOR CAPABILITIES

I have described the services of the BankWire as a private sector provider of payments services, the effect of the Federal Reserve activities in this area--and particularly their practice of not charging for wire transfer services. I have discussed the need of the BankWire for access to the Federal Reserve for same day net settlement, a service related to the Federal Reserve's function as the central bank. I will now address the broader questions: "Is there a real need for private sector capabilities such as the BankWire? Is the nation's banking system well served by having possibly a number of competitive private sector services?"

*Why should there be a private sector capability in wire transfers?*

The need for private sector capabilities and the related benefits are so widely recognized that we know of no serious argument to the contrary. In support of such a need, there is first of all the view of the banking industry itself. Some years ago, the American Bankers Association established the Monetary and Payments Systems Committee to assess the industry's needs. This was a very major undertaking, involving many of the industry's leaders. Just some of the major conclusions, as reported in 1971, were that:

- The Fedwire is capable of overcoming the operational and economic advantages enjoyed by the present (1971) BankWire.

- A shift to virtually complete dependency on the use of the Fedwire does not appear to be in industry's best interest.

- The banking industry must continue to have available for optional use a competitive private wire system.

*The ABA's MAPS Committee called for such a capability.*

- The BankWire administrative structure should be reorganized to provide representation and access to all users.

- The BankWire should be expanded to provide a nationwide credit transfer service.

In response to this, the BankWire did reorganize itself to provide management representation and access to all users and has undertaken the development of BankWire II, a nationwide credit transfer service.

Secondly, there are the needs of the marketplace. In terms of capacity, it is generally recognized that the current systems--both the Fedwire and the BankWire--are operating at close to 80 percent of capacity, while industry projections continue to forecast a growth of 15 percent or more per year. It is not uncommon today for banks and the Fed to encounter throughput problems at times close to cutoff. However, the new BankWire system will more than triple the capacity of BankWire, and add nearly 40 percent to the total industry capacity.

*The marketplace needs the additional capacity that BankWire II can provide.*



99-446 O - 78 - 6

There are also the benefits that come from the different product/service offerings of different suppliers. Different customers have different needs and, in wire transfers, it is not possible to define that one alternative which would best meet all of these. It is far better to permit different offerings, with different features and costs, and then to let the marketplace make its choice. For so critical a service, it is hard to imagine that anyone would seriously argue that there should be only a single source of supply, especially when one of the major suppliers not only need not be responsive to the users of that service, but in fact is a regulator of these users.

*There should be alternate sources, providing different products.*

Thirdly, there is the view expressed by representatives of the Federal Reserve. In 1976, at a National Correspondent Banking Conference sponsored by the ABA, Governor Coldwell, while discussing the Fed's role in ACH activities, said it was still an open question as to whether the transfer systems should be run as a utility or with competing private systems. He expressed the view*, which we hope also applies to wire transfers, that he is "perfectly willing for somebody else" to provide the system "if they can handle it and do the job for the American

*A Federal Reserve spokesman has indicated there should be such a capability.*

---

*Reported in *American Banker*, November 10, 1976 public". He went on to remark that he could agree to a Congressional decision that the Fed should provide only settlement services, but wonders "if we have a private organization that is going to step forward and do this sort of thing on a nationwide basis,....". In this regard, let me point out that in wire transfers, the BankWire is prepared to "handle it" and "do the job for the American public"--that in fact there is a private organization which is prepared "to step forward and do this sort of thing on a nationwide basis".

Finally, and perhaps most importantly, we should recall the basic economic axioms which have made our country the great nation it is today. These basic axioms emphasize the primacy of economic activity through competitive private sector initiatives, calling for the investment of private sector employment, and benefitting from the quick and sef-adapting response to the needs of the marketplace in terms of cost effectiveness and the creative initiatives in the use and extension of technology. These same principles should be applied to the payments system itself.

*The primacy of private sector initiatives is a fundamental basis of our economy.*

RESPONSE TO SPECIFIC ISSUES

I would now like to address briefly the basic issues raised by this Committee regarding the general role of the Federal Reserve in the payments mechanism and the charging for such services.

1. Is the provision of payments mechanism services a necessary and appropriate function for the Federal Reserve in its capacity as the nation's central bank?

Only to the extent that such services provide capabilities related to central bank functions that cannot otherwise be provided by the private sector. The primary emphasis in the payments mechanism should unquestionably lie with the private sector, with the role of the Federal Reserve being one of providing a settlement procedure and the necessary regulation to assure a sound, fair, and competitive environment.

*The primary emphasis in payments systems should be in the private sector.*

2. What are the potential benefits and costs that would result from explicit pricing of Federal Reserve services?

As has been emphasized throughout our testimony, we strongly advocate that there should be explicit pricing for all Federal Reserve services, that such pricing should cover all operating, development, investment, and other costs. As a separate but closely related issue, we believe that members of the Federal Reserve should receive an equitable return on their mandatory reserve deposits. In general, we advocate complete unbundling of the management and regulation of the monetary system from operational services. As an essential corollary, any charges for Federal Reserve services should be entirely separate and not taken as an offset to returns on reserve deposits. Such a shift to completely unbundled pricing would represent a major stimulus to the private sector in providing payments services. It would promote competitive private sector activities and foster the use of technology to establish more efficiency in the payments system. It would provide alternatives to meet different and specialized needs. Today--when the Federal Reserve provides services at no cost to the customers--there can be no incentive whatsoever for the investment of private sector capital. We believe that this is one of the major factors which has limited the growth of electronic funds transfer systems and other alternatives which could provide better services to corporate and individual consumers.

*The Fed should charge fully allocated costs for its services.*

*It should also pay an equitable return on reserve balances.*

*There should be no tie-in between returns on reserves and charges for services.*

3. Should all depository institutions <u>have access to Federal Reserve services?</u>

Our answer to this is "Yes", with the understanding that such services would be fully priced, that there should be equitable returns on reserve deposits, and that the availability of such services would be separated from the regulatory and central bank functions of the Federal Reserve. Furthermore, such services should be available to cooperative or other organizations made up of financial depository institutions, such as clearing houses and the BankWire.

4. What is the impact of the Federal Reserve's current role in the payments mechanism--

a. on correspondent banking?

In third party wire transfer services, it has and is continuing to cause a decline. The overall impact has been a lessening of the competitive environment in this area of banking services.

*Caused a decline in third party wire transfer correspondent services.*

b. on the efficiency of the payments mechanism?

This is difficult to measure directly, but it is our general belief that it keeps the payments mechanism from realizing its full potential. The activities of the Federal Reserve have generally tended to make it impractical for private sector alternatives to compete, which in turn excludes any functional or operational alternatives.

*The Federal Reserve has made it impractical for private sector alternatives to compete.*

c. on private marketplace incentives to provide payments services?

The practice of not charging for services creates an environment which discourages private sector initiatives in payment services. It is unreasonable to expect the private sector to make investments when the Federal Reserve provides payments services at no cost. In particular, those initiatives which might make the most innovative and cost effective use of technology are deterred.

RECOMMENDATIONS

In light of the testimony presented here, we recommend that:

1. Congress call for standards and a time frame for the Federal Reserve to establish pricing for its operational services.

2. The Federal Reserve should provide clearing and settlement services to private sector payments mechanisms serving financial depository institutions.

3. The Federal Reserve should establish a regulatory framework which will foster the development of private sector payments mechanisms.

We believe that if these steps are taken, then there will be a number of payments services based on private sector investment and development. These will evolve under the constantly and rapidly changing influence of the marketplace, until those which provide the most cost effective services in response to business and consumer needs predominate.

SUMMARY

In closing, let me summarize our views by stating that the role of the Federal Reserve as a provider of payments services should be kept to a minimum and that the economic environment in which such services are provided should be one that encourages multiple private sector alternatives. We believe that this can best be accomplished by explicit pricing of Federal Reserve services on the same basis as private sector organizations. Closely related to this, we believe that members of the Federal Reserve should receive an equitable return on their reserve deposits and that these returns should not in any way be contingent upon the purchase of services from the Federal Reserve. The Federal Reserve should emphasize its role as a regulator to establish a sound, fair, and competitive environment. It is especially important that the Federal Reserve not use its position as a central bank to structure and subsidize its activities in payments services so that private sector initiatives cannot compete.

Thank you very much.

# GENERAL BACKGROUND ON BANKWIRE SERVICES AND ORGANIZATION

## BANKWIRE SERVICES

The BankWire is used by banks to make inter-back funds transfers. In terms of hardware, the system operated today consists of two computer switches, one located in New York and the other in Chicago, which are connected by communications links. Communications are made through terminals at the user banks, which are connected full time to the switches. In addition to funds transfer transactions, the system is used for general administrative messages and other traffic related to bank activities such as collections, loan participations, and account balances, et al.

Daily activity averages over 20,000 messages, more than half of which are directly related to funds transfers, involving total amounts estimated to be over $20,000,000,000. Total deposits of the banks belonging to the BankWire exceed $470,000,000,000, which is more than 60% of total commercial bank deposits.

Users pay 40¢ per message, independent of transaction type, length of message, or distance transmitted. This is much less than other forms of communication available in the private sector. In addition, they pay a monthly terminal charge for the equipment at their location, which commonly ranges from $265 to $350 per month. Costs for communication lines, the computer switchers, the operation of the system and full time staff are mutualized through the unit message charge.

Users of the BankWire realize a number of significant benefits. The use of a standard format for funds transfers facilitates the routine processing of such transactions at the originating and receiving banks in either a manual or automated environment. Speed of delivery is an important consideration--over 80% of the transmissions are delivered within 4 minutes of the time of entry. Security is achieved through the private wire nature of the communications system.

The availability of a written record for both the sender and receiver helps in establishing routine operational procedures. In case of questions, a copy of a transmission can be retrieved from the system, giving both sender and receiver the same information about the text and the time of entry and delivery.

## ORGANIZATION

The BankWire is managed and financed completely by the banks that use the system. All users belong to a cooperative organization known as the Payment and Administrative Communication Corporation (PAAC). The Board of Directors of PAAC is elected by the members in such a way that there is at least one director from each Federal Reserve District--thereby assuring nationwide representation in the management organization.

The operations of the BankWire are managed by the Payment and Telecommunication Services Corporation (PATS), a wholly owned subsidiary of PAAC, having a conventional form of corporate organization. PATS has a full time staff which interfaces with the users, coordinates operations of the present system, and supervises the development of a new system.

The PAAC/PATS dual form of organization was established to provide, on the one hand, a membership environment (PAAC) through which users would have ultimate responsibility for the system, while on the other hand providing a corporate structure (PATS) which would readily qualify to provide the BankWire services in all states.

PAAC and PATS have a common Board of Directors. In addition, there is an Executive Committee and a number of Advisory Committees which provide a vehicle for user guidance in defining the operational requirements of the BankWire, with particular emphasis upon the new system which is under development. In this way the systems being operated and developed by the BankWire will be truly responsive to the needs of users for inter-bank funds transfers and related payments capabilities.

NEW SYSTEM

The BankWire organization (PAAC/PATS) is currently engaged in the development of a major new system, BankWire II, which is to go operational in early 1978. This system will replace today's BankWire, providing major extensions in inter-bank electronic funds transfers capabilities, and will also make the maximum use of current technology in terminals, data communications, and message switching.

The specifications for BankWire II were developed by many representatives of the banking industry. Some of the system's most significant features relate to the types of funds transfer transactions that will be available and its capabilities for settlement, (which are dependent upon the willingness of the Federal Reserve System to accept settlement balances from the BankWire).

The system will provide users with various summary reports and journals which will facilitate their control and reconciliation functions. BankWire II will also have a significant capability for batch transmission, which can be used for inter-ACH (Automated Clearing House) requirements as well as direct batch communications between members.

The new BankWire II will provide a range of terminal and computer interface capabilities, which will meet the needs of banks both large and small, having internal systems ranging from advanced computers (for users with high volumes) to those with lower volumes and using manual procedures. Considerable care has been taken to provide users with flexibility in determining their internal procedures and systems, with the BankWire II providing the common inter-bank funds transfer processing, accounting, and communications functions.

The BankWire II represents a major commitment on the part of private sector banking to address the needs for inter-bank electronic funds transfer well into the future, providing options and alternatives responsive to industry needs.

*A Panel Discussion*
*At The Association Of*
*Reserve City Bankers*
*Annual Meeting*

# THE BANKWIRE:

# THE CASE OF FREE ENTERPRISE VERSUS GOVERNMENT REGULATION IN PAYMENT SYSTEMS OF THE FUTURE.

*Tuesday, April 5, 1977*
*Phoenix, Arizona*

*About The Panel . . .*

*This panel discussion was presented to the members of the Association of Reserve City Bankers to describe the current status of the BankWire, the banking industry's cooperatively owned and managed wire transfer payments system. In addition to offering an historical, current and future overview of BankWire services, the discussion focused on a concern that is paramount among bankers today – the role of the Federal government in tomorrow's payment systems. The comments reprinted here document one very specific example of cause for such concern.*

*The panel was chaired by Victor H. Winfrey, Vice Chairman of the United California Bank. Mr. Winfrey introduced Robert K. Wilmouth, President of Crocker National Bank, who made the following opening remarks:*

A few months ago my Operations Manager came to me and asked if I would encourage the Program Committee of the Reserve City Bankers to provide some time for a brief presentation about the BankWire organization. My initial reaction was that's just not the kind of subject this group of bankers is interested in at this particular meeting. I said something like "that's operations, it's a subject that should be dealt with and discussed in different forums." He pressed the matter, however, and pointed out that my reaction was typical of most senior executives in the major commercial banks in this country today, and because that is our attitude we have perhaps failed to see that the current dilemma of the BankWire organization is not merely an "operations issue" but is representative of a much larger issue that could have a widespread and negative impact on the future of the commercial banking industry. That issue is — *whether we will have public or private ownership and hence control of the payments system in the years ahead.*

> *"That issue is whether we will have public or private ownership, and hence control, of the payments system in the years ahead."*

> *"If we do not support a private alternative through our utilization as well as public statements, that alternative will disappear . . . "*

The BankWire organization came into being several years ago as a valid response to a need for wire transmissions between commercial banks which were not being adequately serviced by the Federal Reserve System. It filled that need and has expanded as its capability to provide a responsive and reliable payment and information transfer service became clear. *Its survival and future growth is currently in jeopardy.* The reason for this situation is not that there has been some concerted effort to withhold support from the BankWire. The situation has come about because many banks have made individual decisions at the operating level to reduce costs. The Fedwire is free, the BankWire costs something. Operations managers reacting to the continuing pressure that all of us have imposed to hold down operating costs have acted rationally. Yet the overall impact of these actions presents a serious threat to our industry. If we do not support a private alternative through our utilization as well as our public statements, that alternative will disappear and we will face the prospect of a national payments system controlled exclusively by the Federal Government. It is this issue that I believe merits a few minutes of your attention at our meeting this morning.

Furthermore, over 85% of the Reserve City Banks are members of the BankWire, and so I believe that the activities of this organization should be of concern to us. To give you the background of BankWire, to further articulate the issues we face as an industry, and to suggest some specific courses of action, the Program Committee has invited Mr. Bernhard Romberg, President of the BankWire, to address us. It is my pleasure to introduce Mr. Romberg to you now.

*Presentation by Mr. Romberg:*

I am excited at this opportunity to tell you about an organization which each day sends over 22,000 messages for funds transfers through correspondent accounts having an aggregate daily value of $20,000,000,000. An organization which is now engaged in developing a new capability which can help your banks to serve better your corporate and correspondent customers. An organization which is the only industry owned and financed private sector vehicle for nationwide corporate payments and related communications services. An organization whose success — *and even survival* — is threatened by increased and unfair Government competition and restraint.

*"An organization which is the only industry owned and financed private sector vehicle for nationwide corporate payments and related communications services."*

*"The first objective is to provide an industry owned and managed inter-bank payments mechanism."*

This organization is the BankWire. The services this organization provides today — and will provide tomorrow — can have a major impact on how you serve your most profitable customers — the corporate accounts.

I will tell you about the structure of the BankWire, the services it provides today, some developments that are well underway, and some others on the horizon. I will be candid with you about its economics and describe the competitive situation particularly with respect to Fedwire. I'll outline how the National Commission on EFT regards similar activities, and finally I will identify some critical concerns and suggest what steps might be taken to deal with them.

The starting point for these comments has to be our mission. The first objective is to provide an industry owned and managed inter-bank payments mechanism. A second, to provide an efficient and low-cost capability for administrative traffic — that's general messages — and also bulk, or batch, data. We want to do this at the lowest possible cost and to do so in a way that meets the needs of all banks — large and small. To be the common element which ties together separate banks into an automated nationwide payments system. To provide a means by which commercial banks can maximize their delivery of benefits to customers, at minimal shared cost.

## What is the Organization?

Without trying to do a "Roots" type of genealogy, let me simply state that the BankWire was begun in 1952 by a number of New York and Chicago clearing house banks. About six years ago, the Monetary and Payment Systems, or "MAPS", committee, established by the ABA, and chaired by one of your members, Dick Cooley, recommended that the BankWire reorganize itself to provide representation and access to all users, and that it expand to provide a nationwide credit transfer service.

*"... six years ago, the MAPS committee... recommended that the BankWire reorganize to provide representation and access to all users..."*

Today there is an elected Board, with Directors representing each Fed district, an Executive Committee, and a number of Advisory Committees. All told, over 35 people from more than 30 banks have management and advisory roles. In the past year we have recruited a small full-time staff which supervises Western Union's operation of the present system and the work of Collins Radio in developing a new system.

*"What's really important is that this organization is industry-owned, industry-financed, and industry-managed... every member benefits .. and that includes over 85% of the banks in your organization."*

This organization has been approved by both the Federal Reserve Board and the Comptroller of the currency. Furthermore, its cooperative status has been approved by the IRS. All of this makes things legal from a regulatory standpoint and gives us a beneficial tax climate. However, what is really important is that this organization is an industry-owned — an industry-financed — and an industry-managed vehicle for providing commonly used, or shared services. Every member has an input — every member has an interest — every member benefits, and as was stated before, that includes over 85% of the banks in your organization.

Two-thirds of our 215 members belong to the Association of Reserve City Banks, and they account for over 85% of our revenue. Let me put this another way. Of the 164 banks represented in your organization, 140 are members of the BankWire. And so gentlemen — with such a predominant position — as you go, so also goes the BankWire.

## What Services are Provided by the BankWire Today?

Our basic service today provides a message-switching link that allows members to perform correspondent funds transfers quickly and efficiently. The system currently sends over 22,000 payment messages, collection advices, and other administrative messages among its 215 members. Over 275 terminals are in use at your banks now, and the average message is delivered in less than four minutes.

The present system has been in operation since late 1968. It is reliable and economical, but it is like a car that has gone 75,000 miles — it still has a ways to go, but the time is at hand to replace it.

Accordingly, steps have been taken to develop a new system. After much planning, involving banks large and small from all over the country through the Advisory Committees, we are at the point where this system has been specified in great detail, hardware has been selected and the new system — which we call BankWire II — is now being developed, with implementation set for early next year. It will feature the all-important capability for nationwide same-day net settlement through Federal Reserve accounts.

*"... BankWire II is now being developed, with implementation set for early next year."*

*"... in response to the broad charter set forth by the MAPS Committee, BankWire II has been designed by bankers to meet their needs as they best foresee them in a rapidly evolving marketplace ..."*

## But What Really is Most Important?

It is simply this — that in response to the broad charter set forth by the MAPS Committee, BankWire II has been designed by bankers to meet their needs as they best foresee them in a rapidly evolving marketplace — to provide the capabilities for better customer service — and not by some bureaucrats who feel that they know best and can dictate the operational environment.

## What is on the Horizon?

Well, let me speculate a little about the corporate-to-corporate EFT area. Even today the opportunity for services is only being scratched. As banks automate, we can see unit costs dropping, controls improving, new services evolving, and volume growing. A doubling of activity in the next few years is considered by many to be conservative. The key question is not whether it will come about, but rather who will manage it? Where will the initiative come from? Will the industry

*"A doubling of activity is considered to be conservative. The key question is ... who will manage it?"*

direct its destiny or will this be done by default through the Government? Let me recall the basic issue as mentioned by Bob Wilmouth. Will there be *public* or *private* ownership, and hence control, of the payments system in the years ahead? Governor Coldwell has challenged private industry to build a comprehensive plan for wire transfers and automated clearing houses that meets public needs. Gentlemen, in wire transfers the BankWire is that system, and it must do its part in helping your banks realize the full potential of the new payments mechanisms.

*"Governor Coldwell has challenged private industry to build a comprehensive plan for wire transfers and automated clearing houses that meets public needs. Gentlemen, in wire transfers the BankWire is that system . . ."*

## What About The Economics?

Our charges to members for terminals are the same as our costs, so this is simply a wash, or pass-through. With the present BankWire, annual traffic is about 5,000,000 messages and annual costs for shared resources are about $2,000,000 — and so the message fee is 40¢ — independent of length or distance transmitted. The important point — and let me underscore this — is that costs are generally fixed and independent of incremental volume. If volume went up by 20% to 6,000,000 messages, unit message costs could be reduced to 30¢. An important point to make about the BankWire is that *the more it is used, the lower the unit cost.* Today we are at two-thirds of capacity, so that additional traffic could easily be handled. With BankWire II, fixed costs will be slightly less than $4,000,000. If we use today's message volume — the worst case circumstance — message charges will probably work out to something on the order of 75¢. However, we didn't build a new BankWire for today's volume. We estimate Fedwire volume as being roughly 3 times that of the BankWire. If *just* one-third of this goes over the BankWire, our volume will double, the unit costs will be halved and we will be at unit message fees comparable to today's or even less. With the addition of settlement this is not an unreasonable expectation and the banking industry can make it happen. With the Federal Reserve wire transfer service, known as the Fedwire, there is no message charge — it's free. Users pay for terminals just as with the BankWire, but the Fed underwrites all communications lines, switching center costs, staff, development and everything else that goes into

*"An important point to make about the BankWire is that the more it is used, the lower the unit cost."*

*"You know what happens in a competitive marketplace when one of the players starts to give the product away at far less than cost. We only have to look at NOW accounts."*

making a system. That is pretty tough competition. You gentlemen know what happens in a competitive marketplace when one of the players starts to give the product away at far less than cost. We only have to look at NOW accounts.

**Is Fedwire Really Free?**

Well, you know the answer to that, and you know where the money comes from. But just to put things in perspective, let me point out that the communications budget for the New York Fed alone is 2 to 3 times that of the entire BankWire. Does this include full overheads, the cost of capital, amortization of development expenses?—we don't know, but we do know that the BankWire budgets *do* include these.

**What Is The Competitive Outlook?**

We see corporate needs for funds transfers growing at an escalating rate. For a long time the BankWire was the best way to go. A couple of years ago the Fed developed a system which in certain respects is superior to the BankWire of today. However, I truly believe that BankWire II, because it was developed by its users and

*"BankWire II, because it was developed by its users and owners, will be far better able to meet the needs of the future, but it needs a chance."*

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In its interim report, the Commission has endorsed this position with specific reference to automated clearing houses and point-of-sale systems. Of course, the report addresses many other topics. Unfortunately, it did not address wire transfers at all. We are presenting additional information and meeting with others, and will make every effort to see that the final report will adopt a position with respect to wire transfers which is consistent with those taken in other areas.

Aside from the impact on the BankWire, let me underscore why it is critical to expose to public scrutiny the Government activities in wire transfers. There are many questions about consumer desires for EFT in the retail area. However, the situation is much different in wholesale EFT. The customers — corporations — are looking for services. The benefits are recognized and easier to deliver. Thus, I believe that in the near future by far the most significant advances in payments mechanisms will be in wholesale EFT, that is to say, wire transfers. Already the turnover here is estimated to be in excess of $100 billion per day, which in dollar value totally dwarfs all other EFT activities. Yet it is in this area that the Government is the most significant participant and

*"... in the near future by far the most significant advances in payments mechanisms will be in wholesale EFT, that is to say wire transfers."*

*"Unless ... the banking industry ... supports private sector ownership of the payments mechanism through words and actions ... the conclusion will be that the industry lost out by default."*

the competitive issues in EFT between the commercial banks and the Government are most clearly drawn. Unless these issues are addressed in public forums and the banking industry rises to the occasion and supports private-sector ownership of the payments mechanism through words and actions, the challenge of Governor Coldwell will go unanswered, and in 20 years — when college professors analyze the development of the payments mechanism — or the lack thereof — the conclusion will be that the banking industry lost out by default.

Okay — I've discussed the BankWire, what we do and where we stand, I've tried to show why it is important to you. Let me summarize this. Your banks own and manage the BankWire — it's not somebody in Washington. The BankWire today provides important services — at very competitive costs. A new system will soon be operational. This has been designed by your representatives and will have the capabilities required for the payments mechanisms of today — and tomorrow. The BankWire is the banking industry's own capability for nationwide interbank payments, organized and developed along the guidelines established by the MAPS Committee. However, the services and policies of the

Federal Reserve have caused a diversion of traffic, thereby forcing up unit costs and generally threatening the economic viability of the BankWire.

## What Can You Do?

First, through your operating organizations, support the BankWire. Use it more. Help drive down unit costs. Urge your operating departments to use the BankWire for general messages and thereby also reduce your telephone costs. Have them review internal procedures — it doesn't do much good to transmit a wire in a few minutes and then require several hours for it to be delivered. That's like taking a jet across the country and then spending hours in a traffic jam.

In your dealings with the Fed, talk up the BankWire — formally and informally. Support private enterprise payments capabilities such as the BankWire. Press for a fair competitive environment. Endorse net settlement for the BankWire through the Fed. Keep in mind the overall economics, and the needs of the marketplace.

Thank you for your attention and let me call upon Bob Wilmouth for some concluding remarks.

*Closing remarks by Mr. Wilmouth:*

Thank you for a clear and concise report on the present status of the BankWire. Let me conclude by summing up five brief points.

*"... support the BankWire. Use it more! Help drive down unit costs!"*

*"Support private enterprise payments capabilities ... Press for a fair competitive environment."*

*... look at the larger ssue ... remember you et the tone in your bank— .. Those who choose not to pay for liberty soon will not have the liberty to choose for what they will pay."*

1. 85% of the audience, or 140 out of 164 Reserve City Bank members, are also members of the Bankwire, so that this is no problem.
2. As Gabe Hauge pointed out in his presentation message yesterday, if we don't take over in the EFT area, then we will lose it by default.
3. Although the Fedwire currently makes no charge for usage, Fed watchers will tell you that the possibility of unbundling may come about sooner rather than later.
4. There are four advertisements in this morning's Wall Street Journal relating to corporate EFT services; all of them point to the importance of this area and relate to the various subjects we have been discussing.
5. Finally, remember the basic issue — will there be public or private ownership and control of the payments mechanism? Many operating people say — "This private enterprise business is okay, but our job is to cut costs and if that means using the Fed, so be it." I would urge you to encourage them to look at the larger issue. Remember, you set the tone in your bank. As Ben Franklin said 200 years ago when the colonists were complaining about taxes — "Those who choose not to pay for liberty soon will not have the liberty to choose for what they will pay."

The CHAIRMAN. Thank you very much, Mr. Romberg.
Mr. Dissmeyer, go right ahead, sir.

## STATEMENT OF VIRGIL DISSMEYER, PRESIDENT, NATIONAL AUTOMATED CLEARING HOUSE ASSOCIATION, WASHINGTON, D.C.

### INTRODUCTION

My name is Virgil M. Dissmeyer. I am Executive Vice President of the Northwestern National Bank in Minneapolis, Minnesota, and President of the National Automated Clearing House Association ("NACHA").

I am presenting testimony today on behalf of NACHA with respect to the Federal Reserve's role in providing payments mechanism services only insofar as it relates to matters with which this organization is directly concerned, namely, the providing of Automated Clearing House ("ACH") services.

### THE NACHA ORGANIZATION

NACHA is an organization the membership of which is comprised of 32 regional ACH associations throughout the country. Those organizations are in turn comprised of approximately 10,000 member commercial banks and other financial institutions. Within the confines of its geographical service area, each of those regional organizations administers a system for the transfer of pre-authorized payments and deposits. NACHA was organized in 1974 to encourage the development of such associations and to administer a system for effecting such transfers between the geographical service areas of its members. NACHA does not dictate the membership, access, pricing, or ACH operator policies of member associations; those matters are regarded as solely within the province of the individual ACH association and NACHA takes no position on such matters beyond supporting such freedom of choice.

### CREATION AND OPERATION OF THE ACH SYSTEM

The system administered by those organizations was created because of the enormous and rapidly increasing volume of checks issued and processed each day throughout the country. It was designed to improve the nation's payments mechanism by eliminating the need for paper checks to effect the transfer of periodic, recurring payment amounts to or from deposit accounts, thereby reducing costs, increasing efficiency, and providing the public with a beneficial service alternative to more traditional methods of receiving and making payments.

A typical pre-authorized payment transaction works as follows: a depositor ("Company") authorizing it to transmit a "debit entry" to his financial institution each time an insurance, utility or other recurring payment falls due in the amount of that payment obligation, and authorizing his depository institution to act on entries received from that Company. Such entries are payment orders in magnetic tape rather than paper check form. Pursuant to that authorization, each time a payment falls due the Company transmits a debit entry for that customer in the amount of that payment, together with similar entries for other customers, to the Company's depository institution. That financial institution sends those entries to a computerized clearing house facility (an "Automated Clearing House"). There the entries are sorted, and they are then made available or delivered to the depositor's depository institution for debit to his account when payment falls due.

The service made available to a depositor in this context enables him to pay recurring bills in a timely manner without spending the time and incurring the expense of writing and mailing checks to a creditor Company each time a payment falls due.

In the case of pre-authorized deposits, a depositor authorizes his employer or other Company to transmit periodically to his financial institution for credit to his account "credit entries", representing wages or other amounts payable to the depositor. Such entries are similarly transmitted and processed, and made available or delivered to the depositor's depository institution for credit to his account. The principal user of this facet of the ACH system today is the U.S. Treasury Department, which uses it to effect Social Security and other Government benefit payments.

In this aspect, the ACH system benefits a depositor by enabling him to obtain payment promptly on the day payment is due, without the risk sometimes involved in a check environment that a mailed check might be lost or stolen before deposit, and without the time and effort required to make that deposit.

Except for the medium utilized for exchanging payment data, an ACH transaction closely parallels the process used to effect clearing and settlement of checks, with payment data being routed from one bank to a central clearing facility for clearing and transmittal to another bank, and with settlement of accounts between banks effected through the Federal Reserve System.

In the case of checks, Federal Reserve clearing and delivery services are operated as an alternative to private arrangements, although settlement in both cases is through member bank balances maintained with the Federal Reserve. Similar alternatives exist today with respect to ACH transactions. The Automated Clearing Houses of two of the 30 ACH associations presently operational are operated privately, the remainder by a Federal Reserve Bank. However, even in those two cases, settlement is effected, and delivery services are provided by the Federal Reserve. The same clearing facilities, courier network and settlement procedures provided by the Federal Reserve in connection with check transactions and in handling Government ACH payments as fiscal agent for the Government are used in handling ACH transactions, so that the additional cost to the Federal Reserve in providing ACH services is relatively small.

### ROLE OF THE FEDERAL RESERVE IN PROVIDING ACH SERVICES

Congress has directed the Federal Reserve to provide clearing and settlement services with respect to checks, as an alternative to private arrangements. In addition, whether through Congressional direction or acquiescence over the years, the Federal Reserve has undertaken responsibility for maintenance of an efficient payments system. Given those duties and the close parallel between check and ACH clearing and settlement processes we believe that Federal Reserve operation of ACH facilities and the providing of delivery and settlement services in connection therewith is an appropriate role for the Federal Reserve.

As a purely theoretical proposition, the question of whether the Federal Reserve should provide ACH services may be open to debate. We believe, however, that that question must be answered from a practical standpoint with reference to the public benefit to be derived from such operation and the alternatives available at the present time. From that viewpoint, we believe, that, subject to certain important limitations, that question should be answered in the affirmative.

Despite a well developed organizational and structural framework, the ACH enterprise as an operating system is still in its infancy, with a very limited volume of transactions (other than Government payments) thus far. If permitted to grow, however, that system will provide a significant improvement in the nation's payment system and provide substantial benefit to the public. As stated in the second report of the National EFT Commission to the President and Congress: ". . . the development of ACH facilities . . . will lead, in the long run, to a more efficient and effective payment mechanism for the benefit of the public . . ." (p. 75).

If, however, an effective nationwide ACH system is to evolve, a number of elements must be present, namely (1) computerized clearing house facilities for processing ACH items, (2) a linkage between such facilities in order to transfer items from one part of the country to another, (3) the capability to deliver those items to participating financial institutions, (4) a framework of legal and operating rules and standards governing interchange between participants, (5) an organizational structure through which participants may interact and through which changes may be effected in such rules and standards, (6) participation on a broad basis by financial institutions in order to make the ACH system a viable payment device for their customers, (7) a substantial educational and marketing effort to acquaint those customers and the public with the benefits to be derived from the ACH system, and (8) ultimately, a substantial volume of ACH transactions without which the cost savings made possible by the system cannot be realized.

The private sector has expended substantial amounts to date in creating a local and national organizational, operational and legal framework in which the ACH system can grow, and has also achieved broad financial institution participation across the country. In addition, it has spent considerable amounts in education and marketing, activities which must be continued at an increased pace if the public is to take advantage of ACH services. But it is very unlikely that, at this time, the private sector would make the very substantial additional investment necessary to duplicate a computer network and delivery and settlement systems for ACH transactions such as those now being operated by the Federal Reserve. The great majority of financial institutions could simply not afford to bear their fair share of the additional cost burden required to establish such mechanisms, and the larger institutions could hardly be expected to shoulder the entire burden of such a major undertaking. It is very doubtful that the financial community would be willing to make that additional investment in view of the very substantial level of ACH activity which would be required to recoup those expenditures and the risks involved in such an undertaking.

In short, we believe that at this stage of ACH development, the offering of ACH services in a supportive role by the Federal Reserve is necessary if the public benefits made possible by the availability of ACH services are to be realized over the long term. We also believe, however, that the following limitations now operative through the cooperative efforts of the Federal Reserve and the private sector must be maintained.

As stated by Federal Reserve Governor Gardner in testimony before the National EFT Commission, in providing ACH services "the Federal Reserve interacts with the financial institutions only for purposes of effecting clearing and settlement. All other organizational, operational and legal requirements are between the participating financial institutions and their customers." (p. 4). Moreover, a Federal Reserve Bank provides ACH processing, delivery and settlement services only if requested to do so by an ACH association. The association is free to choose for itself whether a Federal Reserve Bank or a private operator is to provide any or all of those services.

We believe it appropriate for the Federal Reserve to provide automated clearing house services at this time only if such organizational, operational and legal control remains with the private sector so that the ACH system can be responsive to changes dictated by the marketplace, and only if that freedom of choice remains unimpaired.

## ACCESS

The question of whether all depository institutions within the geographical service area of a particular ACH association should be granted equal access to the automated clearing house of that association is a matter left by NACHA to determination by its individual member associations. For that reason, NACHA takes no position on the question of whether all depository institutions should have access to a Federal Reserve Bank acting as an automated clearing house for one of NACHA's member associations. I might note, however, that virtually all ACH associations today do provide equal access to all depository institutions.

## PRICING OF ACH SERVICES BY THE FEDERAL RESERVE

NACHA believes that the Federal Reserve should develop a schedule of fees reflecting fully the costs incurred in providing both ACH and other services to financial institutions. Such a pricing system would provide an impetus for efficient and innovative operation of such services, protect and stimulate competitive incentives in the private sector, and avoid placing the burden of operation on those Federal Reserve member banks who do not use those services but are nonetheless subject to Federal Reserve requirements. We feel that such a schedule should reflect the different categories of service provided, with various services, such as, for example, delivery or courier services priced separately and offered independently from other services.

To fully accomplish such separate pricing, we believe that interest should be paid on reserve balances held by Federal Reserve member banks with the Federal Reserve, and that those interest payments should not be in the form of credits against charges for services used. The latter arrangement would compel a bank to utilize the services provided by the Federal Reserve in order to obtain the benefit of those credits.

Finally, as noted above, ACH services are presently provided either by the Federal Reserve or privately to a particular ACH association rather than directly to individual financial institutions which are members of that association. For that reason, and to provide maximum flexibility for the allocation of costs among originators and receivers of debit and credit items as benefits and burdens are perceived, charges for such services should be levied on ACH associations rather than directly on individual participating financial institutions.

CONCLUSION

In summary, NACHA endorses the following principles concerning the Federal Reserve's role in providing ACH services:

1. The furnishing of such services is an appropriate role for the Federal Reserve at this time, provided the freedom to choose between the Federal Reserve and private operators remains unimpaired.

2. The Federal Reserve's role in furnishing ACH services should be limited to an operational one, not involving control over that system or the customer services it makes possible.

3. ACH and other services should be individually offered and priced by the Federal Reserve on a fully costed basis to promote private sector competition.

We thank you for the opportunity to offer these views to the Committee.

The CHAIRMAN. I want to thank all of you gentlemen for a very fine presentation.

I'd like to ask each of you in turn, beginning with Mr. Lee and then Mr. Romberg and then Mr. Dissmeyer, has the Federal Reserve taken any steps to foster private sector initiatives in the payments mechanism and have they encouraged competition or offered to help in the establishment of the private sector alternatives to the services they supply?

Mr. LEE. I'd have to say that in New York at the local New York City Federal Reserve Bank there is a great deal of sympathy in that respect and they have tried very hard to work with us. I think, though, that they have been constrained by the policies at the national level. At one point in time we perceived that in order to make our privately run automated clearinghouse sustain itself we would need access to Federal Reserve courier routes and we made application to the New York Federal Reserve Bank to obtain access to the Fed courier routes because all other ACHs in all other parts of the country were already being provided the courier routes. This was some time in coming and after about 18 months they did say that we could have access to their courier routes. So that is at least one step they have taken.

Unfortunately, after testing the courier routes we found how they moved tapes around and we found they were not fast enough to meet our deadlines and schedules so we do not use them very much now. But at least in that one respect they have helped us. As an aside, we then took the initiative to install a data point computer—at our own expense—in order to communicate to those locations in northern New Jersey and upstate New York. This illustrates how the private sector can move to respond to the needs of its membership.

The CHAIRMAN. Is that the only respect in which they have provided any specific kind of cooperation?

Mr. LEE. I didn't mean to limit it because in New York, as I say, they have been most helpful.

The CHAIRMAN. You say they have a good attitude. You also say they are restrained by Washington. What do you mean by that? How are they restrained by policies in Washington?

Mr. LEE. Let me be very candid with you, Senator. In order for a private automated clearinghouse to sustain itself we are going to have to have access to the large bulk of the transactions that now flow through automated clearinghouses and they are the Federal recurring payments. Now if those Federal recurring payments come through us and we are not permitted to charge for those payments we are in effect paying for a Government system and that is exactly the way the Fed has made it stand so far. We can have access to those Federal payments and we can move them through the private ACH, but we cannot charge.

The CHAIRMAN. You say the New York people see that and sympathize, but the Washington decision has been consistently adverse? They haven't shown any indication of changing?

Mr. LEE. That is correct.

The CHAIRMAN. All right. Mr. Romberg.

Mr. ROMBERG. From our position, again I think we noticed elements of sympathy, but on the specific issues which most directly affect the wire transfer business, which is the matter of pricing and access to settlement, we don't notice any particular steps forward. We have stated we have been working with them for some time to achieve access. We are hopeful that this will come about, but at this piont we don't have specific indications or a schedule of when this will be realized.

The CHAIRMAN. You say you don't have any specific indications or a schedule of when it would be realized. Have they indicated—has anybody indicated that they want to foster your initiative and assist you? Do they recognize the Bankwire is a real alternative in the private sector?

Mr. ROMBERG. I think in our dealings with the Federal Reserve there have been staff members which have indicated that now, with the results of this survey, that there does seem to be a realistic need on the part of the banking industry for such access and they have said that there's no reason why the Federal Reserve shouldn't provide this.

The CHAIRMAN. But they haven't taken any steps to provide it?

Mr. ROMBERG. The steps have not been accomplished yet. If the Senator will permit me indulgence, we are at a somewhat delicate stage with the Federal Reserve in that we have been told that at the upcoming conference of the first vice presidents which will be later in October, that this matter will be considered. We have also been told by some others that it probably will not be considered. So we are a little bit uncertain as to just where we stand, but because of the delicate nature of the situation I'd rather not go into it.

The CHAIRMAN. It's delicate but if you're going to make any progress you have to know whether it's going to be considered or not. Why don't you bluntly ask if it is going to be considered or not? Who would have the ability to determine that?

Mr. ROMBERG. I would imagine that it would be the chairman of the conference of first vice presidents.

The CHAIRMAN. Who is that?

Mr. ROMBERG. Mr. James McIntosh is the first vice president of the Boston Federal Reserve. We have been working with Mr. Kalinsky of the payments staff.

The CHAIRMAN. Have you asked Mr. McIntosh?

Mr. ROMBERG. We have not asked Mr. McIntosh. We have asked Mr. Kalinsky.

The CHAIRMAN. Why haven't you asked Mr. McIntosh?

Mr. ROMBERG. Our dealings have been through Mr. Kalinsky and he's been the designated staff representative and we have dealt through him.

The CHAIRMAN. Do you want us to ask Mr. McIntosh? We would be happy to do that.

Mr. ROMBERG. I think it would be interesting to know the answer.

The CHAIRMAN. Mr. Dissmeyer?

Mr. DISSMEYER. Mr. Chairman, my answer may be slightly different than my two associates because we have been working so closely with the Federal Reserve as ACHs in order to effect two types of payments, both the Government and the private. So I think I can cite a number of instances where in my perception they have encouraged private alternatives.

For instance, a number of our 32 ACHs have just recently become operational and as a condition for the Fed responding to a request to run those ACHs they have said it has to be open to all financial institutions—banks, thrifts, credit unions—which in effect is an encouragement of those alternatives.

They also have worked very closely with us since March in a pilot national exchange from which we can evaluate the problems so that a private alternative can know what are the timing problems. They have been working very cooperatively with us for about 6 months now to see what are the problems, and I think that helps us to evaluate the alternatives, whether it's Bankwire or others.

They have given us a lot of counsel in our technical subcommittees for handling such things as return items, if you have return items, even in an electronic mode, or the technical problems with tapes.

Very recently I think that they made a major step forward to encourage private alternatives by defining the methods by which a service bureau would have access to the Fed acting as agent for a member bank which would encourage those alternatives and I think more specifically there's a lot of services that can be delivered by the ACH vehicle and they so far have not thrown up any obstacles. That's why we said we want that control to remain unimpaired.

To give an example, we are exploring the delivery of GIRO services through the ACH, a deposit of dividends—these kinds of things. So whether that's the kind of encouragement of private alternatives you had in mind, we are making I feel a lot of progress if we can get the benefit to the public out of the ACH.

The CHAIRMAN. Mr. Dissmeyer, you're very, very helpful in giving me specific instances. However, it's hard for me again, as somebody who's not technically qualified, to assess whether or not those specific instances you give me really are overall substantial or whether there are other areas where they could be helpful which are more important where they haven't taken the kind of initiative that they should or encouraged the kind of initiative on your part I should say.

Mr. DISSMEYER. I'm responding quickly to your question and if you would like me to I can think of it further and supplement this. I can't think of any just offhand. These are large, particularly the pilot national exchange or the GIRO issue. The National Commission just voted in their committee to encourage us to modify our rules to make it possible. So that's a large one.

The CHAIRMAN. Mr. Lee, the New York Clearing House has a great deal of check processing outside of the Fed. Is this because you can do it more cheaply than the Fed? Are there other private clearinghouse arrangements that compete with the Fed in handling a significant volume of checks?

Mr. LEE. I have to believe it's because we can do it more cheaply, although because it occurred as a historical accident we have never run any tests in comparison with the Fed to know that.

To answer the second part of your question, it's my understanding that except for what we call direct sends or direct sending arrangements, we are almost the only place in the country where check clearing is handled under private auspices. Elsewhere it's usually handled under the Fed's auspices either in the Federal Reserve bank or in an RCPC.

The CHAIRMAN. Should this be encouraged; that is, private sector check clearing, if the Fed offered net settling services apart from the processing?

Mr. LEE. I think the RCPC's should be spun off and privately operated and I'm confident, Senator, if the Fed would ever price and charge for its services they would be.

The CHAIRMAN. Mr. Romberg, you said in your statement that the Bankwire has been negotiating with the Federal Reserve for 18 months to acquire access to their system for the purpose of effectuating net settlement of transactions which you have already processed. You also said that at present such interface has already been established for check clearing and CHIPS, which as I understand is the clearinghouse for interbank payments—I always thought of it as a hamburger stand—what has taken the Fed so long for making this possible for you? Are there technical or legal problems there?

Mr. ROMBERG. There is a significant both technical and legal difference between the two modes of access. CHIPS is on what is known as the next day basis of access which means that on the morning after—and Mr. Lee can explain this better than I—they provide the settlement balance. We propose to do this on a same-day basis in order to provide availability at that same day. So we have to provide our balances in the afternoon of the operating day rather than the morning of the next day. To get these balances posted throughout the system is a different technical consideration.

However, in our dealings with the Federal Reserve, both we and I believe they—we certainly feel we have devised a scheme which would be technically and operationally feasible to accomplish this.

The CHAIRMAN. Mr. Dissmeyer, what's the current volume of automated clearinghouse transfers and what is the average cost of making a transfer?

Mr. DISSMEYER. I have the statistics for June of this year and in June the private sector put through 474,000 debit trasactions and 398,000 credits for a total of 872,000 items. Government Treasury Department items totaled 6,041,000.

The CHAIRMAN. Can you give us a little seasonal adjustment? Is that a typical month or is June a busy month?

Mr. DISSMEYER. In the ACH it's growing every month so we don't know yet what our seasonal swings are—all of the ACH are pretty much fixed recurring amounts. You wouldn't see a seasonal fluctuation normally, but we are growing every month. For instance, September of 1976 we only had 500,000 items. The private sector is growing. Both of them are growing. So there is an upward tilt and where they level out, we have no idea at this point.

The CHAIRMAN. How does the cost of an automated clearinghouse transfer compare to a transfer by paper check? Is it higher or lower?

Mr. DISSMEYER. I can only comment from within the commercial bank sector. At this point, because of the volume, an ACH item is costing more to initiate than a check.

The CHAIRMAN. How big would the volume have to be for it to be comparable?

Mr. DISSMEYER. In our case, I'm thinking of a specific bank, we would have to increase our volume about threefold and think that's possible perhaps in the year 1978.

The CHAIRMAN. How many people would be encouraged to use the automated clearinghouse-type transfers, switch from paper, if the two types of services are not priced at their longrun costs?

Mr. DISSMEYER. This is why we encourage the Fed to explicitly unbundle and price so the handling of a check, the handling of the electronic item can be evaluated on its merits and I think when you get the volume, cross over this break-even point, then your electronics will show the economies of scale because the paper is subject to the constant inflation of salaries and this type of thing. Handling checks is still high labor-intensive in banking today. The ACH is strictly electronic.

The CHAIRMAN. Mr. Lee, I think the New York Clearing House Association runs one of two private clearinghouses that exist outside the Fed.

Mr. LEE. Yes.

The CHAIRMAN. How do you arrange settlements?

Mr. LEE. We arrange them with the Fed. Again, this stems from a historical accident since we antedated the Fed in our organization. When the Fed was organized in 1913 they decided to clear their checks with us rather than we clearing them with the Fed. We had arranged settlement at that point and it's grown up historically that we simply send a net settlement sheet to the New York Federal Reserve for settlement. When we organized our CHIPS system, which was really the first use of electronic money in commercial banking, we just devised the same kind of a sheet for electronic settlements that we had for paper check settlements. When we started the ACH we simply devised a similar third sheet for settlements. In the settlement for CHIPS, all transactions are settled to the 10 participating NYCHA members. While there are over 70 members of CHIPS, non-NYCHA members settle their transactions through one of the NYCHA members. Therefore the average 60 to 70 billion transferred daily is settled at the Federal Reserve Bank the following morning in 10 debits or credits to NYCHA members' reserve accounts. This reduces effort for the Fed of New York since 2,510 transactions settled the over 7 million CHIPS transactions in 1976 worth over $13 trillion.

So in effect, all of the institutions which participate in our clearings, whether they be manual or electronic, are netted down at the clearinghouse to the point where one institution has only a debit or only a credit but not both. Then we present that on a sheet, I sign it and send it over to the Fed and it's posted on the accounts of the banks at the Fed.

The CHAIRMAN. Mr. Romberg, would it be possible for automated clearing houses to be linked on a nationwide basis by a Bankwire rather than a Fedwire or must the Federal Reserve provide such linkage?

Mr. ROMBERG. No. In fact, one of the capabilities incorporated in a provision for the new Bankwire system is to be able to provide the facility for batch transmission which will be essentially designed for inter-ACH communications. We see this as a major area of potential usage and we have had some conversations to explore this, but it is a facility definitely planned for our new Bankwire system.

The CHAIRMAN. Would you agree, Mr. Dissmeyer?

Mr. DISSMEYER. Yes, I certainly do. There are a number of private alternatives, including the two nationwide credit card networks, that could be used, when we get the results of our pilot. There are many alternatives.

The CHAIRMAN. I'd like to ask each of you gentlemen to comment on this. Last April we had a hearing on the Federal Reserve budget. During those hearings we talked a great deal about productivity and a suggestion was made to the Fed that they compare their own productivity with private sector alternatives in the operations area. Have any of you gentlemen been contacted by the Fed to provide information which would allow them to make a comparison?

Mr. LEE. No, sir, I have not, but that probably is understandable since I'm not a banker. I'm an association operator.

The CHAIRMAN. Do you know of anybody in your organization who's been contacted?

Mr. LEE. I do not, but that shouldn't be taken to mean that they have not been.

The CHAIRMAN. How would you rate your productivity compared to that of the Fed for similar services?

Mr. LEE. Well, we run very lean, sir, very lean.

The CHAIRMAN. That means very productively.

Mr. LEE. I hope so. We have a very tight budget and we are scrutinized very carefully on what we spend every year. We handle 4½ million paper items; that is to say, paper items every day, in a manual clearing. We have a computer system that we use both to run our CHIPS system and our ACH. Our CHIPS system has grown to be an enormous operation. We settle on CHIPS something like $70 billion every day and on 1 day this year we had more than $100 billion. So we try to keep it very, very tight and very minimal and that's the way we have to run. Any comments I might have about the Fed would be simply casual observations.

The CHAIRMAN. What is the discipline on you?

Mr. LEE. We are funded by our member banks.

The CHAIRMAN. What pressure is there on you therefore to hold down your costs? It's not quite as if you were operating on the basis of a complete usual acceptance of a private enterprise system. That is, if you don't make your costs the member banks contribute a little more. Of course, they complain about it, but they will contribute more and you will always come out.

Mr. LEE. That's correct, but on our ACH and CHIPS system which is our large electronics function, we simply take whatever it costs us every month and divide it per transaction among our participants and every month we have to show how many cents per message our total cost has been and that's a very visible figure. If I move from 12 to 13 cents I get a great deal of flack and if we don't start moving it down, as we have been, from 13 to 12 to 11, we also get a great deal of flack. So the discipline on us is constant and very strong.

The CHAIRMAN. You see, one of the problems we have with the Federal Reserve is that their budget is all but invisible. We don't have review of it. Unlike other Government agencies, which don't have the discipline the private sector has anyway, they at least have the discipline of the Congress complaining about increasing costs, challenging increasing costs, the GAO investigating and giving us the details on where they think they are inefficient and incompetent.

The Federal Reserve doesn't have that audit, doesn't have that budget processing, so it doesn't have that kind of discipline.

Mr. ROMBERG. Well, nobody from the Federal Reserve has approached our organization for any of our economic information, to answer your initial question.

The CHAIRMAN. And the second question was how do you rate your productivity compared to theirs?

Mr. ROMBERG. To retrace some of Mr. Lee's words, we believe we run very lean. Our entire net budget for operating a nationwide system today is $2 million a year. We handle 5 million messages a year at 40 cents. Our new system will be somewhat more expensive. It includes a number of additional features. But by any standard comparison, we would welcome the opportunity to compare our operating costs with comparable activities, both private and public.

The CHAIRMAN. Mr. Dissmeyer.

Mr. DISSMEYER. I have no basis to compare since NACHA as such is not an operating organization. We are more like a trade association. So we have no operations that we could compare ours with versus the Fed. I think the true measure then of this productivity is the thing that all of us have endorsed which is explicit pricing which would then be a measure of productivity.

The CHAIRMAN. Mr. Dissmeyer, National Automated Clearing House Association is an association of banks; is that right?

Mr. DISSMEYER. Well, they are associations of banks and thrifts.

The CHAIRMAN. Financial institutions?

Mr. DISSMEYER. Financial institutions with depository powers.

The CHAIRMAN. I think Mr. Oram indicated thrifts, the S. & L's, were having some problem joining certain ACH's. Is that right?

Mr. DISSMEYER. I think that he put that in the past tense. I think he indicated that two Justice Department suits against two ACH's where they were not permitting thrifts membership have been resolved. As of June 30, 23 or our 29 operational ACH's admitted thrifts and since then——

The CHAIRMAN. How about the other six?

Mr. DISSMEYER. The other six I was going to say since then my information is that they are substantially, to my knowledge, I'd say all but—substantially all are open. At the end of September when those results are in, I would suspect it will probably be all 32.

The CHAIRMAN. Who establishes the rules and regulations for ACH's to make sure they operate in the public interest?

Mr. DISSMEYER. The rules for interregional exchange of items are established by the NACHA board and its subcommittees. If it's within a region, intraregional, say in New York or in our area, those rules are established by the local ACH Association and it stays within their own geographic service area, but obviously if you move items interregionally those rules tend to take precedence over it because the intraregionals have to be compatible.

The CHAIRMAN. Mr. Romberg, I thought your testimony was very interesting in discussing your competition with the Fed. You do compete directly with the Fed in offering wire transfer services. It appears from your testimony the Fed may be driving you out of business because it doesn't price its services. Your graphs I think dramatically show the problem. It's puzzling as to why they aren't successful in driving you out of business entirely. As you say, they operate for free. You charge 40 cents per message, but you're still able to survive, at least up to now. Do you offer services that the Fed doesn't offer? Is there another reason why you can survive as long as you have competing with the Fed's monopoly power and no charge?

Mr. ROMBERG. I'd say there are two factors. One, we do offer certain services that the Fed does not.

The CHAIRMAN. Such as?

Mr. ROMBERG. Particularly capability for wire transfers through correspondent accounts. The Fed has always transferred through reserve balances. We also offer a facility for administering of general text messages. These are the two prinicipal capabilities. The other important reason is I think perhaps a most fundamental one, which is a strong feeling on the part of the banking industry to maintain a private sector capability and we know that many banks are consciously putting a large fraction of their funds into the wire.

The CHAIRMAN. Why are they anxious to operate it privately outside the Fed operation?

Mr. ROMBERG. They feel there's a need for a viable capability to be able to offer different products and services. With the new Bankwire, for instance, we expect with our settlement facility to be able to provide transaction terms which will greatly simplify the problems of reconciliation and the questions of reliability, questions of being able to influence the nature of the wire transfer product. We are industry owned and managed activity and we are responsive to the industry.

The CHAIRMAN. It seems to me you're answering one of my previous questions on productivity in this response. You're doing things more efficiently than the Fed does them?

Mr. ROMBERG. We believe so. We see this in the nature of our communications systems which we feel make better use of the technology. We see this also in our approach to some of the computer systems, but we don't have specifics on which to base this conclusion.

The CHAIRMAN. Mr. Dissmeyer, you said you favored payment of interest on all reserves I believe.

Mr. DISSMEYER. Yes, sir.

The CHAIRMAN. That's quite natural since most of your members are banks and many may be member banks. Has your organization, NACHA, taken a position on uniform reserves for all banks?

Mr. DISSMEYER. No, sir; we have not. In fact, as NACHA, it perhaps is inappropriate to take a stand on interest on reserves, but we feel that it is so linked with pricing of services that we do feel it's appropriate to take a stand on payment of interest on reserves since we feel strongly that the services should be priced and unbundled and one cannot be done without the other.

The CHAIRMAN. Mr. Lee, your association is involved in international transfer of funds I think.

Mr. LEE. Yes, sir.

The CHAIRMAN. Do you compete with the Fed in that area?

Mr. LEE. Not really. We are unique in that area as far as I can tell. We are the only institution in the world so far as I know that handles so-called interbank payments which derive from foreign trade, currency transactions and Eurodollar transactions.

The CHAIRMAN. I take it then the Fed doesn't make any international transfer or offer service to international customers without charge, or do they?

Mr. LEE. I really can't speak to that. Their Fedwire does not extend internationally but whether they have arrangements with other central banks I do not know.

The CHAIRMAN. Are you aware of any foreign central bank that's as heavily involved in the payments services business as the Fed is?

Mr. LEE. No, I'm not.

The CHAIRMAN. Gentlemen, I want to thank you very much. Let me just conclude by pointing out that every one of our five witnesses this morning has given us a very similar theme which is very welcome. Mr. Phillips said let the markets change through private incentives; let the Fed concentrate on monetary policy. Mr. Oram said let Congress encourage the greatest amount of competition. Mr. Lee said open up the role of the private sector in the payments mechanism; keep government intervention down to what is absolutely necessary. Mr. Romberg said keep the role of the Fed as provider of payment services to a minimum; encourage multiple private sector involvement. Mr. Dissmeyer said preserve freedom of choice between the Fed and the private operators. Promote private competition by fully pricing services.

I think it's a consistently clear intention. Our leadoff witness tomorrow will be the Honorable Philip Coldwell of the Board of Governors, so he will have a real challenge. We also have ABA appearing, Mr. Charles F. Haywood; and Mr. Leif Olsen.

Thank you very much. You were excellent witnesses.

The committee will stand in recess until 10 o'clock tomorrow.

[Whereupon, at 12:20 p.m., the hearing was recessed, to be reconvened at 10 am Tuesday, October 11, 1977.]

# FEDERAL RESERVE SERVICES

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**TUESDAY, OCTOBER 11, 1977**

U.S. SENATE,
COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS,
*Washington, D.C.*

The committee met at 10 a.m., in room 5302, Dirksen Senate Office Building, Senator William Proxmire (chairman of the committee) presiding.

Present: Senators Proxmire and Lugar.

## STATEMENT OF CHAIRMAN PROXMIRE

The CHAIRMAN. The committee will come to order.

Today is the second of 2 days of oversight hearings on the payments mechanism, the Federal Reserve's role in providing payments services, and the pricing of Federal Reserve services.

Yesterday the committee heard testimony from five witnesses on this subject and they unanimously agreed that the Federal Reserve should price all of their payment services explicitly so that private competition can be encouraged, and that if this were done there would gradually be a more limited role for the Fed.

Let me share those comments with you, Governor Coldwell.

(1) Dr. Almarin Phillips said that the Federal Reserve should concentrate its energies on monetary policy and that the best policy is to let the markets change and grow through private incentives.

(2) Mr. Oram said that the Federal Home Loan Bank Board urges the Congress to address the issue of pricing comprehensively so as to encourage the greatest amount of competition.

(3) Mr. Lee said that the private sector should be encouraged to assume a greater role in providing payments services with adequate incentive for innovation and improved technology and that the Fed's operational role in the payments mechanism should be as small as possible.

(4) Mr. Romberg said that the role of the Federal Reserve as a provider of payments services should be kept to a minimum and that multiple private sector alternatives would be encouraged by explicit pricing of Fed services on the same basis as private sector organizations.

(5) Mr. Dissmeyer said that the Federal Reserve's role in furnishing automated clearing house services should be limited to an operational one, and that services should be individually offered and priced by the Fed on a fully costed basis to promote private sector competition.

I think there was obviously an overwhelming consensus on the part of our witnesses yesterday that we should do our best to provide the



99-446 O - 78 - 8

kind of innovation and efficiency that private sector competition can provide in this area and that it's impossible unless the Fed agrees to unbundle and cost the services which they are now providing at no cost.

Our first witness today will be Gov. Philip E. Coldwell, a distinguished member of the Board of Governors of the Federal Reserve System. Mr. Coldwell, we are delighted to have you here again. You have appeared before the committee previously and have always been an excellent witness.

The committee is aware of the membership problem that confronts the Federal Reserve and that the centerpiece of the issue is required reserves that are costly to member banks because they earn no explicit interest. I said yesterday that I think the Fed should unbundle its services and price them explicitly, and that if that were done, I could support the payment of explicit interest on a compensatory balance-for-payments services provided there is no reserve loss to the Treasury. This might also require the unbundling of required reserves by the Fed, but it could be worked out.

I think that if the Federal Reserve waits until its membership problem is solved, we may never get them to price their services. We can't afford that time. The current framework is stifling private competition, while the Fed is increasing its role in the payments area and moving ahead with plans for new and bigger payments equipment and systems. Yet, the Fed has not demonstrated that payment transfers are a public good. In fact, from the testimony yesterday, it is clear that the private sector is not only willing, but they are eager—you might say very eager—to compete with the Fed. And I think that the Fed should encourage and aid the development of private alternatives whenever it is possible.

Mr. Coldwell, I am anxious to hear your views and the position of the Federal Reserve. You have a 16-page statement. We would appreciate it if you could abbreviate it in any way, and the entire statement will be printed in full in the record.

## STATEMENT OF PHILIP E. COLDWELL, MEMBER, BOARD OF GOVERNORS, THE FEDERAL RESERVE SYSTEM

Mr. Coldwell. Thank you, Mr. Chairman. I will attempt to abbreviate. You have covered a fairly sizable share of my statement anyway, but I would like to emphasize at least the first eight pages of this testimony and then skip to the latter part.

[Complete statement and additional material follows:]

Testimony

of

Philip E. Coldwell

I am pleased to be able to discuss with this distinguished Committee the role that the Federal Reserve System plays in the nation's payments mechanism. My testimony today will describe the scope of Federal Reserve participation in the payments mechanism, and how that participation serves the public interest. In addition, I shall address the issues of pricing and access and their relationship to the deepening problem of member bank withdrawal from the Reserve System.

The Federal Reserve System provides a public alternative to private check collection arrangements that ensures the safety, solvency, and certainty of the national check collection system. This operational role exerts a public regulatory presence that protects the interests of the general public in using checks. Private arrangements cleared all checks and drafts before the Federal Reserve System was established, but these arrangements were judged by Congress and by the designers of the Reserve System to be inefficient and a burden on commerce. These clearing arrangements also were inextricably intertwined with the pyramiding of balances at correspondent banks that was a primary contributing factor to recurring money panics like the one that occurred in 1907. The National Monetary Commission set up in 1910 to study solutions to the problem of money panics recommended that an association of banks be organized that would provide a nationwide, centralized clearing union supported by the Federal Government.

The Federal Reserve Act was passed in 1913 at least partly to accomplish this objective, although Congress substantially altered this original proposal -- principally to require membership by national banks and to increase governmental oversight. Later, the Act was amended to assign to the Federal Reserve many of the payments functions that were then performed by the Subtreasuries. As a result, one major role of the System is that of providing a largely voluntary, nationwide, governmentally-controlled clearingbank of unquestionable solvency. The other major payments role of the System is to carry on functions of the Subtreasuries, such as issuing Federal Reserve notes and serving as Fiscal Agent of the United States. The Federal Reserve Act has been amended on several occasions since the System's role in the payments mechanism was defined, but those sections dealing with the payments role have hardly been altered.

As a consequence of carrying out its charter, the Reserve System exerts a pervasive and beneficial influence on the nation's payments mechanism. This influence is exerted through four payments activities: cash, check processing, wire transfers of funds, and automated clearinghouses. I should like to describe each activity briefly.

The cash operations of the Reserve Banks involve the distribution of the supply of currency and coin for the economy. Since 1920 when the functions of the Assistant Treasurers of the United States were transferred to the Reserve Banks, the System has been authorized and directed by the Treasury to distribute available supplies of currency and coin directly to commercial banks. Important public service activities of the System's cash operations include counterfeit detection and maintenance of a high quality of money in circulation.

Currently, 37 Federal Reserve offices provide cash services to approximately 25,000 banking offices served by armored carrier for currency and coin pickup and delivery. During 1976, 7.0 billion pieces of currency and 12.6 billion pieces of coin were processed, and 2.6 billion pieces of unfit currency were destroyed. Including the cost of printing Federal Reserve Notes, amounting to $45.3 million, System direct expenses for cash operations were approximately $113 million during 1976.

Check collection operations comprise the largest single activity of the Reserve Banks. Although the Federal Reserve actually processes less than 40% of all checks written, the System is the major participant in check clearing, having worked in cooperation with the banking industry over the years, through its operations and regulations, to provide a smoothly functioning and efficient check clearing system. Last year the public and private check collection systems handled an estimated 28 billion checks, drawn on approximately 106 million accounts.

Each day some 50 million checks are transported in timely fashion by contract courier and U.S. Postal Service facilities from Federal Reserve processing sites to the institutions upon which they are drawn or the payor banks' designated processing centers. Fully 95% of the checks processed by the System are deposited by member banks; the remaining 5% are received from non-member banks depositing at Federal Reserve Regional Check Processing Centers. Because some 40 percent of the checks processed by the System are deposited originally in banks outside the Federal Reserve territory in which they are payable, the System also employs an extensive air charter network to move checks among Federal Reserve offices. During 1976 the 48 Federal Reserve offices which process checks handled over 12 billion items; processed approximately 2.8 million adjustment cases; and returned almost 143 million dishonored or uncollectible checks to the banks depositing them with the Federal Reserve. In 1976 check collection direct expense to the Federal Reserve totalled $131.1 million.

The third major payments mechanism activity is the Federal Reserve Communications System. The need to move financial and administrative data rapidly between offices has existed since the early days of the Federal Reserve System. To meet that need, the System operates communications facilities interconnecting Federal Reserve offices, the Board of Governors, member banks, the Treasury Department and other government agencies. The speed and sophistication of these facilities have improved through the years as communication technology has advanced. Three types of messages are handled through the communications facilities: transfer of reserve account balances between member banks, transfer of U.S. Government and Federal agency securities, and administrative and monetary policy-related information.

Reserve balances are transferred by member banks to purchase or sell Federal funds, to move correspondent bank balances from one bank to another, and to shift funds to other members on behalf of customers. The communications network is used by the Treasury Department and government agencies to disburse and collect monies and to transfer Treasury and government agency securities. In 1976, 21 million such reserve balance transfers took place, amounting in the aggregate to about $35.6 trillion. In the same year 2.3 million securities transfers for $7 trillion were processed. Direct expense of transfers of reserve account balances between member banks totalled $5.7 million.

The fourth payments mechanism activity of the Federal Reserve System is operation of automated clearinghouses. The automated clearinghouse (ACH) concept was originated by the banking industry to utilize new technology to slow or even to reverse the growing volume and increased cost of processing paper checks. Over the past five years bankers and thrift industry representatives have formed associations to implement the ACH concept in their regions. All but two of the twenty-nine ACH associations have requested Federal Reserve assistance (use of clearing and settlement facilities) in processing payments contained on magnetic tapes. The two privately operated ACH facilities use the transportation network and reserve account settlement facilities of the Federal Reserve. Currently the volume of commercial payments processed by Federal Reserve ACH operations approximates 800,000 items per month. Federal Reserve operation of automated clearinghouses has been endorsed by the National Commission on Electronic Fund Transfers.

The Treasury Department uses the electronic payments processing capabilities of the Federal Reserve, including the same general procedures and computer systems used for commercial ACH processing, for its program of direct deposit of federal recurring payments. Currently the volume of payments made under the Government's direct deposit program is approximately 7.3 million items monthly. By 1980 it is estimated that this program will save the Treasury approximately $25 million annually in reduced disbursement costs. The total direct expense to the Federal Reserve to provide both commercial ACH and Government direct deposit processing was $1.6 million during 1976.

System participation in the payments mechanism provides significant benefits to consumers and to business. For example, the acceptability of consumers' checks is greatly enhanced by the nation-wide network of Federal Reserve offices and the speed with which those offices process checks. In addition, the System grants uniform availability of credit for checks drawn on similarily situated banks. These facets of system participation in and regulation of the payments mechanism reduce the impact of the geographic location of the banks on which the checks are drawn. Furthermore, obligations of all sizes can be settled by check because the System collects all items, large or small, at par on the same terms. By reducing the time required to collect funds, by passing credit on a uniform schedule, and by collecting at par, the System reduces the risk taken by merchants that accept checks. Expeditious clearing also improves the functioning of financial markets generally by ensuring that funds in the clearing process are immobilized for a relatively short time.

Finally, the presence of the System as a major factor in the check-clearing process permits the nation's clearing arrangements to be regulated in the public interest. The Uniform Commercial Code permits the regulations of the Board and the operating circulars of the Federal Reserve Banks to govern many of the terms and conditions for collection of checks. By this mechanism, the System can readily make desirable changes in the check clearing process . In the past decade many of the innovations in the check collection mechanism, such as the Regional Check Processing Centers--which have reduced the time required to collect checks--have been sponsored or implemented by the Federal Reserve System. Similarly, establishment of the automated clearinghouses was achieved partly by Federal Reserve involvement and assistance.

The presence of the Reserve Banks in the payments mechanism also benefits commercial banks, particularly smaller and more remote ones, because the System stands ready to collect checks at par for any member bank on the same terms. The Reserve Banks provide an alternative to the services provided by the correspondent banks. The private clearing network processes 60 percent of the checks written in the country. But the existence of the public alternative which will clear all checks on equal terms has eliminated some of the abuses that existed prior to 1914.

The Board holds the view that the difficulties characterizing the check clearing system prior to 1914 are <u>inherent</u> in the nature of the clearing process, and that a valuable discipline is imposed by a centralized nationwide clearing authority--public or quasi-public--performing a par clearing role similar to that now assumed by the Reserve Banks. There does not appear to be any essential difference in this respect between paper and electronic clearing systems. Traditionally, enterprises of such a centralized nature either are operated by the government or are governmentally regulated.

Federal Reserve participation ensures that the entire nation has the benefit of a uniform, basic level of payments mechanism services. Banks that are remote from the financial centers or that have low volume are afforded very nearly the same payments services by the System that are available to the large city banks. Only a centralized nationwide clearinghouse can provide for such uniformity of service in check collection.

In recent years changes in law and regulation have broadened the classes of institutions capable of offering third-party payments accounts to their customers and have authorized new types of payments instruments, such as NOW drafts and credit union share drafts. Many of these institutions can offer electronic payments services as well. The emergence of thrift institutions as participants in third-party payments mechanisms has created a demand for broadened access to Federal

Reserve payments services.

In the past the question of access was not pressing. If a bank wanted direct access to System services, it could simply become a member bank. However, this option is by law not available to most of the new participants in the payments mechanism. With the exception of mutual savings banks, thrift institutions cannot become members of the System. At least partly to circumvent this prohibition, we have recently seen groups of credit unions purchasing banks, thereby obtaining access to Federal Reserve services. Similarly, a group of mutual savings banks in the State of Washington formed a bank and applied for membership. A group of non-member commercial banks in Minnesota has done the same thing. Thrift institutions also have sought direct access to Federal Reserve-operated automated clearinghouse facilities, and the Board has responded with its "interim" access policy of January 1976, granting such access.

We previously have supplied the Committee with a description of the current access arrangements for the System's payments services. We believe these access arrangements are equitable, and we do not believe that any depository institution has suffered serious competitive disadvantage because of this access policy.

The policy attempts to balance a number of conflicting considerations. First, services produced by a quasi-public organization should be available to all depository institutions on the same terms. But because most thrift institutions cannot become members, access cannot be provided on cost and benefit terms equal to those afforded members. Institutions that are not eligible for membership cannot receive the full benefits or bear all of the costs of membership.

Second, if the System were to charge for its services, and to equalize other terms of access between members and non-members, any inequities in costs and benefits arising solely from usage of payments mechanism services could be eliminated. However, charging for services would inequitably impose another cost on member banks over and above that of maintaining interest-free reserves. Overall terms for use of the services would still not be the same.

Finally, the System could charge for its services in order to encourage private competition. But even assuming that private competition could develop, it is by no means evident that the outcome--including the effect on the efficiency of the payments mechanism on the whole, on the service-level available to individual consumers and businesses, and on the erosion of membership in the System--would be in the public interest.

Recognizing the possibility that charging for payments mechanism services might have beneficial effects under some circumstances, the Board stated in conjunction with the "interim" access policy, that it intended to publish a pricing schedule for comment.

Since that time the problem of establishing charges has been investigated in much greater detail, and the benefits of charging have come under considerable question. One cannot know for certain the ramifications of charges by the Federal Reserve upon the present level of services provided by correspondent banks, the potentially differing impact on institutions of different size, volume, and location, or the competitive effects of the significant shifts in payment flows that might result from imposing charges. Furthermore, the administrative costs of operating a system of charges would lessen any possible benefits.

Our studies show that the benefits of charging would be minimal if charges were not imposed upon <u>all</u> users of the services. Because the overwhelming majority of the System's volume is deposited by member banks, any approach omitting the member banks from such charges would have very little impact on improving efficiency, would quite probably be inequitable, and would probably not induce private sector competition. Member banks already pay indirectly for the payments services they receive, and imposing additional charges upon them would be inequitable.

The compensation member banks provide to the System for these and other services they receive takes the form of earnings foregone on required reserve balances held on deposit with the Reserve Banks. These reserves are partly analogous to the balances that correspondent banks require from their respondents. Reserve balances total well in excess of $25 billion. Our studies have shown that these balances are larger than necessary to compensate the System for the services member banks receive, and they also are larger than the compensating balances that would be required if all these services could be and were provided by the correspondent banking system. Of course, the balances required of members serve many other functions, including those related to monetary policy.

Imposition of additional charges related to System services would have the effect of increasing the operating costs of members by comparison with the costs of non-member institutions. The relationship between the value of services received by members from the System and the earnings foregone on member reserve balances would become further distorted. Thus, the erosion of System membership that has been underway in recent years would likely accelerate.

The Board believes that its responsibility to the public interest under the Federal Reserve Act does not permit us to take actions which aggravate the loss of membership. For that reason, the Board is not inclined to change its present access and pricing policy unless and until the special costs of belonging to the nation's central banking system are recognized and offset. If S. 2055 is enacted, the Board has stated that it will make provision for equitable access to System clearing services for all institutions holding NOW reserves. However, the Board does not believe that it would be prudent to impose upon depository institutions another major change, such as the introduction of additional charges for System services, until the transition costs arising from the introduction of NOW accounts have been largely assimilated.

Once the burden of membership has been eliminated and the transition to nationwide NOW accounts is well underway, the Board could consider introduction of full access and pricing based upon three principles. First, all depository institutions could be permitted direct access to payments services. Second, institutions could be charged for the services used, either by holding compensating balances at the Reserve Banks or by fees paid in cash. Third, any depository institution could be permitted to open a clearing account at Federal Reserve Banks for use in settling transactions with the Reserve Banks. The balance required in such an account (in addition to any compensating balances the institution may choose to hold) would have to be sufficient to pay for the amount of the checks and other items the Reserve Bank would charge to the account each day. Otherwise, overdrafts on the reserve account might occur.

As to the schedule of charges to be imposed under these principles, many difficult policy issues as well as some complex accounting questions must be dealt with before the schedule can be determined. It may appear easy to compute prices for the services: theoretically one need only add up the total cost of providing the service, divide by the amount of service provided, and add whatever markup is appropriate for the situation. In practice, there are many unresolved questions. To what service should we assign a specific portion of costs incurred to carry out multiple functions? Should long-run or short-run costs be employed? Over what geographic area--local or national--should prices be uniform? Other technical questions involve our cost accounting. The expense data we collect are adequate for auditing and expenditure control purposes; and they suffice for management information about the efficiency of Reserve Bank operations; but for purposes of charging, they may not be comparable with cost information collected by private industry. Further examples of questions to be resolved include: should System prices include a return on the capital employed, and if so, at what rate? Should capital be valued at historical or replacement cost? How should taxes be treated? A myriad of such issues have been identified and are being studied prior to consideration by the Board. These difficulties are technical, but the Reserve System could resolve them in one way or another. They are not the principal impediment to introduction of charges for System services. The main impediment is the fact that charging would exacerbate the membership problem.

Congress created the Reserve System to be a largely voluntary association of banks, attracting membership broadly from the entire industry. In this way the widest variety of viewpoints, interests, and needs could be brought to the attention of the Board in the formulation of monetary policy, discount and loan policy, and operating policy toward the payments mechanism. Continuing erosion of membership threatens to alter the very nature of the System, cutting off this broad interaction with the banking industry, and through the industry, with its customers. Because the burden of membership falls more heavily on smaller banks, the erosion of membership is most pronounced among those institutions. There is a very real danger that if the erosion continues, the nation's central bank will become an organization to which only the larger banks belong. I hope we can all agree that such an outcome is not in the best interests of monetary policy formation nor of the public generally.

There are other cogent reasons in the public interest to prefer the Reserve System to have as many members as possible. One of these reasons is the part that the member banks play in monetary management. Balances held at the Reserve Banks serve as the fulcrum for the economic stabilization actions of the central bank. Required reserve balances enable the Federal Reserve to gauge the likely effect of its monetary management actions on the supply of money and of bank credit. As more and more transactions balances are held by the public at institutions that are not subject to reserve requirements, monetary policy inevitably becomes less precise, and prediction of the effect of particular policy alternatives more uncertain.

Furthermore, the implementation of monetary policy is critically dependent upon timely and accuracte data flowing to the System's money managers. At the present time, only member banks provide the needed data in the time frame to make it most useful. Cooperative efforts with the FDIC are just beginning to provide a flow of data from a sample of non-member banks. As thrift institutions take on bank-like payments powers, their actions will have an increasing impact upon monetary management.


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With respect to balances providing such bank-like transactions services, thrift institutions should provide the same data and be subject to the same reserve requirements as commercial banks. Perhaps an equally important aspect of membership is its relationship to the safety and soundness of the banking system. Only member banks have ready access to the discount window and to the Federal Reserve counsel and assistance that accompany use of the window. Ready access to adjustment credit cannot be guaranteed by the correspondent banking system--especially in times of stress in financial markets. Access to the discount window may be a major benefit to member banks; but more important, it is the ultimate guardian of our banking system against liquidity crisis. Less obviously, the mere holding of deposits at Reserve Banks increases the soundness of the banking system. Reserve balances are essentially demand deposits held in riskfree form. The same balances held at correspondent banks would be subject to some risk, however small. Therefore, the greater the portion of the banking system's assets that is held at Reserve Banks, the lower the riskiness of the banking system as a whole.

I have dwelt at length this morning on the reasons that broad membership in the Federal Reserve is in the public interest. It is for those reasons that the Board is so concerned about the accelerating erosion of membership. Basically the cause of the loss of members is the burden of earnings foregone by members on the sterile reserves that they hold at the Reserve Banks.

There are a number of techniques that could be employed to equalize the costs of reserve requirements between member and nonmember depository institutions. Uniform reserve requirements would be the best and most simple solution. It would impose the costs of sterile reserves equally on all depository institutions and provide significant benefits for monetary management. And it could do so without weakening our dual banking system or independent thrift institutions. However, the Congress has not been convinced of the ultimate need for such complete coverage. Another way to equalize costs is to lower reserve requirements to the degree necessary to offset the costs of the excess of reserves over the value of services received. Such action would require lowering of the legal limits for reserve requirements. This solution has the disadvantage that the "insurance" value of reserves would be reduced because a smaller proportion of the total assets of the banking system would be held in risk-free reserve balances. Yet another way in which benefits could be equated with costs is by increasing the type, quantity, and quality of services provided by the Reserve Banks. Providing additional services, particulary to smaller banks, could upset traditional banking patterns; and in any case, the System might not be able to provide attractive services in sufficient quantity to offset the earnings lost on the sterile reserves. Finally, this lost income could be offset by the payment of interest on reserve balances. Interest on reserves affords the greatest flexibility, while interfering least with the existing institutional arrangements in the banking industry. Furthermore, it makes explicit the fact that the System is offsetting the special costs of membership.

The Board believes that Title II of S. 2055 is the best presently available alternative for resolving the membership problem, and we trust that it will be enacted. If nationwide NOW accounts are authorized, the banks offering such accounts will face immediate cost increases which will reduce net earnings and force further consideration of the costs of a sterile reserve requirement. Moreover, with new competition for transaction accounts, banks may feel it necessary to protect against a loss of deposits. These forces could bring even greater pressure on membership, and the provisions of Title II will be essential to prevent an acceleration of withdrawals. Whether or not NOW accounts are extended nationwide, however, the Board believes that the case for relief of the burden of membership is overwhelming and urges the adoption of Title II of S. 2055.

My testimony today has been lengthy and somewhat technical. I apologize for both of these shortcomings. But the issue of the Federal Reserve's role in the payments mechanism is a complex and technical one. Because the System's role is justified by the benefits provided to the public interest, costs arising from that role should not be imposed mostly upon the minority of banks that are members of the System. I hope I have been able to convey to this Committee some of the sense of urgency that the Board feels about the risks posed by the decline in System membership.

Thank you for your time and attention. I shall be pleased to answer any questions the Committee may have.

SENATE COMMITTEE ON BANKING, HOUSING, AND UUBAN AFFAIRS,
*Washington, D.C., September 19, 1977.*

Hon. ARTHUR F. BURNS,
*Chairman, Board of Governors of the Federal Reserve System,*
*Washington, D.C.*

DEAR MR. CHAIRMAN: I was pleased to learn that Governor Philip Coldwell will be representing the Board at the Committee's hearings on the Federal Reserve's role in the payments mechanism.

The hearings, as you know, will also examine the issues of pricing and access to Federal Reserve services. I understand that the System has been considering the issues involved in pricing and access to System applied payment services since changes in Regulation J to include electronic fund transfer services were first considered in 1972, and that several years ago a System-wide committee was appointed to look at the issues.

It would be helpful for the Committee to have some background material on the Fed's involvement in the payments mechanism and the issues of pricing and access prior to the hearings. Therefore, please supply the Committee with the following information:

1. A review of the Federal Reserve's current operations in the payments mechanism, including currency and coin services.
2. A detailed list of Federal Reserve Supplied payments mechanism services (including currency and coin) indicating, for example, where transportation, processing, settlement, or other types of services are involved.
3. For the past 5 years, for each service listed under 2 above, the volume and dollar amount of services provided by the System and the total and unit costs (or estimated costs) to the Federal Reserve of supplying those services including an allowance for overhead and depreciation. Also, for each year provide the System's capital expenditures that can be allocated to the payment mechanisms.
4. A list of the various options that the Federal Reserve System is considering or has considered as a framework for establishing a pricing schedule for services. This list should indicate fixed and/or variable prices where applicable, whether volume discounts are being considered, whether prices would be established on a System-wide basis or on a district by district basis, and how member required reserves maintained at the Reserve banks would be taken into account.
5. A description of access arrangements, including any charges that are levied, that are currently in place for nonmember banks, thrift institutions and foreign official and nonofficial users of Fed services.
6. A review of the various access arrangement for nonmember and thrifts that the Board is considering should pricing of Fed services and open access be adopted as Board policy.
7. A projection of the volume of Fed services that will be supplied in the future; in 5 yaers, in 10 years, and beyond. Also, provide the assumptions behind these projections.
8. The projected additional expenditures that will be required to provide the volume of services that has been projected in item 7 above.

The Committee would like to receive 30 copies of the requested material by Wednesday, October 5, 1977.

Sincerely,

WILLIAM PROXMIRE, *Chairman.*

CHAIRMAN OF THE BOARD OF GOVERNORS
FEDERAL RESERVE SYSTEM
WASHINGTON, D. C. 20551

October 4, 1977

The Honorable William Proxmire
Chairman
Committee on Banking, Housing
and Urban Affairs
United States Senate
Washington, D. C.

Dear Mr. Chairman:

I am pleased to respond to your letter of September 19 requesting background material on the Federal Reserve's activities relating to the payments mechanism.

The enclosure provides the information you requested for items one through six in your letter. Items seven and eight, concerned with volume and expenditure projections for 5 years, 10 years, and beyond, are not included in the enclosure.

Preliminary budget estimates for 1978 have been prepared covering the activities in question. We anticipate a 6% increase in volume, a significant increase in productivity, and a decline in employment. Many highly tentative assumptions would have to be made, however, to arrive at the more extended projections that you requested. For example, System volumes and expenditures could either contract or expand, depending upon many factors such as legislative changes affecting the financial industry and the degree to which electronic funds transfer may replace traditional paper-based means of payment. In our view, current uncertainties make extended projections subject to serious errors and probably more misleading than helpful.

I hope the enclosures will be useful to your Committee. Please let me know if I can be of additional assistance.

Sincerely yours,

Arthur F. Burns

Enclosures

Question 1:

"A review of the Federal Reserve's current operations in the payments mechanism, including currency and coin services."

Enclosed is the article, "Federal Reserve Operations in Payments Mechanisms: A Summary," originally published in the June 1976 Bulletin, which provides the review requested.

Other than minor changes in volumes which have occurred since the original publication, and which are generally updated in the answer to question 3, the following changes should be noted:

A. As of September 1, 1977, there remain only 43 nonpar banks in the country. All banks in the state of Texas are now par banks.

B. The Federal Reserve currently maintains 48 check clearing operations. There are no current plans to expand the number of such operations.

C. The Federal Reserve currently provides operating facilities for 27 ACH associations. In addition, two ACH associations which maintain their own operating facilities are provided Federal Reserve accounting and transportation services.

D. In August 1977, the Federal Reserve issued Subpart B to Regulation J providing rules for the transfer of reserve account balances over its wire network.

E. The Direct Deposit of Federal Recurring Payments Program has expanded significantly. The Program is now nationwide in scope and payments are being made for U. S. Air Force payroll, Social Security, Civil Service retirement, and Railroad Board retirement. Payments to recipients of Veterans Administration benefits will be processed under the direct deposit program in the near future.

Question 2:

"A detailed list of Federal Reserve supplied payments mechanism services (including currency and coin) indicating, for example, where transportation, processing, settlement, or other types of services are involved."

A. Cash Services

Cash services can be divided into two categories, currency service and coin service, although the functions performed by the Federal Reserve are quite similar for each category.

1. Currency

Provision of new currency
Receipt and verification of deposits
Settlement
Sort for fitness and counterfeit detection
Destroy unfit currency
Fill orders for new or fit currency
Transportation

2. Coin

Receipt and verification of deposits
Settlement
Sort for fitness
Fill orders for coin
Transportation
Coin wrapping--not performed by all offices

B. Check Collection Services

Receipt and preparation of cash letters
Processing (sorting)
Settlement
Transportation--intra- and inter-zone as necessary
Return Items
Adjustments

C. Transfer of Reserve Account Balances (Wire Transfers)

Receipt of instructions--by telephone, telegraph, on-line terminal
Processing--including entering into the Federal Reserve Communications System, if necessary
Settlement

D. Automated Clearing House

Receipt of magnetic tapes
Processing
Settlement
Transportation

Question 3:

"For the past 5 years, for each service listed under 2 above, the volume and dollar amount of services provided by the System and the total and unit costs (or estimated costs) to the Federal Reserve of supplying those services including an allowance for overhead and depreciation.

Also, for each year provide the System's capital expenditures that can be allocated to the payment mechanisms."

The accounting system of the Federal Reserve in use in the past five years did not allocate overhead costs to operating functions. While a new accounting system has been implemented in 1977 which provides for allocation of overhead costs, there is not sufficient experience to date to be able to make estimates of overhead applicable to the old accounting system. Therefore, all costs shown below are exclusive of an allocation for overhead costs.

Most of the primary equipment used in the payments mechanism service has been leased over the last five years. This has been done primarily because of the rapidly changing technology employed in equipment such as check reader-sorters, encoding and other data preparation equipment, communications terminals, etc. The general purpose computers used to support this primary equipment are both leased and purchased. Because of the multi-processing capabilities of these computers, it is difficult to identify capital costs associated only with payments mechanism services. Under the System's cost accounting procedure, usage charge for this equipment was made to each payments mechanism function, and these charges, together with lease charges, are reflected in the total costs in the attached table.

There have been no significant capital expenditures for physical plant over the last five years that primarily related to the payments mechanism functions. Establishment of regional check processing centers was carried out through utilization of existing or leased facilities and equipment.

The costs for services are shown in the attached table.

Question 4:

"A list of the various options that the Federal Reserve System is considering or has considered as a framework for establishing a pricing schedule for services. This list should indicate fixed and/or variable prices where applicable, whether volume discounts are being considered, whether prices would be established on a System-wide basis or on a district by district basis, and how member required reserves maintained at the Reserve banks would be taken into account."

Method 1: Static Balances- Under this procedure an institution wishing to use System services would deposit with the local Federal Reserve Bank balances approximately equivalent to those required of a member bank. Holding such a balance would entitle the institution to unlimited use of System services at no further charge.

Method 2: Fees- Under this procedure, each Federal Reserve Bank service would be defined, and a price for a unit of service would be

Schedule of Federal Reserve Payments Mechanism Services and Expenses

A. Cash Services

1. Currency Sorting and Counting

| Category | 1972 | 1973 | 1974 | 1975 | 1976 |
|---|---|---|---|---|---|
| Total Expense | 8,304,304 | 9,226,977 | 9,799,536 | 10,025,354 | 10,167,164 |
| Volume (000) | 6,448,616 | 6,711,245 | 6,737,983 | 6,551,093 | 7,015,040 |
| Cost/1000 | 1.29 | 1.37 | 1.45 | 1.53 | 1.45 |
| $ Processed (millions) | 51,535 | 56,838 | 61,943 | 66,065 | 71,011 |

2. Coin Sorting and Counting

| | | | | | |
|---|---|---|---|---|---|
| Total Expense | 1,357,237 | 1,502,348 | 1,489,014 | 1,351,431 | 1,194,870 |
| Volume (000) | 13,892,587 | 14,589,794 | 13,659,762 | 13,611,463 | 12,688,840 |
| Cost/1000 | .098 | .103 | .109 | .099 | .094 |
| $ Processed (millions) | 1,755 | 2,463 | 2,005 | 2,120 | 2,109 |

3. Wrapping Coin

| | | | | | |
|---|---|---|---|---|---|
| Total Expense | 886,627 | 1,154,671 | 1,248,992 | 1,332,781 | 1,265,493 |
| Reimbursement | 1,089,881 | 1,262,600 | 1,416,291 | 1,705,327 | 1,885,809 |
| Net Expense | (203,254) | (107,929) | (167,299) | (372,546) | (620,316) |
| Volume: No. of rolls | 118,914,570 | 144,565,140 | 147,903,761 | 150,269,682 | 149,693,769 |
| Cost/roll | .007 | .008 | .008 | .009 | .008 |

4. Cash Services - All Other

| | | | | | |
|---|---|---|---|---|---|
| Postage and Expressage (both currency & coin) | 23,485,281 | 27,206,458 | 29,302,004 | 31,477,117 | 32,954,606 |
| Total Expense | 35,547,730 | 40,951,615 | 45,347,846 | 49,005,397 | 52,111,635 |
| Reimbursement | 935,198 | 1,183,096 | 1,464,810 | 1,750,844 | 1,890,991 |
| Net Expenses | 34,612,532 | 39,768,519 | 43,883,036 | 47,254,553 | 50,220,644 |

5. Total Currency and Coin Services (including expense of new currency and destruction of unfit currency)

| | | | | | |
|---|---|---|---|---|---|
| Postage and Expressage | 25,612,398 | 29,392,542 | 31,256,454 | 33,780,474 | 35,437,919 |
| Total Expense | 79,499,292 | 89,292,616 | 90,912,489 | 101,842,916 | 116,762,301 |
| Reimbursement | 2,025,079 | 2,445,696 | 2,881,101 | 3,456,171 | 3,776,800 |
| Net Expenses | 77,874,213 | 86,846,920 | 88,031,388 | 98,386,745 | 112,985,501 |

B. Check Processing

1. Conventional Check Processing

| Category | 1972 | 1973 | 1974 | 1975 | 1976 |
|---|---|---|---|---|---|
| Postage and Expressage | 16,249,839 | 22,193,887 | 28,152,068 | 28,411,263 | 28,506,950 |
| Total Expense | 73,627,207 | 100,074,303 | 116,733,122 | 121,201,746 | 125,320,148 |
| Volume (000) | 8,474,188 | 10,051,321 | 10,822,031 | 11,411,337 | 12,291,386 |
| Cost/1000 | 8.69 | 9.96 | 10.79 | 10.62 | 10.19 |
| $ Processed (millions) | 3,317,873 | 3,845,234 | 4,104,275 | 4,256,924 | 4,645,069 |

2. Return Items

| | | | | | |
|---|---|---|---|---|---|
| Total Expense | 3,449,281 | 4,434,992 | 5,402,118 | 5,736,345 | 5,865,939 |
| Volume (000) | 80,719 | 94,535 | 107,513 | 136,526 | 142,458 |
| Cost/1000 | 42.73 | 46.91 | 50.25 | 42.02 | 41.18 |

C. Transfer of Funds

| | | | | | |
|---|---|---|---|---|---|
| Total Expense | 3,667,620 | 4,252,371 | 5,019,833 | 5,338,707 | 5,672,606 |
| Volume | 9,493,580 | 11,633,356 | 14,512,912 | 17,486,436 | 20,767,969 |
| Cost/Transfer | .39 | .37 | .35 | .31 | .27 |
| $ Processed (millions) | 17,916,041 | 23,479,746 | 30,361,778 | 31,392,865 | 35,617,756 |

D. Automated Clearing House

| | | | | | |
|---|---|---|---|---|---|
| Postage and Expressage | -- | -- | -- | 1,636 | 43,951 |
| Total Expense | 5,086 | 84,487 | 178,563 | 431,883 | 1,677,288 |
| Volume (000) | -- | 103 | 477 | 5,941 | 35,456 |
| Cost/1000 | -- | 820.26 | 374.35 | 72.20 | 47.31 |

NOTE:

Settlement: Total expense as shown above for each activity includes some of the expenses associated with "settlement." However, the expense of preparing accounting advices used to effect settlement on the books of the Federal Reserve is not specifically segregated by activity in the cost accounts.

developed for each service defined. The total value of services used would be billed to the institution either by charging the reserve account (for member banks), or by charging the reserve account of the institution's member bank correspondent (for nonmember banks and thrifts).

Method 3: Volume Related Balances- This charging method combines the service fee approach and the balance approach. Each service would be defined, and a price for a unit of service would be developed for each service. The institutions using System services would be required to hold a balance on deposit at their local Federal Reserve Bank which, when evaluated at some interest rate, would generate a revenue flow sufficient to cover the service charges incurred.

Method 4: Balance Plus Fees- This charging method can be considered a hybrid of Methods 1 or 3 and Method 2. That is, the balance portion could either be static as in Method 1, made volume-related as in Method 2, or possibly determined by some other criteria.

Several of the above methods would allow for the incorporation of volume discounts and the possibility for such discounts has been part of pricing discussions.

The issue of whether prices would be established on a System-wide basis or on a district-by-district basis has been part of the pricing deliberations. It is recognized that pricing on a district-by-district basis has the potential advantage of improving the efficiency of System operations by drawing attention to those clearing facilities that are operating at higher cost than general System level. However, the district basis of pricing has the possible disadvantage of inducing unnecessarily circuitous routing of items since banks will probably avoid presenting items for clearing to high cost districts. A final determination on the appropriate basis for pricing has not been made.

Treating members and nonmembers alike when levying charges for System services currently would exacerbate an already serious membership problem. Even when the membership problem is solved, so that the total cost of membership is in line with the value of services received, charging members for System services would tend to reimpose the burden and to rekindle the current problem of preserving voluntary System membership. Therefore, it is anticipated that some recognition will have to be given to member required reserves when levying charges for payments services. However, the precise manner of such treatment cannot be determined until the current membership problem is solved. Among the alternatives that could be considered are adjustment of the rate of interest paid on reserves in order to rebate charges collected from members, credit against charges related to reserves held, not imposing charges on members, and reduction in reserve requirements.

Question 5:

"A description of access arrangements, including any charges that are levied, that are currently in place for nonmember banks, thrift institutions and foreign official and non-official users of Fed services."

Domestic Users

In payments mechanism areas, nonmembers are given access to three types of services: check, ACH and currency and coin.

A. Check-- During the early 1970's, the Federal Reserve implemented the Regional Check Processing Center (RCPC) program to improve check collection services. In RCPC zones, nonmember banks--as agents for member banks--may forward to the Federal Reserve all items payable in the zone. No charges are assessed to nonmembers who deposit items in this manner.

B. ACH-- Currently, the Federal Reserve provides the clearing and settlement facilities for 27 ACH associations. The Federal Reserve's courier system, used to deliver the payment information to participating depository institutions, is used by all 29 ACH's.

At the present time, the Federal Reserve will receive items on tapes from any member bank and any member of ACH associations. The Federal Reserve will deliver such items to member banks and members of ACH associations under the following guidelines:

1. Items may be delivered directly to institutions offering demand deposit accounts in the same manner that checks are presented.

2. Items may be delivered directly to institutions not offering demand deposit accounts provided such institution receives a sufficient volume of such items to warrant separate delivery and is located on an existing check-courier route.

3. Items may be delivered to a data processing service bureau provided the service bureau receives a sufficient volume of such items to warrant separate delivery and is located on an existing check-courier route.

4. Items may be picked up at the local Federal Reserve office provided that the volume is sufficient to warrant such action.

5. Items may be delivered to an endpoint that currently receives checks directly from the Federal Reserve office and the institution may arrange for delivery from that endpoint (that is, the pass-through method).

6. Items may be mailed by the Federal Reserve to any financial organization regardless of its location.

No charges are currently being assessed for ACH services provided by the Federal Reserve.

C. Currency and Coin -- On May 29, 1920, the Congress authorized the Secretary of the Treasury to transfer to the Federal Reserve Banks the duties and functions of the Assistant Treasurers in connection with the exchange of paper currency and coin of the United States (41 Stat. 654). Pursuant to this authority, Reserve Banks have been authorized and directed by the Treasury to make an equitable and impartial distribution of available supplies of currency and coin in all cases directly to member banks and nonmember commercial banks (see 31 CFR 100).

Each Federal Reserve District assesses charges upon nonmember banks to cover transportation and handling costs for its currency and coin services.

Foreign Payment Services

Section 14e of the Federal Reserve Act authorizes the Federal Reserve to provide payment services to foreign entities. Payment services are provided to such foreign entities as foreign governments, central banks and monetary authorities, and international organizations such as the World Bank. Two types of payments services -- transfer of funds and check collection -- are provided to these entities maintaining accounts at the Federal Reserve Bank of New York.

A. Transfer of Funds

Foreign entities may use their account at the Federal Reserve Bank of New York to transfer funds to or from (1) other foreign entities maintaining an account at the Bank, (2) commercial banks, and (3) the United States Government and its agencies.

Charges are assessed only if out-of-pocket expenses are incurred by the Federal Reserve Bank of New York in making the transfer. For example, if Telex services are used, the foreign entity is charged the Telex costs.

B. Check Collection

Most transactions between foreign organizations and the Federal Reserve are made by wire transfer of funds. Occasionally such transactions are made by check, in which case the Federal Reserve processes and collects the check in a fashion similar to that employed in collecting a domestic check. Generally, there are no charges assessed for providing this service.

Question 6:

"A review of the various access arrangements for nonmember an thrifts that the Board is considering should pricing of Fed services and open access be adopted as Board policy."

Under the pricing methods described in the answer to question 4, when the membership problem is solved, it is planned that nonmember institutions will be given the option of direct access to System clearing services, i.e., the same access available to member banks. Currently, nonmember institutions use System clearing services by arranging for members, as part of correspondent banking arrangements, to present their items to the System for clearing. Nonmember institutions compensate the members for these services as part of the overall correspondent relationship between institutions. The System finds such "pass-through" arrangements usually to be desirable and will continue to provide for them in an environment in which charges for System services are levied and open access is made available.

# Federal Reserve Operations in Payment Mechanisms: A Summary

Since its origin in 1913, the Federal Reserve System has been an active participant in the Nation's payments mechanisms. At present the System is operationally involved in check processing, distribution of currency and coin, wire transfer of reserve account balances, wire transfer of Federal Government securities, and clearing payments exchanged on magnetic tape. The System also performs an operating function as the fiscal agent of the U.S. Government and of several Government agencies and handles certain financial transactions on behalf of foreign central banks and governments.

Recently, the Board of Governors was asked to provide a summary of the System's operational role in such payments mechanisms. The history, present scope of operations, and legal authority are outlined in this article for each major area of the System's involvement in each payments mechanism. This review does not present an exhaustive treatment of these activities, nor does it examine other Federal Reserve collection activities—notably, the collection of so-called noncash items, such as bonds and coupons of corporations and municipalities.

In addition, this summary describes two of the Board's regulatory actions permitting member banks to transfer funds from savings accounts to third parties. Although these types of transfers are not processed by the Federal Reserve, they are of importance in obtaining a better understanding of current fund transfer systems.

## CHECK COLLECTION

### History and Statutory Basis for Participation

Prior to the enactment of the Federal Reserve Act, checks were exchanged through a system of clearinghouses (or exchanges). Often exchange charges were levied by the bank that finally paid the check,[1] and since the checks were not paid in full, the practice was termed "nonpar banking." The exchange charge was generally ¼ of 1 per cent of the face value of the checks paid, and many banks engaged in circuitous routing of checks to avoid such exchange charges. Hence, exchange charges resulted in a slow, cumbersome, and costly check collection system and were considered an impediment to commerce and economic growth. The Federal Reserve Act changed these relationships because member banks were required to pay for checks presented to them by Reserve Banks at par and the Reserve Banks were authorized to exercise the functions of a clearinghouse for member banks.

In July 1916 the Board of Governors required all Federal Reserve Banks to function as clearinghouses for member banks. Reserve Banks would receive checks from members that were drawn on a member or nonmember bank agreeing to pay at par for items presented by the Federal Reserve. After that, nonpar clearance was eliminated in many sections of the country and in the major money centers. However, it has continued in certain States in the South; as of June 1, 1976, there were still 64 nonpar

NOTE.—This article was prepared by the staff of the Board of Governors for presentation to the National Commission on Electronic Fund Transfers.

[1] "Exchange charges" should be distinguished from "collection charges." Collection charges are levied on the payee by the payee's bank for collecting the check. Exchange charges are exacted by the bank on which the check is drawn (the "drawee bank"). Exchange charges developed because funds, except when paid over the counter, were transferred by remitting a draft on the drawee bank's correspondent in the city in which the presenting bank was located. For the service rendered by the drawee bank in remitting funds available for use in the city in which the payee's bank was located, a small exchange charge was made and deducted from the amount of the remittance.

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banks, operating chiefly in Louisiana, South Carolina, and Texas.

The general provisions of law under which the Federal Reserve Banks exercise check collection functions are as follows:[2]

1. The first paragraph of Section 13 of the Federal Reserve Act (12 U.S.C. 342) that provides in part:

> Any Federal reserve bank may receive from any of its member banks, and from the United States, deposits of current funds in lawful money, national-bank notes, Federal reserve notes, or checks, and drafts, payable upon presentation, and also, for collection, maturing notes and bills; or, solely for purposes of exchange or of collection, may receive from other Federal reserve banks deposits of current funds in lawful money, national-bank notes, or checks upon other Federal reserve banks, and checks and drafts, payable upon presentation within its district, and maturing notes and bills payable within its district; or, solely for the purposes of exchange or of collection, may receive from any nonmember bank or trust company deposits of current funds in lawful money, national-bank notes, Federal reserve notes, checks and drafts payable upon presentation, or maturing notes and bills; *Provided,* Such nonmember bank or trust company maintains with the Federal reserve bank of its district a balance sufficient to offset the items in transit held for its account by the Federal reserve bank: . . .

2. The thirteenth paragraph of Section 16 of the Act (12 U.S.C. 360) that provides:

> Every Federal reserve bank shall receive on deposit at par from member banks or from Federal reserve banks checks and drafts drawn upon any of its depositors, and when remitted by a Federal reserve bank, checks and drafts drawn by any depositor in any other Federal reserve bank or member bank upon funds to the credit of said depositor in said reserve bank or member bank.

3. The fourteenth paragraph of Section 16 (12 U.S.C. 248(o)) that provides in part:

> The Board of Governors of the Federal Reserve System shall make and promulgate from time to time regulations governing the transfer of funds and charges therefor among Federal reserve banks and their branches, and may at its discretion exercise the functions of a clearing house for such Federal reserve banks, or may designate a Federal reserve bank to exercise such functions, and may also require each such bank to exercise the functions of a clearing house for its member banks.

In nontechnical language, these provisions have been interpreted to mean that a Federal Reserve Bank:

1. *Must* receive deposits at par—that is, must accept deposits for the full face value—and the deposits may be in the form of checks drawn on member or nonmember clearing banks if sent to it by its member banks or other Reserve Banks or by a member bank in another district if permitted by the Reserve Bank of that district;
2. *May* receive from member banks checks payable at par upon presentation anywhere in the country, whether drawn upon member or nonmember banks;
3. *May,* solely for purposes of exchange or collection, receive from other Reserve Banks checks payable at par upon presentation within the receiving Bank's district; and
4. *May,* solely for purposes of exchange or collection, receive from any nonmember bank in its district checks payable at par upon presentation at any bank in the country, provided such nonmember bank maintains a clearing balance with such Reserve Bank.[3]

Pursuant to Sections 11, 13, and 16, the Board has promulgated Regulation J (12 CFR Part 210) designed to afford the public and the

[2] Other important sections of the Act, insofar as payment mechanism services, are Section 4 (12 U.S.C. 341), which permits Reserve Banks to carry on the business of banking, Section 11 (12 U.S.C. 248(i)), which authorizes the Board to establish regulations to enable the Board to accomplish the functions detailed in the Act, and Section 19(f) (12 U.S.C. 464), which permits members to check against and withdraw funds from reserve accounts maintained at Federal Reserve Banks, subject to regulations of the Board of Governors.

[3] The right of the Reserve Bank to present checks to nonmember banks was acknowledged in *American Bank and Trust Co.* v. *Federal Reserve Bank,* 262 U.S. 643. The Federal Reserve does not have the authority, however, to *require* nonpar banks to pay at par. See *Farmers Bank* v. *Federal Reserve Bank,* 262 U.S. 649. Therefore, checks drawn on nonpar banks cannot enter the Federal Reserve clearing system but must be sent directly to the bank on which drawn or presented by a correspondent bank.

banks of the country a direct, expeditious, and economical system for the collection of checks. Regulation J details the rights and liabilities of parties using Federal Reserve collection facilities and permits the Reserve Banks to adopt "operating circulars" that detail, in part, the time limits and procedures established by the Reserve Bank for collecting checks as well as other operating matters. Regulations and operating circulars have been issued by the Federal Reserve since 1914. The operating circulars are viewed as contracts between the Federal Reserve and the banks and, as specifically provided in Section 4-103 of the Uniform Commercial Code, the Federal Reserve operating circulars constitute agreements that can vary the effect of the provisions of the Code.

Section 210.4 of Regulation J authorizes any "sender," that is, a member or nonmember clearing bank in the district, to send to the Reserve Bank of the district checks payable at par in any Federal Reserve district. This authorization to senders in effect means that Reserve Banks are required to receive such items in accordance with the provisions of the regulation. Hence, the Reserve Banks do not refuse a sender's items, and the permissive statutory authority described above has been made an obligation on the part of Reserve Banks.

The Federal Reserve Act does not expressly authorize a Reserve Bank to receive checks directly from banks in other districts. Regulation J provides, however, that, as permitted or required by a Reserve Bank, a member bank in one district may send checks directly to the Reserve Bank of any other Federal Reserve district in which the checks are payable. This rule provides an efficient mechanism to handle interdistrict sendings and avoids processing (and the attendant delay) by an intermediate Reserve Bank.

During the late 1950's and early 1960's, the banking industry and the Federal Reserve moved toward automation in handling the mounting volume of paper checks being processed. The initial step permitted the check to be machine processed by adding the MICR (Magnetic Ink Character Recognition) numbers at the bottom of the check. The use of computers and high-speed check handling equipment increased significantly the speed and efficiency with which checks were cleared. During the early 1970's the Federal Reserve implemented the Regional Check Processing Center (RCPC) program aimed at increasing the number of checks cleared on an overnight basis through Federal Reserve facilities. Continued growth in the number of checks led to experimentation with use of encoding payment information on magnetic tape. (Developments in handling magnetic tapes are summarized later.)

## Present Scope of Operations

By way of background to the entire check payment system, several relationships and costs should be considered. For example, it can be assumed that the bank receiving a deposit in the form of a check will move expeditiously to obtain possession of the funds from the bank on which the check is drawn. Checks for large amounts are often segregated and subject to expedited handling, and bank messengers may make over-the-counter presentment to the drawee for immediate credit in order that the proceeds of the check may be immediately available. Other items may be sent directly to the bank on which they are drawn, to a clearing house, to a correspondent, or to the nearest Federal Reserve office. A correspondent may, in turn, collect certain items and turn others over to the Federal Reserve. Even though there are a variety of alternative collection arrangements available, after "on us"[4] and local clearing items are removed, most of the checks cleared in the Nation enter directly or indirectly into the Federal Reserve clearing system.

Check collection involves processing and transportation costs. The bank of first deposit must ready the check for subsequent processing and pay the cost of delivering it to the bank on which it is drawn or to a clearing agent—the Federal Reserve, a clearinghouse, or a corre-

[4]Items that the payee deposits at the drawee bank are termed "on us" items, and often a predominant portion of the total number of checks deposited are of this character, especially in areas in which there are large branching systems or concentrations in demand deposits.

spondent. Thereafter the clearing agent, if there is one, has the responsibility for delivery and presentation of items to the bank on which the items are drawn. The transportation costs associated with that delivery may be substantial. Clearinghouses (and check processors permitting "in house" banks to exchange checks) incur nominal delivery costs, but delivery by other clearing agents involves substantial contractual costs for surface and air courier delivery under prevailing operations. Correspondents recoup costs they bear by fees charged or by earnings on collected funds in correspondent balances.

A final but vital aspect of check clearing is the actual movement of funds. The check serves as documentation for crediting and debiting individual accounts in banks. The matrix of total credits and debits arising from individual items processed at particular times provides the basis for net settlement among all pairs of banks. Generally, settlement takes the form of charges and credits to reserve accounts maintained by member banks at the Federal Reserve, at present amounting to about $35 billion. However, settlements are also made through correspondent balances.

As to the specific Federal Reserve operations, the Federal Reserve presently maintains 46 check-clearing operations with two more to become operational during 1976. The Federal Reserve clears checks and check-like instruments[5] that have been deposited with member banks[6] and forwarded to the Federal Reserve for collection. The Federal Reserve ultimately presents these items for payment either directly to the financial institution upon which the items are drawn—member or nonmember—or to a processing center designated by that institution.

The Federal Reserve credits the depositing bank with funds in accordance with the Reserve Bank's "availability schedule." This schedule reflects the time that the Federal Reserve normally takes to receive payment from the bank on which the check is drawn. Under current schedules, credit for checks deposited at a Federal Reserve office may be given on the day of deposit, the following day, or the second following day even if the actual time necessary to present the check extends beyond the day credit is made available to the bank depositing the checks. If the item is not collected until after the credit is passed, Federal Reserve float is generated. Currently, Federal Reserve float averages about $2.0 billion. Since the extension of Federal Reserve credit through float has a random effect on the availability of reserves, it hampers the measurement of the money supply. Thus, Federal Reserve System operations are geared to holding float at the lowest possible level.

To accomplish the rapid delivery of checks among Federal Reserve offices (about 40 per cent of the volume is deposited outside the zone in which the item is payable), the System utilizes an air charter service, commercial airlines, and other air courier services. In-zone transportation of checks from Federal Reserve offices to financial institutions on which checks are drawn is accomplished at Federal Reserve expense by contract courier services and the U.S. Postal Service. For all intraterritorial items, however, institutions that deposit items with the Federal Reserve pay for the courier cost of delivering such items to the Federal Reserve.

The Federal Reserve introduces checks received from the Federal Government into this clearing system. With this exception, the Federal Reserve's entire clearing function is determined by the volume of items delivered by member banks and to a limited degree by nonmembers. Thus, in its clearing operations the Federal Reserve's role is one of reacting to flows generated by commercial banks. If the U.S. banking system were concentrated and more like those of the European countries, there would undoubtedly be a less significant clearing role for the Federal Reserve because of the high proportion of "on us" and direct exchange items.

The volume of items cleared through the Federal Reserve's check collection system has

[5]Among the check-like documents handled by the System are the "NOW account" drafts for thrift and commercial bank institutions, the "share-drafts" for credit unions, and the payable-through draft used by corporations.

[6]In RCPC zones nonmember banks—as agents for member banks—may forward to the Federal Reserve all items *payable in the zone*.

grown substantially as shown below (in millions):

| Year | Volume | Year | Volume |
|---|---|---|---|
| 1920 | 504 | 1950 | 1,955 |
| 1930 | 904 | 1960 | 3,419 |
| 1940 | 1,057 | 1970 | 7,158 |
| | | 1975 | 11,410 |

## AUTOMATED CLEARINGHOUSES

### History and Statutory Basis for Participation

The automated clearinghouse (ACH) concept was designed in response to the growing volume and increased cost of processing paper checks. In 1968 a group of commercial bankers in California formed the Special Committee on Paperless Entries (SCOPE) to study the feasibility of exchanging payments on magnetic tape. This system was to augment the check system by providing a more convenient and less costly alternative to the use of checks. As a result of this study, more than 100 banks in California formed an ACH association, and the Federal Reserve Bank of San Francisco was requested and agreed to provide the clearing and settlement facilities for the exchange of such payments on magnetic tape. Subsequently, other Reserve Banks were requested to utilize existing facilities to process the magnetic tapes for other ACH associations. Currently, the Federal Reserve provides the clearing and settlement facilities for such operations in 19 offices, and 5 more offices are expected to begin operations in 1976. The statutory basis for System involvement is the same as that for checks.

### Present Scope of Operations

ACH operations are designed to handle repetitive funds transfers of small dollar amounts, such as salaries and wages and mortgage and insurance premium payments. The Federal Reserve uses its existing computer and courier facilities to clear and deliver such items.

Automated clearinghouse operations and the Federal Reserve's role in such operations essentially parallel check-clearing operations except that the payment information is exchanged on magnetic tape as opposed to paper checks. In an ACH operation, financial institutions create computer tapes of debit and credit items based upon customer instructions and deliver the tapes to their local Federal Reserve clearing and settlement facility, just as those institutions would deliver checks to the Federal Reserve's check-clearing and settlement facility. A Federal Reserve computer—which is also used for other operational purposes—reads, edits, and balances the information on the tape, sorts according to the receiving financial organization, and makes the debit and credit entries in member bank reserve accounts for settlement for both the originating and the receiving financial organization. When the processing has been completed, the computer creates output media consisting of magnetic tapes or descriptive paper listings. The Federal Reserve sends the output media to the receiving financial organization using the same delivery system as that used for delivering checks.

The Federal Reserve is not the sole processor of automated payments. As noted previously, paper checks are cleared through private clearing arrangements apart from the Federal Reserve facilities, and it should be expected that private facilities will handle certain automated payments.

At the present time, the Federal Reserve will receive items on tapes from any member bank and any member of an ACH association. The Federal Reserve will deliver such items to member banks and members of ACH associations under the following guidelines:

1. Items may be delivered directly to institutions offering demand deposit accounts in the same manner that checks are presented.
2. Items may be delivered directly to institutions not offering demand deposit accounts provided such institution receives a sufficient volume of such items to warrant separate delivery and is located on an existing check-courier route.
3. Items may be delivered to a data processing service bureau provided the service bureau receives a sufficient volume of such items to

warrant separate delivery and is located on an existing check-courier route.

4. Items may be picked up at the local Federal Reserve office provided that the volume is sufficient to warrant such action.

5. Items may be delivered to an endpoint that currently receives checks directly from the Federal Reserve office and the institutions may arrange for delivery from that endpoint (that is, the pass-through method).

6. Items may be mailed by the Federal Reserve to any financial organization regardless of its location.

The volume of payments processed in this manner is quite small at present, compared with the volume of checks processed. The 19 operational Federal Reserve offices cleared and settled for approximately 270,000 such automated payments in May 1976.

## FEDERAL RESERVE WIRE NETWORK

### History and Statutory Basis for Participation

From the first days of the Federal Reserve, there was a need for rapid movement of both financial and administrative messages among Federal Reserve offices. Initially, communication was through Western Union and Postal Telegraph facilities. In 1918 the Federal Reserve, in recognition of the need for more rapid and secure communication facilities, installed a private Morse code system. This method of transfer continued until 1937 when it was converted into a teletype system. In 1940, in response to a growing volume of traffic, the Board of Governors and the Federal Reserve Bank of Chicago were designated as primary relay stations. The relay station, or "switch," concept was also incorporated when an automatic message system using advanced teletype machines was installed in 1953 with the Richmond Bank designated as the switching center. This system handled 6,000 messages per day initially and linked Reserve Banks and branches, the Board of Governors, the U.S. Treasury, the Commodity Credit Corporation, and the Reconstruction Finance Corporation.

In 1970 the first components of the present automated network were installed, and the system was fully automated in late 1973. Each of the district offices now have installed communications switches to which Reserve Banks, branches, offices, the Treasury, and a number of member banks are interconnected nationwide through a central switch facility in Culpeper, Virginia. This system allows for virtually instantaneous movement of funds among member banks of the System and aids banks in the efficient handling of reserve balances. In view of the need for a quick and efficient method of handling funds transfers of very large amounts in the Nation's money markets, the Board regards wire operations as a necessary and vital tool in conducting its monetary affairs.

During 1975, 17.4 million funds transfers, valued at $31.4 trillion, were handled on the network, as well as 1.5 million Government and Government agency securities transfers and 1.0 million administrative messages. The System's network is designed to handle the very large transfers and to discourage small transfers; a $1.50 charge is imposed for transfers of less than $1,000, and large transfers are handled without charge to members.

The statutory basis for the System's involvement in transferring member banks' reserve balances is basically the same as its involvement in the check-clearing mechanism that has been discussed previously. In addition, paragraph 14 of Section 16 of the Federal Reserve Act authorizes the Board to regulate the transfers of funds among Reserve Banks, and Section 13 authorizes Reserve Banks to receive deposits from their members.

### Present Scope of Operations

Three types of messages are handled on the network: (1) transfers of reserve account balances (almost exclusively in large dollar amounts) from one member bank to another, (2) transfers of U.S. Government and Federal agency securities, and (3) administrative and research information. The transfer of reserve balances is used by member banks of the Federal Reserve System to transfer (1) funds as a result of purchasing and selling Federal funds, (2) correspondent bank balances, and (3) funds to other members on behalf of customers. Transfers to other members made by member banks on behalf of their customers include (1) the purchasing and selling of commercial paper, bonds, and other securities, and (2) replenishing corporate demand deposits. For the latter, the Federal Reserve is involved only in crediting and debiting the banks involved in the transfer, and the System does not collect and/or store information related to the corporation that originates or receives the funds transferred.

All money transfers of reserve balances are credit transfers—that is, a member bank instructs the Federal Reserve to transfer funds to another member bank. If the members maintain balances at the same Federal Reserve Bank, each reserve balance is debited and credited accordingly. If the institutions do not maintain balances at the same Federal Reserve Bank, the first Federal Reserve Bank debits the reserve account of the sending bank and credits the account of the Federal Reserve Bank in whose district the receiving bank is located. The latter Federal Reserve Bank debits the account of the sending Federal Reserve Bank and credits the account of the receiving bank. Reserve Banks settle by use of the Interdistrict Settlement Fund. Nonmember banks, other financial institutions, businesses, and consumers may request a member bank to send funds through the Reserve System.

## CURRENCY AND COIN

### History and Statutory Basis for Participation

Section 16 of the Federal Reserve Act authorizes the issuance and redemption of Federal Reserve notes. The Federal Reserve Banks have issued and redeemed such notes since 1914.

On May 29, 1920, the Congress authorized the Secretary of the Treasury to transfer to the Federal Reserve Banks the duties and functions of the Assistant Treasurers in connection with the exchange of paper currency and coin of the United States (41 Stat. 654). Pursuant to this authority, Reserve Banks have been authorized and directed by the Treasury to make an equitable and impartial distribution of available supplies of currency and coin in all cases directly to member banks and to nonmember commercial banks (see 31 CFR 100).

### Present Scope of Operations

The volume of currency and coin distribution operations, in millions of pieces, has grown substantially as shown below:

| Year | Currency | Coin |
|---|---|---|
| 1925 | 1,947 | 2,329 |
| 1935 | 2,148 | 2,590 |
| 1945 | 3,016 | 4,562 |
| 1955 | 4,282 | 7,008 |
| 1965 | 5,144 | 5,855 |
| 1975 | 6,551 | 13,611 |

There are 37 Federal Reserve offices that process currency and coin. During 1975, 6.5 billion pieces of currency and 13.6 billion pieces of coin were received and counted. In addition 2.6 billion pieces of currency were retired from circulation and destroyed. Fourteen Federal Reserve offices provide coin wrapping services. Almost one-half of the cost of currency and coin operations is for transportation by armored truck of the money requirements of the more than 18,000 banking offices serviced directly by the Federal Reserve.

## FISCAL AGENT

### History and Statutory Basis for Participation

Section 15 of the Federal Reserve Act states that Federal Reserve Banks, when required by the Secretary of the Treasury, "shall act as fiscal agents of the United States; and the revenues of the Government . . . may be deposited in such banks, and disbursements may be made by checks drawn against such deposits." The Federal Reserve has also been designated as depository and fiscal agent for several international agencies (such as the Inter-American Development Bank) in various other sections of the U.S. Code.

### PRESENT SCOPE OF OPERATIONS

Federal Reserve Banks act as the Government's principal fiscal agents. Among the activities performed, the Banks maintain banking accounts for the Treasury, handle Government checks, receive applications from the public for the purchase of securities being sold by the U.S. Treasury, allot the securities among bidders, deliver securities, collect payment from the buyers, register and redeem securities, make wire transfers of securities to other cities, make denominational exchanges of securities, pay interest on coupons, and conduct transactions in the market for various Treasury accounts. Most of these activities are under the general supervision of the Treasury, which reimburses the Reserve Banks for most fiscal agency functions.

In addition, the Reserve Banks perform fiscal agency services in connection with the financial activities of various Federal or Federally sponsored credit agencies, and reimbursement is provided by the Treasury (or other Government agencies) for much of the expense incurred.

The fiscal agency functions that relate to the payments mechanism are as follows:

1. DIRECT DEPOSIT OF FEDERAL RECURRING PAYMENTS PROGRAM. Certain Federal recurring payments are received on magnetic tape from Government disbursing centers, processed, and distributed to financial organizations.

The same general procedures and the same computer systems are used to process electronic data representing U.S. Government payments as are used for commercial payments through the Federal Reserve's automated clearing and settlement facilities discussed earlier. Currently, each month approximately 540,000 U.S. Air Force payroll payments are processed and delivered to 9,000 financial institutions. In February 1976 the Federal Reserve Bank of Atlanta distributed the first social security payments under the Treasury's Direct Deposit of Federal Recurring Payments Program. This program will expand nationwide by the end of 1976 with all Federal Reserve offices distributing an estimated 7.5 million payments monthly.

2. TREASURY TAX ACCOUNTS. Payments of Federal taxes (income, Federal Insurance Contributions Act, and so on) made by corporations and some individuals are received from commercial banks, processed, and credited to the account of the Treasury. About 45 million tax payment forms were processed in 1975.

3. GOVERNMENT CHECKS. Government checks are received from banks for charge to the Treasurer's account. This activity, which is essentially a check-collection function, processed more than 800 million Treasury check payments in 1975.

4. INTEREST PAYMENT COUPONS. Coupons representing the payment of interest on U.S. Government securities are processed for the Treasury. Approximately 9 million coupons were processed in 1975.

5. U.S. POSTAL SERVICE MONEY ORDERS. U.S. Postal Service money orders are received from banks for payment. Money orders are charged to the Treasurer's account and shipped to the U.S. Postal Money Order processing center in St. Louis. This activity processed more than 170 million items in 1975.

6. U.S.D.A. FOOD COUPONS. Food coupons are received from banks for payment, counted, and destroyed. This activity processed about 2.5 billion items in 1975.

## TRANSFERS FROM SAVINGS ACCOUNTS

### BILL PAYER SERVICES

In July 1975, in recognition of a need for more convenient banking services, the Board amended Regulation Q to authorize member banks of the Federal Reserve System to permit depositors to withdraw funds from savings accounts pursuant to nontransferable orders or authorizations. Prior to this change, the depositor generally[7] had to make requests for withdrawal in person, but the bank could permit regular transfers from savings for mortgage loans and related payments. The Board was requested to permit banks to offer a full range of bill payment services without regard to the nature of the depositor's indebtedness. In promulgating the changes, the Board relied upon its authority under Section 19 of the Federal Reserve Act (12 U.S.C. 461) to define terms used therein.

The actual transfer from a savings account is not handled by the Federal Reserve since that transfer is an "on us" transfer.

The amendment to Regulation Q authorized member banks to offer bill-paying services but did not specify the form for that service. The following examples may be useful:

1. The depositor will sign a contract with the bank specifying the conditions under which withdrawals will be permitted. Such a contract will be the *authorization* to the bank to honor the depositor's instructions. The bank may be authorized to pay a certain creditor, such as a utility company, every month upon receipt of information by the bank that funds are due and owing. If the creditor maintains a deposit with the same bank, the transfer will be made on the books of the bank; otherwise, the bank would write a check to the creditor.

2. The depositor may write *individual withdrawal orders* to the bank requesting transfers to be made to parties named in the order. These orders may be given at irregular intervals and in irregular amounts. The bank would transfer the funds according to the order. The orders are nontransferable, and only the depositor may send instructions to the bank.

[7]There were exceptions for creditors, administrators of estates, court orders, and so on. See 12 CFR 217.5(c)(i)–(vi).

## TELEPHONIC TRANSFERS

In April 1975 the Board authorized member banks to permit their customers to transfer funds from a savings account based upon the customer's telephonic instructions. The Board believed that it was no longer true that unrestricted use of the telephone would absolutely destroy the distinction between savings and demand accounts. In its statement, the Board noted that the telephone was an accepted medium for transmitting financial data and that its action would permit more flexibility in communicating the customer's instructions to a bank. In permitting such withdrawals, the Board relied upon its authority under 12 U.S.C. 371b to establish rules governing the payment of deposits.

As with bill payer amendments, the Federal Reserve is not operationally involved in such transfers. However, it appears that growing numbers of banks are now offering such a service to their customers. □


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Mr. COLDWELL. Mr. Chairman, rather than to read all the way through the rest of this statement, let me summarize what the rest of it says.

The CHAIRMAN. Very good.

Mr. COLDWELL. We obviously are facing two major questions: first, what should be done about the erosion of membership; and second, should the Federal Reserve presently begin to price its particular operations? We think these two are closely interrelated, because (*a*) the member banks are presently bearing a burden of reserves which are held with the Federal Reserve banks without payment, and (*b*) if we price on top of that burden we foresee a further sharp erosion of membership in the Federal Reserve.

We have attempted to provide you with a statement which covers the Board's current position with regard to the pricing question. We have given you reasons why we think it would be inappropriate for the System to charge until something is done with regard to the burden of member banks. We have also attempted to give you a picture of why pricing would be especially difficult in this particular environment.

There are, as my statement indicates, also the issues of the type of pricing that should be used; whether we should cover all costs; whether we should cover a profit margin; how we should handle taxes; and capital costs, that is, whether we use original cost or reproduction cost; and a variety of other questions. I will not attempt to read this entire statement, because you said you have read it and would put it in the record; so I will merely summarize that we have dealt this morning with basically three areas: the reasons why the public presence of the Federal Reserve in an operational role is of benefit to the public interest; the reasons why broad membership is desirable in that public interest; and the problems of erosion of membership and of pricing within the present governmental framework.

Mr. Chairman, I stand ready to try to answer any of your questions.

The CHAIRMAN. Thank you very much, Governor Coldwell.

Governor Coldwell, I think you would share the feeling that Chairman Burns has expressed often and that I think is a general conviction on the part of bankers in this country as well as on the part of most Americans that we should do everything we can to cut down on the size of Government and anything that can be done in the private sector as well as can be done in the public sector should be done in the private sector for many reasons and, furthermore, we should do all we can to encourage competition in providing any kind of services. It goes a long way toward increasing efficiency and competence.

The burden of proof for maintaining a public system should be with those who would want to do it rather than those who would want to have services performed in the private sector where we can open it up to competition.

Now with that in mind, let me say I have a copy of an article from the November 10, 1976, "American Banker," which has a headline, "Coldwell Predicts Equal Fed Pricing for Electronic Facilities, With Reserve Offset." That was about 1 year ago. The story indicates that the Federal Reserve has promised a pricing schedule for users of its check and electronic clearing and settlement facilities.

[The article is reprinted as follows:]

[From the American Banker, Nov. 10, 1976]

## Coldwell Predicts Equal Fed Pricing for Electronic Facilities, With Reserve Offset

(By Michael Quint)

Dallas.—The Federal Reserve Board's promised pricing schedule for users of its check and electronic clearing and settlement facilities will set equal prices for all institutions, but will probably include "some means of an offset in terms of reserve requirement burdens among member banks," a Federal Reserve Governor said here Tuesday.

Philip E. Coldwell challenged private industry to build a comprehensive plan for wire transfers and automated clearing houses that would meet public needs to the same extent as the developing Fed sponsored system.

Mr. Coldwell said the pricing schedule might be ready before the first of February. He said the Board wants to structure prices to encourage more use of automated clearing houses and wire transfers and less use of checks, because the ACH and wire transfers are more efficient.

The Justice Department has urged that Fed ACH and check services be equally priced and that all institutions have the same access. In a letter to the Board last May the Justice Department also warned that Fed activities in ACH and wire transfers could injure the growth of private sector clearing systems.

The declining number of member banks in the Federal Reserve System is another consideration of the Board in developing pricing for clearing systems.

Mr. Coldwell made these comments in a panel of regulators appearing here Tuesday before the national correspondent banking conference sponsored by the American Bankers Association. Other members of the panel were Robert E. Barnett, chairman of the Federal Deposit Insurance Corp.; Robert Bloom, acting Comptroller of the Currency; Lawrence E. Kreider, executive vice president of the Conference of State Bank Supervisors, and Donald P. Jacobs, dean of the Graduate School of Management at Northwestern University and former chairman of the Presidential Commission on Financial Structure and Regulations, known as the Hunt Commission. William M. R. Mapel, senior vice president at the $45.9 billion-deposit Citibank, was moderator.

Discussing the Fed's role in ACH activities and its conflict with privately operated systems, Mr. Coldwell said it was still an open question as to whether the transfer systems should be run as a utility or with competing private systems.

"I am perfectly willing for somebody else" to provide the system "if they can handle it and do the job for the American public," Mr. Coldwell said.

Mr. Coldwell said he could agree to a Congressional decision that the Fed could provide only settlement services. "But I wonder if we have a private organization that is going to step forward and do this sort of thing on a nationwide basis, or are we going to sit and wait and deny the public's convenience and needs over a sustained period of time while we sit and wait for a private organization to develop it," Mr. Coldwell continued.

After the panel session, Mr. Coldwell said the Board was not contemplating using pricing as a means of increasing membership in the system, though there was concern at the Board that the price schedule not encourage more members to leave the system.

He added that the pricing was not aimed at intensifying competition between correspondent banks and the Fed. Mr. Coldwell observed that this competition has always existed and noted that many banks are also unbundling the cost of services and fully passing on the costs to customers.

The contemplated pricing schedule would generate enough income to cover the direct and indirect overhead costs of providing the services but without a profit margin for the Fed, Mr. Coldwell said.

Many member banks have been concerned that Fed membership could become less attractive if banks paid for services twice, once through required reserves and again through the pricing schedule.

Mr. Jacobs observed during the panel session that the world is moving towards unbundling. The commercial banks are doing it, the Fed is doing it, and the process will be continued when the Justice Department requires the Fed to pay interest on member bank reserves, he continued.

In a discussion of capital adequacy in the banking industry, Mr. Kreider said that the problem might be overstated currently. He said this might be true if one assumes that assets and liabilities of banks will not be inflated as rapidly in the future as in the recent past.

Mr. Jacobs concurred, and added that banks cannot allow themselves to grow in an inflationary period to the same extent as they did in the last business cycle.

One banker in the audience disagreed with Mr. Jacobs and claimed it was naive for banks ot assume they can cut back on credit supplying role in the next inflationary period. He suggested this would strangle the economy.

The Fed's guidelines for issuance of capital notes and capital financing for smaller banks are supported by two main reasons, Mr. Bloom said. Most broadly, the total capital in the banking system is not increased by these bank-to-bank loans, he said. Of more narrow concern is the fact that some of the most important creditors of failed banks have been other banks, he added.

All of the regulators present noted that they are making more use of the income statement in the analysis of banks, and relatively less use of analysis of quality of assets.

Mr. Barnett said that the FDIC is "finally sensitive to income and that there has been a drop in emphasis on loan portfolios, though the asset examination is still the most important tool." Ratios of earnings and operating costs are included in early warning systems of the FDIC, he continued. One of these he identified as JAWS or Just a Warning System.

Mr. Bloom said that "earnings and quality of earnings are just as important in the post-analysis of a bank examination asset quality."

In dealing with banks which poorly manage their costs, Mr. Coldwell said the Fed was lending greater emphasis on costs, especially in the area of management fees.

Mr. Barnett observed that the FDIC was still not good in judging costs but that certainly cost abnormalities are recognized in the most serious cases. Mr. Bloom said the Comptroller's Office was not expert in holding down banks' costs, but it is trying to break down the cost elements and compare one bank's data with its peer group. He added that computer printouts of cost and peer group data would be available after the first of the year.

The technique of comparing one bank with its peer group has been extended to the examination process of the Federal Reserve, Mr. Coldwell noted. Previously, peer group analysis had been used primarily by researchers and economists, he said.

The CHAIRMAN. From your statement today and Dr. Burns' on NOW accounts, I get the feeling the Federal Reserve is going back on its word. I hope I'm not right about this. Do you have specific intentions to charge users for payments services and when will you do it?

Mr. COLDWELL. It is a very specific question, Mr. Chairman, and let me respond as specifically as I can, recognizing that I have to speak for myself and not the Board because the Board has not ruled on this matter.

As far as I am concerned, we should try to price our services in the payments mechanism as clearly as we can and do it when we can see that it is in the public interest and benefits competition.

Now I have put two caveats concerned with the public interest. We are not pricing now because we believe that broad membership in the Federal Reserve is a desirable feature. Also, as indicated in my statement, there are certain advantages in having the Federal Reserve in an operational role in the payments mechanism. This quickly leads to some very technical areas but let me try to enunciate. In view of extended disbursement arrangements, the use of float, and the creation of nonpar items, there must be a public presence in the field of the payments mechanism. This public presence can be provided by regulation or by direct operations. I am not saying that an operational role is absolutely necessary, but it certainly does help us to maintain a public presence and to insure that public interest considerations are taken into account in this field.

You have asked when are we going to price our payments services? My answer is that if we started today, it would probably be a year and a half before we could even develop a schedule, get it out for comment and back, and be ready to price. We have to decide what kind of pricing we are going to adopt; that is, (a) whether on a per unit basis, or on a balance basis; (b) in the latter case, whether on a static balance or a moving balance basis; and (c) the kind of access rules that will apply to institutions. They obviously must have a clearing account in order to clear and settle items with us. So it would take some time even if we began today to develop a pricing mechanism. Our problem with the "go today" approach is that if we announced to the commercial banks that we are going to price as promptly as possible, our membership would protest that it is an additional burden beyond that which it already has and that the System is providing the services to others who do not bear this burden.

Second, as you know, Mr. Chairman, Senate bill 2055 would establish nationwide NOW accounts and provide for some payment of interest on reserve balances. If nationwide NOW accounts are enacted, we believe there is going to be a cost burden on the banks, and we believe it would be unwise to add a pricing burden for services on top of the cost burden for NOW accounts.

I have not given you a specific date nor have I told you that we are going to price our payments services, which is a policy determination. I cannot give you those assurances today.

The CHAIRMAN. Well, Governor Coldwell, you said, if this article is correct—and the American Banker of course I believe is a very accurate publication—you said, as I say, November 10, 1976,

> The Federal Reserve Board's promise pricing schedule for users of its check and electronic clearing and settlement facilities will set equal prices for all institutions, but will probably include some means of an offset in terms of reserve requirement burdens among member banks. Philip E. Coldwell challenged private industry to build a comprehensive plan for wire transfers and automated clearinghouses that would meet public needs.

Mr. COLDWELL. Right.

The CHAIRMAN. Now you issued that as a challenge and as an assertion as I say almost 1 year ago. We have the head of the Bankwire who came in yesterday and testified that they have done exactly this. They feel they have met your challenge. They provided an alternative but that they can't continue to operate. They are losing a lot of their business because you don't provide a pricing mechanism and because they can't compete with a Government institution which doesn't have to charge.

Mr. COLDWELL. Let me see if I can enunciate further. There is a charge in this but it is charged to the member banks. There is a cost which they are absorbing, and it is a foregone interest on their basic reserve requirement.

The CHAIRMAN. Let me just interrupt on that. You say there is a charge. It's an implicit charge. It's a charge of the foregone interest. That's such a vague and indefinite kind of a charge that I think you would agree it's an inefficient way on which to allocate resources and on which to base operations; and then looking at it from the standpoint of the people who want to do this in the private sector, they still have to compete with the Federal Reserve which makes an implicit charge for its member banks but nevertheless makes it very difficult for them to have to charge themselves with the specific service, or impossible.

Mr. COLDWELL. You say that it is an indirect or indefinite charge. I would agree in the sense that we have not attempted to designate a portion of required reserves as compensating for each particular service: amount A for discount privileges, amount B for payments services, and so on. But the charge to the member bank represents a very real and definite cost. At present roughly $25 billion is held by the members in non-interest-bearing reserve balances at the Reserve Banks. Applying a market rate to those balances, even one as low as 5 percent, results in an estimate that at least a billion dollars of gross interest earnings are being foregone by the member banks. That seems to me to be a very heavy charge on the membership of the Federal Reserve, and that is the charge that the member banks are paying for the privilege of coming to us for payments service, for discount window access, and so forth. It is true that the charge is not levied on a per unit basis, but there surely is a definite charge.

The CHAIRMAN. How many banks are members of the Federal Reserve?

Mr. COLDWELL. We have about 1,000 State members and all the national banks, for a total of about 5,500 banks.

The CHAIRMAN. So you have a situation where a minority of banks in numbers, although holding maybe two-thirds of the assets of the banks in the country, are members. Is that right?

Mr. COLDWELL. Right.

The CHAIRMAN. Doesn't that seem to be an inefficient way to operate this system? Wouldn't it be far better if it was unbundled and priced and every bank therefore would be able to have a specific price for a particular service?

Mr. COLDWELL. Given my caveats about the public interest, yes, I would prefer a direct charge arrangement.

The CHAIRMAN. When you made this statement in 1976 about a year ago, what did you have in mind? You said, "promised pricing schedule for users of its check and electronic clearing and settlement facilities."

Mr. COLDWELL. At the time, we were—and still are—very closely involved in the development of a pricing mechanism for checks and ACH's. In the interim period we lost a very large number of member banks and the focus of the System had to shift to consideration of how much loss we were willing to allow and whether it was in the public interest to have continued erosion in membership. So in effect, we had to defer our pricing decision until we looked at the membership question.

The CHAIRMAN. When you say members of the Federal Reserve and then cover all the national banks, you're talking not only about members of the Federal Reserve but the national banks which are really not under your jurisdiction, at least for examination purposes.

Mr. COLDWELL. No; they are not for examination purposes, but they do maintain reserves.

The CHAIRMAN. And you feel that the national banks would give up their status?

Mr. COLDWELL. We have seen a sizable conversion from national to State chartered banks just for that purpose.

The CHAIRMAN. Large banks?

Mr. COLDWELL. Not primarily large banks, although some of the more recent withdrawals have reached into the range of $400 to $500 million in assets.

The CHAIRMAN. Well, I have other questions that I want to follow up. My time is up. Senator Lugar.

Senator LUGAR. Thank you, Mr. Chairman.

Governor Coldwell, in your testimony you mentioned that something close to 40 percent of all checks are cleared through the Federal Reserve System. I had not seen that figure before and so my first question just simply comes from that point. Why is it necessary for the Federal Reserve System to be involved that extensively in check clearing? Your testimony is that it's only a bit less than 40 percent. I suppose my question, having heard the testimony of the people from clearinghouses and other associations we heard yesterday, is to have the notion that in fact a great deal more of this check clearing might occur through enterprises other than the Federal Reserve and that this might be a desirable thing to happen.

In your judgment, is that a fair assumption or not. Given your druthers, would you prefer that the Federal Reserve System was less extensively involved in the switching operations and more extensively involved simply in setting policy for the various types of clearinghouse situations that might occur and let private enterprise handle the clearing functions generally?

Mr. COLDWELL. My preference would be that the Federal Reserve not be operationally involved any more than is necessary for the public interest. That means that we have to be sure that the private organizations can do the jobs that we are now doing, which in turn means that private organizations must be willing (A) to collect at par, (B) to make a transfer of credit immediately or within a short time schedule as we do, and (C) to provide a basic level of payments services to all financial institutions and thus to everybody in this country. If we can be assured that the private organizations can do that within the framework of our antitrust laws and the public interest as perceived at that time, I am willing to have the Federal Reserve System diminish its operational role.

You have correctly observed that approximately 40 percent of all checks written are cleared through the Federal Reserve System. The primary reason for handling this relatively large proportion relates to providing for clearing checks between banks not linked by existing private sector clearing arrangements. Virtually all checks cleared between banks located in the same major cities are cleared directly between such banks. In fact, the Federal Reserve will not accept checks which can be exchanged directly between such banks. Where no clearing arrangements exist between banks, either through correspondent or clearinghouse, the Federal Reserve provides the check collection service. For example, a check deposited in Washington or Chicago drawn on a bank in the territory served by the Federal Reserve Bank of Philadelphia would normally clear through the Federal Reserve check collection system. Federal Reserve offices are located in 48 major trade areas, allowing us readily to handle checks received from most member banks and to collect those checks from any financial institution in the Nation. We know of no private endeavors similarly prepared to collect checks from all the banks and thrift institutions in the Nation. There is no way to know whether the private sector could or would provide such a service.

We are hearing a lot about private endeavors handling ACH and wire transfer operations, which is a kind of next step in the payments mechanism. There we have been subject to two different views on this issue. The National Automated Clearing House Association

(NACHA) wants us in this field, and in the early stages of the effort to develop ACHs they came to us and asked us to provide these facilities. We agreed to do so, largely because it was a fairly small expense; our equipment was already in place; and we are using our same courier services to deliver the tapes as we did to deliver the checks.

We have been asked on occasion to permit the private organizations to handle Federal recurring payments, such as social security payments. The answer is that the Federal recurring payments program is administered by the U.S. Treasury with the Federal Reserve acting as its agent in making these payments.

A similar new service requested by the Treasury involves truncation of paid Treasurer's checks at Federal Reserve Banks. Under this program, only microfilm and magnetic tape images of the checks would be forwarded to the Treasury. Truncation promises to reduce processing time and make possible improved service to payment recipients whose checks are reported lost. Faster processing will also assist the Treasury in controlling issuance of duplicate checks in these cases where the check for which a duplicate is requested was not really lost.

These are examples of the kinds of things the Treasury expects of the Federal Reserve. They would expect the same of private organizations seeking to undertake these arrangements, and the private sector would have to gear up to meet these requirements if they are to take over. The Treasury makes the determination as to the service, the compensation, and the provider of each such service.

Senator LUGAR. The Treasury could make a determination if it say the mechanisms there that these private groups could handle it? In other words, by statute, the Federal Reserve is not mandated nor is there any necessary connection between these recurring Federal payments and the Federal Reserve handling them?

Mr. COLDWELL. No; except the sub-Treasury conversion in 1919–1920. That would have to be changed, but it would be a matter for Congress to determine.

Senator LUGAR. Because clearly these recurring Federal payments are an enormous volume. I think we heard testimony yesterday about how important they would be to these fledgling efforts—some of them not fledgling. In essence, your testimony is that as a Governor of the Federal Reserve, you are prepared to try to diminish the amount of clearing the System has provided, that there are linkages with the ACH's and with other transfer situations around the country, and that it's been the policy of the Federal Reserve System to strengthen these situations?

Mr. COLDWELL. We are strengthening them in the public interest. We have a very difficult decision coming at us through the latter part of this year. As you probably know, we have been running a pilot study on handling interdistrict ACH payments.

Senator LUGAR. Yes.

Mr. COLDWELL. We have run this pilot study for several months. It has worked out well, as we had expected. We are faced with a decision: whether to go ahead and mount an interdistrict ACH program for the entire Nation, or to leave these payment arrangements to the private sector. We are getting conflicting advice on this matter. The NACHA would like to have us establish a nationwide interdistrict ACH program. The private groups, so far, have not been able to show us that they can handle this arrangement. Maybe they have not studied it thoroughly enough. There is a question of whether the public interest is best served by another year or two of delay while the private sector gets geared up for this if they can, or should the system go ahead now and provide the service in the expectation of turning it over to the private sector if and when they are ready and able to provide the service?

Senator LUGAR. I appreciate your answer because it does frame an issue for the private people to think about, perhaps a challenge, literally in the words you have just spoken which may be helpful in some of their decisionmaking and testimony.

Mr. COLDWELL. It was exactly that challenge to which I was referring in my speech a year ago.

Senator LUGAR. Yes. Let me ask this question, and advise me if this notion is untrue, but as I read about the extent of the Federal Reserve's activity in clearing and then the final portions of your testimony starting on about page 18 or 19 on the NOW account and title II of S. 2055, when you say that "the Board believes that title II is the best presently available alternative for resolving the membership problem and we trust that it will be enacted," it seems to me that again and again we get back to the membership problem, the fact that there has to be members and policy if the FRB is to make the impact that you want and that we all want as a matter of public policy.

Without debating whether title II of S. 2055 is the best alternative or not, there is no desire on your part, is there, to retain all of these clearing functions so as to retain members? In other words, is there a correlation here that you would like to keep everybody in the fold in some fashion as opposed to dispersing too many responsibilities out so there's some dependence or at least some good feeling on the part of banks that want to stay with you on membership because you're handling the clearing situations?

Mr. COLDWELL. I do not believe that rationale would be applicable to our check-clearing operations, if the burden of membership were removed, for several reasons: (1) normal operational problems associated with check operations such as adjustments, late delivery, et cetera, tend to aggravate banks; (2) certain checks, particularly those drawn on banks in the same city cannot be collected through the Federal Reserve; and (3) a significant number of checks are cleared outside the Federal Reserve today, and there are no requirements that would limit such external check clearings. But in the absence of action to remove the burden, the check-clearing services are very important for retaining membership.

Senator LUGAR. In other words, it wouldn't hurt your membership situation if you're successful in dispersing responsibility broadly and the number of clearings goes down from 40 to 30 or 20 to 10—that this is incidental to the membership problem?

Mr. COLDWELL. I believe the extent of our check clearings are incidental to membership so long as we neither force checks out of our clearing system nor establish pricing before the membership burden is eliminated. The Federal Reserve membership problem is not directly related to payments mechanism operations, a large number of member banks do not directly clear any checks through the Federal Reserve. However, the banks which do clear checks directly perceive that service as being more than adequately paid for through their reserves. Any attempt to shift check-clearing proportions without first eliminating the reserve burden would result in membership attrition.

My first preference to eliminate the reserve burden, as implied in my testimony, is not payment of interest on reserve accounts; it is uniform, universal reserve requirements which I do not think has any membership connotation to it, although I am sure that others would disagree with that rather vigorously.

Senator LUGAR. Thank you.

The CHAIRMAN. If you had those uniform reserve requirements, they could be considerably lower than they are now I take it.

Mr. COLDWELL. Yes, sir.

The CHAIRMAN. If you covered everybody——

Mr. COLDWELL. I would be willing to see 7 percent.

The CHAIRMAN. It might be even lower than that if they were universal.

Mr. COLDWELL. It might be.

The CHAIRMAN. The fear, and it's a justifiable and understandable fear, especially on the part of small banks which have a lower reserve requirement—as we all know, 7 percent—is that they would be caught in a net and eventually their reserve requirements would be higher and I think the fact is if there were universal requirements in order to have a consistent and effective monetary policy that you could then follow a policy of having lower reserve requirements, then monetary policy would be effective.

Mr. COLDWELL. And as long as we had a slight margin of flexibility, I don't think any of us would ask for authority to increase reserve requirements to 15 or 20 percent.

The CHAIRMAN. You appreciate how difficult a political problem that is and I wouldn't say we would be able to get that through at all.

Mr. COLDWELL. We have not convinced Congress of the need to the point where it is willing to take action.

The CHAIRMAN. At any rate, if the charges for services were made at the market rate, it's my conviction that there would be ample revenues to pay interest on reserves and therefore you wouldn't have a membership problem if you could do that. It's a matter of which comes first, the chicken or the egg.

Mr. COLDWELL. Perhaps, to some extent it is a chicken and egg situation. However, the burden of membership would still remain. At the present time, member banks are paying for the services in the form of required reserves. If charges were imposed, they would be paying for the services twice. If revenues from the charges then returned to the members in the form of interest on required reserves, the members would still be in essentially the same position they are in today. They would still be paying the cost of reserves, while nonmembers do not have to pay that cost and, thus, there is a burden to membership. The banks would seek to pass the charges on to their customers, but they could not fully do so.

The CHAIRMAN. It would vary, but if you were able to pay interest on your reserves, that's what I'm saying——

Mr. COLDWELL. That may offset it.

The CHAIRMAN. And the resistance that I have and many people in Congress have and the public would have is they don't want to see the Congress paying the banks hundreds of millions of dollars they don't pay now. It's a tough one to explain. On the other hand, if we get in charges for the services that are now provided without charge, that would mean that the public would not be affected. They wouldn't lose. In fact, they might even gain a little revenue. It would balance out.

Mr. COLDWELL. It obviously depends on the balance of it.

The CHAIRMAN. Governor, the Federal Reserve is in a monopoly position in providing payment services, yet there's no proof that a Federal Government monopoly is justified. What steps has the Federal Reserve taken to foster private sector initiatives in the payment mechanism? Are any steps planned to do that?

Mr. COLDWELL. We have taken a large variety of steps over the past years. I will not bore you with history, but there have been a variety of different projects such as the Tulsa experiment of check consolidation, the Duluth experiment, and the assistance we granted both Chicago and New York in forming their own private ACH arrangements. We have not been resistant to the idea that the private sector should work in this field. What we have said is that it is in the public interest to have a variety of alternatives and that the alternative which government provides in this particular case does permit the public interest to be served.

Whether this is done by direct operations or by a whole new series of regulations is a different matter.

The CHAIRMAN. Well, yesterday Mr. Lee of the New York Clearing House Association and Mr. Romberg of the Bankwire and Mr. Dissmeyer also of the National Automated Clearing House Association indicated that they felt that those private sector initiatives which would foster and assist them were either being taken reluctantly, piggyback on—the courier service is one Mr. Lee suggested he said that came in but it came in rather slowly and then it wasn't efficient. At any rate, they felt that there were not adequate actions by the Federal Reserve.

Mr. COLDWELL. May I comment on that?

The CHAIRMAN. Do you have occasion to talk with these people? They impressed me as being extraordinarily able and thoughtful and sincere people. They feel they are running a very tight ship, as they put it, an efficient operation. Do you or other executives of the Federal Reserve have any occasion for discussing these matters and seeing what can be done to make the Federal Reserve more helpful in assisting the private sector operators to do more and operate more efficiently?

Mr. COLDWELL. Our staff is in constant contact with the NACHA group, the Bankwire group, the ABA, and other trade associations which are attempting to do some of these things.

The CHAIRMAN. Let me give you a specific example. Yesterday Mr. Romberg, president of the corporation that runs the Bankwire, said they had been trying for 18 months to arrange access with the Federal Reserve for net settlement. Do you know about this? Can you tell the committee why Bankwire has not gained the interface in order to complete with the Fedwire?

Mr. COLDWELL. Discussion with Bankwire to provide settlement between Federal Reserve member banks which are also subscribers to Bankwire did begin some time ago. The initial discussions were preliminary, informative exchanges, but no formal proposal was made until some time this year. Currently, the proposal calls for a net settlement through charges and credits to member bank reserve accounts. We are proceeding carefully. Bankwire is the first nonmember bank private sector organization to request nationwide net settlement authority; others may well follow its lead. The operation proposed appears quite straightforward, but it will establish a precedent. Agreement to provide the service involves a series of policy decisions on matters including operations, procedures, security, and member bank reserve maintenance. I am sure that you would want us to be extremely careful about the duties and responsibilities in a legal sense between the Federal Reserve and a private organization like Bankwire, where the private organization would acquire the authority to order us to make a change in a private bank's reserve account. Perhaps consideration of these issues could have been more rapid; but as I recall, the last meeting was just a week ago and final recommendations for action are nearly complete.

The CHAIRMAN. Is it necessary for the Federal Reserve to perform both clearing and settlement of checks and ACH items? I see from the American Banker article that I referred to that you said you could agree to a congressional decision that the Fed should provide only settlement services. Should we do that and what are the pros and cons?

Mr. COLDWELL. I think I could agree to that as a theoretical proposition, as I responded to Senator Lugar, if the private organizations can assure us that (a) they are going to provide a basic minimum of services to all banks and all citizens of this country; (b) are going to collect all checks at par; and (c) are going to provide a settlement arrangement whereby the credit is passed on a schedule very rapidly, as we do. We do not defer settlement for more than 2 days for checks. Some checks, such as those involved in delayed disbursing techniques, require relatively long periods of time to clear. To allow for collection time and the potential return of dishonored checks, consumers are sometimes asked by their banks to wait as long as 25 days before the funds are made available to them. I submit that these practices, when they affect consumers, are not in the public interest.

The CHAIRMAN. One of the problems here is the Federal Reserve seems to be moving to expand its operations and to make commitments on equipment that would imply that you expect to do a bigger job in this area where the private sector would like to move in and compete.

For instance, I understand that the Federal Reserve includes the main system at Culpeper, Va. How extensive are your plans to improve your systems, and what would be the cost for the new capital equipment?

Mr. COLDWELL. We are in the process of studying not only our communications equipment, but also our data processing equipment. They are interrelated, as one would suspect.

Some changes in the Federal Reserve communication system arrangement would be required in connection with the interregional ACH program, to which I referred in response to Senator Lugar's question. As I mentioned there, if we undertake to support that program, we would have to have the capability to do so. We think the capability is in place right now to handle most of those interdistrict ACH items. However, we would plan to insure our capability to support the programs by taking advantage of modern technology to enlarge our line capacity sharply at modest cost.

Other changes in the communications system may be necessary for purposes other than the ACH operation. We have to transfer a large and growing capacity of monetary policy data over those wires. Our administrative and management information requirements are growing and demand enlarged capacity. As far as costs are concerned, I cannot tell you, because we have not finished the study yet.

The CHAIRMAN. Have you had any occasion to work with the private users in the design of the new systems to see that their needs will be met?

Mr. COLDWELL. I cannot say that we have gone directly to private users in a formal way, because this is a service that operates within the Federal Reserve System. As a service to member banks and to reduce System expense, member banks having large volumes of transfers of funds and securities are permitted to install terminals or computers connected to the System's communications arrangement. The Reserve banks consult regularly on an informal basis with member banks about the terminals they attach, the service available through those terminals, the security of the network, and technical improvements that can benefit both the members and the System. We have attempted to get information from the member banks and to guide them as to the best type of terminal and line for transmission of the information they have to send to the Reserve bank.

The CHAIRMAN. Would you consider the following type of systems for required reserves: reserves that the Federal Reserve banks would be separated into two portions, check balances which also might be compensating balances, and reserves, on the other hand, strictly for monetary policy purposes? The latter, the monetary policy reserves, would be lower than the current requirements, at least initially, and uniform for all banks regardless of size.

Mr. COLDWELL. And all depository institutions having third-party payment powers?

The CHAIRMAN. Yes. Interest could be paid on the compensating balance portion.

Mr. COLDWELL. That does not strike me as an unreasonable proposition, provided that all institutions bear an equal proportion of the monetary policy portion of the balances. Then they would all be getting payment back on the same basis, so there would be no net advantage to nonmembership. If there is going to be a reserve requirement for services, are you expecting us to put pricing on top of that? If so, the burden to the member banks would be doubled.

The CHAIRMAN. Well, I said reserve requirements for monetary policy would be lower.

Mr. COLDWELL. Yes, but would it be lower for everybody in terms of equity between member and nonmember? Would you wipe out any burden for the membership in terms of monetary policy reserves?

The CHAIRMAN. That's right.

Mr. COLDWELL. If additional reserves were maintained as compensation for services—in addition to monetary policy reserves—those additional reserves would have to be imposed on all institutions having access. Otherwise, there would be a discrete charge imposed on the group holding monetary policy reserves.

The CHAIRMAN. Everybody who wanted the services provided that way would put up a balance. Those who didn't would not.

99-446 O - 78 - 11

Mr. COLDWELL. In other words, you would have no reserve requirement for payment services?

The CHAIRMAN. Except for monetary policy purposes.

Mr. COLDWELL. I am willing to accept that, Mr. Chairman, although I am not sure about my colleagues. I would have to do a little "selling job," I think, but the majority of them probably would be perfectly willing to accept a monetary policy reserve on a uniform basis for all depository institutions. Then we could go into direct pricing for all of our services. I am not quite sure how to price discounts, but that would have to be considered.

The CHAIRMAN. I just have a couple more questions. I appreciate your responsiveness. On page 9 you say:

> Access arrangement to ACH facilities are equitable, and we do not believe that any depository institution has suffered serious competitive disadvantage because of this policy.

Now, apparently the Justice Department's Antitrust Division disagrees. In April of this year an antitrust complaint was filed against the Rocky Mountain ACH alleging a conspiracy in constraint of trade. The complaint stated that the Fed provided operational support to the ACH and that restrictions on thrift access to the ACH disadvantaged these institutions in favor of commercial banks. In response to my inquiry, Chairman Burns on June 3 of this year listed 11 Federal Reserve offices that provide services to ACH associations that do not admit thrifts.

My question is this: In the light of the record, shouldn't the Fed reexamine its policy that results in discrimination in the operation of ACH's?

Mr. COLDWELL. Mr. Chairman, I think you know that the ACH's involved in the Justice Department's criticism have now amended their rules to permit full access to depository institutions—thrifts as well as banks.

The CHAIRMAN. Is that for all the ACH's?

Mr. COLDWELL. The two which were sued—Rocky Mountain and California——

The CHAIRMAN. How about the others?

Mr. COLDWELL. Now I think the majority are on total access. Let me check with our staff.

The CHAIRMAN. Stand up and identify yourself, please.

Mr. COLDWELL. Mr. Bundy.

Mr. BUNDY. It's our understanding that the majority of the ACH's are now moving to change their rules in light of the Justice Department action.

Mr. COLDWELL. They have not yet changed according to him.

The CHAIRMAN. But here you have a determination by the Justice Department and acquiescence by the two ACH's that were involved, and now we hear that a majority, not all, but a majority are considering the possibility of it being available to the thrifts. Why shouldn't that be universal?

Mr. COLDWELL. I think it is likely to be universal. I think it is a matter of timing, they just have not done it.

The CHAIRMAN. Why shouldn't the Fed require equal access?

Mr. COLDWELL. We have not seen fit to require equal access because we are dealing with an association of institutions which voluntarily organized themselves and put up the money to accomplish this purpose. We said that we would make available our clearing and access facilities to members of that Association and all member banks. We thought it was up to the ACH's to set their own membership rules, and they have done so.

The CHAIRMAN. What I'm talking about is whether or not you should require acquiescence to the law in view of the fact the decision was made.

Mr. COLDWELL. The Department of Justice clearly is enforcing the antitrust laws, which is their responsibility rather than the Federal Reserve's.

The CHAIRMAN. Well, the Justice Department acted and they won the case and that made it clear. It seems clear now that the law has been clarified that the Fed has the responsibility to see that the ACH's comply with the law. Isn't that right?

Mr. COLDWELL. We certainly have used moral suasion without actually requiring it, Mr. Chairman. We have asked the individual ACH's to admit everybody.

The CHAIRMAN. Well, it's hard for me to understand why the Fed shouldn't require acquiescence to the law and inform them what the law is and indicate that this would be expected. It's pointed out that the Fed isn't hands-off here. It provides services—a listing of 11 Federal offices that provide services to ACH associations that do not admit thrifts.

Mr. COLDWELL. And I think the response given by Mr. Brundy would indicate that those associations are all considering a move into full compliance.

The CHAIRMAN. He didn't say all. He said the majority are considering.

Mr. COLDWELL. As a practical matter, I think they are all going to move in that direction.

The CHAIRMAN. I would hope so.

Thank you very much, Governor Coldwell, for your usual fine excellent appearance and your responsiveness. We may disagree on some things, but I admire your ability and your candor.

Mr. COLDWELL. Thank you, Mr. Chairman.

The CHAIRMAN. Our next two witnesses will appear together, Dr. Charles Haywood, accompanied by Mr. Thomas Rideout; and we also have Mr. Leif Olsen, senior vice president and economist for Citibank who is appearing at the same time. Now to assist you gentlemen we are going to do you a favor by running the lights so you will know how much time you have and you can be guided accordingly. The green light will be on when you start and then the yellow light after 9 minutes will be on for 1 minute, and then the stoplight goes on or the red light and we hope you won't run the stoplight. Dr. Haywood, go right ahead, sir.

## STATEMENT OF CHARLES F. HAYWOOD, PROFESSOR, DEPARTMENT OF ECONOMICS, UNIVERSITY OF KENTUCKY; ACCOMPANIED BY THOMAS P. RIDEOUT, SENIOR VICE PRESIDENT, WACHOVIA BANK & TRUST CO., WINSTON-SALEM, N.C., REPRESENTING AMERICAN BANKERS ASSOCIATION

Mr. HAYWOOD. Mr. Chairman, Senator Lugar, I am Charles Haywood, professor of economics at the University of Kentucky, and I have been asked to appear here today on behalf of the American Bankers Association and, as the chairman has indicated, I'm accompanied by Mr. Thomas Rideout. Mr. Rideout is senior vice president of the Wachovia Bank & Trust Co., Winston-Salem, N.C., and a member of the executive committee of the correspondent banking division of the American Bankers Association.

We certainly welcome this opportunity to testify on the role of the Federal Reserve in providing payments mechanism services.

We have filed a written statement and I'm just going to hit a few high points if I may, Mr. Chairman, and not try to cover the statement in full.

In our statement we have tried to be responsive to several questions posed in the announcement of these hearings. And one of these questions, the first one I believe, asked whether the provision of payment services by the Federal Reserve is a necessary and appropriate function of the Nation's central bank.

We think that the provision of payment services is not a necessary function for the Federal Reserve in its capacity as the Nation's central bank.

As to the question of whether or not it is an appropriate function, I think our position would be that the Federal Reserve has provided various payments services over the past 60 or some years that have in various ways contributed to the efficient functioning of our financial system. We certainly would not say that the provision of these services has been inappropriate. We would not recommend that the Federal Reserve get out of the payments business to the extent that it contributes to an efficient functioning of our financial system. Certainly if the Federal Reserve were to withdraw from the payments services business it would be a very difficult adjustment for the system, although we think that in time it would adjust. So I think whether providing these services is or is not appropriate depends in large part upon the kinds of services, how they are provided, and under what circumstances, and what prices might be charged for them in the future.

On the question of the pricing of Federal Reserve services, we see several difficulties. First is, of course, the difficulty of trying to estimate what the cost of the services are. The Federal Reserve, as the Nation's monetary authority, does many things that go beyond these payments services. The Federal Reserve is also involved in extensive regulatory and supervisory activities, and how to allocate out the overhead costs that might be involved would, we think, be a very difficult task, but not an impossible one. One can always come down, in the last analysis, I suppose, with some arbitrary allocation, as is often done in cost allocation systems.

The question of the pricing then is, if these services are to be priced, should they be priced in a way that approximates what the services would cost if provided by the private sector?

Now that also would be difficult to estimate so long as the Federal Reserve is in the picture. That is, if the Federal Reserve were not providing these services at zero marginal cost, then the private sector would be providing them under some competitive system and we would see what the private sector costs would be. But as long as the Federal Reserve is in the picture, it's awfully difficult to say what the costs would be for the services to be provided by the private sector.

However, we think that should be a guideline in thinking about how the services might be priced. That is, any pricing scheme that might be developed should be one that is aimed at stimulating competition, at providing opportunity for competition for the development of private sources of services to a greater extent than has been developed thus far.

The question was also posed in the announcement of these hearings about access to the Federal Reserve services.

As has been pointed out here this morning, access today is based upon the maintenance of a reserve balance. And that has been imposing an increasingly large burden on the member banks relative to their revenues and other expenses.

We think that the question of access cannot really be meaningfully addressed until something is done about the excessive burden of reserve requirements on member banks.

So long as we have our present reserve requirement system, we think that direct access to the Federal Reserve services should be limited to member banks.

In our statement we consider various ways in which the pricing of Federal Reserve services may involve costs or benefits to our financial system and to our economy.

I am going to skip over those, because I think that those have formed a good deal of the substance of the questions that have been posed already in this hearing, and address a further aspect that was raised in the letter to us, and that is what is the impact of the Federal Reserve's current role in the payments mechanism on corresponding banking.

I think what we see today is a rather extensive private system of check collection that has developed through the correspondent banks and is in fact competing with the Federal Reserve, despite the way in which the Federal Reserve prices its services on a zero marginal cost basis.

In thinking about what the impact might be if we were to change the Federal Reserve's pricing arrangement, we could look at several alternatives. If the Fed's services were priced at zero with unlimited access for all financial institutions, there obviously would be no incentive for the private sector to compete in the payments system mechanism. If the Federal Reserve gave its services away free to everybody, that would be pretty hard to compete with.

If the Federal Reserve priced its services on the basis of a one-time fixed entry fee, with prices based on marginal costs thereafter, that system would be similar to the present one. That is, reserve balances that must be maintained by member banks are in effect an entry fee: Once you get into the store, everything else is free.

The Federal Reserve could have a scheme where it priced services on a marginal cost basis; assuming that there are economies of scale in this type of operation. Then the prices could be very low and declining on a per unit basis.

So it might approximate what we have today. In that case, we would find that the relationship between the private and public sector would probably be about what it is today, with some private competition. But it would be difficult to match the Federal Reserve, as its prices would decline toward zero.

Pricing on the basis of what it would cost the banks to provide the service would clearly be of the most conducive situation to the development of private sources of funds.

To sum up several points here, in a paper that covers a number of things, what we are saying is reserve requirements today are clearly too high. The Federal Reserve has been providing services at below cost in an attempt to reduce the burden of these excess reserve requirements. And it may be that the Federal Reserve is considering expansion of services, as a way of further reducing this burden and thereby hopefully alleviating its membership problems.

We would point out that the membership problem could be resolved to a significant extent by reduction of reserve requirements.

Thank you.

[The complete statement of Dr. Haywood follows:]

STATEMENT OF THE

AMERICAN BANKERS ASSOCIATION

Mr. Chairman and members of the Committee, I am Charles F. Haywood, Professor of Economics at the University of Kentucky. I am appearing today on behalf of the American Bankers Association, and am accompanied by Thomas Rideout, Senior Vice President, Wachovia Bank & Trust Company, N. A., Winston-Salem, North Carolina and a member of the Executive Committee of the Correspondent Banking Division of the American Bankers Association. We welcome the opportunity to testify before your committee on the role of the Federal Reserve in providing payments mechanism services. The question was fundamental in the minds of policy makers when the Federal Reserve was originally set up, and is of continuing importance today, particularly in light of the development of new electronic forms of payment services.

## The Provision of Payment Services by the Federal Reserve in its Capacity as the Nation's Central Bank

The provision of payment services is not a necessary function for the Federal Reserve in its capacity as the nation's central bank. The only neccessary function for the nation's central bank is the management of monetary policy. In today's economy, we can see no inherent reason why the provision of payments services must be exercised by the central bank in order to perform this function.

However, at the time of the founding of the Federal Reserve, it was deemed appropriate for it to perform a variety of payments services and it has traditionally done so. Before discussing the appropriateness of this role today, it will be useful to review some of the services provided by the Fed, and some of the historical factors which prompted it to provide payments services.

The Federal Reserve system augments the collection of checks on a nationwide basis through its unique branching network throughout the country. While the vast majority of checks are cleared by direct exchanges between banks, the Federal

Reserves provides a utility for interstate exchange not currently available in the private sector. It is useful to note, however, that many of the large banks have in recent years elected to bypass the Fed in favor in direct presentment of items even to far remote cities.

The Automated Clearing Houses operated in several cities by the Federal Reserve have allowed an orderly transition toward electronic funds transfer and benefited the American people by allowing the Treasury to speed payments and reduce costs of processing Treasury payments. The Fed has been instrumental in helping to develop this service.

The Fed WIRE, which allows the rapid transfer of funds from city to city, has been greatly enhanced in recent years. It allows major transfers of funds to occur quickly and safely outside the check collection system.

Through its Coin and Currency operations, the Federal Reserve provides the distribution networks for new cash from the Treasury into the hands of American people and the collection system for worn and multilated currency.

One of the reasons the Federal Reserve was established was because the Congress perceived the public interest to be served by the establishment of a uniform national currency. In response to this concern, the Fed adopted a deliberate policy of attempting to eliminate non-par banking, the system whereby recepients of payments by check were charged fees for the privilege of depositing those checks in their bank accounts. For the most part, this effort was successful. Non-par banking was disliked because, at the time of the establishment of the Federal Reserve, our financial system had evolved to the point where checks were considered to be a substitute for currency. People felt that, if the value of a dollar used in a transaction was unrelated to the distance between transacting parties, the same should be true of a check. Also, there was a general belief that non-par banking encouraged an inefficient payments system, as checks tended to take very circuitous clearing routes in the attempt to avoid exchange fees. Problems of bank soundness were, in some cases also associated with the high costs and inefficiencies of check clearing. The establishment of the Federal Reserve, with a system of required clearing balances for member banks, and the provision of free clearing services to them, did much to restore public confidence in the efficiency and soundness of our payments system. Thus, one of the reasons the Federal Reserve was established was because Congress perceived a role that was not being fulfilled by the private sector.

In today's world, however, there is an active and efficient payments mechanism provided by the private sector. While we would certainly not recommend that the Fed get out of the payments business entirely, it is not clear what the appropriate role for the Federal Reserve in the provision of payments services is. A complete withdrawal of the Fed from the payments business would be a wrenching experience for the banking system and should be done on a gradual basis, if at all. Nevertheless, we must note that more and more banks are finding Federal Reserve services less valuable relative to the reserves they must hold, and are withdrawing from the System. Surely this calls into question the appropriateness of the Federal Reserve in providing payments services today. Of course, one of the reasons Federal Reserve services are becoming less valuable to banks is the manner in which they are implicitly priced. Banks that are willing to bear the excessive burden of reserve requirements are given the services free. Other banks generally, do not obtain services from the Fed at all. A second factor lessening the value of the Federal Reserve membership has been the innovativeness of the private sector in providing payments services. As the income lost from investment in non-interest bearing reserves has become more and more costly, the private sector has become more efficient in the provision payments services and its market has expanded. In fact, some payments services, such as the bank card, have developed entirely in the private sector and have become very popular and cost-effective. This innovativeness in the private sector would also seem to call into question the appropriateness of the Federal Reserve's role in providing payments services.

In addition, we foresee several difficulties in pricing of existing Federal Reserve services, and the provision of new ones. The problem of determining proper cost allocations is bad enough for regulators of private firms. For the Federal Reserve with its unique monopoly power to create money and its responsibility for administering monetary policy, the situation would seem nearly impossible. How does one allocate overhead costs among such diverse activities as the administration of the monetary policy through open market operations, the provision of services as fiscal agent for the Federal Government, the supervision of state-chartered member banks, the regulation of bank holding company activities, and the provision of payments services which also can be provided by private banks? Even if all the relevant data were know, we can think of no way to do this one on a rational basis. Indeed, as new payments system evolves, it becomes more and more difficult to even know the relevant data. And the relevant data must be known if Federal Reserve involvement in a particular acitvity is to be justified on the basis that the private sector is not providing adequate service.

It is for this reason that the American Bankers Association suggested to the National Commission on Electronic Funds Transfer, that in EFT areas where new payments services are developing rapidly, -- automated clearinghouses might be an example of this -- if Fed involvement is appropriate the service should be priced on the basis of what the private sector would charge if it provided the service. Even this rule is difficult to implement on a fair basis since vendors of payments services in the private sector will frequently be charging different prices and operate under different cost conditions. This policy was proposed because of the belief that in some EFT areas there may be a "demonstration value" to having the Fed provide a particular service, with the private sector taking over the function after the value of the service is realized and known by all. This may have been the case with check clearing at the time the Fed was established. There seems to have been a clear need to demonstrate the value of par banking. However, with the increasing sophistication of correspondent banks, and the advent of deposit insurance, many of the inefficiencies and riskiness have been removed from payments activities.

The provision of payments services is the main banking area in which the Fed competes directly with the private banking system. Yet with 12 regional banks, each having several branches which serve primarily as operations centers, the Fed already has a nationwide system of operations centers in place. There is no way a single bank can be said to match this capability under the current banking structure. This makes accurate comparisons of the public and private clearing systems even more tenuous.

Another example of the difficulties of explicitly pricing of Federal Reserve services was highlighted during recent consideration of S. 2055, proposed legislation dealing with NOW accounts and the burden of Federal Reserve membership. In discussion of this legislation, the Federal Reserve seemed to justify discrimination against larger banks in the payment of interest on reserves on the grounds that these banks took greater advantage of "free" Federal Reserve services. Yet, surely there are volume efficiencies in the provision of many payments services. Would the Fed propose to give volume discounts? Explicit pricing would seem to suggest such a policy.

In sum we believe a thorough investigation of the role of the Federal Reserve in the provision of payments services is certainly appropriate at this time. However, the proper roles for the public and private sectors cannot be determined by merely saying they should compete on an equal basis.

## Access to the Federal Reserve's Services

If there is a proper role for the Federal Reserve in the provision of payments services it would, at first, seem logical that such services should be provided to all institutions. Unfortunately, we cannot agree with this approach at this time. When the Federal Reserve was originally set up, thrift institutions were not in the payments business, and it was widely anticipated that all banks would eventually join the Fed. Of course, a significant portion of the banking system did not join the Fed, and in recent years other institutions have been getting into the payments system. The provision of payments services by the Fed is largely financed by the income derived from the use of reserves that must be held by member banks. These reserve requirements operate as a discriminatory tax. If payments services were provided to all institutions, reserve requirements would become even more discriminatory. Until something is done about the excessive burden of reserve requirements, only member banks should have direct access to Federal Reserve services.

## Costs and Benefits of the Pricing of Federal Reserve Services

Two objectives frequently mentioned for the pricing of Federal Reserve services are economic efficiency and the development of technologically efficient payments systems.

Federal Reserve involvement in the payments systems has been justified by some on the grounds that there is, in some sense, a failure in the private marketplace. Payments services have been perceived by some as having economies of scale which cannot be realized in the private marketplace and should not be priced on a full cost basis but only according to the marginal cost of producing one extra unit. Alternatively, it has been suggested that payments services might involve a public good which has such widespread benefits that they should be offered for free.

While we are skeptical of the accuracy of these views, it is useful to examine the implications of these methods of pricing. We have already mentioned the problem of cost allocations in a diverse public institution such as a central bank, and the difficulties in knowing the relevant data when technology is changing rapidly. There is an additional problem in that neither of these pricing methods would generate enough revenues to cover the cost of producing the service. Payments system activities would have to be subsidized relative to other economic activities. Also, such a pricing method would discourage private competition. For these reasons it is our belief that when the relevant data are difficult to know any new venture by the Federal Reserve into the payments system area should only be on a basis that does not discourage private competition. Surely when no one knows the form the future payments system will take, this is the best rule. Even with such a rule, we believe the burden of proof should be on the Federal Reserve to demonstrate the failure of the private payments systems before it undertakes any new activities.

Another potential objective in the pricing of Federal Reserve services is the development of technologically efficient payments systems. The development of some EFT applications may be extremely risky for private concerns to undertake. Nevertheless, some of the applications may increase the efficiency of the payments systems and the Fed may want to provide such services on a temporary basis. Under these circumstances, pricing of these services may be based more on considerations of the temporary nature of the Federal Reserve's participation in the market than on considerations of short run economic efficiency. A high price will forestall use of these EFT services and delay their development. A low price will accelerate use and acceptance of the services, but delay development of private EFT systems. One potential approach in this situation is the method suggested previously. That is, charge what the private sector would charge if it was offering the service.

How do these approaches to pricing compare with the current pricing methods used by the Federal Reserve? From the standpoint of an individual member bank -- the Federal Reserve sets a direct price of zero on services provided and then imposes a tax on it. The size of the tax is based on the deposits of member banks and substantially exceeds the cost to the Federal Reserve of providing the service. This method of pricing has resulted in at least one and possibly two distortions. The first distortion is caused by setting the price of access to Federal Reserve services above either the average or marginal cost of producing them. This results in a a smaller than optimal number of banks making use of these services. This is currently being discussed as "the Federal Reserve's membership problem". Setting the direct cost of these services equal to zero for member banks may create a second distortion. Some member banks may use an excessive amount of the services from an efficiency standpoint.

Direct pricing of Federal Reserve services alone will only eliminate the second distortion. Any approach to direct pricing must include a significant reduction of the high price in terms of reserve requirements which banks must pay to gain access to Federal Reserve services. This could be accomplished by a reduction in reserve requirements, payment of interest on required reserves, or allowing certain types of earnings assets to qualify as reserve assets.

At one time the Federal Reserve put out for comment proposed changes in Regulation J which called for explicit pircing of services and credits against these prices for reserves held. Such a pricing scheme is anti-competitive in that it reinforces the incentive member banks have to use only those services provided by the Fed, and neglect private market alternatives. Our comments to this proposed regulation are attached to our statement and discuss this in further detail. In addition, this proposed regulation illustrates very well the temptation that exists to use explicit pricing as a tool to stem the erosion of Federal Reserve membership. If this were to happen, the broader questions of economic efficiency and an efficient payments systems could easily become hostage to the membership question.

## Impact of the Federal Reserves' Current Role in the Payments Mechanism on Correspondent Banking

The current Fed policy in providing payments services is to charge a high admission fee, but to charge nothing per unit once access is established. In essence, the Fed currently is financing its payments mechanism by a tax on member banks in the form of required reserves.

The situation encourages the formulation of correspondent relationships to spread the high cost of initial access to the services; member banks shift their burden of cost to non-members by charging an implicit fee for Fed services to which they, as members have unlimited access. While this aspect of current Fed pricing tends to encourage the volume of correspondent relationships, the zero unit price for use of services for member banks has inhibited the development of payments sytems in the private sector. Thus, the current structure of access to Fed services has a sharp impact on the nature of private correspondent activities; member banks are encouraged to act as conduits through which non-members can make use of the Fed clearing facilities.

To assess the impact of the Fed's current role on the development of correspondent services, it is necessary to have a point of reference. If the Fed's services were priced at zero with unlimited access for all financial institutions, there would be no incentive for the private sector to compete in the payments systems market. This conclusion is also valid if the Fed employs marginal cost pricing, with the operating losses being offset by a direct or indirect tax subsidy. If the deficit is financed by a one time fixed entrance fee for the use of the services with the per unit charged based on marginal costs, the system would be similar to the current one. Correspondent relationships would be encouraged in order to share the expense of the cost of entry -- but the per item charge would tend to encourage participants to economize on the use of the service.

Pricing on the basis of what it would cost banks to provide the services would provide a healthly competition from the private sector. However, individual banks may still be at a disadvantage in competing in this market due to the fact that the Fed has a nationwide presence which no single bank can match. Individual banks must form joint ventures to match this presence.

In sum, Mr. Chariman, we are skeptical that enough information is known so that the Federal Reserve can adequately venture into new payments system areas without inhibiting healthy competition. If it does, the standard of pricing should not be any direct measurement of Federal Reserve operations, but the cost to the private banking industry of providing a similar service. The burden of proof should be put on the Federal Reserve to demonstrate the widespread public benefits or economic efficiencies that justify an expanded role for the Fed in the payments systems area. We doubt that such benefits exist. The "issue" of access to Federal Reserve services exists because of the discriminatory tax placed on member banks in the form of excessively high reserve requirements. The Federal Reserve's membership problem must be dealt with first, before consideration is given to direct access by non-member banks and non-bank depository institutions.

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AMERICAN
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EXECUTIVE VICE PRESIDENT

Willis W. Alexander
202/467-4211

March 19, 1976

Mr. Theodore E. Allison
Secretary of the Board
Board of Governors of the
Federal Reserve System
Washington, D. C. 20551

Dear Ted:

This letter is written in response to the January 15, 1976 invitation of the Board of Governors for comments on a revised proposal to amend Regulation J to deal with clearing and settlement of wire transfers, and automated payment operations to effect payroll deposits and other recurring payments. At the same time the Board announced an interim policy on access to Federal Reserve facilities. Finally, the Board announced its intention to established a pricing schedule applicable to the users of Federal Reserve check and automated clearing and settlement facilities.

The Association's comments are directed at all three elements contained in the January 15, 1976 release: Regulation J; Interim Access Policy; and Pricing for usage of Federal Reserve facilities. The comments are organized as follows:

<u>Section I</u> -- Introduction and Background

<u>Section II</u> -- Conclusions concerning the Structure and Content of Regulation J; the Interim Access Policy, and the Pricing Concept

<u>Section III</u> -- Specific Comments on the Revised Proposal to Amend Regulation J.

<u>Section IV</u> -- Summary

SECTION I -- INTRODUCTION AND BACKGROUND

On November 19, 1973 the Board of Governors initially issued for comment a proposed Regulation J, structured as follows:

- Subpart A - Collection of checks and other items
- Subpart B - Transfers of funds -- credit transfers
- Subpart C - Transfers of funds -- debit transfer

The Association replied in a comment dated April 10, 1974. Section II of this comment is pertinent to the Regulation itself, and is cited for background.

Comments on Regulation J

Subpart A

Subpart A is a result of restructuring Regulation J and essentially represents the current regulation. In view of the fact that this modification appears to be purely procedural, we are in agreement with its intent and content.

Subpart B

Subpart B is a codification of current practices in the forwarding of credits for member banks and their customers. We view this codification as desirable and we accept its intent, provided that direct access is limited to demand depository institutions. Additionally, the Federal Reserve should not seek to expand the scope of its services or the market for these services in ways which would endanger the survival of competing facilities.

Many terms and procedures require clarification and more detailed and specific definition before the codification is acceptable. Our concerns include:

- Criteria and standards for inter-district transfers should be formalized now, and be made common to all districts, and
- Security provisions should be defined.

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CONTINUING OUR LETTER OF

March 19, 1976

SHEET NO.

3

Subpart C

Subpart C outlines the proposed framework for a procedure which does not now exist: the use of Federal Reserve facilities by member banks to collect funds electronically from another bank without pre-notification on behalf of a customer. We note that the most recent release of March 6, reflects the assurances we had received earlier from Federal Reserve staff that the intended scope of Subpart C is limited to consumer payments through automated clearing houses. This service concept has the potential for effectively reducing paper volume over time, when applied to consumer payments only. However, the Regulation raises several concerns:

1) In general, there is a requirement for further definition and clarification of terminology and procedures. Specific focus is required on time schedules and return on final payment.

2) In view of the Federal Reserve's position of not accepting any liability, the use of the electronic debit transfer mechanism should be approached cautiously.

3) Protection of the user of the service needs considerable upgrading in the areas of:

- Right to refuse the debit,
- Consumer liability, and
- Extended time for reversal.

We urge that the user protection features proposed by the ABA Automated Clearing House Task Force report be incorporated in regulations for electronic debit transfers to consumer accounts.

These features include the explicit requirement for pre-authorization, and the right of return for fifteen days after receipt of notification.

We do not consider large dollar items to be an appropriate part of the proposed system, because they do not contribute significantly to volume, and a substantial percentage of large dollar transfers are already effected by electronic means. Additionally, the concern over liability grows proportionately with the size of exposure per item.

AMERICAN
BANKERS
ASSOCIATION

CONTINUING OUR LETTER OF

March 19, 1976

SHEET NO. 4

Overall, although Subpart C may be premature, we view the intent as beneficial when applied to relatively routine small-dollar consumer payments, and consider it supportive of efforts eventually to reduce, or stabilize, check volumes and operating costs and to provide a climate for improved and innovative customer services.

We respectfully submit that the Regulation be reissued for analysis and comment after it has been redefined and supported with detailed procedures. This step is essential prior to promulgation.

* * * * * * * *

Since that comment was submitted, numerous developments relevant to electronic transfer of funds have been taken place. A few of these developments which are the most pertinent to this discussion are:

- Establishment of a National Commission on Electronic Funds Transfers;
- Interest by the Congress in comprehensive financial reforms legislation;
- Contractual agreement for upgrading of Bank Wire;
- Growth of other potentially competitive clearing and payments mechanisms;
- Organization of the National Automated Clearing House Association with twenty-five automated clearing house association members; and
- Operational acitivity in seventeen automated clearing houses, fifteen of which use Federal Reserve facilities.

During this period we have also witnessed some dramatic shifts in rules governing access to automated clearing house facilities. Initially the Federal

Reserve espoused the "pass-thru" method of access whereby all financial institutions would have access to the nation's payments mechanism, as a minimum through the facilities of commercial banks for delivery of items. Next, the Federal Reserve Board proposed in June 1975 a liberalized access policy under which many financial institutions could have direct delivery of items. This proposed access position maintained that only institutions with demand depository powers could originate transactions. The most recent "interim" policy on access provides direct origination powers to both Federal Reserve Board member banks, and any member of an automated clearing house association utilizing Federal Reserve facilities. This is a significant change in that it provides to any ACH member institution the capability to solicit corporate third-party transfer business, a service not clearly permitted by statute.

Additionally the subject of pricing for Federal Reserve System services has also surfaced. This further complication has arisen perhaps not so much because of any cost strain placed on the System by the wire transfer or ACH services it offers now, but from a combination of other factors which include:

- Re-examination of the basic role of the System as a provider of operationally based services,
- Fear by potential competitors, probably in non-ACH activities, of a government utility operating an electronic delivery system, and
- Explicit comment by the Justic Department on the Systems' entry into private - sector competitive activity.

AMERICAN
BANKERS
ASSOCIATION

CONTINUING OUR LETTER OF

March 19, 1976

SHEET NO. 6

SECTION II -- CONCLUSIONS CONCERNING THE STRUCTURE AND CONTENT OF REGULATION J; THE INTERIM ACCESS POLICY; AND THE PRICING CONCEPT

The following major conclusions are based on an analysis of the proposed Regulation, as well as information available in the accompanying release which address the interim access policy and the concept of a pricing schedule. More detailed comments on the conclusions related to the Regulation itself are contained in Section III.

1. REGULATION J SHOULD NOT BE ISSUED IN ITS PRESENT FORM.

   - The proposed Regulation defers numerous policy level decisions to the individual Federal Reserve Banks' Operating Circulars, including the vital provision of who may originate or receive directly both wire transfer and ACH items.

   - The Regulation does not codify the apparent intended limitations of its scope: wire transfer credits and automated clearing house credits and debits. It could be interpreted to include off-premise originated transactions, e.g., point-of-sale.

   - The proposed Regulation appears to authorize origination of wire transfer credits to non-members, and provides for voice telephonic transfer of ACH items.

2. THE BOARD SHOULD CONSIDER ISSUING A SEPARATE REGULATION ON WIRE TRANSFERS, AND SHOULD DEFER ISSUANCE OF A REGULATION COVERING AUTOMATED CLEARING HOUSE DEBITS AND CREDITS.

   - The proposed Regulation is confusing in that it attempts to deal with both wire transfer credits, and automated clearing

AMERICAN
BANKERS
ASSOCIATION

CONTINUING OUR LETTER OF

March 19, 1976

SHEET NO. 7

house credits and debits in the same terms. The characteristics differ considerably in that wire transfers are specificially bank-to-bank credits generally in large values, while ACH items are small-value recurring and pre-authorized items, both credit and debit. Several instances are detailed in Section III which highlights the inherent problems in the proposed Regulation in dealing with both types of transactions.

- Services which would be affected by Regulation J, presumably <u>wire transfer</u> and <u>ACH transactions</u>, fall into two basic but distinct categories.
  - Wire transfer credits have been dealt with successfully for many years, and represent a proven record of banks' abilities to deal and negotiate with each other using a Federal facility.
  - ACH transactions are new to the Federal Reserve System. Rules concerning liability, scheduling for interchange, and consumer protection have been written largely by banks controlling automated clearing houses.

These systems work today and there is no evidence that the participants in them: financial institutions, consumers, employees, and commercial entities, have suffered from any aspect of these services.

There may be some logic to imposing regulation on large dollar credits flowing over an electronic system, proven over several decades as a workable instrument of the financial/commercial communities. However, the imposition of new governmental rules on new services in an environment already shown to have responsible concern for its new customers for these services is premature.

3. <u>THE BOARD SHOULD SOLIDIFY ITS POSITION ON ACCESS AND PRICING PRIOR TO ISSUING A REGULATION AND TAKE EXTREME CARE TO AVOID ELIMINATING PRIVATE SECTOR ALTERNATIVES.</u>

In the January 15, 1976 Release, the Board made access and pricing policies contingent on each other:

> "Finally the Board intends to establish a pricing schedule to be applicable to the users of Federal Reserve check and automated clearing and settlement facilities. When such a pricing structure is established, the Board also intends to review the interim policy announced today regarding access to these facilities" (page 3)

As stated, this intent by the Board is far-reaching, and affects the working of the Regulation itself, since both access and pricing concepts can affect membership of the Federal Reserve System, and of local automated clearing house associations. The Board should recognize that these issues are inter-related and impact directly the future rules of all current and potential providers of payment services.

The Board should consider carefully any moves toward combined access and price changes in policy, and reflect on their impacts on current financial industry relationships, and the opportunities for offering competitive services by the private sector.

In any pricing policy, the Federal Reserve should apply charges on an explicit cost basis fully reflecting the costs which would be incurred by a private sector effort, in order to assure a climate for viable competition. To do otherwise would eliminate the development of competitive systems and reduce the potential for efficient and innovative service offerings. Additionally, any pricing policy should be published well in advance of implementation, to provide a sufficient time to review and investigate alternative sources of services.

The Association is pleased by the Board's recognition of the value of member reserve balances, indicated in its January 15 statement: "In developing the pricing schedule, consideration would be given to the burden of required reserves maintained by member banks." Our Association feels that the form of this "consideration" should be explicit payment of interest on reserves. Consideration might then be given to a policy of explicit pricing of services, thereby avoiding the anti-competitive implications of pricing in the form of credits against charges for services used.

With regard to the access issue, the Association supports strongly the concept that origination, or deposit, of entries through the automated clearing house system should be limited to institutions which have been granted demand depository powers by statute. Membership in an automated clearing house association should not imply origination powers.

4. THERE IS NO COMPELLING NEED TO ISSUE REGULATIONS AND POLICIES WHICH MAY ANTICIPATE COMPREHENSIVE LEGISLATIVE REFORM OF THE FINANCIAL INDUSTRY.

At the present time, there is legislation under consideration in the Congress which may alter the relationships between regulators and financial institutions, and among financial institutions. The Board should not anticipate legislation by altering prematurely the powers allowed to those institutions.

AMERICAN
BANKERS
ASSOCIATION

CONTINUING OUR LETTER OF

March 19, 1976

SHEET NO. 10

5. ANY PROPOSED REGULATION COVERING PRE-AUTHORIZED RECURRING PAYMENTS SHOULD ACKNOWLEDGE THE AUTOMATED CLEARING HOUSE ASSOCIATION STRUCTURE AND THE NATIONAL AUTOMATED CLEARING HOUSE ASSOCIATION (NACHA), AND THEIR OPERATING RULES.

- The proposed Regulation is lacking concerning warranties flowing from the originator to the recipient, and does not acknowledge the warranties in place for members of an automated clearing house association.

- The consumer lacks protection from invalid transactions: the proposed regulation does not specify basic operational and legal precautions such as pre-notification, and right of recission.

- The operating rules of automated clearing houses and their National Association take care to observe consumer protection rights and protections of participating financial institutions. The Board should acknowledge these organizations and their rules in its proposed Regulation.

6. THE NATIONAL COMMISSION ON ELECTRONIC FUNDS TRANSFERS SHOULD BE ALLOWED SUFFICIENT TIME TO CONSIDER THE INTERIM ACCESS POLICY, AND A PRICING SCHEDULE FOR UTILIZING FEDERAL RESERVE FACILITIES.

The National Commisssion on Electronic Funds Transfers met for the first time on February 6, 1976. At that time, the Commission was alerted to the Board's proposed positions on Regulation J, access to Federal Reserve facilities, and the development of a pricing schedule for use of the Systems' facilities. In effect, the Commission tabled all considerations of these subjects until March 12, 1976 to consider:

AMERICAN
BANKERS
ASSOCIATION

CONTINUING OUR LETTER OF

March 19, 1976

SHEET NO. 11

- Appropriateness of the Commission to respond to the Federal Reserve Board announcement;
- Capability of the Commission to respond to a complex set of issues in a short period of time -- March 19, 1976.

On March 12, the Commission resolved not to comment on Regulation J, but communicated to Governor Burns the Commissions' interest in the major policy issues of access and pricing. The Commission cited that it was probable that these issues would be addressed in its interim report this fall.

Our Association feels that the Commission has taken a wise course. The issues surrounding the Board's release are extremely complex and of far - reaching importance. These issues relate directly to legislation under consideration by Congress, and the Commission has a responsibility to examine deliberately the policy aspects of this situation before it decides to comment, or recommend. Access and pricing policies will have broad applicability well beyond the scope of Regulation J.

* * * * * * * * *

Section III -- SPECIFIC COMMENTS ON THE REVISED PROPOSAL TO AMEND REGULATION J

Most of ABA's specific comments on the proposed regulation itself focus on two primary areas of concern -- the structure and organization of the regulation, and provisions for assignment of liabilities and warranties of the various participants, as follows:

1. Structure and Organization

As stated in Section II above, encompassing both single, large dollar amount items (wire transfers) and multiple, batched, small dollar amount transactions (ACH entries) in a single set of rules renders those rules confusing and their operation in both contexts confusing. Also the several references in the draft regulation to "as defined in operating circulars" appears to leave too much discretion on policy level matters to individual Reserve Banks. The following specific sections of the proposed Subparts B and C are cited in support of these arguments:

- Section 210.51 (e) and (f) These definitions of the terms "originator" and "recipient" impute that all financial institutions may be eligible to utilize Federal Reserve wire transfer and automated clearing house facilities. Further, the reference in these definitions to "any institution" apparently does not limit eligibilty to even financial depository institutions. In addition to the recommendation that wire transfer and automated clearing house entries be covered separately in the regulation, we recommend that those institutions eligible to participate in either type of activity be spelled out in the regulation itself, rather than being left for definition in the operating circulars of individual Federal Reserve Banks.

• Section 210.53 This section specifies the approved media on which an originator may issue or send a "credit" item. It is assumed that some of the specified media types apply to wire transfer transactions and not to automated clearing house transactions, and conversely that some of the media types apply only to automated clearing house entries; however, such a distinction is not made explicitly in this section.

• Section 210.54 Again, it is assumed that provisions in this section allowing telephonic request for credit transfers apply only to wire transfer activity, but the section can be interpreted to apply to automated clearing house credit transactions as well.

• Section 210.60 (b) The second sentence in this section allows the Federal Reserve to consolidate "several credit items," subject to provisions in its operating circular, for purposes of sending an advice of debit to the originator or the depositor whose account is used by the originator. This provision should apply only to batched, smaller dollar amount automated clearing house credit entries, and not to single, large dollar amount wire transfer transactions.

• Section 210.71 This Section says, in part, "Each Federal Reserve Bank. . . shall receive, process, and act upon debit items. . ." This language is not sufficiently restrictive to insure that Federal Reserve activities do not include point of sale debit processing, nor does it preclude debit applications utilizing Federal Reserve wire transfer facilities. We recommend, therefore, this section be modified to limit the scope of Subpart C to those debit applications contemplated in an automated clearing house environment.

2. Liability and Warranty Questions

The following section-by-section comments illustrate our concerns over the inadequacy of liability and warranty provisions in Subparts B and C, as currently drafted:

- Section 210.55 (a) Under this provision, an "originator" is deemed to warrant to the "recipient" designated in a credit item that the "originator" is authorized to issue and send or request such credit item. It is not clear whether that language refers to an authorization from the customer of the "originator," the "beneficiary," or to authorization under applicable law, charter or other governing instruments. We recommend that this provision be revised to make it clear that, with respect to ACH items, the "originator's" warranty to the "recipient" is both as to the existence of authorization on the part of the "beneficiary" designated in the item, and also to the existence of an agreement on the part of the "recipient" to accept such item.

- Section 210.57 (a) This section provides in part that if an originator fails to maintain a balance sufficient to cover the amount debited to its account, the Federal Reserve Bank shall have a security interest in any or all assets of the "depositor" maintaining such account in the possession or held for the account of the Federal Reserve Bank, and that, if such "depositor" suspends payment or is closed and does not have a balance sufficient to cover the amount so debited to its account, the Federal Reserve Bank will have a security interest in the assets of such "depositor" in the possession or held for the account of such Federal Reserve Bank. We question the equity of these provisions and recommend that the quoted references to "depositor" be changed to read "originator."

AMERICAN
BANKERS
ASSOCIATION

CONTINUING OUR LETTER OF

March 19, 1976

SHEET NO. 15

• Section 210.57 (e) Section 210.64 limits the liability of a Federal Reserve Bank to instances in which it has failed to act in good faith or to exercise ordinary care. Section 210.63 limits the liability of a Federal Reserve Bank in the event it is delayed beyond applicable time limits in taking any action with respect to a credit item because of circumstances beyond its control. Section 210.57 (e) would appear to relieve a Federal Reserve Bank from liability for delay in the particular situation covered therein, whether or not is acts in good faith or with ordinary care. We believe that the standard governing liability of a Federal Reserve Bank contained in the form two provisions in appropriate as a general standard of liability, and an appropriate standard in the situation addressed in Section 210.57 (e). Accordingly, we recommend that the latter section be deleted.

• Section 210.64 (a) This section limits those to which a Federal Reserve Bank may be liable in connection with matters specified under Subpart B to "its immediate originator." Under that provision where a "credit item" is transmitted by a financial institution to a Federal Reserve Bank, and that Federal Reserve Bank fails to exercise ordinary care in handling the item, only that "originator" financial institution may obtain recovery against that Federal Reserve Bank for loss caused by its negligence. In a situation in which a "credit item" is transmitted to one Federal Reserve Bank by an originating financial institution, and transmitted by that Bank to another Federal Reserve Bank, with which the "recipient" maintains its account, the "immediate originator" is presumably the first Federal Reserve Bank. That section would appear

AMERICAN
BANKERS
ASSOCIATION

CONTINUING OUR LETTER OF

March 19, 1976

SHEET NO. 16

to permit only the first Federal Reserve Bank to recover from the second Federal Reserve Bank for loss caused by the other Bank's negligence.

Such rules may be adequate in the check collection environment to protect all those who might suffer loss through the negligence of a Federal Reserve Bank in handling checks. The situation with respect to automated clearing house transactions is significantly different.

We submit that a Federal Reserve Bank which undertakes to handle credit items should be responsible for its failure to exercise ordinary care (or its bad faith) to any person who is injured thereby. Accordingly, we recommend that Section 210.64 (a) be revised to delete the clause limiting the liability of a Federal Reserve Bank to persons other than its "immediate originator."
sistency should be clarified prior to final issuance of the regulation.

- Section 210.73 (a) The comments and recommendations made on section 210.55 (a) above with respect to credit items are also applicable to the warranty of an originator to a recipient as the originator's authority to issue and send debit items.

3. Other Comments

- Section 210.54 This section apparently limits those institutions eligible to initiate telephonic credit transfers to "an originator that is a depositor." Section 210.57 states, however, that "any originator, other than a Federal Reserve Bank, may . . . issue and send credit items . . . or request (the) Federal Reserve Bank by telephone to issue credit items. . ." This inconsistency should be clarified prior to final issuance of the regulation.

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AMERICAN
BANKERS
ASSOCIATION

CONTINUING OUR LETTER OF

March 19, 1976

SHEET NO. 17

- Section 210.61 (b) This section prescribes that a Federal Reserve Bank "may, upon its own initiative or at the request of another Federal Reserve Bank" request a recipient to return funds previously transferred in the case of an erroneous or otherwise irregular transfer of funds. This provision is appropriate only it if applies to cases in which the Federal Reserve Bank discovers its own error in not complying with the instructions of an originator. When a Federal Reserve Bank does accurately carry out the instructions of an originator, it is not appropriate for the Federal Reserve Bank, "upon its own initiative," to request a reversal. We recommend, therefore that the introductory phrase of Section 210.61 (b) be revised to read "In the case of an erroneous or otherwise irregular transfer of funds resulting from a Federal Reserve Bank error. . ." This comment also applies to Section 210.79 (b) for debit items.

- Section 210.80 (a) The requirement for a recipient to return debit items "in the same medium in which they were received by the recipient" is contrary to existing rules and practices of automated clearing houses. It is anticipated that, as a practical matter, items received by recipient on magnetic tape will be returned by many recipients in paper form for some time to come. We recommend, therefore, that the final four lines of this section be revised to read "a form and medium acceptable to such Federal Reserve Bank."

AMERICAN
BANKERS
ASSOCIATION

CONTINUING OUR LETTER OF

March 19, 1976

SHEET NO. 18

Section IV -- SUMMARY

The net conclusions of the Association's analysis of the Federal Reserve Board's Release dated January 15, 1976 are that:

1. The Release and the proposed Regulation require clarification in several areas. Further definition is required concerning originators, depositors, recipients, rights of the participants, liabilities, and who may access the system(s).

2. The Board has delegated far-reaching authority to Federal Reserve Banks' Operating Circulars on matters which are more properly mandated by Regulation, which would assure a national standard to accommodate inter-regional exchange.

3. Timing is inappropriate for promulgating Regulation J and and Access/ Pricing policy because:

- The Congress is currently considering comprehensive financial powers legislation which could affect institutions which are now, or potentially, involved in transactions covered by Federal Reserve Board Regulation and policy.
- The National Commission on EFT has had limited time to consider all aspects of the January 15, 1976 release. The Commission has deemed it inappropriate to comment on the Regulation but adequate time should be provided to the Commission for its deliberation prior to further action by the Board on the access and pricing issues.

4. The Board and its staff should continue to conduct open dialogue with representatives of the banking industry, associations, and other members of the financial industries before putting in place a regulation which may be premature.

AMERICAN
BANKERS
ASSOCIATION

CONTINUING OUR LETTER OF

March 19, 1976

SHEET NO. 19

This is particularly important in the case of our customers, whose interests must be carefully guarded in a new electronic environment. These interests have been given special care in the development of operating rules for the automated clearing house movement. The Association asks that the rights our customers, primarily the consumer, be respected through recognition of the rules of automated clearing house associations and the National Automated Clearing House Association.

Cordially,

Willis Alexander

Willis Alexander
Executive Vice President

The CHAIRMAN. Thank you very much. Mr. Olsen.

## STATEMENT OF LEIF H. OLSEN, SENIOR VICE PRESIDENT AND ECONOMIST, CITIBANK

Mr. OLSEN. Mr. Chairman and Senator Lugar: My name is Leif H. Olsen. I am senior vice president and economist of Citibank, and I am pleased to have this opportunity to share with you some of our views on the Federal Reserve services to the banking industry.

I have submitted a prepared statement to the committee and I will also summarize my remarks as briefly as possible.

I endeavored in my prepared remarks to respond to the four issues, Mr. Chairman, that you raised in your letter of invitation to speak before this committee.

It is my view that it is not necessary for the Federal Reserve to conduct a check clearing or a funds transfer function in order to fulfill its primary responsibility, conducting monetary policy.

The Federal Reserve now conducts a check clearing function for the private sector. But, as you have heard here, the private sector institutions perform a similar function in competition with the Federal Reserve. What is key to the Federal Reserve responsibilities under the present arrangements is the net settlement of payments among member banks on the books of the Federal Reserve System. That we believe to be the appropriate role of the Federal Reserve System in the clearing and payments mechanism.

The introduction of the Federal Reserve System into check collection and clearing grew out of conditions which preceded the establishment of our central bank. The Federal Reserve Act included provisions for Federal Reserve check collection and clearing in an effort to end the nonpar collection of checks by a great many American banks.

There has been some testimony on this already submitted, but I wanted to offer a few other points that may be a little different from the testimony that has been given.

The nonpar collection by a great many banks continued through the 1930's. In other words, for a long period of time after the Federal Reserve had entered the check clearing system, and many banks throughout the post-World War II period continued also, though the largest reduction occurred between the time the Federal Reserve entered the system until the late 1930's.

It is interesting the most successful system for par collection of checks was achieved by private initiative through the Boston Clearing House around the turn of the century. As a result, almost all checks of New England banks became collectible at par before the Federal Reserve ever entered the system. Some historical accounts point out that a plan was started in 1905 to organize country clearing houses along the lines of the Boston Clearing House, but the headway was stopped by the passage of the Federal Reserve Act, which eliminated the need for a country clearing house.

In my opinion it is not at all clear in the historic account of the controversy surrounding the nonpar collection of checks that the Federal Reserve system hastened the resolution of this problem. It may well have impeded private initiatives to solve the difficulties.

Apart from what I feel is the weak historic argument, how can such a conclusion be reached as long as the Federal Reserve fails to price its existing check collection and other services at a bona fide market price, thereby excluding the subsidization, as long as the Federal Reserve is the regulator of the private market in which it is competing.

And it is this last point that is particularly onerous. The Federal Reserve currently sits in a position of conflict of interest because it has the authority to delay private market developments in payments mechanism services so as to favor its own competitive position. If a similar situation existed in the private market, it would clearly be subject to antitrust charges.

Now on the access to Federal Reserve services, I believe membership status should be required for access to Federal Reserve services under the present arrangements, but if the Federal Reserve were to price explicitly for its services, then of course access should be open to all who are willing and able to pay those fees for the services.

What are the benefits and costs to the economy from explicit pricing of Federal Reserve services? Governmental bodies and study commissions, including the Justice Department, the National Commission on Electronic Fund Transfers and the Board of Governors of the Federal Reserve System, have supported the position that payments related services offered by the Federal Reserve should be priced. To reflect such support, and to promote an efficient payments mechanism, the proposed financial institution reforms in Congress should include a requirement that the Federal Reserve price its existing services equitably within a 2-year period.

In recommending that it price its current services, I don't intend to suggest that further extension of the Federal Reserve into electronic funds transfers is acceptable as long as it prices those services.

In the absence of explicit pricing, Federal Reserve services cannot be allocated on an efficient or equitable basis. Indeed, a study conducted by the Federal Reserve Bank of St. Louis suggests that small banks, those with total assets of about $50 million, make relatively little use of Federal Reserve Bank services, using the services of correspondents instead. Large banks are relatively heavy users of Federal Reserve Bank services.

Furthermore, the value of these services to large banks, which is an implicit return on the reserves that they keep with the Federal Reserve, are substantially higher than the implicit returns that accrue to smaller member banks. Yet the implicit return to large banks may be less than the market rate of return on their required reserves.

In some districts larger nonmember banks, and even thrift institutions, have access to those services provided by the Federal Reserve System which are of importance in acquiring correspondent business. In fact, since 1972 member banks with deposits greater than $100 million have begun to leave the system and such withdrawals have accelerated in 1977 as 13 banks with deposits of over $100 million have defected in the first 5 months.

The absence of explicit pricing for check clearing is believed by some to stimulate heavier use of paper checks than might be the case if the true cost was reflected in the marketplace.

Furthermore, to the extent that the Federal Reserve may be underpricing the paper check clearing system, it may inadvertently be delaying the development of electronic funds transfers. This results in the inefficient allocation of resources by discouraging the acceptance of innovations in the marketplace. This is a point which has been made by the Federal Reserve Bank of Philadelphia.

Consequently the absence of explicit pricing by the Federal Reserve interferes with the transition from a paper check system to electronic funds transfers. The Philadelphia Federal Reserve Bank also made the additional valid point that entrepreneurs will be reluctant about developing new banking products when they may end up competing with an institution such as the Fed that is not subject to the normal profit and loss discipline of the marketplace.

One of the reasons why the Fed should substantially minimize its role in the payments systems in the presence of private market development of such systems is the difficulty it faces in appropriately pricing such services. The Federal Reserve should price its services on a marginal cost basis, taking into consideration the costs which a private firm must incur for capital and taxes.

In addition to that the Federal Reserve must allow for the cost which a private firm incurs in meeting the regulatory demands of the Federal Reserve itself.

Should the Fed, even after those tests, price on the basis of the highest marginal cost producer of comparable services in the private marketplace, or should it price as though it were the most efficient producer of such services?

The next issue is the impact of the Federal Reserve's current role in the payments mechanism on correspondent banking, on the efficiency of the payments mechanism, and on private marketplace incentives to provide payments services.

Some of what I have already said responds to this fourth issue. I would only restate that the Federal Reserve's current role has the effect of encouraging many small banks to seek correspondent banking services. This may or may not change even with explicit pricing. There is, of course, a capability resident in the Federal Reserve System to develop electronic funds transfer systems. This has been demonstrated by the Federal Reserve dominance over automated clearinghouse associations. Of the 32 automated clearinghouse associations already in operation or testing, only two, the New York Automated Clearing House Association and the Midwest Automated Clearing House Association, are operated independently of the Federal Reserve System.

We believe, incidentally, that one of the reasons for the Federal Reserve's dominant position as an operator of automated clearinghouse facilities for various banking associations today is the fact that such operating agreements were made prior to any announcement by the Federal Reserve that it intended to charge for use of its clearing and settlement facilities. And the Fed itself defines the access rules in such a framework which effectively supersedes and renders unnecessary the privately administered ACH system. Previously in an environment in which the various Federal Reserve banks were willing to handle ACH items on a noncost basis, there was little or no incentive for most financial institutions and their clearinghouse associations to develop and operate private sector clearing arrangements with the concomitant cost that would be involved.

To summarize the conclusion of my remarks, in moving to explicit fees for its services, the Federal Reserve would be expected to pay interest on required reserves. This would mean an increase in the Federal Reserve's costs, and thus would reduce the amount that would otherwise be remitted to the U.S. Treasury.

Nonearning required reserves represent a form of taxation which peculiarly penalizes member banks of the Federal Reserve to the extent that they do not receive services of a comparable value.

As you know, this membership burden has caused many banks to withdraw from the system. In terms of efficiently and equitably allocating the services of the Federal Reserve system, and eliminating the arbitrary distribution of membership costs, the Federal Reserve should price its services and pay a market interest rate on required reserves.

The benefits to the public using banking services and the removal of a disincentive to Federal Reserve membership is the tradeoff to the net cost increase of the Federal Reserve. Competitive private sector systems best insure the offering of innovative, high quality and efficient payments services at the lowest cost to both the public and the Government.

Thank you.

[The complete statement of Mr. Olsen follows:]

Testimony

of

Leif H. Olsen
Senior Vice President and Economist
Citibank

Before the Senate Banking, Housing and Urban Affairs Committee

Tuesday, October 11, 1977

Mr. Chairman, my name is Leif H. Olsen. I am Senior Vice President and Economist of Citibank. I am pleased to have this opportunity to share with you some of our views on Federal Reserve services to the banking industry. In my prepared remarks I have endeavored to respond concisely to the four basic issues you raised in your invitation to appear before this committee.

1) Is the provision of payments mechanism services a necessary and appropriate function for the Federal Reserve in its capacity as the nation's central bank?

The essential function of a central bank is to conduct monetary policy and serve as fiscal agent for the Treasury Department. In pursuing these responsibilities it is not essential for the Federal Reserve to run the mechanism which enables private citizens and businesses to make payments for goods and services.

The Federal Reserve now conducts a check-clearing function for the private sector. However, private sector institutions perform a similar function in competition with the Federal Reserve. What is key to the Federal Reserve responsibilities under the present arrangements is the net settlement of payments among member banks on the books of the Federal Reserve System. We believe that this is the appropriate role for the Federal Reserve System in the clearing and payments mechanism.

The introduction of the Federal Reserve System into check collection and clearing grew out of conditions which preceeded the establishment of our central bank. The Federal Reserve Act included provisions for Federal Reserve check collection and clearing in an effort to end the non-par collection of checks by a great many American banks.

However, non-par collection of checks continued on a pervasive basis through the 1930s and by many banks throughout the post-World War II period. The most successful system for par collection of checks was achieved by private initiative through the Boston Clearing House around the turn of the century. As a result, almost all checks of New England banks became collectible at par. Some historical accounts, in fact, point out that a plan was started in 1905 to organize country clearing houses, but the headway was stopped by the passage of the Federal Reserve Act which eliminated the need for country clearing houses[1] It is not at all clear in the historic account of the controversy surrounding non-par collection of checks

1. Melvin C. Miller, The Par Check Collection and Absorption of Exchange Controversies, The Bankers Publishing Company, Cambridge, Mass., 1949.

that the Federal Reserve System hastened the resolution of this problem. In fact, it may well have impeded private initiatives to solve the difficulties. In any event, it is a considerable stretch of reason to conclude that the original Congressional authority to enable the Federal Reserve to enter the check clearing and collection function in order to establish par collection of checks can be used as a basis for approving the Federal Reserve's entry into electronic funds transfers.

Simply because the Federal Reserve now conducts a check-collection function is not sufficient reason to argue that it must also provide an electronic funds transfer system in competition with the private sector or, indeed, should provide the sole system to the exclusion of any private services.

Apart from the weak historic argument, how can such a conclusion be reached as long as the Federal Reserve fails to price its existing check collection and other services at a bona fide market price thereby excluding subsidization, and as long as the Federal Reserve is the regulator of the private market in which it is competing. This last point is particularly onerous. The Federal Reserve currently sits in a position of conflict of interest because it has the authority to delay private market developments in payments mechanism services so as to favor its own competitive position. If a similar situation existed in the private market it would clearly be subject to anti-trust charges.

2) Whether and on what basis all depository institutions should have access to Federal Reserve services.

Under present institutional arrangements, including its present policy of not charging member banks for use of its payments mechanism, access to Federal Reserve services should require membership status. Members, of course, must maintain reserves with the Fed. Those reserves, which today yield no income to member banks, are considered to provide implicit payment of services.

The Federal Reserve should, however, explicitly price its services on a fee basis without differentiating between member and nonmember banks. Then, access should be based on the willingness and ability of depository institutions to pay for those services. It follows, of course, that such explicit pricing would be accompanied by either a reduction in, or the elimination of required reserves, or the payment of a market rate of interest on those reserves.

3) What are the potential benefits and costs that the economy would obtain from explicit pricing of Federal Reserve services?

Governmental bodies and study commissions including the Justice Department, the National Commission on Electronic Fund Transfers and the Board of Governors of the Federal Reserve System, have supported the position that payments-related services offered by the Federal Reserve should be priced. To reflect such support, and to promote an efficient payments mechanism, the proposed financial institution reforms in Congress should include a requirement that the Federal Reserve price its existing services equitably within a two-year period. In recommending that it price its current services, I do not intend to suggest that further extension of the Federal Reserve into electronic funds transfers is acceptable as long as it prices those services.

In the absence of explicit pricing, Federal Reserve services cannot be allocated on an efficient or equitable basis. Indeed, a study conducted by the Federal Reserve Bank of St. Louis[2] suggests that small banks -- those with total assets of about $50 million -- make relatively little use of Federal Reserve Bank services using the services of correspondents, instead. Large banks are relatively heavy users of Federal Reserve Bank services. Furthermore, the value of these services to large banks, which is an implicit return on the reserves that they keep with the Federal Reserve, are substantially higher than the implicit returns that accrue to smaller member banks. Yet the implicit return to large banks may be less than the market rate of return on their required reserves.

In some districts larger nonmember banks -- and even thrift institutions -- have access to those services provided by the Federal Reserve System which are of importance in acquiring correspondent business. In fact, since 1972, member banks with deposits greater than $100 million have begun to leave the System and such withdrawals have accelerated in 1977 as 13 banks with deposits of over $100 million have defected in the first five months.

The absence of explicit pricing for check clearing is believed by some to stimulate heavier use of paper checks than might be

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2. "Utilization of Federal Reserve Bank Services by Member Banks: Implications for the Costs and Benefits of Members," Federal Reserve Bank of St. Louis REVIEW, August 1977, pps. 2-15.

the case if the true cost was reflected in the marketplace. Furthermore, to the extent that the Federal Reserve may be underpricing the paper check clearing system it may inadvertently be delaying the development of electronic funds transfers. This results in the inefficient allocation of resources by discouraging the acceptance of innovations in the marketplace. This is a point which has been made by the Federal Reserve Bank of Philadelphia[3]. Consequently, the absence of explicit pricing by the Federal Reserve interferes with the transition from a paper check system to electronic funds transfers.

The Philadelphia Federal Reserve Bank also made the additional valid point that "entrepreneurs will be reluctant about developing new banking products when they may end up competing with an institution such as the Fed that is not subject to the normal profit-and-loss discipline of the marketplace."

Indeed, one of the reasons why the Federal Reserve should substantially minimize its role in the payments systems in the presence of private market development of such systems is the difficulty it faces in appropriately pricing such services. The Federal Reserve should price its services on a marginal cost basis taking into consideration the costs which a private firm must incur for capital and taxes. But in addition to that, the Federal Reserve must allow

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3. "Should the Fed Sell Its Services", by W. Lee Hoskins, Federal Reserve Bank of Philadelphia BUSINESS REVIEW, January 1975, pps. 11-15.

for the cost which a private firm incurs in meeting the regulatory demands of the Federal Reserve itself. Should the Federal Reserve price on the basis of the highest marginal cost producer of comparable services in the private market, or should it price as though it were the most efficient producer of such services?

The standards that should be imposed on the pricing of Federal Reserve services are as follows:

a) The Federal Reserve should price its services based upon fully allocated current costs and known volumes of usage. Any prices based on projections of costs will merely result in another subsidy of the payments system.

b) Costs should reflect actual operating costs plus a provision for taxes and capital investment. The Federal Reserve should not subsidize the payments mechanism due to its preferred status as a tax-exempt institution that does not compete in the market for capital funds.

c) All prices should be explicit, because implicit charges and credits merely hide any subsidy. Interest should be paid on reserves at market rates of interest, and charges made to users of the service at the market price.

d) The pricing schedule and its underlying rationale should be proposed for comment within 18 months and promulgated within two years. Periodic revisions would be necessary and would also be issued for comment.

If the pricing policy was implemented without interest payments on reserves, the additional costs to member banks could result in additional erosion of membership in the Federal Reserve. If pricing were coupled with the payment of interest on reserves, however, there would be less cause for dissatisfaction with membership in the System, and erosion might be quelled.

4) The impact of the Federal Reserve's current role in the payments mechanism on correspondent banking, on the efficiency of the payments mechanism, and on private marketplace incentives to provide payments services.

Some of what I have already said responds to this fourth issue. I would perhaps restate that the Federal Reserve's current role has the effect of encouraging many small banks to seek correspondent banking services which may not change, I might add, with explicit pricing by the Federal Reserve. The threat that the Federal Reserve may substantially broaden its activities in the electronic funds transfer systems to effectively preempt the development of private systems clearly acts as a disincentive to the marketplace. There is obviously a capability resident in the Federal Reserve System to develop electronic funds transfer systems. This has been demonstrated by the Federal Reserve's dominance over Automated Clearing House Associations (ACHA) which currently are involved in the electronic funds transfer of both private sector and certain government transfer payments (such as the social security checks) to private recipients.

Of the 32 automated clearing house associations already in operation or testing, only two (The New York Automated Clearing House Association and the Midwest Automated Clearing House Association) are operated independently of the Federal Reserve System. We believe that one of the major reasons for the Federal Reserve System's dominant position as an operator of automated clearing house facilities for various bank associations today is the fact that such operating agreements were made prior to any announcement by the Federal Reserve that it intended to charge for use of its clearing and settlement facilities and, itself, define access rules in a framework which effectively supersedes and renders unnecessary the privately administered ACH system. Previously, in an environment in which the various Federal Reserve banks were willing to handle ACH items on a non-cost basis, there was little or no incentive for most financial institutions and their clearing house associations to develop and operate private sector clearing arrangements with the concomitant cost that would be involved.

At the present time, government payments exceed private sector payments over the ACH network by a ratio of 7 to 1. In fact, without the government payments over the ACH network, the ACH undertaking would have to be considered a failure. This illustrates how Federal Reserve intervention and sponsorship has created an ACH system before private usage had developed sufficient volume to justify such a system. The private sector is closer to the needs of both the consuming public and corporate clients and is better able to identify and develop new payments services and products with the speed necessary to fulfill the needs of the marketplace. While the Federal Reserve has the responsibility to accept and distribute government payments in acting as a fiscal agent for the Treasury Department, this need does not have to be met by Federal Reserve operation of the ACH system if private sector systems were encouraged to develop and handle them.

It is natural for those involved in such activities within the Federal Reserve to develop an entrepreneurial instinct to broaden the scope of their activities. Yet a government-funded agency which is not subject to the tests of the marketplace is not likely over the long run to develop the most efficient system which would include special tailoring to meet the numerous selective requirements of the private market.

In moving to explicit fees for its services, the Federal Reserve would be expected to pay interest on required reserves. This would mean an increase in the Federal Reserve's costs and, thus, reduce the amount that it would otherwise remit to the U.S. Treasury Department. Non-earning required reserves represent a form of taxation which peculiarly penalizes member banks of the Federal Reserve to the extent that they do not receive services of a comparable value. As you know, this membership burden has caused many banks to withdraw from the system. In terms of efficiently and equitably allocating the services of the Federal Reserve System and eliminating the arbitrary distribution of membership costs, the Federal Reserve should price its services and pay a market interest on required reserves. The benefits to the public who use banking services and the removal of a disincentive to Federal Reserve membership is the tradeoff to the net cost increase of the Federal Reserve. Competitive private sector systems best ensure the offering of innovative, high quality and efficient payments services at the lowest cost to both the public and the government.

The CHAIRMAN. Thank you very much, Mr. Olsen. I want to thank both of you gentlemen for so competently summarizing your statements. And without objection all three statements, yours and Governor Coldwell's, will be printed in full in the record.

Mr. Olsen, you indicated that the Fed's involvement in the payment services is, as you put it, a conflict of interest, which may cause delay in pricing and perhaps other developments, so as to favor its own competitive position.

How serious is that conflict? Do you feel it is a potential or a real problem, one that should be dealt with right now?

Mr. OLSEN. I think it is a very serious problem. Mr. Coldwell this morning indicated, for example, that the Federal Reserve had assisted the private sector development, for example, of automated ACH's by providing them access to their settlement functions.

In fact, it took a considerable length of time, I think something like 14 months, or even longer, and very considerable persuasive efforts on the part of the private sector, including publicizing the delays, before it was able to gain such access for the private clearinghouse.

Now there you have an explicit illustration. Of course as I mentioned before, if such a condition existed in the private sector, you would hardly have to have any burden of proof, because even where the Federal Reserve may not consciously be delaying, it is very difficult when they are in competition and they are considering their own next steps, to avoid allowing that to enter into the decisions they are making in granting the next step for the private sector.

Indeed, this morning in the testimony that Mr. Coldwell gave, when he kept insisting that where the private sector is able to demonstrate its competence and its readiness to deliver the kind of services that are required by the public and by the Government, the Federal Reserve should step aside. But of course it is very difficult for the private sector to undertake such initiatives in the face of the intimidation by the Federal Reserve's presence and the uncertainty as to what the Federal Reserve may do with regard to its strong regulatory position that it holds.

How can the private sector develop any kind of initiatives freely, undertake the risks of capital, et cetera, when they don't know when the Federal Reserve will use its authority to pre-empt those very initiatives?

It is a little bit like building a 12-foot wall, and then suggesting the private sector should jump over that wall, but the private sector doesn't know whether or not the wall will be 12 feet high or 14 feet high when they are prepared to jump the 12-foot wall. This is a very difficult position.

I think the conflict of interest is a very serious and clear one.

The CHAIRMAN. Mr. Olsen, you are an eminent economist as well as a widely recognized banker.

Have you discussed this with Governor Burns or Governor Coldwell, or other members of the Federal Reserve, called it to their attention?

Have they indicated any realization of the strength of your position? It seems so strong and logical and clear to me. And these are fine men, men who obviously are interested in doing what is right. How do you account for the position of the Federal Reserve?

There is an obvious kind of a desire on the part of all agencies to keep whatever their responsibility and authority is. But I have always felt these people have less of that unfortunate syndrome than most big agencies in Washington.

Mr. OLSEN. Well, I have not talked directly with Dr. Burns or other members of the Board of Governors on my position on this particular issue, in part because I have just entered this for the purposes of testifying before this committee.

But my hope is that I will have an opportunity to discuss it with them. I don't question the sincerity of the Federal Reserve. I think they are caught up in a very complex issue. Within the Federal Reserve there are wide differences of opinion. People within the Fed do not hold a monolithic view on this issue.

The studies I cited that emanate from the district banks of the Federal Reserve system clearly indicate that they hold views somewhat different from those which were presented this morning by Governor Coldwell. I am sure that within the Board itself you may find there are differences of view, because it is a very complex issue.

I feel in one respect that the Federal Reserve should separate its membership problems from the question of pricing of its services.

The CHAIRMAN. That is the point, I think. It was clear in the Coldwell statement that they are just overwhelmed by the membership problem, that that comes first, and that is what stands in the way of rational solution.

Mr. OLSEN. This is true, I feel. I feel as you stated, that it stands in the way. I think it unnecessarily complicates the issue.

The CHAIRMAN. Dr. Haywood, would ABA favor a system of reserve requirements in which reserve requirements were lowered, but additional clearing balances were required of banks using Fed services?

Dr. HAYWOOD. I really can't say, sir. I think they would certainly favor a lowering of reserve requirements. We don't see from the point of view of monetary policy why it is necessary to have reserves as high as they are.

Let me gie you a response to the second part of your question on clearing balances.

The CHAIRMAN. Yes; clearing balances used for the purpose—as I pointed out before, kind of segregating this operation for monetary policy purposes, where you would have lower reserve requirements, and then clearing balances as a compensation for the services the Fed gives?

Dr. HAYWOOD. A clearing balance would in effect give you a credit for earnings and then that would be offset against your item expenses?

The CHAIRMAN. Right.

Dr. HAYWOOD. Well, that is sort of a company store approach. That is if you get a certain credit balance and you can use it up, but you have to use it up at the Federal Reserve.

I think that we would probably say explicit pricing would be better than such implicit pricing.

The CHAIRMAN. The clearing balance would only be required of those who use the services.

Dr. HAYWOOD. Who wanted to do it; yes.

The CHAIRMAN. That's right. Interest might be paid on the clearing balance and the reserve requirements which would be lower than the current levels, and would be the same for all banks.

Dr. HAYWOOD. I would say we would deal with a specific proposal along those lines. We would be happy to look at it, give further thought to it, and evaluate it. Offhand, I would not have a negative reaction, except to say I think explicit pricing would be better than having compensating balances for the services.

The CHAIRMAN. Mr. Olsen, do you prefer a reduction in required reserves or interest payments on some reserve balances or both, if a pricing schedule is put into place?

Mr. OLSEN. I have a preference for reduction of required reserves, in part because I think it is a cleaner way of doing it. Although I am not sure that the weight rests that heavily on that particular side. But I would prefer either a substantial reduction of reserve requirements or——

The CHAIRMAN. Do you think such a reduction would have a possibly adverse effect on monetary policy? Would it make it harder to administer?

Mr. OLSEN. No; as a matter of fact, it is possible for the Federal Reserve to conduct its monetary policy without required reserves. I think the Federal Reserve might argue that it could conduct monetary policy, but it would feel it couldn't do so as efficiently as it could if reserves were required.

And of course this is the reason why the payment of interest would be preferred.

The CHAIRMAN. That is a pretty strong argument in view of the trouble the Federal Reserve Board is having in maintaining an effective monetary policy and meeting their goals. The Chairman will come before this committee, again in November, and try to justify the Fed's policies, and it is pretty hard, when the Fed sets up a particular standard, deliberately lower the goal, and then shoot above it. If it gets any less efficient, it will be pretty bad.

Mr. OLSEN. Yes; I don't think the mistakes they have made, particularly in recent months, however, are due to their having incomplete data, for example, from nonmember banks. I don't think it would have made any difference as far as required reserves are concerned. I think they would have overshot their target in the last 6 months on the basis on which they now conduct monetary policy regardless of required reserves.

The CHAIRMAN. Your answer is you would prefer reduction in required reserves.

How about interest payment on some reserve balances?

Mr. OLSEN. I would accept an interest payment on reserve balances, but I would feel it should be at a market rate, and I think it should be on total required reserves. That is, I would prefer not to see a tradeoff between the fees charged by the Federal Reserve and the interest paid on a portion of the reserves that would match those fees.

The CHAIRMAN. Wouldn't the cost to the Treasury of that be very big, a burden on the taxpayers?

Mr. OLSEN. It would cost the Treasury something, that is true. But as has been stated by the Federal Reserve in the testimony here, they clearly indicate that these reserves belong to the member banks, and they also indicate that these reserves, without any interest earned on them, represent implicit payment for the services.

So you already have on the record the fact that banks are foregoing an income on these reserves, in order to get services.

Now having established that fact, I think that I would go further and say that to the extent that the interest paid is not at a market rate, reserves continue as a tax on the banking industry.

The CHAIRMAN. It does, except that they get the services gratis?

Mr. OLSEN. Except to the extent they now receive services.

The CHAIRMAN. If the services are priced, it is possible that would compensate for the interest on the balances and it would be a wash-out as far as revenue for the Treasury is concerned, is that right?

Mr. OLSEN. Yes; it would, it would compensate for some part of it. As it now stands, the reserves have a market value which is greater than the value of the services which are performed.

The CHAIRMAN. My time is up. Senator Lugar.

Senator LUGAR. I would like to follow up on the questions that the chairman was raising, Mr. Olsen, just to try to get roughly into the dollars and cents we are talking about.

For example, the idea that has been generally expressed, reduction of reserves, how much of a reduction are we talking about? What would your recomendation be if you were to make one?

Mr. OLSEN. Well, in theory, the Federal Reserve can conduct monetary policy without any required reserves. In other words, you would not have required reserves. The banks would keep reserves, to be sure, but the banking system would not have required reserves.

Senator LUGAR. Would you recommend that?

Mr. OLSEN. I would recommend that or the payment of interest on those reserves.

Senator LUGAR. Let's say interest is going to be paid on reserves, market interest. Why would banks maintain reserves at the Federal Reserve as opposed to other sorts of reserves in other investments?

In other words, talking about market interest, why would money be left at the FRB?

Mr. OLSEN. If they receive a market rate of return on these, it is true there may be some opportunity in the marketplace where the rate of return might be higher than, say, the Treasury bill rate.

But I don't think that the inducement to move those reserves from the Federal Reserve to obtain what might be a slightly higher rate would be great enough to cause banks to substantially move their reserves, if they were receiving a rate of interest that was a market rate, and in this case I would suggest and I think others have, that the market rate would be something like the Treasury bill rate.

Senator LUGAR. Now, theoretically, if we say there are no required reserves, but the Federal Reserve is paying this market rate, and we assume, therefore, some reserves are being left by member banks there, and we add onto that the idea of explicit charges for services being rendered, what is likely to be the net result for the Treasury at that point?

In other words, do we have any estimate? If $6 billion is now flowing from all of this to the Treasury, say this year, what sort of a prediction could we make for the future?

Mr. OLSEN. I can't give you an answer off the top of my head. Actually we did a calculation of this kind some months ago. I didn't bring it with me, but I would be happy to submit an answer for the record.

Senator LUGAR. I would appreciate that, because I think it really is material to the discussion of all of this.

I have been trying to unravel in a commonsense way who will be the winners and the losers in this. Clearly one reason why people have been reticent to move into the recommendations that you have been suggesting and others have, is that they fear there is going to be a substantial loss to the Treasury, meaning the general taxpayers, that the Federal Reserve situation is profitable for good reasons that we have been talking about today.

On the other hand, can you work with me on this thought: Let's say, for example, that after interest is paid on these reserves, and explicit charges occur, and maybe there is or is not a washout, there is some money coming and going. But let's say the return to the Treasury is less than $6 billion.

Is it a fair assumption that some of that money is going to be recouped by the Treasury, maybe through taxes paid by banks, for example, or maybe through some other efficiencies or stimulation that occurs to the economy?

Can you, off the top of your head, think along those lines?

Mr. OLSEN. I would be happy to include that in the full response to your question.

But to be sure there would be a recouping in part by the taxes that would be paid. If I may just add an additional point on this, which is a point in theory, that when the Federal Reserve speaks in terms of delivering services to the public, you know, we talk about them being at a zero cost, but it is not zero cost to the extent that the Federal Reserve is a Government agency, and is supported in one way or another by tax funds, even by a lesser amount that they remit to the Treasury, or whatever, they are still supported by tax funds. And this, I think, is a very important point in theory, because without a market test, the public may very well be getting services which, when you include the tax support cost of those services, may be a whale of a lot higher than the services which will be performed by a private sector organization.

Senator LUGAR. In other words, you are suggesting the Federal Reserve adopt a marketplace discipline, maybe providing these services less efficiently than they can be provided elsewhere, and you don't have a test?

Mr. OLSEN. Less efficiency and at a higher cost to the public at large, when you include the subsidy costs.

Dr. HAYWOOD. We would like to join in the response to that question, Senator. We have some thoughts on how much reserves might be reduced and the effect.

[The following letter was received from the ABA:]

AMERICAN BANKERS ASSOCIATION,
*Washington, D.C., November 4, 1977.*

Hon. RICHARD G. LUGAR,
*U.S. Senate, Dirksen Senate Office Building,*
*Washington, D.C.*

DEAR SENATOR LUGAR: On October 11, 1977, at the oversight hearing on the role of the Federal Reserve in providing payments mechanism services, you posed a question to Dr. Charles Haywood, who was testifying on our behalf, about the extent to which required reserve ratios might be reduced for Federal Reserve member banks without impairing the effectiveness of Federal Reserve monetary policy. We are pleased to have this opportunity to respond for the record.

The American Bankers Association has long supported the view that required reserve ratios of Federal Reserve member banks should be reduced. In 1957 the Economic Policy Commission of the American Bankers Association published a study entitled, "Member Bank Reserve Requirements." The key conclusions of that study were as follows:

1. That the chief function of reserve requirements is to serve as a fulcrum for the use of the discount rate and open-market operations in influencing the volume of bank credit and money.
2. That the present high requirements should be substantially reduced over the years ahead to enable the banking system to accommodate the monetary and credit needs of a growing economy.
3. That when reserve reform is undertaken, we should move in the direction of a geographically uniform system of reserve percentages.
4. That vault cash should be treated as a reserve asset.

Beginning December 1, 1959, member banks were permitted to count a portion of their vault cash to meet reserve requirements, and since November 23, 1960, all vault cash has been included in the legally required balances. At the end of 1976, vault cash accounted for $8.6 billion of the $35.5 billion total of member-bank required reserves. As banks must hold a certain amount of vault cash regardless of the level of legal reserve ratios, inclusive of vault cash as a reserve asset has made the burden of reserve requirements less than it would otherwise have been.

Prior to July 18, 1962, there were three categories of member banks with differential required reserve ratios. The categories were central reserve city banks, reserve city banks, and country banks. The first two categories were merged in 1962. Since November 1972 the Federal Reserve has not formally employed the reserve city and country bank terminology. Instead, differential reserve ratios have been imposed by size of bank and, additionally in the case of time deposits, by certain maturity designations. However, the size categories used by the Federal Reserve for demand deposit reserves are closely related to the old reserve city and country bank classifications of banks. A "geographically uniform system of reserve percentages," as recommended by the Association in 1957 has yet to be established in fact, though the present system does not explicitly differentiate by geographical location.

We also wish to note that when the Association's study was published in 1957 required reserve ratios on demand deposits were 20 percent for central reserve city banks, 18 percent for reserve city banks, and 12 percent for country banks; the required reserve ratio on savings and time deposits for all member banks was 5 percent. Currently, required reserve ratios for demand deposits vary between 7 percent and 16.25 percent depending on the amount of demand deposits held by the bank. For savings and time accounts, they vary between 1 percent and 6 percent depending on the amount of time and savings accounts held, the type of account, and maturity of account. Comparison with 1957 ratios is difficult, but in general there has been some modest decrease in average reserve ratios.

This modest decrease in the level of reserve requirements, has not hindered the ability of the Federal Reserve to conduct an adequate monetary policy. Indeed, as you know, the Federal Reserve recently endorsed provisions of S. 2055, which called for reduction in the statutory minimum required reserve ratios. Evidently, the Federal Reserve feels there is room for further reduction in required reserve ratios without any undue hindrance to monetary policy.

We have noted these changes since our 1957 study to demonstrate that dialogue with the Federal Reserve has resulted in improvements in the structure of reserve requirements. Regrettably, progress has not been sufficient to mitigate the burden of reserve requirements to the extent needed. It appears that the Federal Reserve now has a fuller appreciation of the need to reduce the burden of reserve requirements. Continuing dialogue might well be productive of further change. The door to such change could be opened by a simple technical amendment eliminating the statutory minimums for required reserve ratios.

Under 12 USC 462, the minimum required ratios on demand deposits are 10 percent for reserve city banks and 7 percent for country banks; the minimum for savings and time accounts is 3 percent. Eliminating the statutory minimums would increase the discretionary authority of the Federal Reserve to make its own determination of the level of reserves consistent with the need to mitigate the burden of Federal Reserve membership as well as the need to assure efficient implementation of monetary policy.

We mention the possibility of eliminating the statutory minimums as one alternative that might be considered. We do not propose it at this time as an official position. However, we do favor reduction of reserve requirements. Expansion of the Federal Reserve's discretionary authority in this regard would also be consistent with the Association's long-standing position in support of the independent status of the Federal Reserve.

As to the extent to which required reserve balances might be reduced, we think that there is a rationale for reducing such balances by at least $10.5 billion. At the end of 1957 the gold certificate reserve of the Federal Reserve Banks was approximately $22.1 billion. The gold certificate reserve at the end of 1976 was $11.6 billion. The decline in the gold certificate reserve was associated, of course, with an outflow of gold from the United States in the late 1950s and the 1960s. This loss tended to decrease member-bank reserve balances. However, the effect on reserve balances was offset by Federal Reserve purchases of U.S. Government securities in the open market. The Federal Reserve thus gained interest bearing assets in replacement of the non-income gold certificates. The interest-bearing assets were shifted from the private sector, mainly the banking system, into the Federal Reserve.

An alternative would have been for the Federal Reserve to reduce required reserve ratios commensurate with the decline in the gold certificate reserve. Dr. Haywood, who represented the American Bankers Association at the October 11, 1977, hearings, recommended such an approach to reduction in reserve requirements in the early 1960s. A gradual reduction in reserve ratios would have been possible during the 1960s. Required reserve balances today would be about $10.5 billion less than they are, and the Federal Reserve would be holding $10.5 billion less in U.S. Government securities.

We estimate that the Federal Reserve's income would have been reduced by about $687 million in 1976 if it had held $10.5 billion less in securities. The Federal Reserve's net earnings in 1976 were $5,982 million, of which $5,870 million were paid to the Treasury. A reduction of $687 million in the Federal Reserve's income would not be matched dollar-for-dollar by a reduction in the Treasury's income. Transfer of $687 million from the Federal Reserve to the private sector would result in some increase in Treasury tax revenues, as much as $330 million, or perhaps, even more. Net loss to the Treasury would be in the range of $300 million to $400 million.

In fact, there is no need for the Treasury to sustain any loss in revenue. It would be possible for the Federal Reserve to phase in a reduction in reserve requirements over a period of several years or so in such a way that growth in Federal Reserve net earnings would be slowed but the level of such earnings and payments to the Treasury would not be reduced. The following data on Federal Reserve earnings paid to the Treasury indicate a growth trend that could accommodate a phased reduction in reserve requirements without decreasing payments to the Treasury.

*Federal payments to the Treasury*

| | *Millions* |
|---|---|
| 1957 | $542.7 |
| 1962 | 799.4 |
| 1967 | 1,907.5 |
| 1972 | 3,231.3 |
| 1976 | 5,870.5 |

Of course, a gradual phase in of the reduction in reserve requirements would mean that it would take a longer time to achieve an effective reduction in the burden of Federal Reserve membership.

There is disagreement both within and outside of the banking industry on the role played by reserve requirements in the administration of monetary policy. Nevertheless, even if reserve requirements are important as a supplement to open market operations in the administration of monetary policy, a statutorily specified minimum reserve requirement is irrelevant for this purpose. What is important is not the level or reserve requirements, but the ability of the Federal Reserve to change the amount of required reserves at a given point in time if monetary and credit conditions warrant such a change. In this context, elimination of the statutorily specified minimum reserve requirements would give the Federal Reserve sufficient latitude to significantly reduce its membership burden while still retaining the flexibility needed to administer monetary policy.

In closing, we wish to repeat that our long-standing position has been that reduction of reserve requirements is desirable. The extent of such reductions should be left to the discretion of the Federal Reserve. Legislative action should focus on the mitigation of statutory restrictions on the Federal Reserve's discretion, such as reduction, or perhaps elimination, of the statutory minimums for required reserve ratios.

Sincerely,

GERALD M. LOWRIE.

Senator LUGAR. I would appreciate that very much.

If we moved in that direction, in what way would the conflict of interest you were discussing be dissipated?

And let me add just one further aspect to that question. You have made a comment that the Federal Reserve appears to have decided that electronic funds transfers should move along about on the same course as paper checks, and the ability to be involved in the collection of one implies a movement along the technology to another, which you say may be tenuous as a historical point.

But clearly how is the conflict of interest going to be relieved if we have no required balances, interest paid at market rates on the balances, explicit pricing for all of the services? Where does that put us now in terms of relief of the conflict of interest, or the generation of private competition?

Mr. OLSEN. Quite honestly, the conflict of interest in my judgment would continue to exist as long as the Federal Reserve has a presence in the marketplace in direct competition with private initiative, and it is at the same time the regulator of their competitors.

That conflict would, as I say, continue to exist. I feel that for this reason, the burden of proof that the Federal Reserve is not employing its position as a regulator to its own advantage should be very great and it should not be caught in a position of arguing that it needs to delay a long period of time in order to allow access to its system by private initiative, or even that it should be permitted to argue it will take 18 months to establish a pricing schedule.

That seems to me to be totally unreasonable. In the private market, a private system setting up couldn't possibly afford to take that length of time to establish a pricing schedule, if it wanted to meet the competition.

Senator LUGAR. I agree with you. But reason with me now. What is the relief for this? Where are the umpires with regard to this burden of proof? This committee, the Congress, or what?

Mr. OLSEN. Well, it may rest with Congress to take the initiative to see to it the Federal Reserve is not unfairly using its position as a regulator to slow or to discourage the development of the private sector systems.

Senator LUGAR. In other words, we still have the problem that you would not deny, that the Federal Reserve is trying to link together various systems, has a role to play. And the problem is one of determining whether that role is oppressive, and there should be some outside arbiter looking over its shoulder to make certain conscience is quickened and the right decisions made?

Mr. OLSEN. I think one way in which the Federal Reserve could effectively satisfy that it was not using its position unfairly would be for it in fact to gradually withdraw from the initiatives that it has undertaken in the electronic funds sector and hold itself clearly and only to the paper check collection system which was initially established for the reasons we have stated.

And by withdrawing because the capability does exist in the marketplace, private organizations can run the automated clearinghouse associations, and by withdrawing from that, now that it has established that initiative, I think would show clearly it is not using its position as a regulator to unfairly advance its own electronic funds development.

To the contrary, what we see happening unfortunately is that it is continuing to move further and further into the electronic funds sector, and in doing so, clearly will intimidate and discourage private initiative.

Senator LUGAR. One final thought. How is the withdrawal to be effected? What are the effective steps to bring that about? Is it by law? Is it by hearings and oversight?

Mr. OLSEN. I think by hearings and oversight, if that works, and if not, why then perhaps by statute.

Senator LUGAR. Thank you.

The CHAIRMAN. I would like both of you gentlemen to give me a response to this, beginning with Dr. Haywood, perhaps.

Can you give me your arguments on how monetary policy can be conducted without required reserves? I think that has been answered in part by Mr. Olsen. But I would like, if you don't want to do it now, maybe give me a little paper on it. It is fascinating. Because I think it is something that would contradict the conventional wisdom, it is something we ought to think about. We are changing these situations so much, and being forced to change in part by technology.

Maybe this is a time to take a more clear-eyed look at the required reserves than we have in the past.

You both favor reducing reserves, but I didn't understand you to say you favor abolishing required reserves. Perhaps you did.

Dr. HAYWOOD. I would draw a distinction; it is possible to conduct monetary policy effectively without legally required reserves, and perhaps that is what we mean when we use the term "required reserves." But there must be in the system some cash balances, which are held on the basis of custom or for clearing purposes.

The CHAIRMAN. Is it possible for the Federal Reserve then to know the relationship between those cash balances and the money stock, so they can conduct monetary policy, without being able to control the reserves?

Dr. HAYWOOD. I think it would be possible. I think in a banking system as large and as diverse as ours, with over 14,000 units, that the problem is obviously much more difficult than to do it in a banking system such as you have in Great Britain, where you have a few clearing banks and where you can phone them up every day and find out what they are doing.

The CHAIRMAN. You see, what remains here is, I think, the more commonly understood public feeling, that you need reserves to keep the banks solvent, so the bank will always be able to meet its obligations.

I had a professor of banking from Harvard almost 40 years ago, in 1939, I remember him saying the required reserve policy is like a cab company, that always require a cab to be at a particular stand, always. If somebody came along and wanted to use that cab, no way, because the cab had to be at that stand all of the time, you couldn't move it. Obviously the cab was utterly useless, because you couldn't move it.

The same way is you have required reserves and you can't reduce those required reserves by law, they don't serve any solvency purpose, you are telling us they don't serve a monetary policy purpose.

Dr. Haywood?

Dr. HAYWOOD. The legal requirement may be unnecessary. But given the practice of banks of keeping certain funds in cash, those practices are relatively stable, and if they are known to the central bank, then the central bank can use that information as a basis for effective implementation of monetary policy through open market operations.

Mr. OLSEN. I would agree. I would agree it is not necessary to have required reserves in order to conduct monetary policy. The monetary base on which the Federal Reserve operates includes reserves and currency. And when we say that you don't have required reserves doesn't mean that the banking industry doesn't maintain reserves. They do maintain reserves. And there are systems in the world in which you don't have required reserves.

The CHAIRMAN. Would the Fed have the information it needs without the legal requirements?

Mr. OLSEN. I think the Federal Reserve could have the information. I might add that the problems which the Federal Reserve has had in the conduct of monetary policy in recent years, the execution problems they have had such as we have seen in the last 4 or 5 months, would not be aggravated in my judgment in the absence of required reserves.

Why I am saying that is because there are other problems which the Federal Reserve has in the manner in which it executes monetary policy which it should resolve long before it worries about the question of required reserves. In other words, we still have rather volatile swings in the growth of monetary aggregates. And the Federal Reserve should seek to resolve those.

If I may, if I understood your question earlier, I would be happy to submit to you, if you wish, a short piece on this question in some greater detail, because I would add that I am not entirely confident that we would find that the Federal Reserve could conduct monetary policy as efficiently in the absence of required reserves. But I would like to seek that finding.

The CHAIRMAN. I would like that very much; it would be very helpful.

Professor Haywood, you seem to indicate in your statement that it would be very difficult for the Fed to establish a pricing schedule that would be equitable, and also would encourage efficient use of payments services. In your opinion, can the Fed do it?

Dr. HAYWOOD. Would you like to comment on that, John? I think, as I said, it would be very difficult. I think it is conceivable that it can be done. Did you say is it likely it would be done by the Federal Reserve? I may not be as critical as Mr. Olsen in terms of them——

The CHAIRMAN. Do you think they should price their services, or do you think it is so difficult they probably wouldn't be able to do it equitably, and therefore we should not do it?

Dr. HAYWOOD. Right now they are not going to price their services, because that will aggravate the membership problem. And until that problem is resolved, I don't see the Federal Reserve going on and tackling the allocational problem of figuring out what these costs are, and then trying to relate that to the functions involved.

I don't think they have the incentive right now to tackle those problems. I hope I am being responsive, Mr. Chairman.

The CHAIRMAN. What troubles me, of course, is that I am concerned that if we wait until the Fed's membership problem is solved, we would be likely to wait a long time. They are not likely to get the kinds of pricing which is essential if we are going to give the private sector an opportunity to move in here.

The Fed is moving rapidly, as they have to, because of the technological developments in EFT and other matters, and we are going to have a fait accompli. We have a situation where you will have an agency so big with so much equipment, it will be very hard then to move into the private operations.

Mr. RIDEOUT. Senator, it seems to me——

The CHAIRMAN. Will you identify yourself again, please?

Mr. RIDEOUT. I am Thomas Rideout, senior vice president, Wachovia Bank & Trust Co., Winston-Salem, N.C.

It seems to me with respect to this question of the private market, I would like to give you an example of the way the Fed operates, and the way the private market has responded, two different examples.

Within certain Federal Reserve districts, and perhaps within all Federal Reserve districts, I don't know, certainly within our Federal Reserve District, the Federal Reserve will allow access by nonmember banks to check clearing facilities within that district.

In other words, if there are items to be presented within that district, the Federal Reserve will allow access to their services for clearing that activity.

That particular access question has in fact created a disincentive among correspondent banks within that district, who would clear that activity in the district, to perform those services, because the nonmember correspondent can get the same level of service at no cost, as against a private market charge which would be made by the correspondent bank.

Now, the Federal Reserve has not yet chosen to make those services available to nonmember banks on an interdistrict basis. And because that has not yet occurred, the private market has very promptly developed their own clearing network on a nationwide basis, in which they can provide better availability to banks all across the country to clear these items from coast to coast.

And while they have to charge an implicit price, and have it compensated for in the form of balances, the availabilities which are generated by that clearing system far offset the implicit cost the correspondent banks charge.

As a result, the private market is doing a very efficient job of clearing those items.

I just wanted to point out an example of where, when the private market is left alone, they can provide very effective clearing services, whereas when the Federal Reserve allows, for instances, nonmember access to their payment services, it does tend to create disincentives as far as the private market is concerned.

So that is just one comment I wanted to make on that particular issue.

The CHAIRMAN. Does the private market clear its long-distance checks with remote disbursement arrangements?

Mr. RIDEOUT. I don't really understand that phrase "remote disbursement arrangements." What we do, when we talk about this clearing across the country, just to give you an example, if a check came into our bank in Winston-Salem today, we could through a private clearing network, say the check was drawn on California, we could get next-day availability in California by direct sending to another bank, let's say an Atlanta bank who was in the business, or a Chicago bank who is in the business of clearing California items. We could get availability the next day on that particular item. Whereas if we presented it to the Federal Reserve, put it into the Charlotte Federal Reserve, it would take us 2 days, we wouldn't get availability from them for 2 days.

That, to me, is an indication of the effectiveness of the private market, and what they can do if they are not discouraged.

But I must agree with Dr. Olsen that the banks who enter into these kinds of direct clearing arrangements certainly have done it with some concern that the Federal Reserve might decide to make changes in the clearing timetables, which might result in their having to absorb some float, because they couldn't actually get those times. Or they might in turn make those services available to nonmembers.

That certainly would be a very discouraging thing from the private sector's point of view.

So we would encourage the Fed—I think the solution to the thing right now is rather than be too concerned about the pricing mechanism, it would be perhaps for the Fed to sort of draw a line, particularly with respect to ACH services, and also with respect to the paper services, and begin to withdraw and allow the private system to take over.

Because I think the private system is at a point where they can handle the basic payments mechanism services, though the Federal Reserve could still, for member banks, be a very effective partner in providing settlement services among member banks.

The CHAIRMAN. Do you think we should set a deadline, a time deadline? My feeling is unless we set a specific date, say January 1, 1980, for final action on pricing services or something like that, that we are going to drift along like this and the Fed will move ahead and usurp the field, because it is just impossible for the private sector to operate absent a pricing schedule on services from the Fed.

Mr. RIDEOUT. I think with respect to a date, sir, that setting a date is probably a pretty good idea. But in order to make the setting of a data on effective tool, it would be necessary for the private sector to have signals, either directly from the Federal Reserve, or from others who can influence this particular issue, that in effect would say the role of the Federal Reserve from here on as far as payments mechanisms services will be thus and such, and outline specifically what their role is going to be.

Then if there is common agreement, the private market knows what to expect, then I think we can go forward very nicely.

But there needs to be that whole question of definition of the role of the Federal Reserve solved before we get into the microeconomic issues of pricing and payment of interest on reserves, and placement of charges for various kinds of services.

The CHAIRMAN. Mr. Olsen, how important do you think it is for us to do our best to provide a deadline?

Mr. OLSEN. I think it is crucial to provide a deadline, because the Federal Reserve, and again for perhaps complex reasons, has already indicated a tendency to shift its position on the question of pricing, and when it will come forward with explicit pricing.

And I think one of the reasons why this happens, which I come back to again, is because they have made this a very complex issue, which interlinks with the membership problem. So that I think it would be very important for Congress to specifically set forth deadlines for the Federal Reserve to price and also for the Federal Reserve to take steps to withdraw over time from its entry into the electronic funds transfer sector, particularly.

The CHAIRMAN. That is very helpful.

Thank you very very much, gentlemen, you have made a fine record, I deeply appreciate your appearances.

The committee will stand adjourned.

[Thereupon, at 12:10 p.m., the hearings were adjourned.]

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