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# ARE MMMFS MONEY?

JEFF HAYMOND

**T**wo decades have passed since the Federal Reserve instituted the “monetarist” experiment. This attempt to implement Fed policy based on quantity theory prescriptions was flawed almost from the beginning,<sup>1</sup> with one monetary aggregate after another being tried and eventually discarded. The Lucas critique was in effect, and, with changing technological innovation, exactly what was “money” became more and more difficult to define. The Fed thereafter resumed targeting the Fed Funds Rate and de-emphasized monetary aggregates. Monetarism as a theory was widely discredited, at least in a practical sense for public policy.

Changing monetary instruments and institutions may affect other theories as well. The central core of the Austrian business cycle theory (ABCT) suggests that monetary expansion is responsible for the boom-and-bust business cycle (Mises 1981, pp. 403–04). But what measure do we use to determine whether we have a monetary expansion? Differing Austrian examinations of business cycles have used slightly different definitions of money, for each investigation,<sup>2</sup> but central to each is the role of fiduciary media, which traditionally are expanded when the central bank increases reserves. Previous investigations have limited the fiduciary media in question to checkable deposits (and notes when legal for banks to issue). But as institutions change and financial

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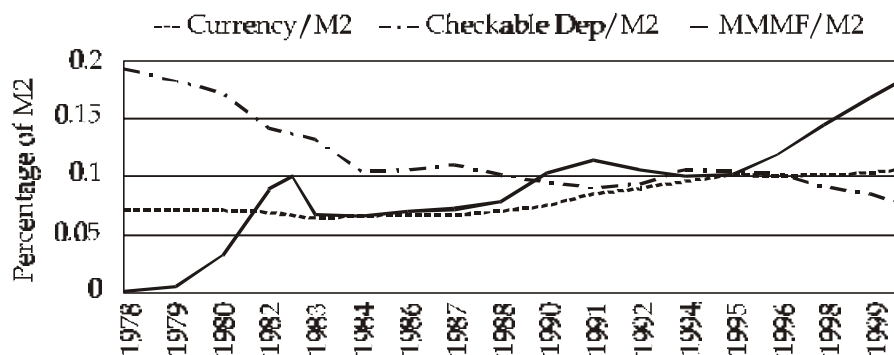
<sup>1</sup>Milton Friedman claimed that the policy followed was anything but monetarist, as monthly money supply figures were highly variable—exactly opposite of a monetarist approach. The Fed, for its part, acknowledged the lack of precision in hitting targets, but claimed it was doing its best, given changing money demand functions.

<sup>2</sup>Rothbard was widely criticized (wrongly, in my view) for including the cash surrender value of life insurance policies in his definition of money in *America’s Great Depression*. Recently, Hughes (1997) simply used M2 in his analysis.

innovation increases, is this the only form of fiduciary media that Austrians should consider in their views on business cycles? This article will specifically examine the question of whether money market mutual funds (MMMFs) are fiduciary media in a Misesian sense. If MMMFs are considered money, for instance, who creates them? Are there any direct limitations on their creation via Federal Reserve action? If not, how are these monies affected by Fed policy? And if MMMFs are money, are there nonbank sources of inflationary credit that can initiate a business cycle? This article will argue that, in the economically relevant way, MMMFs are money, and while nonbanks cannot *initiate* a credit expansion, their ability to expand their balance sheets should be a relevant factor for Austrian analysis.

For Austrians as well as most economists, there is little debate as to the “moneyness” of fiat currency or checkable deposits; yet the question of MMMFs offers the possibility of a fruitful debate. Consequently, while this article will not assess whether each particular asset is money, the principles developed will apply when assessing any monetary instrument. The other main reason for focusing on MMMFs, and the nonbank intermediaries that issue them is simply the tremendous increase in the number of MMMFs, in the 1990s. This is contrary to the approach that White (1989, p. 207) took: he examined traveler’s checks in-depth, even despite their lack of practical importance to the money supply (to illustrate the principles involved). Conversely, we will look at MMMFs precisely because of their growing importance to the broader money supplies. Figure 1 below shows the growth of MMMFs as a percentage of the broader money supply M2, contrasted with a reduction of checkable deposits as a percentage of M2.

Figure 1  
Percentage of M2



Source: Federal Reserve

### WHAT ARE MONEY MARKET MUTUAL FUNDS?

While most readers are familiar with MMMFs, it may be useful to review what they are and how they operate. An MMMF is an equity fund that typically purchases highly liquid, high-quality, short-term debt instruments such as T-Bills or commercial paper. A purchaser will transfer money balances to the fund, which will purchase shares of the existing portfolio with a nominal par value of one dollar. If the value of the portfolio changes, the number of shares within an individual's account will change to maintain the par value per share. MMMFs do not have any established reserve requirements, but typically hold a small amount on deposit with banks in the form of checkable deposits for adverse clearings. Since they hold highly liquid assets, if their outflows exceed their inflows, they can easily sell assets to replenish their cash reserves with low transaction costs. In fact, MMMFs must sell assets in exchange for demand deposits in this case, since that form is required by the ultimate recipient of an MMMF check.<sup>3</sup> Most MMMFs issue checkbooks and allow withdrawals, although they typically must exceed a certain dollar amount. Purchasers sacrifice some liquidity (they can write checks only above a certain amount), but have continuous access to their money. Checks drawn against MMMFs are generally accepted anywhere demand deposit checks are accepted. Subjectively, this asset appears to be a present good to those participants. Although the MMMFs are not debt claims, but equity claims, the possibility of failure to redeem is extremely remote, so much so that in practice MMMFs are usually seen simply as another form of cash.<sup>4</sup> MMMFs are an increasing part of individuals' portfolios, while reducing the requirement for narrower versions of money. MMMFs are not insured by the federal government, however, but most are insured by the Securities Investor Protection Corporation (SIPC) up to \$500,000 per customer, but this does not ensure redeemability at par.<sup>5</sup>

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<sup>3</sup>I thank an anonymous referee for pointing out the need to be more clear in this matter. It is certainly true that the assets held in the MMMF are not money directly, but must be converted into a narrower form in some market. The crucial point, however, is that this conversion is virtually invisible to the market participants who write checks against their MMMF accounts, as well as to those who accept them. This also legitimately implies that, according to the same logic, as the referee points out—other funds that issue check-writing privileges could be considered “money.” I would agree when and if market participants subjectively assess them as they do MMMFs—but, given their less certain redemption at par and low relative usage, this does not seem germane just yet.

<sup>4</sup>To my knowledge, there has only been one failure of an MMMF, and it paid something over ninety cents to the dollar.

<sup>5</sup>See <http://www.sipc.org/faq/content/faq1.shtml>, however it explicitly states “An investment in mutual fund shares, including money market mutual fund shares, is not protected or guaranteed by SIPC against loss in value.”

### ARE MONEY MARKET MUTUAL FUNDS MONEY?

This issue has recently become a point of debate between two financial market participants<sup>6</sup> who both claim to analyze money from an Austrian perspective. Frank Shostak (former chief economist for Ord Minnett), claims that MMMFs are not money, for to create shares in an MMMF, someone must first surrender real money (2000a). Accordingly, creation of MMMFs is a credit transaction, not a money creation. Doug Noland (financial market strategist for David Tice and Associates) asserts just the opposite—that growth in MMMFs is the outward manifestation of a dangerous credit bubble. He argues that MMMFs possess the widow’s curse, and can infinitely multiply deposits as the financial system requires. (While outside the traditional academic mainstream, we should seriously consider market participants’ claims since they put more on the line than their academic reputations.)

### WHY THE CONCERN OVER MONEY?

While seemingly obvious, the answer to this question will help us understand which assets should be considered money. Central to our review will be an application to MMMFs of concepts from Mises’s *The Theory of Money and Credit*. Mises addressed this question as follows:

In attempting to draw a line of division between money and those objects that outwardly resemble it, we only need to bear in mind the goal of our investigation. The present discussion aims at tracing the laws that determine the exchange ratio between money and other economic goods. This and nothing else is the task of the economic theory of money. (1981, p. 65)

We therefore ask what is money because of the way certain assets and claims influence its price relative to all other goods. As will be discussed below, Mises shows how some assets that are not money proper but substitutes for it can influence the price level. These same money substitutes, while disturbing the objective exchange value of money, also disturb relative prices of nonmonetary goods as the introduction of new “money” necessarily affects the prices of some goods prior to others. These relative price disturbances send false signals to economic actors concerning consumer preferences, leading to malinvestments. As the introduction of the new money works its way through the economy, all prices will readjust to reflect true consumer preferences, revealing the bad investments—the boom is thus followed by a bust. This boom-and-bust business cycle caused by monetary policy is the second reason for being

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<sup>6</sup>See Noland (2000b). Many of his commentaries for the first quarter 2000 deal with this subject, and are archived at [www.prudentbear.com](http://www.prudentbear.com).

concerned with money—the inflation we were originally concerned with is also a source of economic instability.

While acknowledging the technical and legal requirements for money, the important consideration for Mises was the actual economic effect of an instrument. As he notes, “it is not the formal technical aspect of a transaction but its economic character that determines its significance for us” (1981, p. 303). Further, “It is a mistake to deal with economic problems according to legal criteria” (p. 73). He also stresses that individual subjective valuations will determine the moneyness of an object—an individual treating and accepting an object as money carries more weight than some technical justification.

[I]t is not the dead letter of the law so much as actual business practice that counts, so that some things function as fiduciary media, although they cannot be regarded as promises to pay money from the juristic point of view, because they nevertheless are in fact honored as such by somebody or the other. (1981, p. 311)

While disagreeing with this paper’s conclusion regarding MMMFs, Salerno, Rothbard, and White share the belief that an asset’s function determines its moneyness. Salerno applies this logic to savings deposits:

The objection that claims on dollars held in savings deposits typically do not circulate in exchange . . . while not unimportant for some purposes of analysis, is here beside the point. The essential, economic point is that some or all of the dollars accumulated in, e.g., passbook savings accounts are effectively withdrawable on demand by depositors in the form of spendable cash. (1987, p. 3)

Salerno credits this “commonsense” approach to Melchior Palyi, who stated “In their own minds, money is what people consider as purchasing power, available at once or shortly. People’s ‘liquidity’ status and financial disposition are not affected by juristic subtleties and technicalities.”<sup>7</sup> Rothbard uses this approach to illustrate the moneyness of checkable deposits.

It is important to recognize that demand deposits are not automatically part of the money supply by virtue of their very existence; they continue as equivalent to money only so long as the subjective estimates of the sellers of goods on the market *think* that they are so equivalent and accept them as such in exchange. (1978, p. 145)

Rothbard also says that it is not a question of whether an asset can actually deliver on its promises (i.e., fractional reserve banking ensures that not all

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<sup>7</sup>Quoted in Salerno (1987, p. 3).

claims for cash can be simultaneously satisfied), but the issue depends on the subjective estimates of the agents.

Deposits are not *in fact* all redeemable in cash in a system of fractional reserve banking; but so long as individuals on the market *think* that they are so redeemable, they continue to function as part of the money supply. (1978, p. 145)

White also endorses this view. He (1989, p. 203) states, “From a subjectivist perspective, it is clear that the defining set of attributes of money is to be sought in the role that money plays (and alone plays) in the plans of individual economic agents.” Salerno’s “commonsense” approach will often be applied in subsequent sections as we argue that, in fact, MMMFs act as money in today’s economy—both from an inflationary and a malinvestment perspective.

#### ARGUMENTS AGAINST MMMFS BEING MONEY

The debate over what constitutes money is not new, and there are probably as many different opinions as there are economists. Many of the important arguments over economic policy have arisen from disagreements over money—in one case, the Currency School was rejected because of its failure to understand that checkable deposits were as much money as banknotes (Mises 1981, pp. 407–11). In some cases, the debate is over no opinion: Alan Greenspan recently suggested that the Fed does not know what money is, so its control thereof is impossible.<sup>8</sup> In contrast, Rothbard, Salerno, and White have addressed this question from an Austrian perspective, offering methodology to characterize money.<sup>9</sup> Yet all are in agreement that MMMFs are *not* money. As White notes (and Salerno references in agreement),

the item that the check-writing MMMF customer relinquishes (ownership of shares in a portfolio of assets) is not what the payee accepts (ownership of an inside-money claim to bank reserves). Because the actual MMMF shares are not what the second party accepts (or intends to accept), MMMF shares cannot be considered a generally accepted medium of exchange; hence they are not money. (1989, p. 213)

The first objection, therefore, is,

1. Technical considerations dictate that MMMFs cannot be money. One cannot call an asset generally accepted if what one party accepts is not what the other party relinquishes.

<sup>8</sup>Greenspan made this point during his Humphrey–Hawkins testimony of February 2000, when Congressman Ron Paul challenged him on the need to restrict money growth. I am unable to document this directly, although Shostak discusses it in “The System of the Money Supply” (2000b).

<sup>9</sup>See Rothbard (1978, pp. 143–56), Salerno (1987, pp. 1–6), and White (1989, pp. 203–14).

Is this true? And, if it is, does this technical consideration overcome the practical functionality of MMMFs as an economic instrument? The previous quotations from Austrians, *including* White, suggest just the opposite. It is true that what one person offers in exchange is not what the other party wishes to receive. But if an individual accepts a draft on a MMMF and deposits it with his bank, which credits his account after it clears, this process is *exactly* the same as that for a checkable deposit. For economic purposes, they are identical. If there were differences in probability of payoff, a businesswoman might cast a more suspicious eye toward an MMMF draft. But, given their record, this is not a practical consideration.

When Osborne reviewed the question of what money is, he came to a narrow conclusion: only the monetary base can be considered money (1985, pp. 1–15). He founded this claim on three propositions: first, that money must enjoy routine circulation (i.e., be the medium of exchange). Second, that there is simultaneity of payments—“money is that, the entire stock of which can be spent at once.” Third, that there be finality of payment: “money is that which pays for goods or services without creating a further debt for the payer” (p. 1). This may be an appropriate methodology when narrowly defining money, but even Osborne doubts it. He points out his own regrettable implications as follows,

Our present analysis forces us to identify private bank notes as money even though they are economically indistinguishable from intangible balances. This unacceptable result proves the incompleteness of our definition of money. (1985, p. 14)

Osborne’s definition raises a second objection where MMMFs are concerned.

2. Only the narrow monetary base meets the Yeager–Shackle requirements of routine circulation, simultaneity, and finality.

For our purposes, though, this addresses only half the problem. Money is of interest precisely because of its potential mischief in exchange (by its changing objective exchange value because of inflation or deflation) and possible business-cycle implications. But these considerations are not unique to narrow money; one must also consider the state of money substitutes in an economy—especially fiduciary media, which Mises refers to as circulation credit. Mises introduced the ABCT by noting the ability of fiduciary media expansion to initiate monetary disequilibrium. Thus, even if the objection is correct, it is inapplicable to traditional Austrian concerns over money.

Shostak offers a different critique of MMMFs as money, he makes the distinction between MMMFs as credit transactions and as credit creation. As he states,



Let's say Joe deposits \$1 million with a money-market mutual fund. A mortgage supplier borrows the \$1 million from the mutual fund and lends it to Jane, who in turn uses the \$1 million to buy a house. The recipient of the \$1 million, i.e., the seller of the house, deposits the money with a money-market mutual fund.

Has the economy's money supply increased by \$1 million? Not at all. What we have here is a credit transaction, money transferred from a lender to a borrower. Credit always involves the purchase of a future good by the creditor in exchange for a present good.

Thus when Joe makes a loan to Jane, he temporarily transfers his ownership over the money. Similarly, when Joe invests in a stock or a money-market mutual fund, he gives permission to these institutions to invest his money. He has temporarily transferred the ownership of money to these institutions.

Since a credit transaction is a transfer of saved funds from a lender to a borrower it does not result in the creation of new money, but simply new credit. This credit, however, is not harmful, for it is fully backed by saved money. (Shostak 2000a, p. 1)

3. A third objection, then, runs as follows: the purchase of MMMFs constitutes a credit transaction, not credit creation.

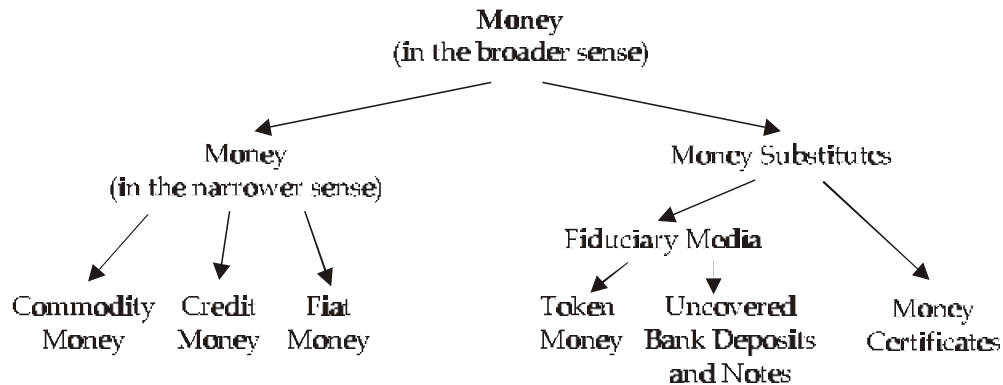
But in Shostak's example, has Joe really given up control of his money? If so, has he agreed to give it up for the period of time for which it is loaned out? Certainly not. If Joe sees an asset he wants to purchase, say a new car, he will not be the least concerned with whether his original money is loaned out somewhere else: he will simply open his MMMF checkbook and write the check. Were this liquidity not available, he likely would never have deposited his money with an MMMF. Once again, technical considerations do not outweigh the practical use of this instrument. Shostak would be correct *if Joe were truly surrendering control over this present good*. But he has no such intent. If he did, he would purchase the mortgage directly and obtain the higher yield. He is willing to accept the lower yield for the right to enjoy ownership of what he correctly considers a present good. In addition, this discussion doesn't address the possibility of MMMF multiple deposit expansion, which is reviewed below.

4. MMMFs are equity claims, not debt, so they can't represent any given amount.

Once again, this is a technical consideration (discussed more thoroughly below), which, while true, does not have practical significance. If, historically, there were more instances of MMMF failures that resulted in losses, this would be more relevant. But, given the low failure rate, it seems reasonable for people to believe that the shares they redeem will be at par.

### WHY MMMFS SHOULD BE CONSIDERED MONEY

In Ludwig von Mises's *The Theory of Money and Credit*, Appendix B offered the following taxonomy to describe money.



Clearly, MMMFs do not fall under the category of money in the narrower sense. But are they a type of fiduciary media? For Mises, money substitutes are “those objects that are employed like money in commerce but consist in perfectly secure and immediately convertible claims to money” (1981, p. 65). But as noted previously, these characteristics are subjectively evaluated. Consumers today seem to find a money-market fund as secure as a check, as do producers. No one could argue that they are perfectly secure, but one can make the case that they are as secure as checks, which are readily acknowledged as money.<sup>10</sup> Mises expands on this definition of perfectly safe, noting that “(money substitutes) are . . . absolutely safe as far as human foresight goes” (1981, p. 66). This seems a slightly less stringent requirement than “perfectly secure,” and one that MMMFs have demonstrated throughout their history. They are also immediately convertible (subject to the minimum withdrawal amount) when used as a check. MMMFs thus seem to meet Mises’s two requirements of money substitutes practically, if not juristically. As Mises again, states,

A depositor of a sum of money who acquires in exchange for it a claim convertible into money at any time which will perform exactly the same service for him as the sum it refers to, has exchanged no present good for a future good. The claim that he has acquired by his deposit is also a present good for him. The depositing of the money in no way means that

<sup>10</sup>It is true that checks are guaranteed by the FDIC whereas MMMFs are not, but in today’s environment of “too big to fail” and government bailout of any financial flop that threatens systemic crisis, is it reasonable to think the government would step in the case of a large MMMF failure?

he has renounced immediate disposal over the utility that it commands. (1981, p. 301)

If this is true, what type of money substitutes are MMMFs? They seem to fall under the category of fiduciary media, money substitutes not fully backed by money for redemption purposes (p. 155). Clearly MMMFs are not fully backed, and, in fact, lack reserve requirements though they do keep certain reserves available to meet redemption requirements.<sup>11</sup>

As noted above, Mises considered the objective exchange value of money to be the central economic problem of money. To what extent—if any—do MMMFs change the objective value of money? For Mises (1963, p. 411), this is determined by the interaction of supply and demand for money, broadly defined (i.e., including money substitutes). MMMFs affect this money relation in two ways: they reduce the demand for narrow money (currency and demand deposits, as reflected in Figure 1) and they increase the supply of broad money. Both of these factors tend to reduce the objective exchange value of money, *ceteris paribus*. As Mises states,

The cash balance held by an individual need by no means consist entirely of money. If secure claims to money, payable on demand, are employed commercially as substitutes for money, being tendered and accepted in place of money, then individuals' stores of money can be entirely or partly replaced by a corresponding store of these substitutes. (1981, p. 154)

As argued above, all of these features are subjectively inherent to MMMFs, which allows a reduction of narrow money balances.<sup>12</sup>

#### MMMF MULTIPLICATION

According to Austrian theory the ability of banks to issue fiduciary media has been the source of both inflation and business cycles. Banks create loans on the asset side of their balance sheets while adding checkable deposits on the liability side. The checkable deposits represent a claim on, without the saving of, present goods, based on a promise to pay back future goods. Without new present goods, the issue of further claims against present goods is necessarily

<sup>11</sup>This amount obviously depends on each institution, but some sources estimate that MMMFs keep roughly one-half of one percent available for redemption.

<sup>12</sup>As an anonymous referee points out, for the previous analysis to be true, MMMFs cannot be perfect substitutes; otherwise, MMMFs could only work through the supply side, not the demand side. While perhaps not as clear as I would like, the reference to Mises's distinctions between broad and narrow money is an attempt to show that, despite the fact that MMMFs and narrow money are imperfect substitutes, MMMFs nonetheless can influence the critical monetary question—the exchange value between money and other economic goods. I in no way want to suggest that they are perfect substitutes (especially since the act of choice illustrates the fact that there can be no such thing as “perfect” substitutes).

inflationary. And, according to Austrian theory, the increase in fiduciary media lowers the market rate of interest below the natural rate of interest, giving entrepreneurs false incentives to invest in higher order goods, which lead to malinvestment. The initial boom (due to the increase in fiduciary media) will inevitably lead to a bust, for increased investment cannot be sustained in the absence of a change in consumer preferences. The process of money creation can be found in any macroeconomics or money and banking textbook. An individual bank could not expand the money supply independent of the expansionary actions of other banks: as one bank issued checkable deposits at a rate greater than that of its competitors, it would suffer adverse clearings, lose reserves, and be forced to pull back on its expansionary efforts. If, however, all banks were issuing new fiduciary media at the same high rate, no adverse clearings would take place.<sup>13</sup> In the face of reserve requirements, money multiplication could take place up to the inverse of the reserve requirements. In actual practice, money multiplication is much less than this, as “leakage” occurs. This leakage can occur as either the bank decides to maintain excess reserves or as the public demands additional currency. But if MMMFs are money, how do they fit into this multiplication scheme?

MMMFs have no statutory reserve requirements, so, theoretically, they could expand their balance sheets infinitely. Let’s review one possible scenario. If Bill deposits one million dollars with Vanguard money market mutual fund, Vanguard can purchase one million dollars of GE’s commercial paper. GE can spend this money on anything it wants, but let’s say they use it to finance car loans. If all car dealers deposit this money into their own MMMFs (say Fidelity MMMF), the process can continue. Fidelity then uses the one million dollars to purchase mortgage-backed securities from Fannie Mae, who then uses the sum to purchase more mortgages. This money will go ultimately to sellers of home equity (either direct sales or refinances). If these individuals deposit it directly into Schwab’s MMMF, then more commercial paper is bought, and more spending can occur throughout the economy. Theoretically, this could lead to infinite expansion—if no *leakage* occurs. Leakage occurs when the recipient of newly created credit demands a form of money, narrower than that offered. In the case of MMMFs, the chance of leakage seems greater than for checkable deposits; they could leak into demands not only for currency or excess reserves, but for checkable deposits themselves. The whole point of MMMFs is their liquidity, coupled with higher interest rates than

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<sup>13</sup>As Selgin (1988) points out, however, when gross clearings increase, the probability of insufficient reserves increases, thus providing a natural limit to the expansionary capabilities of the whole system. This natural limitation is obviated with a central bank lender of last resort, thus greatly increasing the possible inflationary expansion.

those of checking accounts. Clearly, many consumers are going to redeem them and the multiplication process will fall far short of infinite. In fact, as the redemption process occurs, multiple deposit contraction will take place, just as it does in the banking system when individuals demand cash from their checking accounts.

Nonetheless, the expansion of MMMF balance sheets is inflationary since more claims to present goods are created without any abstention of claims to present goods. Many commentators have argued that credit is only created by the Federal Reserve. This is not strictly true as the above discussion demonstrates. One should say, rather, that the Federal Reserve is responsible for the initiation of all credit booms. In our example above, Bill originally received one million dollars that was the result of the Fed's money creation process. But, once it is initiated, the Fed cannot control how this credit will multiply throughout the system, especially when there are no statutory reserve requirements. But this is really no different than what happens with credit creation via the banking system. The Fed supplies reserves, then the banking system and the public's decisions regarding excess reserves and currency requirements dictate the actual money created. It is true that, ultimately, one can lay the blame for excess credit creation at the Fed's feet, for they must supply all reserves (both for the banking system and MMMFs). But it is also true that the control of money is difficult enough (in a fractional reserve system) in the banking system (especially during the short run), and much more difficult with nonbank financial intermediaries (due to lack of reserve requirements).

As discussed earlier, some analysts like to separate MMMFs from the banking system because they are equity claims instead of debt claims. If everyone tried to redeem MMMFs for cash, MMMFs would be forced to liquidate their assets, ultimately leaving the holders with less than par value. This is the same situation that occurs for the banking industry without a lender of last resort, if holders of checkable deposits demand cash. Loans have to be liquidated at fire sale losses, and banks would have to declare bankruptcy. The only difference is that the MMMF would not have to declare bankruptcy, for holders of these funds are residual claimants. The banking system overcame this problem upon creation of the Federal Reserve and FDIC insurance, which the MMMF industry does not have. But, as White argues, countries with loosely regulated free banking did not experience the sort of banking panics seen in the U.S. (1999, pp. 69–73). This suggests that private markets can devise run-proof institutional arrangements. Cowen and Krözner argue that the residual claimant status itself makes MMMFs inherently run-proof (1990, pp. 225–28). As mentioned previously, this technical distinction isn't economically meaningful,

as both holders of MMMFs and acceptors of MMMF checks treat them as virtually *identical* to checkable deposits. And, as most Austrians agree, the appropriate test is how an asset functions economically.

#### IMPLICATIONS AND FUTURE WORK

A traditional concern of many Austrians is the practice of fractional reserve banking.<sup>14</sup> They hold that fractional reserve banking as an institution is responsible for all inflations and the boom–bust cycle itself. The central bank is not the primary, but rather a secondary problem because it is only through central banks that fractional reserve banking, with the effective “cartelization” of private banks, can survive and flourish (Rothbard 1994, pp. 54–69). But if the analysis above is correct, even if we were to have a one-hundred-percent reserve gold standard, we could still have potential inflation and business cycles with creation of money substitutes such as MMMFs. As monetary innovation has occurred, fractional reserve banking is no longer the *only* potential source of mischief.<sup>15</sup> Implicit government guarantees are also responsible, for it especially considering the recent experience of “too big to fail.” One has to wonder if people would be as willing to accept MMMFs as a money substitute if the government were not there to *resolve every* crisis and add to the moral hazard problem. Just as Garrison (1994) expanded ABCT to include risk transfer via FDIC guarantees, the moral hazard “bubble” created by the IMF and other agency bailouts may be another potential manifestation of ABCT. The willingness of individuals to hold less liquid forms of money may simply reflect this change.

The implications of this are clear. Austrians should be concerned about the growth of MMMFs. They can be inflationary, and Austrian theory provides a unique perspective to assess their growth. Austrians are virtually alone among current theorists in that they discuss the distributional aspects of inflation—money is not neutral, because it is created and injected in a certain place and time. Not all goods see the effects of inflation equally. When new money is created by banking loans, the items purchased with the newly created checkable deposits will see their prices rise first (Cantillon effects). As money for those goods is subsequently spent, the inflation will pass from good to good. Only in the long run will the inflation be seen throughout the system. But money is not neutral, even in the long run, as those who were able to spend it

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<sup>14</sup>See for example, Rothbard 1994. This concern has been contrasted by other Austrians, such as Selgin and White 1996, who are more concerned with the institution of central banking itself.

<sup>15</sup>Given the reasons for much of the financial innovation (i.e., to avoid the effects of inflation), one naturally wonders how the course of innovation would have progressed absent fractional reserve banking.

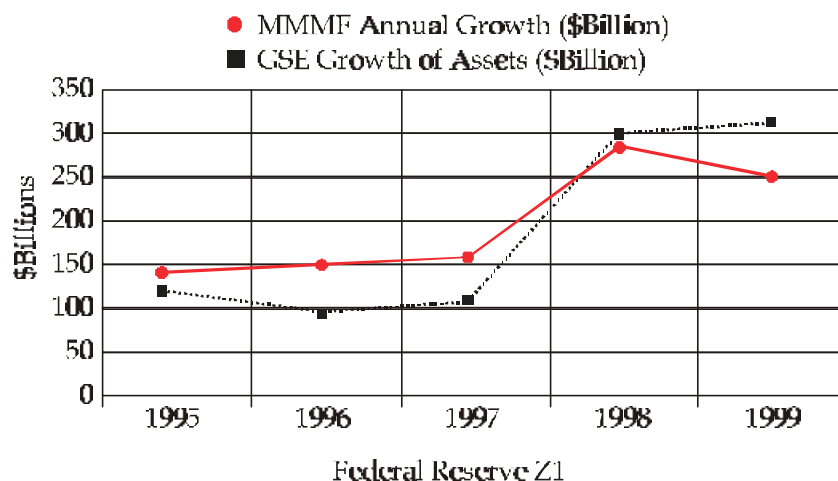
first benefited at the expense of those who received it last. In standard Austrian theory, the producer's goods purchased first will be the first to see the inflation, and only in the end will it spread throughout the consumer's goods.

With the Austrian perspective, one can ask the question: which prices will rise first as a result of the money creation process inherent to MMMFs? In the case of MMMFs, the money goes first to the sellers of the highly liquid debt instruments (usually commercial paper, mortgage-backed securities, and T-bills). Figure 2 below suggests that there may be a relationship between MMMFs and the explosive growth in the balance sheets of government sponsored-enterprises (GSEs), as Noland (2000a) suggests.

Unfortunately, there are no detailed aggregate statistics available on the overall composition of MMMF assets (when we aggregate as Hayek suggests, we lose the very granularity needed to assess), although individual MMMF balance sheets are available. But if MMMFs invest in mortgages and the commercial paper of Wall Street firms (they do, the only question is the degree), then Austrian theory suggests that growth in this form of fiduciary media would initially lead to inflated asset prices and a subsequent rise in consumer prices. This issue should be explored further.

In addition, if GSEs account for such a large part of the MMMF increase, what role does their implicit U.S. government guarantee play in the expansion of their balance sheets? Treasury Undersecretary Gensler recently noted that "The advantages of GSE status have also enabled the GSEs to grow rapidly and gain an increasing share of the capital markets. The GSEs now control a central position in the mortgage market and an increasing share of the U.S. debt

Figure 2  
MMMF and GSE Growth



markets.”<sup>16</sup> These advantages have led to their dominance in capital markets. The large increases over the last two years are clearly becoming a significant issue:

The \$1.4 trillion of GSE debt is large on any relative scale. It is now roughly the size of the entire municipal bond market—the outstanding debt of the fifty states and localities that issue publicly traded debt. The GSEs’ debt of \$1.4 trillion is now more than one-half of the \$2.7 trillion of outstanding privately held marketable Treasury debt. Adding the \$1.2 trillion in GSE-guaranteed mortgage-backed securities to the mix, GSE involvement in the credit market is approaching the size of the Treasury market. (Gensler 2000, p. 3)

ABCT depends on the government’s central bank sending entrepreneurs false signals regarding the time preferences of consumers. Are GSEs, through their implicit government guarantees, able to expand their balance sheets in excess of what the market would do? The GSE status allows them less expensive capital as well. As Gensler notes, “Over the last six months, the GSEs borrowed at approximately 40 basis points less than AA-rated banking and financial firms on one- and five-year debt.”<sup>17</sup> Does the lower cost of mortgages result in malinvestment and inflation in the housing market? These are all questions to consider once we determine that MMMFs are money.

#### CONCLUSION

In the last twenty years, continual financial innovation has led to the increased use of MMMFs as a substitute for checkable deposits. While many technical considerations suggest that it is inappropriate to list MMMFs as money, traditional Austrian thought has emphasized money’s subjective aspects: money is what people think it is. Since the public increasingly uses MMMFs as money substitutes, they are money in all practical respects. Every technical consideration that would restrict the use of MMMFs as a type of money thus crashes against the rocks of practical, everyday experience.

While nonbank financial intermediaries can expand this type of money substitute, the Federal Reserve must still provide initial credit for any multiplication to take place. These nonbanks are even more difficult for the Fed to control, for they face no reserve requirements. But, on the other hand, there are more opportunities for leakage from the system, thereby limiting potential credit expansion. Nonetheless, this is an aspect of money that is becoming increasingly important. And if, as seems likely, MMMF expansion stimulates different

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<sup>16</sup>See Gensler’s (2000, p. 3) testimony to the House Banking Subcommittee on Capital Markets, Securities and Government Sponsored Enterprises.

<sup>17</sup>Ibid., p. 2.



sectors of the economy than the banking system generally, we should expect to see monetary inflation manifest itself in different ways than previous inflations.

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