

THE RELEVANCE OF FEDERAL RESERVE SURPLUS CAPITAL
FOR CURRENT POLICY

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INTRODUCTION

Surplus capital is employed in commercial enterprises as a reserve for contingencies such as absorbing losses or meeting expenses and dividends when earnings are low. The Fed has employed its surplus capital in a similar manner. Prior to the 2007-09 credit turmoil, the most important contingencies were exchange rate revaluations of foreign-currency-denominated securities that the Fed held for its own account. Since these have been marked to market on a regular basis, an appreciation of the foreign exchange value of the dollar would reduce the dollar value of the Fed's foreign-security holdings.² The Fed has carried its dollar-denominated securities at historical cost. But surplus has been used to absorb any realized losses on sales of domestic securities.

While the Fed's holdings of foreign securities have increased relatively little since the early 1990s, the Fed's balance sheet has undergone an unprecedented metamorphosis in the wake of the 2007-09 credit turmoil. Most importantly i) the Fed has grown its balance sheet from around \$900 billion in June 2007 to around \$4 trillion today, ii) the Fed has greatly lengthened the maturity of its portfolio of Treasuries and mortgage backed securities, and iii) the Fed finances around \$2.6 trillion of its assets with bank reserve balances that currently pay 0.25% interest.

² The Federal Reserve began revaluing its foreign currency holdings on a daily basis rather than a monthly basis in July 2001.

The Fed expanded its balance sheet aggressively, and greatly extended the maturity of its assets in order to supplement its zero interest rate policy with additional monetary stimulus. The purpose of this essay is not to judge the advisability of the Fed's expansive maturity mismatch, but to reconsider the role of the Fed's surplus capital account in light of the Fed's unprecedented balance sheet policy. As explained below, the Fed has long had discretion over its surplus capital and the amounts it transferred to the Treasury. The Fed should use that discretion today to suspend transfers and build up surplus capital against the unprecedented interest rate risk on its balance sheet. If the federal debt ceiling were modified to exclude Treasury securities held by the Fed until the Fed can normalize its balance sheet, the accumulation of surplus capital would be costless for taxpayers and the Treasury. However, the build-up of surplus capital against interest rate risk on the Fed balance sheet would better position the Fed to sustain its 2% inflation objective.

BRIEF HISTORY OF FED SURPLUS CAPITAL³

The Federal Reserve Act (FRA) requires that each member bank subscribe to the capital stock of the Fed an amount equal to 6% of the capital and surplus of the member bank. As a member bank's capital and surplus changes, its holding of stock must be adjusted. Only one-half of subscribed capital has been paid-in.

³ The historical treatment of surplus is discussed together with the history of Fed payments to the Treasury in Goodfriend, Marvin and Monica Hargraves, "A Historical Assessment of the Rationales and Functions of Reserve Requirements." Federal Reserve Bank of Richmond *Economic Review* March/April 1983), 3-21.

Initially, the FRA authorized the Fed to build up a surplus by retaining interest earned from its asset portfolio until surplus reached 40% of paid-in capital of member banks. After surplus reached 40%, net earnings were to be transferred to the Treasury as a “franchise tax.” In 1919 the FRA was amended to allow surplus to be raised to 100% of subscribed capital (twice paid-in capital.) The Banking Act of 1933 transferred half of Fed surplus, \$139 million, to capitalize the newly established Federal Deposit Insurance Corporation. In return, Congress abolished the franchise tax and allowed the Fed to retain all subsequent net earnings to rebuild surplus.

The present basis for Fed-Treasury transfers was set in 1947 as part of what would become the 1951 Fed-Treasury Accord freeing the Fed from its World War II interest rate peg. As part of the Accord, the Federal Reserve Board voluntarily resumed Fed-Treasury transfers as “interest on Federal Reserve notes,” transferring 90% of net earnings to the Treasury as part of the agreement to float the Treasury bill rate. Fed surplus capital continued to accumulate until 1959, when under threat of legislative action, the Fed appealed to the principle that Congress had established in 1919 and voluntarily announced its decision to transfer to the Treasury 100% of net earnings after maintaining surplus at subscribed capital, and to transfer the excess immediately.

Growth of member bank assets and liabilities yielded a 35% increase in subscribed Fed capital from 1959 to 1964 at a time of large Federal budget deficits. Under renewed threat of legislative action, the Fed announced voluntarily in 1964 an immediate 50% reduction in surplus to the level of paid-in capital. With minor exceptions, the Fed has transferred to the Treasury 100% of net earnings after maintaining surplus at paid-in capital to this day.⁴

FEDERAL RESERVE DISCRETION OVER SURPLUS CAPITAL AND FED-TREASURY TRANSFERS

The 2012 *Annual Report* of the Board of Governors of the Federal Reserve System makes clear that it is the Federal Reserve Act that requires member banks to pay in capital to the Federal Reserve Banks.⁵ But it is the Board of Governors that mandates Reserve Banks to maintain surplus equal to paid-in capital; and it is the Board of Governors that mandates the Reserve Banks to transfer excess earnings to the Treasury after providing for the cost of operations (including the payment of interest on reserves), the payment of dividends on member bank stock, and the reservation of an amount necessary to equate surplus with capital paid-in.

⁴ The 1993 Deficit Reduction Act contained a provision to transfer \$213 million from the Fed surplus account to help meet Federal Budget targets in fiscal years 1997-98 but the Fed was free to restore surplus to paid-in capital shortly after fiscal 1998 by withholding of transfers to the Treasury. The 2000 consolidated Appropriations Act directed the Fed to transfer \$3.752 billion during fiscal 2000. Again the Fed was permitted to retain earnings thereafter and shortly restored surplus to paid-in capital by withholding transfers to the Treasury.

⁵ 2012 *Annual Report* of the Board of Governors of the Federal Reserve System, page 360.

Furthermore, the Board of Governors allows for the suspension of remittances to the Treasury if excess earnings are insufficient to meet the abovementioned costs.

In effect, the Board of Governors asserts in the *Annual Report* independent authority over the size of the Fed's surplus capital account and the transfer of excess earnings to the Treasury. Two reports issued by the United States General Accounting Office (GAO) in 1996 and 2002, respectively, reinforce and elaborate the Board of Governors' disposition toward surplus capital and Fed-Treasury transfers.⁶ For instance, the GAO (1996) report states that

...Currently, and in the past, the levels of the surplus account have been discretionary because the requirement to have the surplus account equal to paid-in capital has been a matter of Federal Reserve policy; it was not required by law...Congress may wish to determine whether these surplus accounts are necessary and, if so, set permanently in law an appropriate amount for these accounts. [GAO (1996), pp. 67-8]

Despite the GAO (1996) report's suggestion, Congress has declined to set in law requirements for Fed surplus and transfers, and continues to allow the Fed full latitude to determine independently its policy toward surplus and transfers to the Treasury. Again, the GAO (2002) report repeats that

The amount and timing of the Reserve Banks' payments to the Treasury are not regulated by law. The Federal Reserve Board has discretion over the amounts the Federal Reserve System transfers to the Treasury. [GAO (2002), page 1]

The GAO (2002) report conveys the Fed's disposition toward surplus capital

⁶ GAO (1996) *Federal Reserve System: Current and Future Challenges Require Systemwide Attention*, June 1996, and GAO (2002) *Federal Reserve System: The Surplus Account*, September 2002.

The *Financial Accounting Manual for the Federal Reserve Banks* says that the primary purpose of the surplus account is to provide capital to supplement paid-in capital for use in the event of loss. According to Board officials, the capital surplus reduces the probability that total Reserve Bank capital would be wiped out by a loss as a result of dollar appreciation, sales of Treasury securities below par value, losses associated with discount window lending...[GAO (2002), page 7]

Furthermore, according to GAO (2002), Federal Reserve Board officials noted

...it can be argued that a central bank, including the Federal Reserve System, may not need to hold capital to absorb losses, mainly because a central bank can create additional domestic currency to meet any obligation denominated in that currency. Federal Reserve Board officials acknowledged that determining the appropriate level of a central bank's capital account is difficult...[GAO (2002), page 7]

Nevertheless, according to GAO (2002), Federal Reserve Board officials also noted that

...it could be argued that maintaining capital, including the surplus account, provides an assurance of a central bank's strength and stability to investors and foreign holders of U.S. currency...[and] that the demand for U.S. currency [abroad] conceivably could fall if a large loss wiped out the Federal Reserve's capital accounts, giving the misimpression that the Federal Reserve was insolvent. [GAO (2002), page 7]

Finally and importantly, the Federal Reserve emphasizes in its comment letter on GAO (2002) that

...while the benefits of the surplus account can be debated, it is costless to the taxpayer and the Treasury...[GAO (2002), page 24]

And the Congressional Budget Office is reported in GAO (2002) to agree that

...the transfer of surplus funds from the Federal Reserve to the Treasury has no import for the fiscal status of the Federal government...Where the funds reside has no economic significance. Hence, any transfer of the Federal Reserve surplus fund to the Treasury would have no effect on national savings, economic growth, or income. [emphasis in original] [GAO (2002), page 17]

The argument can be understood as follows. If the Fed sells a security and transfers the proceeds of the sale to the Treasury, the Treasury loses the interest on that security, interest it would have received from the Fed. It is as if the Treasury issued a new security to borrow the funds in the first place. Hence, the reduction of Fed surplus yields no new revenue for the government. Conversely, retaining earnings that would have been transferred deprives the Treasury of no revenue because the acquisition of a security for the Fed's capital account and the transfer of that new interest is as if the Treasury retires an outstanding security that it had borrowed against.

THE ROLE OF FEDERAL RESERVE SURPLUS CAPITAL

Currently, the Fed pays its excess interest earnings to the Treasury weekly. Starting from zero, the Fed accrues payments each week as so-called undistributed net income which it remits to the Treasury with a week lag. As an accounting matter, undistributed net income has not been allowed to go negative. For example, whenever a revaluation of foreign security holdings or a realized loss on the domestic portfolio causes it to do so, assets have been moved from the surplus account to bring undistributed net income back up to zero. In the following weeks, no transfers are made to the Treasury until the Fed's assets are replenished and surplus is restored to the level of paid-in capital.

Surplus, then, serves as a buffer helping to protect paid-in capital and to insure that the Fed's securities cover its liabilities. Eliminating even the entire Fed paid-in capital and surplus, which currently stands at around \$50 billion would reduce the Fed's portfolio of securities by far less than one-tenth of 1%, so it would certainly not impair the Fed's ability to conduct policy. The elimination of surplus, however, would undermine the principle that the Fed should retain possession of the interest earning assets it acquires through the creation of bank reserves and currency.

The Fed should maintain control of such assets—and supplement its assets with surplus capital commensurate with the scale and risk of its balance sheet—for four reasons. First, according to the logic above, the government would gain no new resources by forcing the Fed to sell assets and transfer the proceeds to the Treasury. Second, the Fed should be assured of retaining assets acquired as a result of monetary accommodation against deflation, so that the Fed can be confident of i) having sufficient assets to sell to reverse the process and drain reserves to sustain low inflation, or ii) having sufficient interest earnings on retained assets to pay whatever interest on its reserves is needed to raise market interest rates against inflation. Third, the Fed has long asserted—and Congress has acquiesced to—the Fed's independence to maintain surplus capital sufficient to assure the effectiveness of monetary policy. Fourth, there is no reason for the Fed to

compromise whatsoever the independent power to maintain its 2% inflation objective by economizing on surplus capital.

THE FEDERAL RESERVE SHOULD BUILD UP SURPLUS CAPITAL IN SUPPORT OF CURRENT STABILIZATION POLICY

The Fed's \$4 trillion balance sheet and near zero interest rate policy stance have achieved about all that can be expected of monetary policy at the moment. However, the Fed must be poised to tighten financial conditions on short notice if circumstances warrant or even to expand its balance sheet further if conditions weaken substantially again. To be fully flexible at the zero interest bound the Fed must position itself to raise interest rates promptly against inflation if necessary, even after possibly having to expand its balance sheet further against deflation if that becomes necessary. Credibility against deflation is tied to credibility against inflation and vice-versa.

In order to strengthen its policy flexibility in both directions, the Fed must be prepared credibly to exit the zero bound against inflation without first shrinking its balance sheet. To do that, the Fed must secure the financial resources to "finance" nearly \$3 trillion of its assets by paying interest on reserves at a market rate until the assets mature or are sold. In part, the Fed may be deterred from selling long-term securities so as not to realize capital losses.

However, carrying long-term securities on its balance sheet subjects the Fed to *negative cash flow risk*. A negative cash flow problem could arise if the Fed is either insufficiently preemptive against deflation or insufficiently preemptive against inflation. If the Fed is too slow against deflation, buying long term securities at high prices and very low interest, then its interest earnings could be insufficient to pay interest on reserves subsequently. Alternatively, if the Fed is insufficiently preemptive against inflation, a negative cash flow problem could arise if subsequently the Fed has to raise interest on reserves above interest earned on its assets. Cash flow problems are more likely if Fed actions allow inflation expectations to become unanchored in either direction.

Around one-quarter of Fed assets are currently financed with \$1 trillion of non-interest bearing currency. Taking currency into account, and assuming 2.5% average current interest earnings on Fed assets, Fed interest earnings could finance at most 3.3% interest on the Fed's \$3 trillion of reserves. Plausibly, interest on reserves might have to go much higher as the economy gathers strength. So currency does not provide as much of a financial cushion as one would like.

The Fed could hedge interest payments on reserves by holding short-term Treasury bills; but such hedging would shorten the average maturity of the Fed's assets and defeat the purpose of its asset acquisition policy. Alternatively, the Fed could borrow from money markets via reverse repurchase agreements, for

example, if need be to finance interest payments on reserves. But the Fed would pay interest on reverse repurchases akin to interest on reserves; and doing so would build up interest-paying reverse repurchases without acquiring assets whose earnings could finance interest on the reverse repurchases. Moreover, reverse repurchases would carry “roll-over risk”—in times of turmoil the market might prefer to keep its cash than lend to the Fed. Furthermore, borrowing by the Fed to finance interest on reserves would drive up credit costs for private borrowers.

Ultimately, the Fed could *create reserves* to pay higher interest on reserves in order to act more aggressively against inflation. But the Fed would acquire no assets against such reserve creation whose earnings could finance interest on the freshly-created reserves. Finally and most importantly, the credibility of the Fed’s anti-inflation policy could be jeopardized if the Fed, even temporarily, were to create money in the form of bank reserves, to pay interest on reserves, in order to stabilize the purchasing power of money.

As explained above, the Fed has long had discretion over its surplus capital and the amounts it transfers to the Treasury. Moreover, we saw that net interest income retained by the Fed for its surplus account deprives the fiscal authorities of no resources. Therefore, the Fed should use its discretion immediately to suspend transfers and build up surplus capital against the unprecedented interest rate risk on

its balance sheet to guard against negative cash flow problems that could degrade the effectiveness of monetary policy.

Fed remittances to the Treasury have been running around \$80 billion per year since 2010 as the Fed expanded its balance sheet to \$4 trillion and earned the spread, generally in excess of 2%, between long-term interest and the ¼% interest paid on reserves. By retaining its enormous net interest income over the next few years, the Fed could build surplus capital far above paid-in capital, which has only risen from \$16 billion to \$28 billion since 2007. An additional \$100 billion of surplus capital held in liquid Treasury bills could finance 3.3% interest on \$3 trillion of reserves for a year. The Fed should take advantage of the opportunity to substantially improve its surplus capital cushion and mitigate its negative cash flow risk by immediately suspending transfers to the Treasury.

Only the *federal debt ceiling* would make a suspension of transfers costly for the Treasury. The diversion of transfers from the Treasury to Fed surplus capital would force the sale of more debt by the Treasury. The Fed would buy Treasury debt in the open market for its enlarged surplus account and return the accrued interest to the Treasury. The enlarged Fed surplus account would thereby be costless for the Treasury—except that Treasuries held by the Fed would still count as outstanding public debt under the federal debt ceiling. So the sale of new debt by the Treasury to accommodate the build-up of Fed surplus capital would use up

debt capacity under the federal debt ceiling. To facilitate the build-up of surplus capital on the Fed balance sheet and strengthen the Fed's capacity to sustain its 2% inflation objective, Treasury securities acquired by the Fed should be exempt from the federal debt ceiling until such time as the Fed is able to normalize its balance sheet.