

Is Fedwire Still a Subsidy That Fully Recovers Its Cost?

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ABSTRACT

This paper examines the Federal Reserve’s current financial losses—unprecedented in scale—and the questionable accounting practices it uses to downplay their impact. It argues that the Fed’s self-defined accounting standards, particularly the creation of a “deferred asset” to mask negative equity, obscure the fiscal consequences for the U.S. government and taxpayers. The analysis connects today’s losses to longstanding institutional practices, notably the Fed’s flawed cost-recovery accounting for its Fedwire payment system. These issues first emerged in the late 1990s and early 2000s, when the author, then a Fed staffer, challenged the internal logic used to claim that Fedwire guaranteed payments and still avoided subsidies. The paper includes as an appendix the original 2002 draft, “Fedwire: A Subsidy That Fully Recovers Its Cost?”, which helped reveal the moral hazard and accounting inconsistencies that contributed to the 2008 crisis and continue to shape central bank risk and governance today.

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Lately the Federal Reserve has been doing something it has never done before. It is losing lots of money. These losses have consequences for the already-poor financial condition of our federal government. The Fed has also been behaving badly while accounting for itself, employing deceptive accounting practices that downplay its deteriorating financial condition. Deceptive accounting at the Fed is not a new thing, however. Current Fed accounting issues and massive financial losses have roots in questions I raised about Federal Reserve payment systems while working at the Fed in the late 1990s and early 2000s.

A central bank does three main things, at least in the United States. It conducts monetary policy, it regulates (and supervises) banks, and it provides payment services. Monetary policy involves buying and selling securities and lending to banks to manage benchmark interest rates and the overall flow of money and credit. In the US, Congress has directed the Fed to do so with a statutory mandate to achieve “maximum employment,” “stable prices” and “moderate long-term interest rates.” The Federal Reserve also regulates and supervises banks and other financial institutions to promote banking stability and consumer protection. Together, the Fed advertises that it conducts monetary policy and financial regulation to provide a “safe, flexible and stable monetary and financial system.”

A central bank need not conduct monetary policy as well as financial regulation. In fact, there are strong arguments against combining those two elements, as they can undermine the stated goals when conducted by the same institution. The Fed statement that it provides a “safe, flexible and stable monetary and financial system” appeared at the top of the Federal Reserve Board’s website before, during, and after the massive 2008-2009 financial crisis. It still appears there today, helping us all rest easy – at least, most of us.

Monetary policy and bank regulation are relatively well known. There is a third leg of the stool, however, and one that receives far less attention than it should. Banking system stability depends on interconnections between banks, and banks are importantly linked to one another through the third leg of the stool at the Fed – its payment system services.

You can put money in two main buckets. There is “money at rest,” and there is “money in motion.” Money at rest, much of it, is in bank accounts. Central banking and deposit insurance help secure a feeling of safety in cash, and our accounting principles put cash at the top of the balance sheet to advertise its primary liquidity role. But these accounting practices put two very different things into “cash.” There is “cash on hand” (currency, Federal Reserve Notes) and there is “cash in bank” (bank deposits).

Uninsured cash can be very risky, and many financial professionals got a reminder that cash management is never to be taken for granted in the 2023 banking crisis that led to the failure of Silicon Valley Bank. As “money at rest” includes bank account balances, it is also worth remembering a memorable line from a banking attorney who defined “money in the bank” as a “lawsuit in embryo.”

How about “money in motion?” We can pay each other money through banks. Banks also pay each other money, however. The Fed provides massive wholesale payment services for banks that want to move money to each other, on their own behalf and on behalf of their customers.

The Federal Reserve’s “Fedwire” payment system moves trillions of dollars in payments between banks every day. It is popular for a few reasons, including the fact that the Fed has guaranteed every payment that it processes to the receiving bank – even if the sending bank didn’t have the money in its reserve account at the Fed when it sent the payment. These “unfunded” payments can lead to “daylight overdrafts,” exposing the Reserve Banks to risk if the sending banks aren’t able to make good on their intraday borrowings at the end of the day.

So how is the Fed losing historically unprecedented amounts of money today, and how do those losses relate to its conduct of monetary policy, regulation of banks, and accounting for its payment systems?

Like any bank, the Fed (and here I’m referring to the consolidated system of 12 Federal Reserve Banks) is exposed to interest rate risk. If a bank pays more in interest than it receives, it has negative net interest. Back in the old days, when savings and loan associations were still with us (before they imploded in the 1980s), there was something called a “3-6-3” rule in banking. Banks paid 3% to get money in the door, they earned 6% on their loans, and by 3pm they were on the golf course.

Banking was easy -- until it wasn’t. After letting inflation get out of hand in the 1970s, the Fed drove targeted short-term interest rates sharply higher in the early 1980s, well above long-term rates as well as the rates many S&LS and banks had booked on longer-term loans on their books. The sad history of the S&L crisis remains relevant today. Readers are encouraged to get to know the work of past [INET contributor Edward Kane](#), who wrote two books about the S&L crisis before we knew what hit us. Kane coined the term “zombie bank” to identify failed but still-walking institutions with incentives to “gamble for resurrection,” given that those who controlled risky bets could gather any upside while losses would be socialized. The latter outcome is what we received with the S&L crisis, and we may be facing the same harrowing set of incentives with our central bank today.

The main driver for the Fed’s recent operating losses has been its practice of paying interest on reserves. Reserves are the money banks have in their accounts at the Fed. After inflation accelerated in recent years, the Fed raised its targeted short-term interest rates (including the interest rate it pays banks for their reserves) sharply, from near-zero to near 5%. The Fed’s net interest earnings have turned sharply negative, now running at an annualized basis north of a hundred billion dollars a year. And the Fed has also suffered much larger but “unrealized” losses on longer-term securities in its massive portfolio of Treasury and other government securities purchased as part of its quantitative easing program.

So how does the Fed account for itself, and for these recent losses? I don't use the term "account for itself" loosely.

Financial accounting in the US for external reporting purposes is largely based on "GAAP" – "Generally Accepted Accounting Principles." The name is a misnomer, however. These principles aren't so freely and generally accepted. They effectively have the force of law, through securities law and regulation. And while "GAAP" may sound like there is only one generally accepted set of principles, there are actually three different types of GAAP.

In much of the "private" sector, GAAP is set by the Financial Accounting Standards Board, a nonprofit organization sanctioned (and overseen) by the SEC and in turn, the US Congress. That is the main GAAP that people think of when they refer to GAAP. But there are two other GAAPs. One is GAAP for state and local governments, set by the FASB's "sister" organization GASB – the Governmental Accounting Standards Board. And the federal government's GAAP is set by a federal government entity called FASAB – the Federal Accounting Standards Advisory Board. Together, FASAB and GASB accounting principles for government entities serve as the informational foundation for our massive government securities markets.

So, which standards govern accounting at the Federal Reserve Banks and their multi-trillion-dollar balance sheet(s)? Who sets those standards? Does the Fed follow FASB, GASB, or FASAB?

The Fed doesn't follow any of those three standards. It sets its own accounting standards and changes them when it sees fit. The Fed truly "accounts for itself." And back in 2010, on the immediate heels of the financial crisis, the Fed changed its own accounting to allow for the accumulation of a dubious "deferred asset" in the event of losses such as it has more recently been accumulating.

Accounting has "debits" and "credits." In double-entry accounting, debits increase assets and expenses, and credits increase liabilities and revenues. Normally, when you have a loss, it negatively impacts reported capital (or net position) – the net amount remaining after liabilities are subtracted from assets. However, the Fed now effectively transforms losses into reported assets, with a "deferred asset" account that accumulates losses in an *asset* debited to insulate the reported net position from turning negative. (For further study, see this recent article at Law & Liberty titled "[Duplicity at the Fed](#)" by Paul Kupiec and Alex Pollock.)

The Fed also insulates its reported capital position from turning red by accounting for its massive bond portfolio not on current market prices, but on the cost it paid for those securities. With large relative increases in long-term interest rates in recent years, the Fed's balance sheet amounts for government securities do not reflect hundreds of billions of losses for securities purchased at lower rates (and higher prices) several years ago – securities that have significantly lower market prices today. The Fed's practice of accounting for its securities portfolio at cost resembles the

“held-to-maturity” accounting that has been identified as an element in the failure of Silicon Valley Bank and broader banking crisis in 2023.

A couple of years ago, a former senior regulatory official gave an address about that 2023 crisis. After the talk, in the Q&A, I asked “Do we need to revisit held-to-maturity accounting – in general, in banks, and for Reserve Banks in particular?” Her answer ended with “I’m not going to touch the Reserve Bank question.”

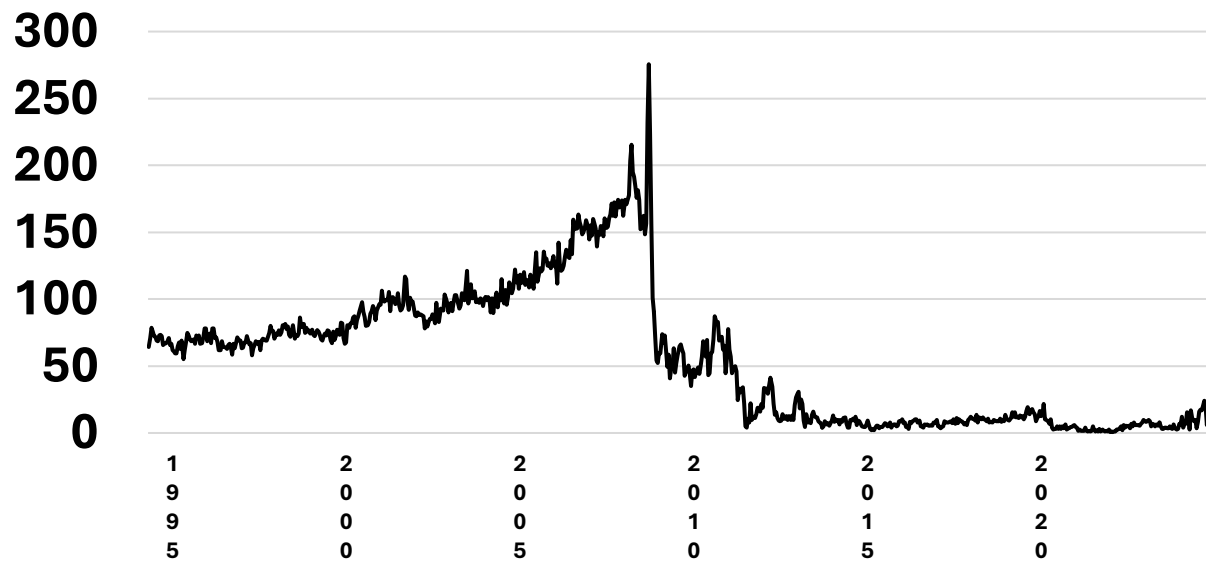
Together, the “deferred asset” and securities portfolio accounting have kept the Fed afloat, on its own books, anyway. These recent developments have important historical precedent, however. The Fed’s strategic and/or deceptive accounting for its Fedwire system helped set the stage for today’s large-scale losses.

The Fed hasn’t always paid interest on reserves. The Fed began the practice in early October 2008, amidst arguably the worst financial crisis in US history. Congress originally granted the Fed the authority to pay interest on reserves in 2006, with implementation planned for 2011. However, Congress accelerated the timeline in 2008. On October 3, 2008, Congress passed the Emergency Economic Stabilization Act, and it was signed by the President that same day. This law allowed the Fed to begin paying interest on reserves immediately.

Here's a look at daylight overdraft credit from 1994 to 2024. The amounts shown are peak daily amounts, calculated for two-week intervals. The massive spike in the middle of the chart, to an amount reported at \$275 billion, arrived in the two-week period ended October 8, 2008 – when the Fed started paying interest on reserves. (Note that these amounts are two-week averages of peak daily amounts).

Peak Daylight Overdrafts 1994-2024

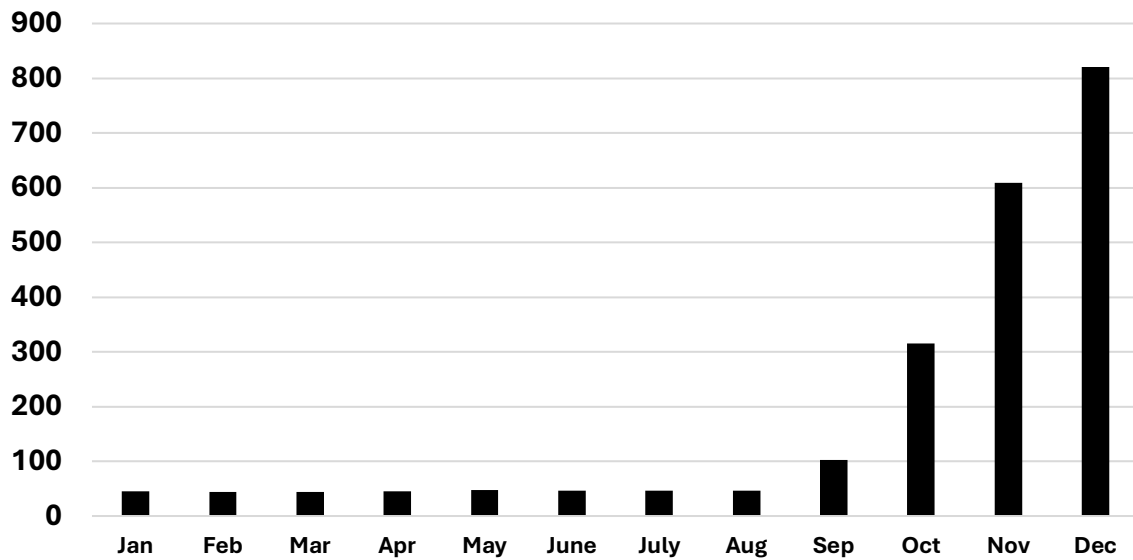
(\$\$ in billions)



Daylight overdrafts mushroomed in 2008 as Fed failures in the supervision-and-regulation led to a crisis in money markets. Daylight overdrafts then fell dramatically in late 2008, as reserve balances galloped higher with QE and the incentive banks had to maintain high reserve balances with the new October 2008 practice of paying interest on reserves. Reserve balances averaged around \$50 billion in the first eight months of 2008, and then rose dramatically to more than \$800 billion by the end of the year.

Total Reserves 2008

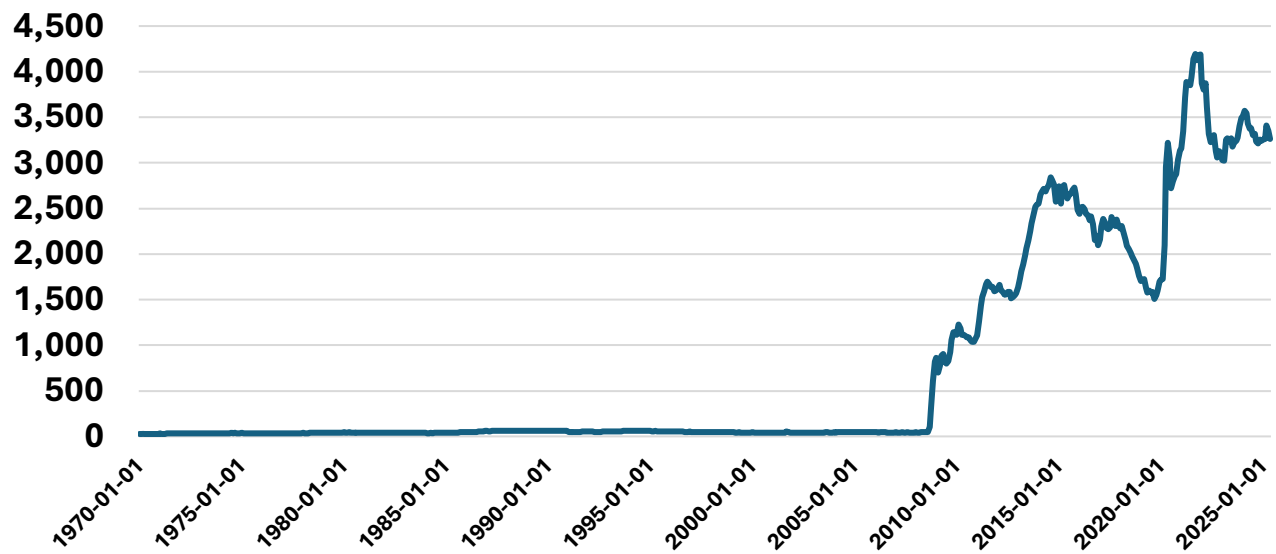
(\$\$ in billions)



These interest-bearing balances (and interest paying balances, for the Fed) have since risen north of \$3 trillion.

Total Reserves at the Federal "Reserve"

(\$\$ in billions)



Back in late 2008, when the interest rate paid on reserves fell from 1% to 0.25%, the implied annualized interest expense for the Fed was under \$5 billion. However, at today's levels, with reserves north of \$3 trillion and the interest rate paid on reserves at about 4.5%, well, things add up in a hurry. This is the key factor leading to the large cash operating losses now accumulating in the Federal Reserve Banks.

How are these losses related to Fedwire accounting and the issues I raised in the early 2000s? Back in 1999, Congress passed the "Gramm-Leach-Bliley" law, formally the Financial Services Modernization Act of 1999. This law allowed banks, securities firms and insurance companies to effectively consolidate under the umbrella of a "financial services holding company." The Fed was pressing its case for taking lead regulatory responsibility for these new holding companies. That case included expression of apparently heartfelt concern the Fed's leaders had for the moral hazard implications of the "safety net" provided to the financial system. The Fed's leaders, including its then-chairman Alan Greenspan, testified to Congress that access to Fedwire-guaranteed payments provided a subsidy given the Fed's assumption of risk on the system.

Trouble is, the Federal Reserve had been accounting for its payment services, including Fedwire, to measure its compliance with cost-recovery mandates for its priced payment services like Fedwire. In the Monetary Control Act of 1980, the Congress first directed the Fed to fully recover all direct and indirect costs of its payment services, and thereby refrain from subsidizing banks on Fedwire. And every year since 1980, the Fed produced accounting statements "proving" that its revenues were exceeding expenses on its payment services, and therefore, the Fed was faithfully living up to Congressional directive not to subsidize banks.

How could we say that we are subsidizing banks when we are also saying we are not subsidizing banks? That's the question I posed to my favorite economics professor at the University of Chicago when I was working as a financial markets policy analyst at the Federal Reserve Bank of Chicago in the late 1990s/early 2000s. He responded "It sounds like you are talking out of both sides of your mouth." I asked the same question to a senior Chicago Fed officer, after I was summoned to his office to discuss how I was invited to present the paper in Washington by the former White House Counsel to President Ronald Reagan. That Fed officer responded "You are calling the chairman a two-talking criminal! ... You can drop this and move on, or do this, and really move on."

In more recent years, defending the practice of paying interest on reserves, some Fed economists have argued how the new "ample reserves" regime -- incentivized importantly by the Fed paying interest on risk-free balances -- helps to insulate the Reserve Banks from the risk of loss on daylight overdrafts. Those were the amounts flowing north of \$200 billion a day at peak amounts in the 2008 financial crisis, right before the Fed started paying interest on reserves.

So, today, we have the Fed incurring massive losses driven by the Fed paying interest to banks for the privilege of reducing the risk they pose to the Fed, instead of charging banks to

fully recover the cost of guaranteeing daylight-overdraft funded Fedwire payments. And the Fed is accumulating losses in a dubious asset that helps it keep from reporting a negative capital position on its balance sheet. Yet the Fed's balance sheet has significant consequences for the federal government's fiscal condition, and in turn, taxpayers. The Fed is effectively masking its true net position, keeping it from showing a negative number like the "zombie banks" that Edward Kane identified. Ironically, the Fed is able to do so using accounting policies it drafts for itself while asserting the value of central bank "independence."

The Fed asserts that its losses need not impair its ability to conduct monetary policy. If they are indeed irrelevant, however, why does the Fed choose to implement strange accounting policies that keep it from reporting red numbers in the net position for the Reserve Banks? The Fed and its defenders have stressed a broader related theme that central bank profitability need not necessarily matter for central bank operations. Central bank profitability certainly matters for the deep pockets – taxpayers – that effectively stand behind the central bank, however. Taxpayers may have to provide higher future resources explicitly, or implicitly through taxes imposed by inflation.

Quantitative easing and payment of interest on reserves have generated large, continuing and hard-to-forecast future Fed losses, but the Fed's accounting currently helps to ensure that it will not show a negative net financial position. The Fed's dubious accounting is not without precedent. In fact, the Fed's accounting for cost recovery on Fedwire back in the 1990s and early 2000s arguably erected a moral-hazard-driven "pay no attention to the man behind the curtain" dynamic responsible in part for the 2008-2009 financial crisis and today's large Fed losses. I share below the draft paper I was invited to present at in Washington D.C. in early 2002 by the former White House Counsel mentioned above. This is the paper I was told "You can drop this and move on, or do this, and really move on." It is titled "Fedwire: A Subsidy That Fully Recovers Its Cost?"

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Fedwire®:
A Subsidy That
Fully Recovers its Costs?

Bill Bergman

ABSTRACT

The Federal Reserve provides payments services to depository institutions. The Fedwire® system is the largest such service in terms of dollar volume. Total volume on Fedwire regularly exceeds \$1 trillion on a daily basis.

In recent years, the Board of Governors of the Federal Reserve System has regularly affirmed that fee revenue fully recovers the costs of providing payments services, including Fedwire, as required by the law. Over the same interval, however, speeches and testimony by members of the Board of Governors have identified Fedwire as a source of subsidy for depository institutions.

Fedwire is indeed a source of significant subsidy. Pricing, payments system risk and accounting policies prevent the Federal Reserve from meeting cost recovery requirements identified by the Board of Governors as flowing from federal law. The Federal Reserve should implement a new credit measurement and cost accounting system in order to set a new price schedule achieving full cost recovery.

Introduction

The Federal Reserve provides a variety of payment services to depository institutions. The Fedwire® funds transfer system is the largest such service in terms of dollar volume, averaging about \$1.5 trillion in transfer volume -- every day.

Federal law directs the Federal Reserve to establish prices for its payments services on the basis of costs, as a result of the Depository Institutions Deregulation and Monetary Control Act of 1980 (the ‘MCA’). In recent years, the Board of Governors of the Federal Reserve System has regularly affirmed that Federal Reserve payments services fully recover their costs, in line with statutory requirements arising from this legislation.¹ Yet over the same interval, speeches and testimony from members of the Board of Governors have identified Fedwire, daylight overdrafts, and/or payment system guarantees as elements of a federal subsidy.

This article briefly describes the Fedwire funds transfer service, reviews how Fedwire has been described as a source of subsidy, and explores how such a subsidy can exist in light of cost recovery requirements arising from the MCA. The subsidy is indeed significant. Pricing, payments system risk and cost accounting policies prevent the Federal Reserve from fully meeting the cost recovery requirements identified by the Board of Governors as flowing from federal law.

The Fedwire Funds Transfer Service

The Fedwire system enables depository institutions to effect payment to one another on the ‘books’ of the central bank, using their existing balances and central bank credit. Fedwire funds transfer volume regularly exceeds \$1 trillion on a daily basis.

Fedwire funds transfers are initiated by payment instructions issued from a depository institution to the central bank. The central bank processes the instructions, debits the account of the sender, and credits the account of the receiver. The Federal Reserve may credit the receiver even if the sender does not have a sufficient balance of its own at the time of the transfer; in this case, the sender utilizes intraday credit, also called overdraft capacity, as a source of funding. Upon central bank notification to the receiver or credit to the receiver’s account, whichever comes first, the transfer becomes ‘final.’ This important guarantee is critical to understanding the nature of the service provided. Once credited, the receipt is immunized to any subsequent insolvency of the sender, and the central bank assumes credit risk should the sender’s account remain in overdraft upon insolvency. The Federal Reserve may require that overdraft credit be

¹ See Board of Governors, Federal Reserve System, Annual Report 2000, pp. 145-150. See also Board of Governors, Federal Reserve System; “Fedwire Funds Transfer System: Self-Assessment of Compliance with the Core Principles for Systemically Important Payment Systems,” December 2001, available at <http://www.federalreserve.gov/paymentsystems/coreprinciples/default.htm>

collateralized, but most of the credit regularly extended is not explicitly collateralized.² Under current measurement techniques, the Federal Reserve banks extend overdraft credit arising from funds transfers in excess of \$30 billion, on average, during the day, while peak daily overdraft levels approach \$100 billion.

The finality guarantee and associated credit extensions lead the Reserve Banks to assume risk while offering payment services. The Federal Reserve has developed extensive policies and procedures to manage payment system risk, including the risk to the Reserve Banks. The probability of loss is not high, but the risk is not zero, either, and the dollar values are quite significant. The Federal Reserve Board's payment system risk policy³ establishes account posting and monitoring procedures, sets levels and processes for administering non-binding credit 'caps,'⁴ and determines overdraft fees.⁵ Dedicated personnel monitor accounts under the payment system risk policy, while the risk to the Reserve Banks is also framed by the Federal Reserve's extensive supervisory responsibilities for monitoring member banks, bank holding companies, and financial holding companies. Specific examiner responsibilities are defined for debit cap administration.⁶

The Federal Reserve prices its wire transfer services under provisions in the Federal Reserve Act, as amended by the MCA.⁷ Funds transfer fees are charged on a per transfer basis; 'volume' discounts are available based on the number of transfers sent, with fees ranging from 31 cents to 15 cents (assessed to both sender and receiver) per online transfer. Up to \$1 billion can be

² The Board of Governors is currently studying the possibility of establishing a two-tier pricing regime for daylight overdraft fees, with higher prices for uncollateralized overdrafts. See Board of Governors, Federal Reserve System, Docket No. R-1111, "Policy Statement On Payment System Risk: Potential Longer Term Direction," May 30, 2001

³ See Board of Governors, Federal Reserve System, "Federal Reserve Policy Statement on Payment System Risk," at www.federalreserve.gov/PaymentSystems/PSR/policy.pdf

⁴ Ibid., see pp. 5-6.

⁵ Overdraft fees are assessed at an annualized rate of 0.36 percent, based on estimates for average overdraft levels during the day.

⁶ See Board of Governors, Federal Reserve System, "Federal Reserve Policy Statement on Payment System Risk," at www.federalreserve.gov/PaymentSystems/PSR/policy.pdf, p. 6. Note that the set of central bank account holders extends beyond member banks and bank holding companies, and includes national banks and state-chartered non-member banks. The former are supervised by the Office of the Comptroller of the Currency, the latter by the Federal Deposit Insurance Corporation. The CHIPS system also maintains a dedicated account and incorporates Fedwire transfers, calling into question any claim that the CHIPS system functions as a private-sector competitor to Fedwire.

⁷ See Section 11A, Federal Reserve Act (Appendix I), coupled with Board of Governors, Federal Reserve System, "Principles for the Pricing of Federal Reserve Bank Services;" (Appendix II)

transferred in a single Fedwire, but fees do not vary with the *size* of the individual transfer, even if the transfer utilizes overdraft credit as a source of funding.

The MCA and Cost Recovery

On March 31, 1980, President Jimmy Carter signed the Depository Institution Deregulation and Monetary Control Act into law. This comprehensive legislation extended reserve requirements to all depository institutions, not just Federal Reserve member banks, and directed the Federal Reserve to provide access to its payments services to all depository institutions. The legislation called in turn for the Federal Reserve to establish prices for its payments services on the basis of costs; prior to 1980, the Federal Reserve had provided payments services exclusively to member banks for free. The Federal Reserve has repeatedly affirmed its understanding that the law and the pricing principles it has established under the law call for full cost recovery.⁸

A comprehensive piece of legislation, the Monetary Control Act was preceded by a lengthy deliberative process. During the 1970s, high and rising inflation and interest rates were coupled with a much-discussed Federal Reserve ‘membership problem,’ a problem identified as a source of difficulty in conducting monetary policy. Federal Reserve member banks were increasingly opting out of membership as the opportunity cost of maintaining non-interest bearing reserves rose along with market interest rates, even though payments services were offered to member banks for free.

In April 1978, G. William Miller, the Chairman of the Federal Reserve Board of Governors, testified to Congress that the Federal Reserve was considering the possibility of paying interest on reserves held at Federal Reserve banks as a means of addressing the membership problem.⁹ The legal foundation for an independent decision on this action was questioned by Congressional leadership. Comprehensive legislation was developed to address the membership issue by requiring universal yet simpler and less onerous reserve requirements, together with a direction that the Federal Reserve begin offering its payments services to all depository institutions on a priced basis. The Federal Reserve previously provided these services exclusively to member banks, and for free.

The pricing provisions of the MCA added a new Section 11A to the Federal Reserve Act (see Appendix I), and were placed in Subchapter II of Chapter 3 of Title 12 of the United States Code. Title 12 of the U.S.C. is titled “Banks and Banking.” Chapter 3 of Title 12 is titled “Federal Reserve System.” Subchapter II of Chapter 3 is titled “Board of Governors of the Federal

⁸ In addition, the DIDMCA phased out interest rate ceilings on deposit accounts, authorized the payment of interest on transaction accounts, and broadened asset investment powers for federal savings and loan associations.

⁹ See Committee on Banking, Finance and Urban Affairs, United States House of Representatives; “Description of the Monetary Control Bill,” 95th Congress, Second Session; December 1978; p. v.

Reserve System.” The pricing provisions exist today in 12 U.S.C. 248a. These provisions determined a duty for the Board of Governors to begin to adopt a set of pricing principles while establishing prices for payments services on the basis of cost. These principles were announced later in 1980, and remain intact today (see Appendix II).

Taken together, what do the pricing provisions in 12 U.S.C. 248a and the pricing principles announced by the Board mean? The Board of Governors recently released a ‘self-assessment’ of Fedwire under newly established international risk management standards. This self-assessment included the following interpretation:

The MCA requires the Federal Reserve to set service fees that, over the long run, recover the actual costs incurred to provide the services, as well as imputed costs the Federal Reserve would have incurred and imputed profits it would have expected to earn if it were a private-sector firm. The pricing principles adopted by the Board added to the aggregate cost-recovery objective specified in the MCA a more stringent objective of full-cost recovery for each service line, such as Fedwire. These requirements promote competition and economic efficiency by placing the Federal Reserve Banks in a situation more comparable to private institutions.¹⁰

The pricing provisions of the MCA are included in Section 11A of the Federal Reserve Act.¹¹ Within this Section, 11A(c)(3) and 11A(c)(4) read as follows:

“(3) Over the long run, fees shall be established on the basis of all direct and indirect costs actually incurred in providing the Federal Reserve services priced, including interest on items credited prior to actual collection, overhead, and an allocation of imputed costs which takes into account the taxes that would have been paid and the return on capital that would have been provided had the services been furnished by a private business firm, except that the pricing principles shall give due regard to competitive factors and the provision of an adequate level of such services nationwide. (4) Interest on items credited prior to collection shall be charged at the current rate applicable in the market for Federal funds.”¹²

As the law requires fees to be established on the basis of ‘all direct and indirect costs,’ the question arises how those costs are identified and quantified. The Federal Reserve allocates expenses to the funds transfer service under its Planning and Control System (PACS) manual. These procedures allocate costs to five System service lines, one of which is service line 5000, called “Fee-Based Services to Financial Institutions.” This is the service line accumulating

¹⁰ Board of Governors, Federal Reserve System; “Fedwire Funds Transfer System: Self-Assessment of Compliance with the Core Principles for Systemically Important Payment Systems,” December 2001, available at <http://www.federalreserve.gov/paymentsystems/coreprinciples/default.htm>

¹¹ See Appendix I and Appendix II.

¹² Section 11A(c), Federal Reserve Act.

expenses for the purposes of priced services cost recovery calculations. Within this service line, funds transfer expenses are included in activity 5252, titled “Online Transfer of Reserve Account Balances.” The description for this activity in the PACS manual reads:

Includes all operations, processes, and related expenses associated with transferring account balances between authorized financial institutions, the Treasury, and certain Government Agencies via the Fedwire funds transfer system.

Communications, computer and other operational expenses are specifically cited within this activity, including the labor expenses arising from the efforts of skilled and dedicated professionals. However, interest expense is not included, even as a high level of overdraft credit is extended as a result of Fedwire finality. In addition, substantially all of the expenses from the payment system risk function of the Federal Reserve are excluded from the cost base for funds transfers,¹³ and all of the expenses associated with supervisory activities are similarly excluded.

The only exception in this regard arises in the activity identified as ‘monitoring operating status and reserve account positions.’ This line relates to personnel time spent on the Account Balance Monitoring System (ABMS), a tool used to assess the account status for specifically identified problem institutions. The ABMS allows the Federal Reserve to choose to intercept or reject payment orders from institutions in specifically identified risk categories. Substantially all of the volume flowing over the Fedwire funds transfer system regularly arises without ABMS scrutiny or intervention, however,¹⁴ and the majority of related intraday credit extensions are not explicitly collateralized. While the direct personnel and telecommunications costs of using ABMS are included in the cost base while it is operating, the costs associated with identifying problem institutions deemed deserving of ABMS scrutiny are not.

In addition to the above-noted expense allocations, the Federal Reserve applies a Private Sector Adjustment Factor (the “PSAF”) to meet the requirements for imputed costs identified in Section 11A(c)(3). The PSAF provides estimated allowances for taxes that would have been paid and the return on capital that would have been earned had the Federal Reserve’s priced services been produced by a private sector firm. The return on capital is a composite of two components – return on debt and return on equity. The Federal Reserve constructs a balance sheet for priced services, identifying assets used to produce the services together with estimates of the cost of the

¹³ Payment system risk expenses are listed on service line 3000, titled “Services to Financial Institutions and the Public,” within activity 3702, titled “Payment System Risk Administration.”

¹⁴ The Federal Reserve is currently studying the possibility of using the ABMS system to reject any payment instruction with settlement-day finality (including Fedwire funds transfers) from any institution, if it leads to an overdraft in excess of an institution’s net debit cap (credit limit). See Board of Governors, Federal Reserve System; Docket No. R-1111, “Policy Statement on Payment System Risk: Potential Longer Term Policy Direction;” May 30, 2001

liabilities and equity funding those assets. This balance sheet is reported to the Congress annually, in the “Annual Report: Budget Review” document.¹⁵

Total assets reported for priced services in the 2001 budget year amount to \$12.5 billion, with about 90% of those assets arising in the short-term category. The line “Items in the Process of Collection” amounts to about one-third of short term assets, while “Investments in Marketable Securities” accounts for over half of short term assets. The first note at the bottom of the balance sheet for priced services states that ‘data are averages for the year,’ but the balance sheet is prepared on the basis of end-of-day data. The Federal Reserve extends an average of at least \$30 billion in overdraft credit during every day for Fedwire funds transfer activity alone, based on reported averages of end-of-minute data during 2001. Excluding intraday credit extensions from the priced services asset base is similar to excluding interest expense from the costs of Activity 5252 (“Online Transfer of Reserve Account Balances.”)

Cost Recovery Reporting

Section 10 of the Federal Reserve Act calls for the Federal Reserve Board of Governors to report annually to the United States Congress. The Annual Report of the Board of Governors includes a discussion of cost recovery experience for priced services provided by the Federal Reserve Banks. In the annual report for the year 2000, for example, priced services were reported to have recovered 101.1% of their costs in 2000, and 100.8% of their costs over the 10 year period ending in 2000.¹⁶ The Annual Report for 2000 did not break out Fedwire funds transfer cost recovery performance specifically, but summed funds transfer and net settlement services together, noting that fee revenue exceeded expenses for the aggregated results for these two services. The above-noted ‘self-assessment’ of Fedwire (see note 7, above) specifically stated in late 2001 that full cost recovery has been achieved for Fedwire standing alone.

Members of the Board of Governors periodically testify to Congress about cost recovery. In 1997 testimony,¹⁷ Federal Reserve Board of Governors Vice Chair Alice Rivlin stated:

The MCA requires the Federal Reserve Banks to charge fees for their payment services, which must, over the long run, be set to recover all direct and indirect costs of providing the services. In addition, the MCA requires the Federal Reserve Banks to recover imputed costs, such as taxes and the cost of capital, that would have been paid and

¹⁵ See Board of Governors, Federal Reserve System; **Annual Report: Budget Review 2001**; pp. 51-54

¹⁶ Board of Governors, Federal Reserve System; **2000 Annual Report**; p. 146.

¹⁷ Alice M. Rivlin; “Role of the Federal Reserve in the Payment System;” Before the Subcommittee on Domestic and International Monetary Policy of the Committee on Banking and Financial Services, U.S. House of Representatives; September 16, 1997.

imputed profits that would have been earned if the services were provided by a private firm.

... Over the last ten years, the Federal Reserve has fully recovered the total costs of its priced services, including imputed costs as required by the Monetary Control Act. ... Shortly after the MCA was enacted, the Board of Governors adopted pricing principles that are more stringent than the requirements of the MCA and that require the Federal Reserve Banks to recover priced service costs, not just in the aggregate, but for each major service category. Our check service, for example, has fully recovered its costs over the last ten years.

In turn, in an appendix¹⁸ to the body of this testimony, Vice Chair Rivlin reiterated that

Taxpayers do not subsidize the cost of the Federal Reserve's check transportation (emphasis in original). It is understandable that whenever a public entity competes with the private sector in providing services, the issue of subsidies arises. The Monetary Control Act of 1980 (MCA) addressed that issue by requiring the Federal Reserve, over the long run, to set fees for its priced payment services to recover all direct and indirect costs of providing those services.

... The Federal Reserve has complied with those requirements and has recovered 100.7 percent of the costs of its priced services, including imputed costs and profits, over the last ten years.

Similarly, Federal Reserve Board Chairman Alan Greenspan stated in 1996 testimony,¹⁹

... priced services are subject to the inherent discipline of the marketplace as the Federal Reserve must control costs in order to meet the statutory directives for cost recovery in the Monetary Control Act. The risk-management decisions that we make concerning the way we provide payment services to depository institutions are tested directly in the marketplace. These services comprise more than one-third of the Federal Reserve banks' total budget and the Monetary Control Act requires that, over the long run, we price these services to recover their costs, as well as costs that would be borne by private businesses,

¹⁸ Appendix 2 to above testimony of Vice Chair Alice M. Rivlin; "The Payments System; Interdistrict Transportation System and Implications of H.R. 2119" Before the Subcommittee on Domestic and International Monetary Policy of the Committee on Banking and Financial Services, U.S. House of Representatives September 16, 1997.

¹⁹ Testimony of Chairman Alan Greenspan; "Recent reports on Federal Reserve operations," Before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate July 26, 1996

such as taxes and a return on equity. If we provide these services inefficiently, we price ourselves out of the market.

Over the past decade, our track record has been good. The Reserve Banks have recovered 101 percent of their total cost of providing priced services, including the targeted return on equity. I should also note that, by recovering not only our actual costs but also the imputed costs that a private firm would incur, the Federal Reserve's priced services have consistently contributed to the amount we have transferred to the Treasury. During the past decade, priced services revenue has exceeded operating costs by almost \$1 billion.

Payments services may still be provided inefficiently, however, if the Federal Reserve prices its services too *low*, and extends its output too far *into* the market. The pricing provisions of the MCA were grounded on the expectation that pricing Federal Reserve services on a full cost recovery basis would lead market forces to result in efficient service output, for both the Federal Reserve and private sector competitors. Without full cost recovery, Federal Reserve services may still be provided inefficiently if a substantial output level results from prices set below costs.

Mixed Messages?

The Board of Governors has certified that the Federal Reserve has achieved full cost recovery for priced services, including Fedwire, in recent years. Yet over the same interval, speeches and testimony of members of the Board of Governors have labeled the Federal safety net a subsidy for depository institutions, including Fedwire, daylight overdrafts and/or final riskless settlement of payments as elements of this subsidy.

In July 1997 testimony on the proposed Financial Services Competition Act, for example, the Federal Reserve Board Chairman Alan Greenspan stated:

... a number of observers have argued that there is no subsidy associated with the federal safety net for depository institutions -- deposit insurance, and direct access to the Federal Reserve's discount window and payment system guarantees. The Board strongly rejects this view.²⁰

In turn, in the same 1997 testimony, the Chairman stated:

While some benefits of the safety net are always available to banks, it is critical to understand that the value of the subsidy is smallest for very healthy banks during good

²⁰ Testimony of Federal Reserve Board Chairman Alan Greenspan on The Financial Services Competition Act of 1997; before the Subcommittee on Finance and Hazardous Materials of the Committee on Commerce, U.S. House of Representatives, July 17, 1997

economic times, and greatest at weak banks during a financial crisis. What was it worth in the late 1980s and early 1990s for a bank with a troubled loan portfolio to have deposit liabilities guaranteed by the FDIC, to be assured that it could turn illiquid assets to liquid assets at once through the Federal Reserve discount window, and to tell its customers that payment transfers would be settled on a riskless Federal Reserve bank?²¹

In 1998 testimony²² that similarly identified a bank's ability to 'tell its customers that payment transfers would be settled on a riskless Federal Reserve Bank' along with 'access to the discount window and the payment system,' as elements of a 'safety net subsidy,' the Chairman stated:

... the safety net has predictably created a moral hazard; the banks determine the level of risk-taking and receive the gains therefrom, but do not bear the full cost of that risk; the remainder is borne by the government.

During testimony addressing financial modernization legislation that same year, the Chairman explicitly linked a subsidy from Fedwire to the need for regulatory change:

Another twenty-first century issue is whether we should move beyond affiliations among financial service providers and allow the full integration of banking and commerce. As technology increasingly blurs the distinction among various financial products, it is already beginning to blur the distinctions between predominately commercial and banking firms. We cannot rule out whether sometime in our future full integration may occur, potentially with increased efficiencies. But how the underlying subsidies of deposit insurance, discount window access, and guaranteed final settlement through Fedwire, are folded into a commercial firm, should the latter purchase a bank, is crucially important to the systemic stability of our financial system.²³

If a 1980 law directs the Federal Reserve to charge prices for its payments services so as to achieve full cost recovery in the long run, why did members of the Federal Reserve Board of

²¹ Ibid.

²² Testimony of Federal Reserve Board Chairman Alan Greenspan on H.R. 10, The Financial Services Act of 1998; before the Committee on Banking, Housing and Urban Affairs, U.S. Senate; June 17, 1998

²³ Testimony of Chairman Alan Greenspan on H.R. 10; before the Committee on Banking and Financial Services, U.S. House of Representatives; February 11, 1999

Governors testify in the late 1990s that guaranteed final settlement through Fedwire comprises a subsidy?²⁴

What Does the Law Say? A Closer Look

The priced services provisions arising from the MCA cast a wide net. They are included in Section 11A of the Federal Reserve Act (see Appendix I). The first part of this Section directed the Board of Governors to publish a set of pricing principles, and to begin to put into effect a schedule of fees based on those principles. The next section lists a set of services for which prices are to be established. The third section contains four principles on which prices are based; these four principles are also the first four principles of the seven published by the Board of Governors. The third such principle, both in the statute as well as the principles published by the Board of Governors, specifically includes ‘interest on items credited prior to actual collection’ as a member of the set of ‘all direct and indirect costs’ for which the prices for a list of services are to be established. This list includes ‘wire transfer services.’

The Federal Reserve Act does not explicitly define the term ‘item,’ but the term is incorporated in a variety of other definitions in the Federal Reserve Act, and when the ‘item’ term does appear, it appears in a broad sense as one of a number of specified means of effecting payment. In Section 11A(c)4 of the Federal Reserve Act, the reference to ‘interest on items credited prior to collection’ (note: not ‘actual’ collection, as in 11A(c)(3)) is also included in the list of 4 provisions respecting a list of payments services to be priced, a list that includes ‘wire transfer services’ as well as ‘settlement services’ and ‘Federal Reserve float.’ Early proposed versions of the MCA did not include ‘Federal Reserve float’ in the list of services to be priced; ‘Federal Reserve float’ was added after private sector comments pointed to unpriced float as a source of subsidized competitive advantage for Federal Reserve payments services. Unpriced float subsequently became a source of considerable Congressional concern as a subsidy.²⁵ Similarly, the statutory phrases ‘items credited prior to actual collection’ and ‘items credited prior to collection’ were not included in early versions of the MCA, but were added to the bill that was enacted, and remain law today.

When the MCA was enacted, funds transfers were referred to as ‘items’ in both Regulation J and the operating circulars governing Reserve Bank service relationships with depository institutions,

²⁴ A more complete collection of testimony and speeches referring to Fedwire or the Federal Reserve’s payment system as a source of subsidy is included in Appendix III.

²⁵ See for example, Littlewood, Shain and Company; “Float: A Non-Earning Asset,” study prepared for the Trustees of the Banking Research Fund, Association of Reserve City Bankers; May, 1982; pp. iv, v, and 12

and Regulation J and the operating circulars both contemplated funds ‘transfer items’ as items that might be credited prior to actual collection.²⁶ Importantly, however, even if the Federal Reserve were to interpret transfers accomplished with intraday credit as falling outside the ‘items credited prior to actual collection’ language, by specifying that the category of things called ‘all direct and indirect costs’ includes something called ‘interest on items credited prior to collection,’ the law requires consideration whether things closely similar to ‘interest on items credited prior to collection’ *also* fit into the broader category of ‘all direct and indirect costs.’ If anything, the similarity between ‘items credited prior to collection’ and ‘daylight overdrafts’ leads to a conclusion that prices for payments services should indeed incorporate interest on credit extended during a day – even in the remote possibility that ‘items credited prior to collection’ do not include funds transfers accomplished with daylight overdrafts. The Federal Reserve Board’s Payment System Risk policy has only called for overdraft pricing since 1994, however, while overdraft fee collections are excluded from the cost recovery calculation for priced services.

Daylight credit is not a small number, currently, and the amount required for recovery purposes may be significantly higher than any requirement arising from current reported data. Assume the \$30 billion worth of overdraft credit extended on average during the day -- based on end-of-minute averages -- effectively represents the true credit extension on Fedwire. A crude, back-of-the-envelope estimate of interest foregone by not incorporating the cost of this credit in Fedwire prices might proceed as follows: \$30 billion worth of credit extended during the day, every day, can be conceived as a stock of credit existing continually. Applying a 3% interest rate on this risky credit leads to annual interest expense of about \$1 billion. With 100 million Fedwire transfers each year, allocating this cost simply to Fedwire prices leads to a fee of \$10 per transfer, not 60 cents (30 cents to sender and receiver alike). This is a simple estimate, to be sure, but likely a conservative one.

Why might this estimate be conservative? Overdraft fees have been argued to have meaningfully impacted depository institution behavior.²⁷ These fees are based on estimates of overdrafts using end-of-minute positions. If a price reduces the overdraft position measured at the end of every minute, or for positions representing at most one-sixtieth of the day, it is quite likely to expect that a higher level of effective credit is consumed on average over the rest of the day, when positions are unpriced. For a service accomplishing roughly \$1.5 trillion in daily payments on a base of less than \$20 billion in reserves, effective daily average credit consumption may total significantly higher than the \$30 billion or so in overdraft credit reported on the basis of end-of-minute averages.

²⁶ See Appendix IV.

²⁷ See Heidi Wellman Richards; “Daylight Overdraft Fees and the Federal Reserve’s Payment System Risk Policy;” Board of Governors, Federal Reserve System; **Federal Reserve Bulletin**; December 1995.

A minute may seem like a short time, but for a transfer mechanism that can accomplish thousands of transactions in seconds in the billions of dollars, a minute is a long time indeed. Consider a simple example. Assume two institutions maintain reserves or clearing balances of \$10 apiece at the central bank. At the beginning of a given minute, the first institution sends a funds transfer to the second institution of \$100. Seconds later, the second institution sends a transfer to the first institution of \$101. At the end of the minute, the first institution has a balance of \$11, and the second institution has a balance of \$9. Over \$200 dollars of transfers have been effected with reserves totaling \$20, with no apparent overdraft, so long as overdrafts are measured for pricing purposes at the end of a minute. As a result, the fee structure may discourage daylight overdrafts, but only at the end of minutes. On balance, the fee structure may encourage overdrafts within minutes by providing incentives to collect ‘offsetting’ payments. True intraday credit extensions may be significantly higher than the averages reported on the basis of end-of-minute observations, and the effective price significantly lower.

A recent article in a publication of the Federal Reserve Bank of New York reinforces this impression. This article (“The Timing and Funding of Fedwire Funds Transfers”²⁸) estimated the share of Fedwire funds transfers funded by three sources: existing balances, overdrafts, and incoming payments entered within the same minute as outgoing payments. The authors found that roughly 35% of transfers were funded by the movements of maintained balances, 25% of transfers were funded by incoming payments, and 40% of transfers were funded by overdrafts. The estimation method did not account for the possibility that an ‘incoming payment’ to one institution may have itself been funded by an overdraft incurred by the sending institution, so the estimate for incoming payments as a source of total funding (25%) is likely inflated, and the overdraft funding share understated. Even so, 40% of total daily funds transfer volume represents 40% of about \$1.5 trillion, or over \$500 billion worth of funds transfers being funded by overdrafts over the course of every day.

A subsidy arising from Fedwire has occasionally been identified as a result of access to Fedwire *and* daylight overdrafts, or from ‘final riskless settlement.’ If daylight overdrafts were defined outside the Fedwire service, and overdraft credit costs were either zero or independent of the penumbra of ‘all direct and indirect costs,’ then any need to recover costs of intraday credit might be asserted as unnecessary for the purpose of cost recovery. Consistent with such an interpretation, the Federal Reserve excludes daylight overdraft fees from priced services cost recovery calculations, excludes interest expense from funds transfer activity expense allocations, sets prices for funds transfers that do not vary with the dollar amount of individual transfers, and excludes intraday credit from the assets on the end-of-day balance sheet used to estimate capital costs for priced services. A narrow vision of Fedwire might contend that it is Fedwire coupled with a different thing, credit, that constitutes the source of the subsidy – not the Fedwire service itself. However, if credit is indeed deemed a component of the Fedwire funds transfer, or if the

²⁸ James McAndrews and Samira Rajan; “The Timing and Funding of Fedwire Funds Transfers;” **Economic Policy Review**; Federal Reserve Bank of New York; July 2000

costs associated with providing intraday credit are deemed to fall into the category of ‘all direct or indirect costs actually incurred’ specified by the Federal Reserve Act as the costs for which prices must be established, a subsidy identified in ‘final riskless payments’ would not, at the same time, be consistent with full cost recovery.

The Section 11 phrase ‘*all* direct and *indirect* costs’ (emphasis added) requires such a broader perspective. Fedwire is a funds transfer service, with ‘funds’ defined as existing balances as well as overdraft capacity.²⁹ Overdraft capacity represents the ability to access risky credit extensions from the central bank. Fedwire moves funds, which include costly things produced by a central bank. It was titled the “Monetary Control Act,” to be sure, but legislative concern regarding credit extensions as a component of payment services rested fundamentally in concern about costs to be recovered. A payments study prepared in 1982 for the Association of Reserve City Bankers³⁰ characterized Congressional intent in the following terms:

From the Fed’s point of view, float is significant because float levels are extremely volatile and difficult to predict, and thus complicate monetary control. ... Congress has viewed Federal Reserve float as an interest-free loan from the government to the banking system and its customers. ... This loss of Treasury revenue prompted Congress to pressure the Fed to reduce float and led to the inclusion of a mandate by Congress in the ... MCA that Fed float be eliminated or priced at the Federal funds rate.

Funds transfers effected with overdraft credit may not produce ‘Federal Reserve float,’ strictly speaking, as accounts are credited at the same time or after, not before, sender accounts are debited. What about overdrafts? Did they need to be eliminated or priced? In a late-1980 letter to Reserve Banks published in the *American Banker*,³¹ the Board of Governors stated that it had adopted a policy position respecting overdrafts, and the letter included the following observations:

Daylight overdrafts that occur from the use of the Federal Reserve’s wire transfer network are of special concern because of the large dollar value of irrevocable funds transfers. Extensive overdrafts are an undesirable banking practice that create financial risks borne by the System. ... Daylight overdrafts in reserve accounts should be discouraged. Reserve banks should take particular care to eliminate practices whereby member banks incur frequent and large daylight overdrafts through wire transfers.

²⁹ See Board of Governors, Federal Reserve System; “Fedwire Funds Transfer System: Self-Assessment of Compliance with the Core Principles for Systemically Important Payment Systems,” December 2001, available at <http://www.federalreserve.gov/paymentsystems/coreprinciples/default.htm>

³⁰ Littlewood, Shain and Company; “Float: A Non-Earning Asset,” Association of Reserve City Bankers; May, 1982; p iv.

³¹ *American Banker*, “Fed Acts to Discourage Daylight Overdrafting,” September 25, 1980; p. 4

Peak overdraft levels now regularly approach \$100 billion every day, under current measurement techniques. Daylight overdraft pricing did not arrive until 1994, however, and in a manner and at levels significantly at odds with the requirements stipulated by the MCA.

In the late 1970s debates leading up to the MCA, concerns were expressed about the cost to the taxpayer arising from the subsidy associated with unpriced Federal Reserve float in Congressional testimony and statements by members of Congress.³² The manner in which float led to higher costs was identified along the following lines:

- The extension of float leads to higher reserve levels, given that payor accounts are credited prior to collection from payees, and consequently a lower demand for reserves in the federal funds market for a given level of payments activity.
- Higher reserve levels and lower reserve demand lead to a lower federal funds rate than otherwise would exist, and a need to have open market operations sell securities to draw down reserves and raise the federal funds rate.
- As a result, Federal Reserve System holdings of securities fall, and securities income returned to the U.S. Treasury falls below what would otherwise exist without the extension of unpriced float.
- If the Federal Reserve were to stop extending float credit, the demand for reserves would increase, leading to a higher federal funds rate and a consequent need to buy securities (and return greater interest income to the Treasury) for a given state of monetary policy.

A nearly identical line of argument can be drawn regarding the effects of extending of intraday credit:

- Intraday credit extension dampens the demand for reserves as money; a given level of payments volume may be accomplished on a lower reserve base.
- The reduced demand for reserves leads to a lower fed funds rate than otherwise would exist, and a need for open market operations to sell securities to draw down reserves and raise the federal funds rate.
- Federal Reserve System holdings of securities fall below what would otherwise be the case, and the income returned to the U.S. Treasury similarly falls below what would otherwise exist absent the extension of intraday credit.

³² see also Comptroller General, General Accounting Office; “The Federal Reserve Should Move Faster to Eliminate Subsidy of Check Clearing Operations;” GGD-82-22; May 7, 1982. ‘Float is ultimately a cost to the taxpayers because it prematurely increases member bank reserves at the expense of Federal Reserve interest income.’

- Just as in the case of float, if the Federal Reserve were to stop extending daylight credit, the demand for reserves would increase, leading to a higher federal funds rate and a consequent need to buy securities (and return greater interest income to the Treasury) for a given state of monetary policy.

Does the Monetary Control Act indeed require Federal Reserve Banks to recover the cost of specified priced services? Section 11A does not include the word ‘recover,’ and section 11(A)(C)(3) only states that prices ‘shall be established’ on the basis of costs. Strictly to the letter of the law, then, it might appear that prices *established* on the basis of all direct and indirect costs could still meet the dictates of the law, even if they were so established to explicitly *under-recover* all direct and indirect costs. However, the ‘full recovery’ interpretation has long been commonly held, and the text of the law also requires that pricing be based on principles published by the Board of Governors.³³ These principles do not include the word ‘recover’ either, but references to the MCA in the annual reports of the Board of Governors, testimony to Congress, and articles in Reserve Bank publications all indicate that the Board of Governors interprets the law -- and has established its principles -- as calling for full cost recovery, not simply an intent that revenues for major service categories simply be associated with relevant costs. The principles published by the Board³⁴ include the following provision:

The Board intends that fees be set so that revenues for major service categories match costs (inclusive of a private-sector markup). During the initial start-up period, however, new operational requirements and variations in volume may temporarily change unit costs for some service categories. It is the System's intention to match revenues and costs as soon as possible, and the Board will monitor the System's progress in meeting this goal by reviewing regular reports submitted by the Reserve Banks. **If, in the interest of providing an adequate level of services nationwide, the Board determines to authorize a fee schedule for a service below cost, it will announce its decision.”** (emphasis added).

There has been no such announcement of an intent to price Fedwire funds transfers below the cost of producing the service; indeed, the Federal Reserve continually reports that it indeed recovers the cost of providing funds transfer services. As a result, the statute and the pricing principles seem to mean ‘full cost recovery,’ even if they, or the Federal Reserve Act, do not include the words ‘recover’ or ‘recovery.’

Are Other Costs Improperly Excluded?

³³ See Appendix II.

³⁴ See Appendix II.

At the Federal Reserve Bank of Chicago's Bank Structure Conference in May 2001, the opening paragraph of Chairman Greenspan's speech included the following:

“Deposit insurance, the discount window, and access to Fedwire and daylight overdrafts provide depository institutions and financial market participants with safety, liquidity, and solvency unheard of in previous years. These benefits, however, have come with a cost: distortions in the price signals that are used to allocate resources, induced excessive risk-taking, and, to limit the resultant moral hazard, greater government supervision and regulation.³⁵”

The Chairman explicitly labeled 'access to Fedwire and daylight overdrafts' as elements of the safety net, and proceeded to identify 'distortion in price signals' and 'greater government supervision and regulation' as some associated costs. Identifying 'distortions in the price signals that are used to allocate resources' as a cost of 'access to Fedwire and daylight overdrafts' seems to explicitly acknowledge that discretionary Federal Reserve pricing policy works at odds with the intent of the Monetary Control Act's priced services provisions. In turn, Chairman Greenspan's citation of 'greater government supervision and regulation' as a consequence of payment system guarantees opens the door to consider whether other costs are improperly excluded while pricing Fedwire. In 1997 testimony on financial modernization legislation,³⁶ the Chairman similarly stated:

... Fedwire and a very small number of private clearinghouses are arguably the linchpin of the international system of payments that relies on the dollar as the major international currency for trade and finance. Disruptions and disturbances in the U.S. payment system thus can easily have global implications. ... Indeed, it is in the cauldron of the payment and settlement systems, where decisions involving large sums must be made quickly, that all of the risks and uncertainties associated with problems at a single participant become focused as participants seek to protect themselves from uncertainty. Better solvent than sorry, they might well decide, and refuse to honor a payment request. Observing that, others might follow suit. And that is how crises often begin.

Limiting, if not avoiding, such disruptions and ensuring the continued operation of the payment system requires broad and in-depth knowledge of banking and markets, as well as detailed

³⁵ Alan Greenspan, Chairman, Board of Governors, Federal Reserve System; “The Financial Safety Net;” remarks at the 37th Annual Conference on Bank Structure and Competition of the Federal Reserve Bank of Chicago; May 10, 2001.

³⁶ Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System; The Financial Services Competition Act of 1997; testimony before the Subcommittee on Finance and Hazardous Materials of the Committee on Commerce, U.S. House of Representatives; July 17, 1997

knowledge and authority with respect to the payment and settlement arrangements and their linkages to banking operations. This type of insight and authority--as well as knowledge about the behavior of key participants--cannot be created on an ad hoc basis. It requires broad and sustained involvement in both the payment infrastructure and the operation of the banking system. *Supervisory authority over the major bank participants is a necessary element.* (emphasis added)

These observations invite active consideration whether a share of the total costs of supervision and regulation should be considered as part of the costs of Fedwire, and included in the price of a Fedwire transfer.³⁷ Allocating these costs precisely would not be easy, but *none* of these costs are currently allocated to priced services in the Federal Reserve's cost accounting procedures.

The Federal Reserve Board of Governors' website includes a short section titled 'About the Payment System Risk Policy.'³⁸ The first paragraph states:

In 1985 the Board of Governors of the Federal Reserve System adopted a policy to reduce the risks that large-dollar payment systems present to the Federal Reserve Banks, to the banking system, and to other sectors of the economy. The Federal Reserve's Payments System Risk (PSR) Policy includes a program to control the use of intraday Federal Reserve credit, commonly referred to as 'daylight credit' or 'daylight overdrafts.'

...

Large dollar payment systems are explicitly acknowledged to pose risk to the Federal Reserve banks in this statement, and credit extended as a consequence of providing such services is the vehicle identified as the way the risk is produced. If this identification is accurate, then recovery of the costs of credit is also required. The costs of credit include not only the risk-free and risky components of interest on high level of daylight credit, but the costs incurred while working to manage and minimize the risks of a given level of credit exposure. These risks differ with respect to transfers among individual institutions, as well as the risks arising from transfers dedicated to achieving or enabling final settlement for 'competing,' 'private' large-dollar payment systems.

³⁷ From the perspective of a depository institution, supervision and regulation provide benefits as well as costs. Of particular relevance to the immediate topic, in the Federal Reserve Board of Governors *Commercial Bank Examination Manual*, the "Examination Objectives" for supervisory personnel examining the "Due from Banks" account includes an explicit charge 'to evaluate the credit quality of banks with whom demand accounts are maintained.'

³⁸ Board of Governors, Federal Reserve System; "About the Payment System Risk Policy;" <http://www.federalreserve.gov/paymentsystems/psr/about.htm>

One reason offered for not incorporating risk of loss to Federal Reserve banks in ‘wire transfer services’ has been that accounting losses incurred have historically been close to zero. However, the Federal Reserve Act calls for pricing to recover ‘costs actually incurred,’ not ‘actual losses.’ In one element of this distinction, it is useful to note that many people hold, and pay a price for, fire insurance, even though they have never had a fire at their house. Even if losses under finality have indeed been low, any such low risk levels have been achieved with the unpriced expenditures arising from costly resources expended for supervision, regulation, and payment system risk management. If a significant loss did indeed occur, one argument has it that the Federal Reserve could price it in services provided to survivors after the fact, and thereby meet cost recovery requirements in the long run. This is not a common private sector practice, however, and costs incurred while “self-insuring” (an odd phrase, for a publicly-established central bank) would have to be reflected in a cost calculation, perhaps in assessing the cost of capital. In turn, in light of the legal requirement that prices be set to recover all direct and indirect costs in the long run, should Congress and the Federal Reserve now consider including not only current intraday interest expense, but an additional element to incorporate the interest foregone over the past 20 years, together with past expenditures on related supervision, regulation, and payment system risk management activities?

Is a Subsidy Always Bad?

Fedwire has been identified in Congressional testimony as a source of subsidy. A subsidy is not necessarily a bad thing. If a given market is deemed to be operating below an optimal level of output, a subsidy may help provide an incentive for the market to reach a socially optimal equilibrium -- if a central planner can actually find such a thing and determine the right path to go about getting there. A darker and/or more realistic view arises from the ‘public choice’ school of economics, where the pursuit of self-interest in regulatory markets is assumed to lead policy formation in the interest of the regulated, or other well-organized and closely-interested groups, at the expense of the public.

Whatever one’s view about the value of subsidies *per se*, or in the payment system specifically, subsidizing Fedwire operation is simply not a matter for Federal Reserve discretion. Since 1980, the law has been interpreted by the Board of Governors to forbid any such subsidy – even as Congress has received testimony over the past several years from the Board of Governors identifying Fedwire as a source of subsidy.

Technological advances since 1980 have increased the efficiency of electronic payments significantly. Low user costs and overall economic efficiency are not one and the same, however, if subsidized government services constitute a significant source of low user cost, and the subsidy is obtained in spite of law and testimony to the contrary. As the technical efficiency of electronic payments has increased and the use of electronic services has grown, so have the means of continuously assessing and pricing intraday and even intra-minute credit extensions.

The Federal Reserve should include costs of credit previously excluded from the cost base for wire transfer services, and price the services to recover those costs. These previously excluded costs include a risk-free and risky component to interest on intraday credit extensions, as well as those costs relating to monitoring, managing, and reducing Federal Reserve risks associated with extending intraday credit. Fee drivers for Fedwire funds transfers should include all direct and indirect operating and monitoring expenses, as well as the dollar volume of the transfer coupled with the interest expense incurred while offering finality. Today, a sender pays a fee of 31 cents, at most, for a Fedwire transfer, no matter the size or risk of the transfer, which can range up to \$1 billion. In light of the extent of credit extended as a part of the service, this price is far too low.

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Appendix I: Section 11A, Federal Reserve Act

SECTION 11A--Pricing of Services

(a) Not later than the first day of the sixth month after the date of enactment of the Monetary Control Act of 1980, the Board shall publish for public comment a set of pricing principles in accordance with this section and a proposed schedule of fees based upon those principles for Federal Reserve bank services to depository institutions, and not later than the first day of the eighteenth month after the date of enactment of the Monetary Control Act of 1980, the Board shall begin to put into effect a schedule of fees for such services which is based on those principles.

(b) The services which shall be covered by the schedule of fees under subsection (a) are--

- (1) currency and coin services;
- (2) check clearing and collection services;
- (3) wire transfer services;
- (4) automated clearinghouse services;
- (5) settlement services;
- (6) securities safekeeping services;
- (7) Federal Reserve float; and
- (8) any new services which the Federal Reserve System offers, including but not limited to payment services to effectuate the electronic transfer of funds.

(c) The schedule of fees prescribed pursuant to this section shall be based on the following principles:

- (1) All Federal Reserve bank services covered by the fee schedule shall be priced explicitly.
- (2) All Federal Reserve bank services covered by the fee schedule shall be available to nonmember depository institutions and such services shall be priced at the same fee schedule applicable to member banks, except that nonmembers shall be subject to any other terms, including a requirement of balances sufficient for clearing purposes, that the Board may determine are applicable to member banks.
- (3) Over the long run, fees shall be established on the basis of all direct and indirect costs actually incurred in providing the Federal Reserve services priced, including interest on items credited prior to actual collection, overhead, and an allocation of imputed costs which takes into

account the taxes that would have been paid and the return on capital that would have been provided had the services been furnished by a private business firm, except that the pricing principles shall give due regard to competitive factors and the provision of an adequate level of such services nationwide.

(4) Interest on items credited prior to collection shall be charged at the current rate applicable in the market for Federal funds.

(d) The Board shall require reductions in the operating budgets of the Federal Reserve banks commensurate with any actual or projected decline in the volume of services to be provided by such banks. The full amount of any savings so realized shall be paid into the United States Treasury.

(e) All depository institutions, as defined in section 19(b)(1) (12 U.S.C. 461(b)(1)), may receive for deposit and as deposits any evidences of transaction accounts, as defined by section 19(b)(1) (12 U.S.C. 461(b)(1)) from other depository institutions, as defined in section 19(b)(1) (12 U.S.C. 461(b)(1)) or from any office of any Federal Reserve bank without regard to any Federal or State law restricting the number or the physical location or locations of such depository institutions.

Appendix II: Principles for Pricing Payments Services under the Federal Reserve Act (Board of Governors, Federal Reserve System)

The Board has adopted the following pricing principles, which incorporate both the specific statutory requirements of the Monetary Control Act and provisions intended to fulfill its legislative intent:

1. All Federal Reserve Bank services covered by the fee schedule shall be priced explicitly.
2. All Federal Reserve Bank services covered by the fee schedule shall be available to nonmember depository institutions, and such services shall be priced at the same fee schedule applicable to member banks, except that nonmembers shall be subject to any other terms, including a requirement of balances sufficient for clearing purposes, that the Board may determine are applicable to member banks.
3. Over the long run, fees shall be established on the basis of all direct and indirect costs actually incurred in providing the Federal Reserve services priced, including interest on items credited prior to actual collection, overhead, and an allocation of imputed costs that takes into account the taxes that would have been paid and the return on capital that would have been provided had the services been furnished by a private business firm, except that the pricing principles shall give due regard to competitive factors and the provision of an adequate level of such services nationwide.
4. Interest on items credited prior to collection shall be charged at the current rate applicable in the market for federal funds.
5. The Board intends that fees be set so that revenues for major service categories match costs (inclusive of a private-sector markup). During the initial start-up period, however, new operational requirements and variations in volume may temporarily change unit costs for some service categories. It is the System's intention to match revenues and costs as soon as possible, and the Board will monitor the System's progress in meeting this goal by reviewing regular reports submitted by the Reserve Banks. **If, in the interest of providing an adequate level of services nationwide, the Board determines to authorize a fee schedule for a service below cost, it will announce its decision.** (emphasis added)
6. Service arrangements and related fee schedules shall be responsive to the changing needs for services in particular markets. Advance notice will be given for changes in fees and significant changes in service arrangements to permit orderly adjustments by users and providers of similar services.
7. The structure of fees and service arrangements may be designed both to improve the efficient utilization of Federal Reserve services and to reflect desirable longer-run improvements in the nation's payment system. Public comment will be requested when changes in fees and

service arrangements are proposed that would have significant longer-run effects on the nation's payment system.

Appendix III: Relevant references to Fedwire in testimony and speeches by members of the Federal Reserve Board of Governors over the past few years

Testimony of Chairman Alan Greenspan

Modernization of the financial system

Before the Subcommittee on Financial Institutions and Consumer Credit of the Committee on Banking and Financial Services, U.S. House of Representatives

February 13, 1997

... Safety Net Implications. In this century the Congress has delegated the use of the sovereign credit--the power to create money and borrow unlimited funds at the lowest possible rate--to support the banking system. It has done so indirectly as a consequence of deposit insurance, Federal Reserve discount window access, and final riskless settlement of payment system transactions.

... In the process, it has profoundly altered the risks and returns in banking. Sovereign credit guarantees have significantly reduced the amount of capital that banks and other depositories need to hold, since creditors demand less of a buffer to protect themselves from the failure of institutions that are the beneficiaries of such guarantees. In different language, these entities have been able to operate with a much higher degree of leverage--that is, to obtain more of their funds from other than the owners of the organization--than virtually all other financial institutions. At the same time, depositories have been able to take greater risk in their portfolios than would otherwise be the case, because private creditors--depositors and others--are less affected by the illiquidity of, or losses on, the banks' portfolios. The end result has been a higher risk-adjusted rate of return on depository institution equity.

Moreover, the enhanced ability to take risk has contributed to economic growth, while the discount window and deposit insurance have contributed to our macroeconomic stability. But all good things have their price. The use of the sovereign credit in banking--even its potential use--creates a moral hazard that distorts the incentives for banks: the banks determine the level of risk-taking and receive the gains therefrom, but do not bear the full costs of that risk. The remainder of the risk is transferred to the government. This then creates the necessity for the government to limit the degree of risk it absorbs by writing rules under which banks operate, and imposing on these entities supervision by its agents--the banking regulators--to assure adherence to these rules. The experience in the 1980s with many insured thrift institutions showed just how

dangerous lax enforcement of supervisory rules can be. In the end, some hard lessons were learned, many of which were legislated into the FDIC Improvement Act of 1991.

The subsidy to the banking and other depositories created by the use of the unsurpassable sovereign credit rating of the United States government is an undesirable but unavoidable consequence of creating a safety net.

Testimony of Chairman Alan Greenspan

Supervision of banking organizations

Before the Subcommittee on Capital Markets, Securities and Government

Sponsored Enterprises of the Committee on Banking and Financial Services,

U.S. House of Representatives

March 19, 1997

... Subsidiaries, Subsidies, and Safety Nets.

The members of this Subcommittee are, I think, aware of the Board's concerns that the safety net constructed for banks inherently contains a subsidy, that conducting new activities in subsidiaries of banks will inadvertently extend that subsidy, and that extension of any subsidy is undesirable. The Subcommittee recently heard testimony that there is no net subsidy and, therefore, the authorization of nonbank activities in bank subsidiaries would neither inadvertently extend this undesirable side effect of the safety net nor reduce the importance of the holding company as a consequence of the increased incentives to shift activities from the holding company to the bank.

Mr. Chairman, I would like briefly to comment on these latter views.

Subsidy values—net or gross—vary from bank to bank; riskier banks clearly get a larger subsidy from the safety net than safer banks. In addition, the value of the subsidy varies over time; in good times, markets incorporate a low risk premium and when markets turn weak, financial asset holders demand to be compensated by higher yields for holding claims on riskier entities. It is at this time that subsidy values are the most noticeable. What was it worth in the late 1980s and early 1990s for a bank with a troubled loan portfolio to have deposit liabilities guaranteed by the FDIC, to be assured that it could turn illiquid to liquid assets at once through the Federal Reserve discount window, and to tell its customers that payment transfers would be settled on a riskless Federal Reserve Bank? For many, it was worth not basis points but percentage points. For some, it meant the difference between survival and failure.

It is argued by some that the cost of regulation exceeds the subsidy. I have no doubt that the costs of regulation are large, too large in my judgment. But no bank has turned in its charter

in order to operate without the cost of banking regulation, which would require that it operate also without deposit insurance or access to the discount window or payments system.

Testimony of Chairman Alan Greenspan

H.R. 10, the Financial Services Competitiveness Act of 1997

Before the Committee on Banking and Financial Services, U.S. House of Representatives

May 22, 1997

... Our concern is the transference of the safety net subsidy directly to those activities that the bill would authorize for subsidiaries of banks. ... But there is another risk: the risk of transference to nonbank affiliates of the subsidy implicit in the federal safety net—deposit insurance, the discount window, and access to the payments system—with the attendant moral hazard.

Testimony of Chairman Alan Greenspan

The Financial Services Competition Act of 1997

Before the Subcommittee on Finance and Hazardous Materials of the Committee on Commerce, U.S. House of Representatives

July 17, 1997

Mr. Chairman, a number of observers have argued that there is no subsidy associated with the federal safety net for depository institutions--deposit insurance, and direct access to the Federal Reserve's discount window and payment system guarantees. The Board strongly rejects this view. In saying this, the Board fully agrees that mandated government supervision and regulation impose significant costs on banks, costs which, in many cases, can and should be reduced. But given that these costs cannot be avoided by a bank, no rational bank manager would ignore the opportunity to take advantage of the lower cost of funds, or equivalently, the lower capital ratio, that access to the safety net demonstrably provides. While it is true that the safety net does increase the possibility of loss to taxpayers, a far larger public policy concern is that it provides banks with a government-sanctioned competitive advantage over nonbank firms. In the Board's view, unless Congress explicitly desires to expand access to the safety net and tilt the competitive playing field further, a core component of any prudent financial modernization strategy should be to minimize the chances that safety net subsidies will be expanded into new activities and beyond the confines of insured depository institutions.

Testimony of Governor Laurence H. Meyer

S. 1405, the Financial Regulatory Relief and Economic Efficiency Act of 1997

Before the Committee on Banking, Housing and Urban Affairs, U.S. Senate

March 10, 1998

... Daylight Overdrafts. Section 118 would require the Federal Reserve to make intraday credit, in the form of daylight overdrafts, available to the Federal Home Loan Banks. As it did in the last Congress, the Board strongly opposes this proposal, which would provide special treatment to the Federal Home Loan Banks over other GSEs and other lending institutions as well as overall depository institutions with access to central bank credit.

Section 118 would represent the first time that Congress has mandated the availability and price of central bank credit. As such, this bill would serve as precedent for other GSEs to meet intraday liquidity needs with Federal Reserve credit at an administered interest rate instead of with the proceeds of obligations issued in the markets at competitive rates as contemplated by their statutory funding schemes.

Testimony of Chairman Alan Greenspan

H.R. 10, the Financial Services Act of 1998

Before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate

June 17, 1998

... as a society we have made the choice to create a safety net for depository institutions, not only to protect the public's deposits, but also to minimize the impact of adverse developments in financial markets on our economy. Although we have clearly been successful in doing so, the safety net has predictably created a moral hazard: the banks determine the level of risk-taking and receive the gains therefrom, but do not bear the full cost of that risk; the remainder is borne by the government. ...

The safety net subsidy is difficult to measure and several observers have doubted its existence net of regulatory costs. Subsidy values--net or gross--vary from bank to bank; riskier banks clearly get a larger subsidy from the safety net than safer banks. In addition, the value of the subsidy varies over time. In good times, such as now, markets demand a low risk premium and it is difficult to discern the safety net subsidy. But, when markets turn weak, financial asset holders demand to be compensated by higher yields for holding claims on riskier entities. It is at this

time that subsidy values are the most noticeable, as spreads open up between bank and nonbank claims. What was it worth in the late 1980s and early 1990s for a bank with a troubled loan portfolio to have deposit liabilities guaranteed by the FDIC, to be assured that it could turn illiquid to liquid assets at once through the Federal Reserve discount window, and to tell its customers that payment transfers would be settled on a riskless Federal Reserve Bank? For many, it was worth not basis points but percentage points. For some, it meant the difference between survival and failure.

Testimony of Chairman Alan Greenspan

H.R. 10 and the need for financial reform

**Before the Committee on Banking and Financial Services, U.S. House of Representatives
February 11, 1999**

Another twenty-first century issue is whether we should move beyond affiliations among financial service providers and allow the full integration of banking and commerce. As technology increasingly blurs the distinction among various financial products, it is already beginning to blur the distinctions between predominately commercial and banking firms. We cannot rule out whether sometime in our future full integration may occur, potentially with increased efficiencies. But how the underlying subsidies of deposit insurance, discount window access, and guaranteed final settlement through Fedwire, are folded into a commercial firm, should the latter purchase a bank, is crucially important to the systemic stability of our financial system.

Testimony of Chairman Alan Greenspan

Need for financial modernization

**Before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate
February 23, 1999**

A twenty-first century issue that has become a part of the financial modernization debate is whether we should move beyond affiliations among financial service providers and allow the full integration of banking and commerce. As technology increasingly blurs the distinction among various financial products, it is already beginning to blur the distinctions between predominately commercial and banking firms. But how the underlying subsidies of deposit insurance, discount window access, and guaranteed final settlement through Fedwire, are folded into a commercial firm, should the latter affiliate with a bank, is crucially important to the systemic stability of our financial system. It seems to us wise to move first toward the integration of banking, insurance, and securities, and employ the lessons we learn from that important step before we consider

whether and under what conditions it would be desirable to move to the second stage of the full integration of commerce and banking.

Testimony of Chairman Alan Greenspan

H.R. 10 and financial modernization

**Before the Subcommittee on Finance and Hazardous Materials, Committee on Commerce,
U.S. House of Representatives**

April 28, 1999

Subsidies. Government guarantees of the banking system--deposit insurance and direct access to the Fed's discount window and payments system guarantees--provide banks with a lower average cost of capital than would otherwise be the case. This subsidized cost of capital is achieved through lower market risk premiums on both insured and uninsured debt, and through lower capital than would be required by the market if there were no government guarantees. The lower cost of funding gives banks a distinct competitive advantage over nonbank financial competitors, and permits them to take greater risks than they could otherwise.

Testimony of Governor Laurence H. Meyer

Federal deposit insurance reform

**Before the Subcommittee on Financial Institutions and Consumer Credit of the
Committee on Financial Services, U.S. House of Representatives**

July 26, 2001

... Deposit insurance, combined with other components of our banking safety net--the Federal Reserve's discount window and payment system guarantees--and with enhanced macroeconomic stability resulting from monetary and fiscal policies, has meant that periods of financial stress are no longer characterized by depositor runs on banks and thrifts. Quite the opposite: Asset holders now seek out deposits as safe havens when they have strong doubts about other financial assets.

Deposit insurance and other components of the safety net also enable banks and thrifts to attract more resources than would otherwise be the case. In short, insured banks and thrifts receive a subsidy in the form of a government guarantee that allows them both to attract deposits at lower interest rates than would be required without deposit insurance and to take more risk without the fear of losing their deposit funding.

... To be sure, uninsured deposits are more expensive than insured deposits, and bank costs would decline if their currently uninsured liabilities received a government guarantee. But that is a different matter, and raises the issue of a subsidy in its starkest terms.

Remarks by Governor Susan M. Phillips

At the Annual Washington Conference of the Institute of International Bankers

March 3, 1997

Think how obvious the subsidy would be if it involved another industry -- for example, if the government guaranteed that commercial paper holders of the automobile industry would be repaid in full. To complete the other strands of the safety net -- the discount window and the payment system -- let us assume that automobile companies experiencing liquidity problems could borrow from the Federal Reserve for the purpose of repaying commercial paper, and that they are able to achieve risk-free settlement. The effects of extending such a subsidy are not difficult to imagine. Automakers would find it very easy to place their commercial paper, and would be able to pay a below-market yield. And, to the extent the hypothetical allowed, I would not be surprised to see automakers use this funding advantage to enter other businesses.

Remarks by Governor Laurence H. Meyer

At the Seventh Annual Conference on Financial Structure, Annandale-on-Hudson, New

York, April 10, 1997

Safety Net Subsidies and Organizational Form

Beyond regulatory structure, financial modernization--the linkage of banks to a wider range of financial activities--also raises organizational structure issues. This issue is closely linked to the subsidy provided by the federal safety net, a much discussed topic in recent weeks. By the safety net I mean deposit insurance, and access to both the Federal Reserve discount window and the Fed's payment system

Remarks by Chairman Alan Greenspan

G-7 economic summit meeting

At the Spring Meeting of the Institute of International Finance, Washington, D.C.

April 29, 1997

The presence of the safety net, which inevitably imparts a subsidy to banks, has created a disconnect between risk-taking by banks and banks' cost of capital. It is this disconnect that has made necessary a degree of supervision and regulation that would not be necessary without the existence of the safety net. That is, regulators are compelled to act as a surrogate for market discipline since the market signals that usually accompany excessive risk-taking are substantially muted, and because the prices to banks of government deposit guarantees, or of access to the safety net more generally, do not, and probably cannot, vary sufficiently with risk to mimic market prices. The problems that arise from the retarding of the pressures of market discipline have led us increasingly to accept supervision and regulation that endeavors to simulate the

market responses that would occur if there were no safety net, but without giving up its protections.

Remarks by Governor Laurence H. Meyer

At the Bank Administration Institute, Finance and Accounting Management Conference, Washington, D.C.

June 9, 1998

Banks have a lower cost of funds than other financial entities because of the safety net--the name we give the collection of deposit insurance, access to the discount window, and access to the payments system. This subsidy is provided by the government in order to buy systemic stability, but it has a cost: increased risk taking by banks, reduced market discipline, and consequently the need for more onerous bank supervision in order to balance the resultant moral hazard.

Remarks by Chairman Alan Greenspan

The implications of technological changes

At the Charlotte Chamber of Commerce, Charlotte, North Carolina, July 10, 1998

For the Federal Reserve, the basic focus of such a redesign has been the implications of expanded powers, that we fully support, on the special benefits now provided to banks by the federal safety net. In order to help assure stability in the banking system, our society has chosen to provide banks with deposit insurance, access to the discount window, and payment system guarantees. These privileges, while succeeding in enhancing the stability of the system, have also provided a subsidy to banks in the form of a lower cost of funds. Access to the sovereign credit of the United States has meant that bank creditors feel less need to be concerned about the risk-taking of their bank. This requires that the government oversee the risk exposure of banks through supervision and regulation, that is, for government to substitute itself for the market discipline faced by those financial businesses that do not have access to the federal safety net.

Remarks by Governor Laurence H. Meyer

At the Financial Institutions Center, University of Tennessee, Knoxville, Tennessee

September 18, 1998

Today, largely because of deposit insurance and the Federal Reserve discount window, flights to currency are not a real concern in the United States. But liquidity and solvency problems at large banks and other financial institutions can create systemic concerns, and while banks are no longer "special" the large banks do play a central role in our financial system. Indeed, the stability of the electronic, large dollar payments system, which moves trillions of dollars a day and in which banks play a pivotal role, is critical in limiting systemic risk. Other potential

pressure points, in all of which banks play a key role, include the liquidity of securities, financial derivatives, and interbank funding markets.

Our very success at virtually eliminating the risk of bank runs in the United States has led to a second major reason for supervising and regulating banks. Deposit insurance, the discount window, and Federal Reserve payment system guarantees--the very things that have eliminated bank runs--create what is called a "safety net" for banks. The existence of this safety net gives the government a direct stake in keeping bank risks under control, just as a private insurance company has a stake in controlling the risks of policyholders. Because deposit insurance and other parts of the safety net can never be fully and accurately priced, it is necessary for us to monitor and sometimes to act to control bank risks in order to protect the potential call on taxpayer funds.

... Banks have a lower cost of funds than other financial entities because of the safety net. As I discussed earlier, this federal safety net, and the subsidy that goes along with it, are provided by the government in order to buy systemic stability. But it has a cost: increased risk taking by banks, reduced market discipline, and consequently the need for more onerous bank supervision in order to balance the resultant moral hazard. The last thing we should want is to extend that subsidy over a wider range of activities, which is, I believe, exactly what would happen if bank op subs could engage in wider nonbank financial activities.

Remarks by Governor Laurence H. Meyer

At the 1999 F. Hodge O'Neal Corporate & Securities Law Symposium, Washington

University School of Law, St. Louis, Missouri

March 12, 1999

There are three ways you can absolutely assure that the safety net does not get spread any wider. The first is to eliminate the safety net--just do away with deposit insurance, the discount window, Fedwire, and bank supervision. The second is to do away with the need to have the safety net by doing away with banks as we know them: create replacements called narrow banks, banks that, by law, hold only very safe assets making all but a rudimentary safety net redundant. The third is just to leave banks out of financial modernization: prohibit other financial institutions from acquiring a bank and prohibit banks from acquiring other financial institutions. By even raising these options I am showing my background and my limited term in the city by the Potomac because none of these are, in my judgement and the judgement of the political pros, acceptable to the body politic. They have not been, are not, and will not be on the political agenda.

Remarks by Chairman Alan Greenspan

The financial safety net

At the 37th Annual Conference on Bank Structure and Competition of the Federal

Reserve Bank of Chicago, Chicago, Illinois

May 10, 2001

The safety net, along with our improved understanding of how to use monetary and fiscal policies, has played a critical role in this country in eliminating bank runs, in assuaging financial crises, and arguably in reducing the number and amplitude of economic contractions in the past sixty years. Deposit insurance, the discount window, and access to Fedwire and daylight overdrafts provide depository institutions and financial market participants with safety, liquidity, and solvency unheard of in previous years. These benefits, however, have come with a cost: distortions in the price signals that are used to allocate resources, induced excessive risk-taking, and, to limit the resultant moral hazard, greater government supervision and regulation. Clearly, the latter carries with it attendant inefficiencies and limits on innovation

Appendix IV: Are Funds Transfers ‘Items?’

Funds transfers resulting in sender overdrafts fall into the ‘items credited prior to actual collection’ category, and have so fallen since 1980. This interpretation might seem to be challenged by a citation of current version of Article 4 of the Uniform Commercial Code, which defines ‘item’ while specifically stating that ‘the term does not include a payment order governed by Article 4A.’³⁹ In turn, Article 4A (“Funds Transfers Through Fedwire”) does not define or refer to payment ‘items.’ At the federal regulatory level, Subpart B of Federal Reserve Regulation J (“Funds Transfers Through Fedwire”) incorporates Article 4A of the UCC by reference, and similarly excludes the phrase ‘item’ from its provisions. This might seem to give rise to an argument that ‘items’ do not refer to funds transfers through Fedwire and that ‘interest on items credited prior to collection’ may not call for applying interest to prices charged for Fedwire funds transfers accomplished with the use of Federal Reserve credit.

However, the term ‘item’ has not always been absent from Regulation J, nor has it always been missing from Federal Reserve bank operating circulars governing funds transfers. Regulation J has existed in various forms since 1920. For many years, it was titled “Check Clearing and Collection.” In the 1970s, as electronic funds transfers gained greater headway, Regulation J was progressively revised and retitled. In a 1977 amendment, the regulation was retitled “Collection of Checks and Other Items and Transfers of Funds.” This prompts a question whether funds transfers were being placed outside the “item” category. Describing the authority and scope of the regulation, however, Section 210.50 of Subpart B of the Regulation as amended in 1977 stated that the Board of Governors ‘has promulgated this Subpart governing the handling by Federal Reserve Banks of transfer items and requests for transfer items.’ In turn, in the definitions (Section 210.52), the term ‘item’ appeared and was defined to mean ‘any instrument for the payment of money, issued, transmitted, or received in accordance with this Subpart,’ with a ‘transfer item’ defined as an ‘item issued by a transferor (other than a Federal Reserve Bank) to a Federal Reserve Bank for debit to an account of the transferor at such Federal Reserve Bank and for credit to a transferee named in such item.’ In addition, Federal Reserve Operating Circular #8 (titled “Wire Transfers of Funds”) similarly referred to ‘transfer items’ in the late 1970s.

At the time the MCA was enacted, then, funds transfers were depicted as items in Federal Reserve Regulation J as well as operating circulars drafted to govern the contractual relationship between the Reserve Banks and individual depository institutions. Today, neither Subpart B of Regulation J (“Funds Transfers Through Fedwire”) nor Operating Circular #6 (“Funds Transfers Through Fedwire”) define or use the term ‘item.’

Funds transfers were ‘items’ during the late 1970s, but that doesn’t imply they necessarily fell directly into the ‘items credited prior to collection’ language of the MCA at the time it was

³⁹ Article 4, Uniform Commercial Code, Section 4-104(a)(9)

enacted. If ‘collection’ refers solely to check collection, it still might be remotely contended that Fedwire funds transfers fall outside of the category of ‘items credited prior to collection.’ Yet Regulation J and the operating circulars that existed in the late 1970s did, indeed, refer to ‘collection’ as a process relating to funds transfers. For example, the Federal Reserve Bank of Chicago’s Operating Circular #8 (“Wire Transfers of Funds”) included the following relevant language at the time the MCA was enacted:

Issuance of Transfer Items and Requests for Transfer Items: Subject to the applicable provisions of this circular, transferors maintaining or using accounts with an office of this bank may issue transfer items or requests for transfer items to that office in accordance with the provisions of this operating circular: **Provided, That each transferor, other than a Federal Reserve bank, using our wire transfer of funds facilities shall maintain with this bank a balance of actually and finally collected funds in accordance with Section 210.57(a) of Subpart B [of Regulation J];** and *Provided further,* That this bank may in its discretion refuse to act upon a transfer item at any time when this bank has reason to believe that the balance in the account maintained or used by such transferor is not sufficient to cover such item. **(emphasis added)**

After the MCA was enacted in March 1980, Operating Circular #8 was amended in November 1980. The new circular was still titled “Wire Transfers of Funds.” Language added to the first provision specifically stated that the circular was “binding on transferors, transferees, beneficiaries, and other parties interested in an item.” In turn, the above-quoted provision including the ‘actually and finally collected’ language was revised slightly, but retained the thrust of that language in the following form:

A transferor maintaining or using an account with an office of this Bank may send a transfer item to or make a transfer request of that office. We may refuse to act on, or may impose conditions to acting on, a transfer item or request if we have reason to believe that the balance in the transferor’s account is not sufficient to cover the item. **A transferor, other than a Reserve Bank, that uses our wire transfer of funds facilities shall maintain with us a balance of actually and finally collected funds in accordance with Section 210.31(a) of Regulation J** (emphasis added).

This operating circular was released at the same time as a revision to Subpart B of Regulation J. The reference to Section 210.31(a) of Regulation J was referring to the following language:

1. A transferor (other than a Reserve Bank) may send a transfer item to, or make a transfer request of, its Reserve Bank. A Reserve Bank may refuse to act on, or may impose conditions to its acting on, a transfer item or request if it has reason to believe that the balance in the transferor’s account is not sufficient to cover the item or

request. **The transferor shall arrange to have in its account, at the end of its Reserve Bank's banking day, a balance of actually and finally collected funds sufficient to cover the amounts of transfer items debited to the account during that day ...** (emphasis added).

Prior to the enactment of the MCA, this section of Regulation J read (as Section 210.57(a)) as follows:

5. Any transferor, other than a Federal Reserve Bank, may, in accordance with the provisions of this Subpart and the operating circulars of its Federal Reserve Bank, issue and send transfer items to that Federal Reserve Bank or request to transferees for their own use or the use of beneficiaries: ***Provided, That, at the end of a Federal Reserve Bank's banking day, a transferor shall maintain or cause to be maintained a balance of actually and finally collected funds sufficient to cover the amounts of transfer items debited to such account at the Federal Reserve Bank during that day ...***(emphasis added).

At the time the MCA was enacted, then, Fedwire transfers resulting in sender overdrafts fell into the 'items credited prior to actual collection' category. A wire transfer effected with central bank credit represented an 'item,' an item that was 'credited,' and an item that was credited 'prior to actual collection.' Subsequent regulatory redefinition of an 'item' has not extinguished the duties established at the time the MCA was enacted.

Importantly, however, even if the Federal Reserve were to interpret transfers accomplished with intraday credit as falling outside the 'items credited prior to actual collection' language, by specifying that the category of things called 'all direct and indirect costs' includes something called 'interest on items credited prior to collection,' the law requires consideration whether things closely similar to 'interest on items credited prior to collection' *also* fit into the broader category of 'all direct and indirect costs.' The similarity between 'items credited prior to collection' and funds transfers effected with daylight overdraft credit from a cost standpoint leads to a conclusion that prices for payments services should indeed incorporate interest on credit extended during a day. The Federal Reserve Board's Payment System Risk policy has only called for overdraft pricing since 1994, however, while overdraft fee collections are excluded from the cost recovery calculation for priced services.

Appendix V: Testimony from William Anderson, Director, GAO, 1983

... The [MCA] also stated that float was to be priced at the Federal funds rate. Float is the interest-free advance that occurs when the Federal Reserve credits the reserve account of a depositing bank pursuant to published availability schedules before the funds are actually collected from the reserve account of the paying bank. ... evaluating compliance with the pricing provisions of the act is not a simple matter due to the amount of discretion the act gave to the Federal Reserve System. Thus, the Act required the Federal Reserve System to begin pricing its services by September 1, 1981 – the first day of the 18th month after the act was passed – but it did not say when all services had to be priced. ... failure to cover full costs has important implications for taxpayers, who must make up for revenue shortfalls that result from reduced Federal Reserve payments to the Treasury – and for private sector institutions that compete or would like to compete with the Federal Reserve System.

... although float pricing affects the earnings that the Federal Reserve System turns over to the Treasury, the impact of float on the private banking system needs to be evaluated in terms of how monetary policy is being implemented. The interest-free advance that float represents accounts at the present time for about 8 percent of the reserve balances of banks and other institutions. This advance does not, however, increase total reserve balances of all banks added together when the Federal Reserve conducts monetary policy, as it has during the recent period, by trying to restrict reserve account balances to certain ranges.

To achieve a given reserve target, the Federal Reserve must offset an increase in float – which increases reserves – by the sale of securities, which decreases reserves. The institution that receives float benefits financially from it because it obtains a larger share of a given total of bank reserves.

Reducing float by operational improvements or by being less generous in granting availability allows the Federal Reserve to increase its earnings because the system has to buy more securities – which pay interest to the Federal Reserve – to offset the decline in float. Pricing float or eliminating it are thus alternative ways of increasing Federal Reserve revenues ... A private sector institution that credits a customer's account with funds it has not yet collected must finance the float that this creates as a cost of doing business. Until it has priced or eliminated float, the Federal Reserve will be offering a service whose quality is not fully reflected in the prices charged.

William J. Anderson, Director, General Accounting Office, testimony before Subcommittee on Domestic Monetary Policy of the Committee on Banking, Finance and Urban Affairs and the Subcommittee on Commerce, Consumer, and Monetary Affairs of the Committee on Government Operations; House of Representatives, U.S. Congress; 98th Congress, 1st Session; June 15-16, 1983