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"Fractional Reserve Banking and Central Banking as Sources of Economic Instability: The Sound Money Alternative"

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Introduction

Fractional reserve banking has historically been viewed by some economists and most monetary cranks as a panacea for the economy—a source of easy credit and new purchasing power to quicken trade. Better economists, however, recognized fractional reserve banking with its ability to create credit, Mises's (1971, 268-69) circulation credit or Rothbard's (1994) deposit banking, as a major source of financial and economic instability. The establishment of a central bank was often, *when not driven by fiscal priorities of government*, an attempt to achieve the first while mitigating or eliminating the second. For the United States, in particular, the effort was perhaps misguided. Per Vera Smith (1990 [1936], 166):

A retrospective consideration of the background and circumstances of the foundations of the Federal Reserve System would seem to suggest that many, perhaps most, of the defects of American banking could, in principle, have been more naturally remedied otherwise than by the establishment of a central bank; that it was not the absence of a central bank *per se* that was at the root of the evil, ... there remained [even with a central bank] certain fundamental defects which could not be entirely, or in any great measure, overcome by the Federal Reserve System.

Rothbard (2002) covers the history of money and banking in the U. S. and amply documents periods of instability generated by banking panics associated with fractional reserve banking *sans* an explicit central bank. However, compared to this earlier era, fractional reserve banking supported by 'scientific' management of the currency by a central bank has failed to provide the promised stability. Besides the continuing instability, the Fed has guided a significant (massive) decline in the purchasing power of the dollar. The dollar currently has a purchasing power less than 5% of a 1913 dollar. Selgin, Lastrapes, and White (2010), "Has the Fed Been a Failure?" summarize:

Drawing on a wide range of recent empirical research, we find the following: (1) The Fed's full history (1914 to present) has been characterized by more rather than fewer symptoms of monetary and macroeconomic instability than the decades leading to the Fed's establishment. (2) While the Fed's performance has undoubtedly improved since World War II, even its postwar performance has not clearly surpassed that of its undoubtedly flawed predecessor, the National Banking system, before World War I. (3) Some proposed alternative arrangements might plausibly do better than the Fed as presently constituted. We conclude that the need for a systematic exploration of alternatives to the established monetary system is as pressing today as it was a century ago.

During a period known as the Great Moderation, roughly 1983-2000, the U. S. economy experienced a period of *apparent* relative stability and prosperity. The U. S. economy was then buffeted by two boom-bust cycles tied directly to credit expansion and low interest rates driven by fractional reserve banking supported by central bank activity (Garrison 2012 and 2009, Salerno 2012, Ravier and Lewin 2012, and Cochran 2011). The most recent recession and slow recovery rivals or exceeds the

instability of 1970s and early 1980s in severity and is arguably the most significant crisis since the 1930s. While much of the discussion following the recent crisis has focused on why the recovery has been so slow, a lesson that should have been learned is that the economic growth driven by money and credit creation is short term only; an artificial boom cannot last. Ultimately credit creation is a major destructive power that misdirects production, falsifies calculation, even in a period of relatively stable prices, and destroys wealth (Salerno 2012, 32-36). An economy with a complex financial system like the present banking system, which in turn depends on a government monopoly of the supply of money, is prone to cycles and crisis even with the best of either discretionary or rule-based management. Under our current system of interest rate targeting "Policy-induced booms tend to piggyback on whatever economic development is underway" (Garrison 2009). This would be true whether the central bank followed a single, rather than the current dual mandate, such as a policy goal of price stability or adopted nominal GDP targeting (Garrison 2012, 435-36). Under fractional reserve banking supported by a central bank the interest rate brake which would normally stop such events before they turn into bubbles or booms is effectively neutered (Hayek, 1941, pp. 406–10). Because of this neutering, booms and busts remain a significant threat in a "learning by doing" policy framework (Garrison 2009).

Without a foundation of sound money, a market determined money, cycles are inevitable and destructive not only of short-term economic well-being, but potentially destructive of long-term freedom and prosperity. It is urgent than that policy makers take seriously Hayek's proposal, developed during the economic crisis of the 1970s, for drastic monetary reform, for a "denationalization of money." This call is echoed by Garrison (2012, 436) who argues future prospects for "achieving long run sustainable growth can only rest on the prospects for decentralizing the business of banking."

Sound Money¹

After the decline of former socialist countries and under the influence of the apparent prosperity in most market economies during the Great Moderation, most economists recognized the importance of markets and private property for long-term economic prosperity.² But markets and private property generate prosperity because only in such an order can monetary calculation facilitate rational economic planning. But for monetary calculation to operate in a way most consistent with consumer sovereignty, calculation and prices must be embedded is a sound monetary system. As expressed by Salerno (2010 [1998], 468):

¹ This section draws on Cochran 2004.

² Andrei Shleifer summarized, "Between 1980 and 2005, as the world embraced free market policies, living standards rose sharply, while life expectancy, educational attainment, and democracy improved and absolute poverty declined." From "The Age of Milton Friedman." Journal of Economic Literature: 2009, 47:1, 123-135

While there is now a basic recognition by economists that rational allocation of resources necessitates institutional reforms that return resources to private hands and restore genuine markets for productive inputs, there is no such comprehension of the importance of sound money to the processes of economic calculation.

Salerno (473) continues "Sound money, then is simply one which does not lead to systematic falsification of or nullification of economic calculation." Economic calculation requires money prices, but for calculation to most adequately achieve the goal of solving the economic problem, the money prices used for calculation must reflect the valuations of producers/consumers that are based on their individually unique preferences, knowledge, and resources.

Sound money then is money whose purchasing power and quantity are determined by consumers' and producers' valuations; preferences, knowledge, and resources—that is, a market-determined commodity money absent government intervention. As expressed by Mises (1998, p. 225),

Economic calculation does not require monetary stability in the sense in which this term is used by champions of the stabilization movement. The fact that rigidity in the monetary unit's purchasing power is unthinkable and unrealizable does not impair the methods of economic calculation. What economic calculation requires is a monetary system whose functioning is not sabotaged by government interference. The endeavors to expand the quantity of money in circulation either in order to increase the government's capacity to spend or in order to bring about a temporary lowering of the rate of interest disintegrate all currency matters and derange economic calculation.

Financial Intermediation and Fractional Reserve Banking and Cycles³

The Austrian business cycle theory (ABCT) is a blend of monetary and capital theory and highlights coordination problems connected to "time and money." In the framework developed by Ludwig von Mises, banks create money by creating credit. This created credit finances investment in excess of savings, distorts the structure of production, and sets the stage for the boom–bust cycle.

But what is created credit and when and how do banks create credit? Different answers to this question yield different implications for business cycle theory, research, and monetary policy, as well as different monetary reform proposals. In ABCT banks and central banking provide the link between capital markets, money, and economic instability.

Fractional reserve banks developed from two separate, apparently legitimate, business activities: banks of deposit or warehouse banking offering transactions services for a fee, and banks of circulation or financial intermediaries. Economists early on recognized that circulation banking, financial intermediation, reduces transactions costs and enhances the efficiency of the capital markets, leading to

³ The following section draws heavily on Cochran and Call 2000 and 1998 and Cochran, Call, and Glahe 1999.

more savings, investment, and economic growth.⁴ Fractional-reserve banking combined these two types of banking institutions into one institution—a single institution offering both transaction services and intermediation services.⁵ With the development of a fractional reserve banking system, money creation, either through note issue or deposit expansion, and credit creation became institutionally linked.

In an Austrian analysis of money and credit, injection effects matter. The way money enters the economic system—that is the injection—affects the dynamic adjustment process. The spending of those who are initially affected by the monetary disturbance change before the spending plans of those who receive additional money balances only as the effects of the monetary change spread through the economy. In an economy with a developed banking system, monetary changes most often enter the economy as changes in the availability of credit. This analysis, which is the foundation of Austrian business cycle theory, combines the theoretical proposition that injection effects matter with the empirical observation that these effects take place as the banking system extends credit.

Monetary changes that originate through the banking system alter not just bank credit but total credit available in the economy and thus put downward pressure on interest rates. It is not the change in the rate of interest *per se* that is important, but the change in the rate relative to the natural or equilibrium rate.⁶ An equilibrium rate reflects the "ratio of the value assigned to want-satisfaction in the immediate future and the value assigned to want-satisfaction in remoter periods of the future. It manifests itself in the market economy as the discount of future goods as against present goods" (Mises 1998, p. 523). Ordinarily, Mises (1998, p. 534) argues, "The loan market does not determine the rate of interest. It adjusts the rate of interest on loans to the rate of originary interest as manifested in the discount of future goods." Credit creation temporarily suspends this adjustment process. Credit creation alters the money rate of interest relative to the equilibrium rate and disrupts the balance between the "supply and demand" for capital.⁷

⁴ For a counter-argument on term intermediation see Barnett and Block.

⁵ Selgin (1988, chap. 2) argues that fractional-reserve banking develops naturally in a free economy as "a result of individuals finding new ways to promote their self-interest." Banks are pure intermediaries (Selgin 1996, p. 120). Other Austrians have argued that fractional-reserve banks are hybrid institutions that could only develop as the result of special privileges granted to banks by government. The activities of these hybrids are not pure intermediation. The critical economic issue is: Is credit issued by a fractional reserve bank financial intermediation or credit creation? See Mises (1971, pp. 268–77) and Cochran and Call (1998, pp. 33–35).

⁶ The term "natural rate" is controversial. Following Mises (1971, p. 359 and 1978, pp. 120–30), when I use the term it will be to distinguish between an equilibrium rate and a rate that has been altered by credit manipulation.

⁷ While Mises argued that money was neither a consumption good nor a production good (1971, pp. 79–92), he definitely classified 'money' as a present good in his discussions on money and credit (pp. 268–77). See particularly (p. 268), "The claim he has acquired by his deposit is also a present good for him. The depositing of the money in no way means that he has renounced immediate disposal over the utility that it commands" and "(t)he note is a present good just as much as the money" (p. 272).

Mises developed an argument clearly explaining why and how credit creation takes place. Mises (1978, p. 119) cautioned:

One must be careful not to speak simply of the effects of credit in general on prices, but to specify clearly the effects of "increased credit" or "credit expansion." A sharp distinction must be made between (1) credit which a bank grants by lending its own funds or funds placed at its disposal by depositors, which we call "commodity credit" and (2) that which is granted by the creation of fiduciary media, i.e., notes and deposits not covered by money which we call "circulation credit."

Circulation credit is created credit because "[c]irculation credit is granted out of funds especially created for this purpose by banks. In order to grant a loan, the bank prints banknotes or credits the debtor on deposit account. It is creation of credit out of nothing" (Mises 1978, p. 218). Others in the Austrian tradition who seriously attempted to define credit creation include Machlup and Selgin. Machlup explicitly calls Mises's circulation credit "created credit."

I use the term transfer credit if the purchasing power accruing to the borrower is counterbalanced by purchasing foregone by somebody else, such as a voluntary saver or a disinvesting producer. My term "transfer credit" corresponds to Mises's "commodity credit." For Mises's term "circulation credit," I have substituted the term "created credit," which clearly conveys the meaning that the purchasing power accruing to the borrower is not counterbalanced by any purchasing foregone by anybody else. (Machlup 1940, p. 224n)

Selgin (1988, p. 66) defines created credit as "credit granted independently of any voluntary abstinence from spending by holders of money balances."

The Misesian model of credit creation sees modern fractional-reserve banks as hybrid institutions. Some transactions by these banks are financial intermediation, and as such enhance the efficiency of the saving and investment process. Other transactions by these same institutions create credit. Mises (1971, p. 261) describes these two distinct roles as "the negotiation of credit through the loan of other people's money and the granting of credit through the issue of fiduciary media, i.e., notes and bank balances that are not covered by money." Transactions in which both a depositor and a borrower retain, temporarily, current claims to money may not be intermediation, but credit creation. According to Mises (1971, 268-69):

It is usual to reckon the acceptance of a deposit which can be drawn upon at any time by means of notes or checks as a type of credit transaction and juristically this view is, of course, justified; but economically, the case is not one of a credit transaction (p. 268)... but this is not a credit transaction, because the essential element, the exchange of present goods for future goods, is absent. (p. 269)

The transaction is different in nature from a true credit transaction. In a true credit transaction the lender temporally surrenders "money or goods, disposal over which is a source of satisfaction and renunciation of which is a source of dissatisfaction" (Mises 1971, p. 264).

In this framework money as the medium of exchange is the present good *par excellence*. Since the holding of cash balances, whether in the form of demand deposits or bank notes, does not require the sacrifice of present goods, changes in cash balances financed from current income are part of the allocation of income to provide present utility. Households can use current income for present goods or future goods. If present goods are preferred, the household may choose specific consumption goods or money balances. Hence, the proper economic interpretation of a demand deposit or bank note is that the deposit or bank note is a bailment or warehouse receipt, not a credit instrument.⁸ The depositor has not engaged in a true credit transaction because no sacrifice of present utility has taken place. Fractional-reserve banking combined with the creation of circulating credit expands the supply of credit beyond the limits set by prior saving. Banking institutions can and do push interest rates below the natural rate, resulting in spending by ultimate investors exceeding saving.

Created credit eventually causes an economic crisis. The normal operations of the money and banking institutions supported by a central bank generate business cycles by attempting to keep market rates of interest too low for too long. The recession phase of the business cycle is the economic correction of previous monetary excesses and the resulting malinvestment and overconsumption (Salerno 2012).

Alternative Views of Fractional Reserve Banking

In a Keynesian framework (Cochran and Call 1998), banks are viewed as financial intermediaries and money is considered a future, not a present, good; a store of value. This Keynesian framework is what Selgin (1996, p. 119) has labeled the "new view" of money and banking, where banks "are pure intermediaries: they act as brokers of, rather than creators of, loanable funds, and are not an independent cause of investment in excess of *ex ante* saving." Banks are financial intermediaries that issue a liability that the public willingly uses as a medium of exchange. The problem for such a banking system may not be boom–bust cycles caused by credit creation and malinvestment, but secular stagnation. Such an

⁸ See Rothbard (1978, pp. 148–49). If bank deposits are considered a short-term loan from a legal standpoint, then the funds are legally considered the property of the bank, not the property of the depositor. But the legal structure does not change the economic impact of the transaction. If such deposits (or notes) are used as a medium of exchange, they are a readily available source of current purchasing power.

economy would suffer from chronic unemployment as money and banking institutions operated so that the market rate of interest would be too high. Saving would exceed investment.⁹

In this Keynesian view, financial intermediation should facilitate the flow of funds from savers to investors. Bank liabilities that do not serve as a medium of exchange are clearly of this type. The owner of the bank liability has loaned the funds to the bank for future considerations. Such intermediation is usually viewed as efficiency enhancing¹⁰. Just as in a credit transaction without intermediation, the ultimate lender has a claim on future money and the borrower has acquired present money. In the new view, deposit banking is also intermediation. The saver prefers liquidity to return and decides to invest in money. The depositor loans funds to the bank and receives a bank I.O.U.—a bank deposit payable on demand. The bank now owns additional loanable funds. As reserves are loaned out, funds are transferred from an ultimate lender (the depositor) to an ultimate investor (the borrower).

Banks, for legal or economic reasons, maintain cash reserves to back these short-term liabilities (demand deposits or bank notes). As a result total lending will be less than total saving. A dollar held in a reserve balance is a dollar saved but not loaned to an ultimate investor. The supply of credit will be less than available saving and the market rate of interest will rise above the natural rate. Investment will be less than saving and the economy may remain below its productive capacity. Fractional-reserve banks and other intermediaries provide intermediation services that increase investment relative to a system without banking, but when these institutions hold significant cash reserves, the amount of investment may consistently be less than ideal. In this view, there exists no market process that ensures that saving will equal investment at full employment levels. A "natural" rate of interest may exist, but it is an equilibrium rate only in the sense that it preserves a *status quo*, a status quo that may not be ideal. A central bank is a necessary addition to the banking system. Central banks can provide new money and credit, high-powered money, to offset the general contractionary tendencies due to a fetish for liquidity which is part of the normal operation of financial markets (Garrison 2001, chapters on Keynes and Keynesians).

Selgin (1988 and 1996) offers a "qualified defense of the new view" that can be considered a middle ground between the Misesian and the new view. While fractional-reserve banking is intermediation, banks can still create credit. Credit is created when credit is "granted independently of any

⁹ Selgin and White (1996, p. 101) argue that a consistent application of the Wicksellian framework would recognize not only that money creation can lower rates below the natural rate, but that "unanticipated destruction of money (or a drop in 'velocity') can drive the interest rate in the short run above its natural level, and hereby artificially curtail warranted investments." Here again, the Misesian model leads to a different conclusion. See Mises (1971, p. 360): "The opposite case, in which the rate of interest charged by the banks is raised above the natural rate, need not be considered; if banks acted in this way, they would simply withdraw from the competition of the loan market, without occasioning any other noteworthy consequences."

¹⁰ For an Austrian critique of term intermediation see Barnett and Block 2011, 2009a and 2009b.

voluntary abstinence from spending by holders of money balances" (Selgin 1988, p. 60). *Extensive credit creation requires not just fractional-reserve banking, but central banking*. In this framework, the creation of fiduciary media that is matched by a willingness to hold the additional fiduciary media is not credit creation, but financial intermediation. Such transactions facilitate the flow of saving into investment. In the case where increased saving (reduced spending on present goods) takes the form of an increased demand for cash in the form of "inside" money, consumption is deferred and the funds are loaned to the banks for at least *short periods*. The extension of bank credit and the creation of new fiduciary media do not, in this instance, reduce the market rate below the natural rate, but instead, allow the market rate to follow the natural rate downward. Investment keeps up with a higher level of saving rather than exceeding a fixed level of saving. Credit creation can take place if banks issue fiduciary media and credit in excess of the demand for fiduciary media. But what mechanism prevents excessive credit creation? Here Selgin and White (1996, p. 103) rely on and build on Mises (1998, p. 440):

Free banking is the only method for the prevention of the dangers inherent in credit expansion. It would, it is true, not hinder a slow credit expansion, kept within very narrow limits, on the part of cautious banks which provide the public with all the information required about their financial status. But under free banking it would have been impossible for credit expansion with all its inevitable consequences to have developed into a regular—one is tempted to say normal—feature of the economic system. Only free banking would have rendered the market economy secure against crises and depressions.

The existence of a central bank with the ability to create high-powered or base money is a necessary prerequisite for excessive credit creation and the resultant boom–bust cycle. Free banking without central banking could provide intermediation services that could mitigate contractionary pressures arising from monetary disequilibrium while also providing sufficient market discipline to prevent excessive credit creation. Austrian-type business cycles are thus a phenomenon of central banking, not of fractional-reserve free banking¹¹.

The Market Synthesis

The differences between the Keynesian-based new view and Mises, Machlup, and Selgin are significant and lead to different explanations of macroeconomic instabilities and policy proposals. In the Keynesian form of the new view, banks, including a necessary and benevolent central bank, do not create

¹¹ The above argument depends on the caveat that free banking means banks operate in an environment in which banks are subject to the general rules of commercial and civil law and are not the recipients of special privileges and protections granted by the state. As expressed by Mises (1998, p. 440), "What is needed to prevent any further credit expansion is to place the banking business under the general rules of commercial and civil laws compelling every individual and firm to fulfill all obligations in full compliance with the terms of the contract."

credit. With a 'fetish for liquidity', an economy absent central bank expansion of credit and lower interest rates will be subject to economic stagnation as the rate of interest exceeds the natural rate and investment falls below the level needed to achieve and sustain full employment. Central banking is a needed extramarket solution to a market malady (Garrison 2001).

In contrast, Mises (1971) developed the argument that fractional-reserve banking creates credit. Created credit is the source of the malinvestment of the boom phase of the cycle. But significant malinvestment in the Misesian cycle depends on central bank action or government backed special privileges, either explicit or implied. The central bank either actively provides new base money which banks use to create credit or the central bank passively makes new base money available to provide the needed liquidity (reserves) to an overextended banking system.¹² Without central bank activity, the **credit creation by fractional reserve banks would be limited in extent.** Large misdirection of production caused by credit creation requires either newly created base money or the promise to create new base money in the event of a crisis by a central bank.¹³ Central banks provide the source of the newly created credit or remove the market barriers to bank initiated created credit.¹⁴

Banking freedom can potentially limit the scope of and quickly correct for or reverse any created credit that originates from fractional-reserve banking. Extensive and harmful credit creation is the result of the activity of central banking. The **malady is extra-market**. Created credit distorts the structure of production causing the boom–bust cycle and the remedy, really the preventative, is a return to free markets in money creation. The solution; eliminate the central bank and restore a free market in money and banking¹⁵ (Herbener, 2012).

Banking freedom would allow market participants to make the ultimate judgment on what to use as a medium of exchange and where to draw the line between money as a present good and money as a store of value. Bankers would make a judgments on the proportion of their deposits (or notes) that represent saving and the proportion that are currently serving as present money for the holders of the

¹² Machlup (1940, pp. 247–48) argues, "Professor Mises believes, furthermore, that commercial banks alone without the support of the central bank can never produce a dangerous credit inflation." Mises (1998, p. 788) is quite emphatic on this point, "But today credit expansion is an exclusive prerogative of government."

¹³ See White (2011, 497) for an argument, relative to the most recent crisis, why "A commodity standard with free banking, and **no central bank to distort the financial system** [emphasis mine], would have avoided such a boom-and-bust credit cycle."

¹⁴ The existence of a lender of last resort who can and will create credit with newly issued base or high -powered money leads to a moral hazard problem that gives fractional-reserve banks an incentive to over-extend credit, which can show up as either more credit extended at lower rates of interest or riskier loans extended at unchanged rates of interest.

¹⁵ Herbener recommends 100% reserves for deposits that serve as a medium of exchange or for privately issued bank notes. 100% reserves also would more clearly remove threats of bank runs and panics.

deposits. Only funds held as savings may be safely "invested" or loaned. Consumers of banking services make judgments about the safety and soundness of the banking institutions with which they deal. Successful banks will provide the mix of services that meet the needs of their clients.

Monetary Reform¹⁶

In an introduction to the most recent issue of the *Cato Journal*, "Monetary Reform in the Wake of Crisis" the editor James A. Dorn writes:

At no time since the founding of the Federal Reserve nearly a century ago has it been more important to reconsider the role of monetary policy in a free society. In particular, as F. A. Hayek noted, "All those who wish to stop the drift toward increasing government control should concentrate their effort on monetary policy."

Central bank response to the most recent crisis and slow recovery has moved in the direction of greater, not lesser central bank involvement in the economy. Recent troubling trends include money creation to finance massive government deficits¹⁷, the Fed engaging in "Mondustrial Policy¹⁸, and becoming a gigantic financial central planner.

Cochran (2011) describes the Fed reaction:

With this second bust, unlike the first recession of the 21st century, the real economic slowdown was accompanied by a significant financial crisis and if not a public panic, definitely a policy panic. Policy makers feared that the financial crisis would lead to a collapse of the banking and credit system. The fear was deflation. The model was monetary events of 1929 to 1932. The Fed and the federal government responded with an unprecedented bailout of both financial and non-financial firms with the creation and use of new monetary policy tools and Fed-Treasury coordination accompanied by aggressive use of more traditional policy instruments (Duca *et al* 2009). The result has been a massive expansion of the Fed's balance sheet as well as massive re-structuring of the type assets held by the Fed. The picking of winners and losers has moved the Fed very close to a policy which is even more dangerous to liberty and prosperity that an ordinary

¹⁶ See Table 1 (elimination of central banking) and Table 2 (reforms retaining a central bank) for a summary of suggested reforms. Reforms are listed from a-f in order of ability to generate increased economic stability, although on this ground a and b are indistinguishable with perhaps a slight edge to b and with b leading to perhaps greater financial stability. Reforms a, b, and c are consistent with *HR 1094*. Reform e is consistent with *HR 4180* or *HR 245*. Reform f is consistent with HR 245. If either reform a or b would be adopted, discussion should continue on free banking versus 100% reserves.

¹⁷ Per John B. Taylor, the Federal Reserve purchased 77% of the net increase in the debt by the Federal government in 2011. See <u>http://johnbtaylorsblog.blogspot.com/2012/06/fed-bought-77-of-federal-debt-increase.html</u>

¹⁸ In early 2009 at the AEA meetings, Stanford economist John Taylor used the term "Mondustrial Policy to criticize the Fed and Treasury response to the financial crisis. Taylor, as quoted in a *WSJ* blog post by Jon Hilsenrath (<u>http://blogs.wsj.com/economics/2009/01/05/the-feds-outspoken-critic/</u>), used this "unflattering term" to describe a policy environment that was "not a monetary framework. It is an intervention framework financed by money creation."

fractional reserve banking system supported by a central bank; a *mondustrial policy*; monetary policy as an agency not only of irresponsible fiscal policy, but of industrial policy as well.

In an important paper published in the *Independent Review*, "<u>Ben Bernanke versus Milton</u> <u>Friedman: The Federal Reserve's Emergence as the U.S. Economy's Central Planner</u>", Jeffrey Rogers Hummel provides, without explicitly mentioning the term, the intellectual foundations for a "Mondustrial Policy". Hummel builds his case by illustrating the significant differences in "approaches to financial crisis" between the Bernanke approach and a Friedman approach. In addition to exposing the theoretical foundation of this misguided and dangerous policy, Hummel provides a very detailed almost step by step use of this type of policy in response to the major events of the recent crisis. A must read for anyone interested in the details of how and why the Fed's balance sheet expanded so significantly and how much of what was done did not and does not show explicitly in 'regularly' reported monetary aggregates, their sub components, or Fed balance sheet reports.

Hummel argues the differences have been rarely noticed. The impact as "those differences resulted in another Fed failure – not quite as serious as the one during the Great depression, to be sure, yet serious enough – but they have also resulted in a dramatic transformation of the Fed's role in the economy. Chairman Bernanke has so expanded the Fed's discretionary actions beyond controlling the money stock that it has become a gigantic, financial central planner."

It should be clear, that this failed policy response to the current situation has set up future monetary conditions that may be very difficult to unwind without significant inflation and/or a continuing boom-bust pattern.

These trends make a return to sound money which "involves abolishing central banking and paper fiat money and restoring a commodity money chosen by and totally subject to the market" (Salerno 2010 [1998], p. 474) imperative. There is, however, controversy over the means. Does sound money require 100 percent reserve banking or does it allow banking freedom? Mises (1998, 440) opined, "Only free banking would have rendered the market economy secure against crises and depression. [And] [t]here is no reason whatever to abandon the principle of free enterprise in the field of banking."

However, Rothbard, Salerno, Herbener, Huerta de Soto, Block, and Reisman among others favor 100 percent reserves; a clear separation of deposit banking from loan banking, on the basis of reform proposals made by Mises (1971, pp. 448–57, and 1978, pp. 17–21 and 44–47.) In these proposals, Mises argued for 100 percent backing of any *newly issued notes or checkable deposits*. For reform of a monetary system on the verge of collapse or as a proposal for how we move from our current system toward a

sound money system, such a step may be essential. After reform though, it is also essential that "the question of banking freedom must then be discussed again and again, on basic principles" (Mises 1978, p. 45).

H.R. 1094 is consistent with reform recommended in this testimony. *H. R. 4180* would be a strong improvement over current Fed operations as would *H. R. 245*, but both would leave the economy subject to boom-bust cycles as monetary policy would still not prevent a boom-bust which piggy-backs created credit induced growth on top of productivity driven growth. A movement in the right direction would include elimination of all laws restricting private sector initiatives to develop competing medium of exchanges to Federal Reserve notes. New competitive currencies could be facilitated by privatization of all government stocks of precious metals. More detailed proposals for reform can be found in Rothbard (1991 [1962], 65-72), Salerno (2010, 333-363), White (2102), or Herbener (2012). The *Cato Journal* (Spring/Summer 2012, volume 32, number 2) is devoted to "monetary reform in the wake of crisis." If or while significant reform such as H. R. 1094 is politically impossible, Selgin's (1997) proposal for a productivity norm, which would greatly reduce the likelihood of significant credit creation in response to a productivity shock, should be given strong consideration as an appropriate guide for improving policy under existing banking arrangements.

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a. Commodity Standard with Free Banking	b. Commodity Standard with 100% Reserves	c. Denationalization of Money
Mises (1998, 440): "Only free banking would have rendered the market economy secure against crises and depression. [And] [t]here is no reason whatever to abandon the principle of free enterprise in the field of banking." Free banking means banks operate in an environment in which banks are subject to the general rules of commercial and civil law and are not the recipients of special privileges and protections granted by the state; placing "the banking business under the general rules of commercial and civil laws compelling every individual and firm to fulfill all obligations in full compliance with the terms of the contract."	From Huerta de Soto (2012): "(T)heoretical analysis yields the conclusion that the current monetary and banking system is incompatible with a true free-enterprise economy, and that it is a continual source of financial instability and economic disturbances." Three recommended reforms: 1 . The reestablishment of a 100 percent reserve requirement as an essential principle of private-property rights with respect to every demand deposit of money and its equivalents; 2 . the abolition of all central banks (which become unnecessary as lenders of last resort if reform 1 above is implemented, and which as true financial central-planning agencies are a constant source of instability) and the revocation of legal-tender laws and the always- changing tangle of government regulations that derive from them; and 3 . a return to a classic gold standard, as the only world monetary standard that would provide a money supply that public authorities could not manipulate and that could restrict and discipline the inflationary yearnings of the different economic agents."	Hayek (1978): Elimination of central bank with denationalization of money and competing currencies. Hayek's proposal for drastic monetary reform: In response to events in the 1970s, Hayek was driven "into proposing the denationalization of money" and a return to a market- determined money" (Hayek in Pizano 2009, 10)

Table 1Summary of Reforms: No Central Bank

Table 2			
Reforms Retaining Central Banking			

d. Productivity Norm	e. Policy Rules	f. Price Stabilization (single mandate) with Discretion in Crisis or Nominal GDP Targeting
Selgin (1997, 10): "I submit that a constant that a constant price level, even once in place, would be far from ideal. Instead, the price level should be allowed to vary to reflect changes in goods' unit cost of production [emphasis mine]. I call such a rule for individual price changes a 'productivity norm.' Under a productivity norm, changes in velocity would be (as under zero inflation) from influencing the price level by offsetting adjustments in the supply of money." Productivity norm is consistent with Hayek of the 1930s.	Taylor (2012, 2): "For all these reasons, there is a great need for improvement in the degree to which the Federal Reserve follows rules rather than discretion." And: "However, a more practical and effective approach, in my view, is to reform the Federal Reserve and create strong incentives for rule-like behavior. The starting place for such a reform is the recognition that a clear well- specified goal usually results in a consistent and effective strategy for achieving that goal." And : "In the case of monetary policy, multiple goals enable politicians to lean on the central bank to do their bidding and thereby deviate from a sound money strategy. More than one goal can also cause the Federal Reserve to exceed the normal bounds of monetary policy— moving into fiscal policy or credit allocation policy—as it seeks the additional instruments necessary to achieve multiple goals." Taylor (2012, 4): "(L)egislative reforms which clarify the Fed's mandate, enhance reporting requirements about its strategy or rule for the monetary instruments, restrict the nature of the its purchases of securities, and balance voting rights on the FOMC would allow Congress to exercise appropriate political control without becoming involved in day-to-day monetary policy operations or otherwise micromanaging the Fed. In my view the reforms [H.R. 4180] would enhance the independence of the Fed by adding reassuring accountability appropriate for an independent agency of government and clarifying that its overall responsibility is monetary policy not fiscal policy or credit allocation policy. History and basic economics tells us that such reforms would greatly improve employment and price stability and would help restore America's prosperity."	 Price Stabilization: From Hayek (1979 from lectures delivered 1974 and 1975, 17): "Though monetary policy must prevent wide fluctuations in the quantity of money or in the volume of the income stream, the effect on employment must not be a dominating consideration. <i>The primary aim must again become the stability of the value of money</i> [emphasis original]." But (Hayek 1979, 18): Where policy still generates a boom-bust, then, to prevent "liquidity crises or panics" there is a need "to ensure convertibility of all kinds of near-money into real money" For this, "the monetary authorities must be given some discretion" But (Hayek 1979, 10): "T do not believe we shall regain a system of international stability without returning to a <i>system of fixed exchange rate</i>[emphasis mine], which impose upon national central banks the restraint essential for successfully resisting pressure of the advocates of inflation in their countries" Nominal GDP: "The moment there is any sign that the total income stream may actually shrink [during a post-bust deflationary crash], I should certainly not only try everything in my power to prevent it from dwindling, but I should anounce beforehand that I would do so in the event the problem arose." F. A. Hayek in 1975, in reply to a question from his old friend Gottfried Haberler in a talk given at the American Enterprise Institute Posted at http://hayekcenter.org/?p=5401 Accessed 06-26-2012.