

# WHY CREDIT DEFLATION IS MORE LIKELY THAN MASS INFLATION: AN AUSTRIAN OVERVIEW OF THE INFLATION VERSUS DEFLATION DEBATE

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## 1. Introduction

WILL THE US ECONOMY FACE a sustained period of inflation or deflation, or perhaps hyperinflation? This is the subject of the great monetary debate of our day. It comprehends in its consequence nothing less than the fate of the world's most important markets; from the international currency market to the US stock and bond markets to labor markets across the globe. The fate of the dollar as the world's reserve currency and the viability of the subsisting monetary order rest on the denouement of the monetary process being debated.

In late 2007, in an attempt to mitigate the effects of the housing crash, the Federal Reserve began a series of interventions in the US economy, ultimately expanding its balance sheet to approximately 2 trillion dollars under a policy known as “quantitative easing”. Since the inception of the Fed's policy of quantitative easing, the inflation versus deflation debate has raged in the blogosphere, the economics profession and in the halls of power. Much of the analysis devoted to the inflation-deflation debate in the economics profession is neoclassical in nature, focusing on economic aggregates such as employment, GDP, CPI and their ostensible correlations. This method of economic analysis is fundamentally flawed. It is not merely that the aggregates themselves are misleading and often manipulated, as Kevin Phillips points out in his exposition of “forty years of economic and

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statistical dissembling”<sup>1</sup> but, more significantly, that neoclassical economics fails to capture the *causal* factors that determine the course of economic events.

The Austrian school of economics provides an alternate means of understanding economic phenomena based on laws of economic causality derived from the actions and motivations of individuals. As Dolan writes:

[Austrian economics] insists on laying bare the true causal relationships at work in the social world and is not content to simply establish empirical regularities among dubious statistical aggregates.<sup>2</sup>

The aim of this article is to provide an overview of the inflation-deflation debate from an “Austrian” perspective and to provide an explanation for why, contrary to the predictions of many Austrian economists, credit deflation is more likely than mass inflation. The article begins by defining the Austrian usage of the terms inflation and deflation to avoid confusion with their more common and imprecise usage. This is followed by a description of fractional reserve banking and its inflationary effect on the supply of money. A short history of banking in the United States is then provided to give the context in which fractional reserve banking has been employed and the development of the banking system into its contemporary form. The money multiplier theory of credit expansion, which aims at describing how inflation is directed by the Federal Reserve in our current banking system, is described and then criticized for being an incorrect causal theory of current commercial banking lending practice. A review of the Austrian Business Cycle Theory is presented to shed light on the correct theory of commercial bank lending and the implications this theory has for the inflation versus deflation debate. The review is followed by an analysis of Quantitative Easing and whether the Federal Reserve’s policy to combat the bust phase of the business cycle will produce mass inflation. The article concludes with an analysis of the politics of deflation and provides a class theory which suggests that the Federal Reserve is more likely to pursue a policy of “controlled deflation” than one of mass inflation or hyperinflation.

## 2. Inflation and Deflation Defined

Among the difficulties plaguing a resolution to the inflation-deflation debate is a widespread confusion regarding what inflation and deflation

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<sup>1</sup> Phillips, K. “[Numbers racket: Why the economy is worse than we know.](#)” Harper’s Magazine, May 2008.

<sup>2</sup> Dolan, E.G. *Austrian Economics as Extraordinary Science*. In *The Foundations of Modern Austrian Economics, Collected Essays*, 1976.

actually are. In the popular media and much of the economics profession, “inflation” is taken to mean an overall increase in prices, typically as measured by a price aggregate such as CPI<sup>3</sup>. This unfortunate definition hides the causal relation that produces general increases in prices—namely an increase in the supply of money within an economy. The great Austrian economist Ludwig von Mises bemoaned the “semantic revolution” that swept away the erstwhile usage of the term “inflation” in the field of economics.

What many people today call inflation or deflation is no longer the great increase or decrease in the supply of money, but its inexorable consequences, the general tendency toward a rise or a fall in commodity prices and wage rates. This innovation is by no means harmless. It plays an important role in fomenting the popular tendencies toward inflationism.<sup>4</sup>

Mises’s point was more than just a definitional quibble; he insisted on shifting the focus from prices *per se* to the causal effects that money has as it enters and leaves an economy. In contrast to monetarists, such as Milton Friedman, who relied on the spurious quantity theory of money<sup>5</sup>, Mises noted that money is *not* “neutral” and that as new money enters an economy it disrupts the prices of some goods before others, thereby altering the structure of production<sup>6</sup>. To understand the specific mechanism by which money enters a modern economy, and the implications this mechanism has for the inflation-deflation debate, we must understand Fractional Reserve Banking

### 3. Fractional Reserve Banking

Fractional Reserve Banking is a practice where banks keep only a fraction of the deposits they receive on reserve to satisfy potential customer withdrawals. The fraction of each deposit that must be kept on reserve is called the “reserve requirement”, while the rest may be lent to borrowers in the economy.

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<sup>3</sup> Horwitz, S. “[Deflation: The Good, the Bad, and the Ugly.](#)” *The Freeman* 60, Issue 1, January/February 2010.

<sup>4</sup> Mises, L. *Human Action*. Scholar’s edition p. 420.

<sup>5</sup> Friedman, M. *The Optimum Quantity of Money*. Transaction Publishers, fourth printing, 2009. Cf. pp. 4–6 for the toy helicopter model on which inflation operates under the quantity theory of money.

<sup>6</sup> *Human Action*. Cf. the chapter on Interest, Credit expansion and the trade cycle. p. 535.

When a bank makes a loan, the borrower eventually spends the money which then finds itself back on deposit in another (or perhaps the same) bank, where it can be lent out again. Lending may continue until banks either reach their reserve requirement or are no longer willing to lend. The process of repeated fractional reserve lending is inherently inflationary as it expands the total money available for use in an economy. The diagram below illustrates the process where \$100 is initially deposited in bank A, with a reserve ratio of 20%.

Bank	Amount Deposited	Reserve Held	Loaned out
A (CB)	\$100.00	\$20.00	\$80.00
B	\$80.00	\$16.00	\$64.00
C	\$64.00	\$12.80	\$51.20
D	\$51.20	\$10.24	\$40.96
E	\$40.96	\$8.19	\$32.77
F	\$32.77	\$6.55	\$26.21
G	\$26.21	\$5.24	\$20.97
H	\$20.97	\$4.19	\$16.78
I	\$16.78	\$3.36	\$13.42
J	\$13.42	\$13.42	\$0.00
	\$446.31	\$100.00	\$346.31
	Total of Deposits	Total of Reserves	Total of Loan Amounts
	Equals	Equals	Equals
	Total Debt in System	Total of Government Debt	Total Debt in Economy

The money created in the process of fractional reserve banking is called “credit money”, as it creates an obligation on the recipient of a bank loan (the debtor) to repay the amount loaned, plus interest, to the bank (the creditor). As economist Herbert Davenport observed, the interest payments on fractional reserve loans “explains in the main the gains attending the business of commercial banking.”<sup>7</sup>

#### 4. A Brief History of Banking in the United States

Historically, fractional reserve banking originated as a practice among banks whose deposits were in the form of gold (or silver) specie. The legal requirement that deposits could be redeemed for gold served as a check on the expansion of the money supply, because excessive or reckless lending would lead to bank runs with depositors demanding gold for their bank notes<sup>8</sup>. During the latter part the 19<sup>th</sup> century and early 20<sup>th</sup> century, major banking interests began cartelizing in an attempt to reduce competition from smaller regional banks and to loosen the strictures of the gold standard. The

<sup>7</sup> Davenport, H. *The economics of enterprise*. Augustus M. Kelley Publishers, 1968. p. 264.

<sup>8</sup> *Human Action*. Cf. the discussion of the limitation on the issuance of fiduciary media, especially in regard to so-called “free banking,” pp. 431–45.

process of cartelization culminated in the establishment of a central bank—the Federal Reserve—which was granted a monopoly on the issuance of bank notes. As Rothbard explains,

The financial elites of this country, notably the Morgan, Rockefeller, and Kuhn, Loeb interests, were responsible for putting through the Federal Reserve System as a governmentally created and sanctioned cartel device to enable the nation's banks to inflate the money supply in a coordinated fashion, without suffering quick retribution from depositors or noteholders demanding cash.<sup>9</sup>

The creation of the Federal Reserve did not end the gold standard entirely, however, because Federal Reserve notes (i.e., dollars) remained redeemable for gold. It was the coordinated expansion of the money supply, made possible by a central bank, which led to the Great Depression<sup>10</sup> and the demolition of the next pillar of the gold standard.

On March 6<sup>th</sup>, 1933, in an attempt to stay the bank runs that were striking down banks across the country, President Roosevelt declared a bank holiday, eliminating the requirement that banks redeem Federal Reserve notes for gold. While it was believed the Presidential proclamation was a temporary measure, it was followed on December 28<sup>th</sup> by an order of the Secretary of the Treasury requiring that all gold (with a few minor exceptions) be delivered to the Treasurer of the United States by January 17<sup>th</sup>, 1934<sup>11</sup>. The massive confiscation of gold marked the end of domestic convertibility of Federal Reserve notes, leaving only one pillar of the classical gold standard remaining; foreign central banks and governments were still able to redeem dollars for gold, albeit at a new debased price of \$35 per ounce<sup>12</sup>. It was only a few short decades before this last vestige of the gold standard was also swept away by Presidential fiat.

In the years following the Second World War, the United States increasingly ran a negative balance of trade, thereby causing a surplus of dollars to accumulate in the treasuries of foreign governments. Economic law

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<sup>9</sup> Rothbard, M. "[Origins of the Federal Reserve.](#)" *Quarterly Journal of Austrian Economics* 2, no. 3 (Fall 1999), pp. 3–51.

<sup>10</sup> Rothbard, M. [America's Great Depression](#). Fifth edition, Ludwig Von Mises Institute, 2000. Cf. Part II Inflationary Boom, 1921-1929.

<sup>11</sup> Friedman, M. and Schwartz, A.J. *A Monetary History of the United States*. Princeton University Press, 1963. pp. 462–63.

<sup>12</sup> *Ibid.* p. 469. "on January 31, 1934, when the President, under the authority of the Gold Reserve Act passed the day before, specified a fixed buying and selling price of \$35 an ounce for gold, thereby devaluing the gold dollar to 59.06 per cent of its former weight."

predicts that, under a gold standard, a nation that consistently runs a trade deficit will see its gold reserves dwindle—and this is precisely what occurred. During the 1960s the French President, Charles de Gaulle, under the influence of his economic advisor Jacques Rueff, grew antagonistic toward the “exorbitant privilege”<sup>13</sup> the United States has won itself in crafting the Bretton Woods monetary order of 1944 (which had established the dollar as the world’s reserve currency<sup>14</sup>). On February 4<sup>th</sup>, 1965, in a now famous press conference, de Gaulle called for the reestablishment of the classical gold standard<sup>15</sup>, observing that the privilege of having the reserve currency had allowed the United States to expropriate business from other nations through the inflation of its money supply<sup>16</sup>. President de Gaulle backed his words with action by demanding redemption of France’s surplus of dollars for gold. The drain on the US gold supply precipitated by France, and followed by other nations, culminated in President Nixon’s executive order of August 15, 1971 which “closed the gold window”, finally and completely abrogating the convertibility of dollars for gold<sup>17</sup>.

Since the closing of the gold window the expansion of the United States money supply has no longer been constrained by the strictures of gold redeemability. Instead money supply growth has largely been determined by

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<sup>13</sup> DeLong, B.J. “[Exorbitant privilege](#).” February 22, 2005.

<sup>14</sup> Rothbard, M. *[What Has Government Done to Our Money?](#)* Ludwig von Mises Institute, fifth edition, 2005. pp. 95–97.

<sup>15</sup> de Gaulle, C. Text of press conference. Paris, France, February 4, 1965.

See in particular: “*Nous estimons nécessaire que les échanges internationaux soient établis comme c’était le cas avant les grands malheurs du monde sur une base monétaire indiscutable et qui ne porte la marque d’aucun pays, en particulier. Quelle base ? En vérité on ne voit pas qu’il puisse y avoir réellement de critère, d’étalon autre que l’or. Et oui l’or qui ne change pas de nature, qui peut se mettre différemment en lingot, en barre, en pièce, qui n’a pas de nationalité, qui est tenu éternellement et universellement pour la valeur inaltérable et fiduciaire par excellence du reste.*”

<sup>16</sup> Ibid. See: “*Alors il se crée en Amérique par le moyen de ce qu’il faut bien appeler l’inflation, des capitaux qui sous la forme de prêts en dollars accordé à des Etats ou à des particuliers sont exportés au dehors, et bien entendu cette augmentation de la circulation fiduciaire américaine rend moins rémunérateurs les placements à l’intérieur des Etats-Unis. D’où chez eux une propension croissante à investir à l’étranger. De là il en résulte pour certains pays une sorte d’expropriation de telle ou telle de leurs entreprises.*”

de Gaulle’s argument is congruous with that of Riesman, described in [Credit Expansion, Crisis, and the Myth of the Savings Glut](#), where he writes: “While it may appear that increased foreign holdings of dollars and short-term dollar-denominated securities represent foreign investment, the truth is that much or possibly even all of the alleged foreign saving entering the United States is nothing other than a consequence of US credit expansion and money supply increase.”

<sup>17</sup> Rothbard, *What Has Government Done to Our Money?* p. 101.

Federal Reserve policy and its influence on the willingness of US banks to expand credit in the economy.

## 5. Federal Reserve Policy and Credit Expansion

According to standard economic thinking, the primary mechanism used by the Federal Reserve to influence credit expansion in the banking system is the manipulation of reserves. Using so-called “open market operations”, the Fed may purchase assets in the economy—typically Treasury debt—using money that it creates *ex nihilo* (“out of nothing”). The purchase of assets expands the Fed’s balance sheet and “injects” money into the economy, which finds its way into the banking system as new deposits. The new deposits may then be lent out, expanding credit within the economy as described in the previous section on fractional reserve banking. Oppositely, the Fed may “drain” money from the economy by selling assets from its balance sheet, which would reduce deposits in the banking system. Finally, the Fed may raise the reserve requirement, demanding that banks hold a greater fraction of their deposits on reserve, which would curtail their ability to lend. A lowering of the reserve requirement would have the opposite, inflationary, effect.

The account of credit expansion described above is called the money multiplier theory of lending. The theory is common to both Austrian economics<sup>18</sup> and neoclassical economics<sup>19</sup> and assigns the Federal Reserve the primary causal role in inflating the money supply. The temporal causality posited by the theory is that the Fed *first* creates reserves, which are *subsequently* multiplied many times over in the process of fractional reserve banking. Rothbard explains that “[s]ince banks profit by credit expansion, and since government has made it almost impossible for them to fail, they will usually try to keep “loaned up” to their allowable maximum.”<sup>20</sup> In other words, newly created reserves will cause increased fractional reserve lending and eventually an increase in aggregate prices, as new credit money pours into

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<sup>18</sup> Ibid. Cf. pp. 72–73 where Rothbard writes “Precisely how does the Central Bank go about its task of regulating the private banks? By controlling the banks’ “reserves”—their deposit accounts at the Central Bank.” See also Rothbard, M. [\*The Mystery Of Banking\*](#). p. 134–39.

<sup>19</sup> Samuelson, P.A. and Nordhaus, W.D. *Economics*. McGraw-Hill Companies, 16th edition, January 6, 1998. Cf. p. 495 where the authors write: “The [Federal Reserve Open Market Committee] controls the single most important and frequently used tool of modern monetary policy—the supply of bank reserves.” The authors provide a diagram of the temporal sequence in the money multiplier theory on p. 494.

<sup>20</sup> *What Has Government Done to Our Money?* p. 73.

the economy. It is not surprising, then, that many economists and particularly many Austrian economists predicted that the massive expansion of the Federal Reserve's balance sheet in 2008 and attendant creation of new reserves, would allow for a substantial increase in lending, which in turn would lead to a commensurately large increase in prices<sup>21</sup>.

Unfortunately, the money multiplier theory, on which these predictions were based, has some significant problems. The first problem with the money multiplier theory is the diminishing role of reserves in the operation of commercial banks. Since 1994, the Federal Reserve has permitted commercial banks to implement a retail sweep program, explaining that:

Under such a program, a depository institution sweeps amounts above a predetermined level from a depositor's checking account into a special-purpose money market deposit account created for the depositor. In this way, the depository institution shifts funds from an account that is subject to reserve requirements to one that is not and therefore reduces its reserve requirement.<sup>22</sup>

That is, banks may "sweep" deposits to savings accounts on a daily basis and these savings accounts have no reserve requirement at all<sup>23</sup>, allowing banks to lend out the entire amount originally deposited. In an empirical analysis of the impact of sweep programs on reserve requirements, Anderson and Rasche conclude that:

the willingness of bank regulators to permit use of deposit-sweeping software has made statutory reserve requirements a "voluntary constraint" for most banks. That is, with adequately intelligent software, many banks seem easily to be able to reduce their transaction deposits by a large enough amount that the level of their required reserves is less than the amount of reserves that they require for day-to-day operation of the bank.<sup>24</sup>

In other words, since the institution of sweeps, most commercial banks have operated as if there were no reserve requirement at all. In this context, Chairman Bernanke's comment that "[t]he Federal Reserve believes it is possible that, ultimately, its operating framework will allow the elimination of minimum reserve requirements, which impose costs and distortions on the

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<sup>21</sup> As an example, consider the predictions of [Rozeff](#) and [Murphy](#).

<sup>22</sup> *The Federal Reserve System: Purposes and Functions*. 9<sup>th</sup> edition, June 2005. p. 44.

<sup>23</sup> O'Brien, Y-Y C. "[Reserve requirement systems in OECD countries.](#)" Finance and Economics Discussion Series, Divisions of Research & Statistics and Monetary Affairs of the Federal Reserve Board, Washington, D.C. p. 52.

<sup>24</sup> Anderson, R.G. & R.H. Rasche. "[Retail Sweep Programs and Bank Reserves.](#)" *Federal Reserve Bank of St. Louis Review*, 83, 2001. p. 71.



banking system”<sup>25</sup> is not revolutionary but merely the recognition of current banking reality. While it is true that commercial banks maintain a cushion of reserves (usually a mix of vault cash plus excess reserves held at the Federal Reserve) to deal with day-to-day operations, the quantity of these reserves does not, as we shall see, determine the quantity of loan issuance, as posited by the money multiplier theory.

A second major problem with the money multiplier theory is the contention that banks must wait for reserves before making loans. In an appraisal of unconventional monetary policy produced by the Bank of International Settlements, Borio and Disyatat argue that this constraint does not exist:

The underlying premise of the [money multiplier theory], which posits a close link between reserves expansion and credit creation, is that bank reserves are needed for banks to make loans. Either bank lending is constrained by insufficient access to reserves or more reserves can somehow boost banks’ willingness to lend. An extreme version of this view is the text-book notion of a stable money multiplier: central banks are able, through exogenous variations in the supply of reserves, to exert a direct influence on the amount of loans and deposits in the banking system. In fact, the level of reserves hardly figures in banks’ lending decisions. The amount of credit outstanding is determined by banks’ willingness to supply loans, based on perceived risk-return trade-offs, and by the demand for those loans. ... The main exogenous constraint on the expansion of credit is minimum capital requirements.<sup>26</sup>

Further confirmation that the availability of reserves does not constrain lending is provided by Kirnos in an informal interview conducted with the executive of a regional bank who explained that “during his tenure as a commercial banker, he never had to worry about his bank’s reserve ratio—loans were made without regard to it. The biggest constraint on lending (on the supply side) was bank *capital*, or the capital ratio.”<sup>27</sup> The banker’s explanation of lending practice is congruent with modern banking

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<sup>25</sup> Bernanke, B. “[Federal Reserve’s exit strategy](#).” Before the Committee on Financial Services, U.S. House of Representatives, Washington, D.C. February 10, 2010.

<sup>26</sup> Borio, C. and P. Disyatat, “[Unconventional Monetary Policies: An Appraisal](#),” *BIS Working Papers*, No. 292, 2009

<sup>27</sup> Kirnos, I. “[Reserves, Capital and Me](#).” March 4, 2010.

regulation—namely the Basel II accord—which focuses almost exclusively on capital ratios<sup>28</sup> and pays little regard to reserves.

Given that commercial banks are effectively operating without a reserve requirement and that loan issuance is not constrained by reserves, it would be sensible to reconsider the temporal causality posited by the money multiplier theory of lending. If the causality were correct, one would expect changes in reserves to precede changes in the issuance of credit, *ceteris paribus*. Citing an empirical study on business cycle statistics conducted by the Federal Reserve, Steve Keen explains that the opposite is true:

...rather than [reserves] being created first and credit money following with a lag, the sequence was reversed: credit money was created first, and [reserves were] then created about a year later.<sup>29</sup>

From an Austrian perspective, an empirical argument based on a temporal correlation is not definitive proof of an underlying causality—although it may be illustrative and suggestive of that causality. An explanation for the counterintuitive temporal sequence is provided in a Federal Reserve study of the institutional structure of the US banking system since 1990, conducted by Carpenter and Demiralp. They demonstrate that “reservable liabilities fund only a small fraction of bank lending and the evidence suggests that they are not the marginal source of funding, either.”<sup>30</sup> Their point is that when a bank makes a loan, the matching liability used to fund the loan does not need to be reserves created by the Fed. To buttress their statement they provide data showing that the amount of reserves available in 2007 could not plausibly have funded the outstanding bank credit at the time:

For perspective, M2 averaged about \$7¼ trillion in 2007. In contrast, reservable deposits were about \$600 billion, or about 8 percent of M2. Moreover, bank loans for 2007 were about \$6¼ trillion. This simple comparison suggests that reservable deposits are in no way sufficient to fund bank lending.<sup>31</sup>

They go on to explain that “managed liabilities”, rather than reserves, are the major source of funds used by banks to issue loans:

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<sup>28</sup> A bank’s capital ratio is the ratio of positive capital (common or preferred equity, or hybrid capital) to its risk-weighted assets (i.e., its loans and investments, weighted based on credit quality).

<sup>29</sup> Keen, S. “[The Roving Cavaliers of Credit](#).” January 31, 2009.

<sup>30</sup> Carpenter, S.B and Demiralp, S. “[Money, reserves, and the transmission of monetary policy: does the money multiplier exist?](#)” *Finance and Economics Discussion Series 2010–41*, Board of Governors of the Federal Reserve System (U.S.), 2010. p. 27.

<sup>31</sup> *Ibid* pp. 5–6.

Banks have access to non-deposit funding ... [n]otably, large time deposits, a liability that banks are able to manage more directly to fund loans ... Banks' ability to issue managed liabilities increased substantially in the period after 1990, following the developments and increased liquidity in the markets for bank liabilities. Furthermore, the removal of interest rate ceilings through Regulation Q significantly improved the ability of banks to generate non-reservable liabilities by offering competitive rates on large time deposits.<sup>32</sup>

In support of this claim they provide empirical data showing that “managed liabilities rise immediately in response to an increase in bank loans whereas the increase in reservable deposits is barely significant and short-lived, reinforcing the notion that it is managed liabilities that fund a substantial portion of lending.”<sup>33</sup> In a further blow to conventional wisdom, Carpenter and Demiralp provide data showing that, contrary to the prediction of the money multiplier theory, a “contractionary policy” that reduces reserves in the banking system “is accompanied by an increase (not a decrease) in bank loans and an increase in managed liabilities to fund these loans.”<sup>34</sup> The increase in loans is a function of businesses drawing on pre-existing credit lines in response to the anticipated effects of the contractionary monetary policy. The banks whose credit lines are being drawn on then typically issue managed liabilities (or purchase them) to fund the increased loans.

To sum up, since the early 90s changes in banking regulation have allowed banks to fund the majority of their loan issuance with sources other than reserves created by the Fed. Furthermore, the creation of retail sweeps has effectively allowed commercial banks to operate without any reserve requirement. The consequence of these policy changes has resulted in a banking system where the temporal causality posited by the money multiplier theory is not operative. In practice, the issuance of loans precedes the creation of reserves. Banks do not wait for reserves before making loans, and if a bank needs reserves for operating reasons, e.g., to satisfy customer withdrawals, it can buy or borrow them from the Federal Reserve, The Federal Home Loan Bank, or other commercial banks. If the banking system as a whole is short of reserves, the Fed will inject more. However, it is critical to recognize that the injection of reserves is not the cause of greater loan issuance, it is the consequence. In other words, the Fed is following the expansionary activities of the banks, rather than leading them.

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<sup>32</sup> Ibid p. 4.

<sup>33</sup> Ibid p. 14.

<sup>34</sup> Ibid p. 19.

Importantly, the fact that the money multiplier theory is incorrect does not vitiate other aspects of Austrian economics. As we shall see, the Austrian Business Cycle Theory is a powerful tool for understanding the causal origins of the housing bust. It will help provide the answer to why the US banking system is so catastrophically capital constrained and whether we are likely to face a period of inflation or deflation.

## 6. The Austrian Business Cycle Theory

The Austrian Business Cycle Theory is essentially a theory of the *misallocation* of capital. It provides a causal explanation for the periodic economic booms and busts that have been observed throughout history. Where other schools of thought, primarily the Keynesian school, attribute the bust phase of the business cycle to the mysterious and inexplicable disappearance of so-called “animal spirits”<sup>35</sup>, Austrians recognize that the seeds of the bust are planted in the fertile soil of a credit-expansionary boom. In the boom phase, the expansion of credit by the banking system lowers the market rate of interest from its natural rate<sup>36</sup> and causes capital to be diverted to projects that require a greater abundance of real savings than are actually present in the economy<sup>37</sup>. It is only a matter of time before it becomes apparent that sufficient savings are unavailable to complete the misguided projects, whereupon a liquidation of the businesses involved and a reallocation of their capital become necessary. The market recognition of the squandering of capital is typically attended by a “panic” where prices of the capital goods, which had been bid up in the credit boom, quickly collapse. Contrary to Keynesian doctrine, panics are not the trigger of economic malaise, but merely the first stage of a curative process that realigns industry

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<sup>35</sup> Keynes, J.M. *The General Theory of Employment, Interest and Money*. First Harbinger Edition, 1964. p. 161.

<sup>36</sup> The natural rate of interest is the rate consistent with the aggregate time preference of consumers.

<sup>37</sup> Loyd, S.J. *House of Commons Papers*. Volume 8, part 3. Cf. p. 149. A similar analysis of the business cycle was advanced by Samuel Jones Loyd who was recognized as the foremost expert on banking in Britain in the mid 19<sup>th</sup> century. On February 28<sup>th</sup>, 1948, Loyd, testifying before the House of Commons, explained that the Railway Panic of 1847 “was caused by a Deficiency of Capital to sustain the mercantile Engagements that were in existence. That Deficiency of Capital arose ... from the extraordinary Diversion of Capital from trading Purposes to the Construction of Railways.” Indeed, Austrian theory finds much in common with the explanation of busts expounded during the 19<sup>th</sup> century by classical economists, who, much more than their neoclassical posterity, tended to pay careful heed to the importance of capital.

in a manner commensurate with consumer preferences and the available pool of savings in the economy. As John Mills observed in a speech given to the Manchester Statistical Society in 1867, “panics do not destroy capital; they merely reveal the extent to which it has been previously destroyed by its betrayal into hopelessly unproductive works”<sup>38</sup>.

In an economy with fractional reserve banking the misallocation of capital during the boom phase is represented as loans made by banks to fund misguided business ventures, as discussed above. Once the bust arrives, the “malinvested” debt within the economy must either be defaulted on or written down. That is, banks must recognize losses on the loans they made. During Alan Greenspan’s tenure as Federal Reserve Chairman, he repeatedly responded to busts by lowering the short term interest rate in an attempt to spur a resumption of credit expansion. The folly of Greenspan’s policy was that it prevented the necessary reallocation of capital and greatly exacerbated the magnitude of the misallocation that took place. There is a limit, however, at which the scale of squandered capital becomes so large and the pool of real savings so depleted that lowering short term interest rates can no longer encourage further lending and borrowing. Indeed, it appears that such a limit has been reached. The International Monetary Fund estimated that “write-downs on U.S.-based assets suffered by all financial institutions over 2007–2010 will amount to \$2.7 trillion”<sup>39</sup>, leaving the US banking system effectively insolvent<sup>40</sup> and rendering the Federal Reserve’s standard policy impotent.

In detailing an Austrian taxonomy of monetary deflation, Professor Salerno explains that

Before World War II bank runs generally were associated with the onset of recessions and were mainly responsible for the “bank credit deflation” that almost always characterized these recessions. Bank runs typically occurred when depositors lost confidence that banks were able to continue redeeming the titles—represented by bank notes and demand deposits—to the property they had entrusted to

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<sup>38</sup> Article read before the Manchester Statistical Society, December 11, 1867, on Credit Cycles and the Origin of Commercial Panics as quoted in *Financial crises and periods of industrial and commercial depression*, Burton, T. E. (1931, first published 1902). New York and London: D. Appleton & Co, p. 20.

<sup>39</sup> International Monetary Fund. “[World Economic Outlook, Crisis and Recovery](#).” April 2009, p. 29.

<sup>40</sup> Quinn, J. “[Roubini warns US banking system effectively insolvent](#).” January 2009.

the banks for safekeeping and which the banks were contractually obliged to redeem upon demand.<sup>41</sup>

That is, prior to World War II the loan losses suffered by banks during recessions were generally followed by a public loss of confidence in the ability of many banks to redeem depository notes on demand. The repudiation of bank notes during these recessions was deflationary as it reduced the supply of money in the economy. The creation of the Federal Deposit Insurance Corporation in 1933, established the insurance of deposits up to a certain size and effectively eliminated bank runs on those deposits<sup>42</sup>. However, the insurance of deposits—even in the theoretical case where *all* deposits are *fully* insured—does not preclude the possibility of bank credit deflation, albeit of a different and less dramatic variety than that described by Salerno.

If the expansion of credit by the banking system slows sufficiently, either by decreased demand for credit, or increased credit standards, it is possible, as Huerta de Soto explains, that

the repayment of loans produces ... deflationary effects when enough new loans are not granted to at least offset the ones returned.

... Under *ordinary conditions* the contraction or deflation we are describing does not occur, because when a customer of one bank returns a loan, the sum is compensated for by another loan granted by another bank; in fact even within the same bank the attempt is always made to replace the repaid loan with a new one<sup>43</sup>.

Yet the economic conditions in the aftermath of the 2008 housing bust have been anything but ordinary, even for a recession. In a speech on restoring the flow of credit to small businesses, US Federal Reserve Chairman Bernanke, citing a survey by the National Federation of Independent Business, stated that “credit conditions have ... remained extremely elevated

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<sup>41</sup> Salerno, J. T. “[An Austrian Taxonomy of Deflation—With Application to the U.S.](#)” *Quarterly Journal of Austrian Economics* 6 (4): 81–109, 2003.

<sup>42</sup> Not all deposits are insured however. The failure of IndyMac in 2008 was prominent case where the FDIC estimated that there were “about \$1 billion of potentially uninsured deposits held by approximately 10,000 depositors.” Cf <http://www.fdic.gov/news/news/press/2008/pr08056.html>. It is undoubtedly the case that during the panic of 2008 many large deposits not insured by the FDIC fled the banking system for the safety of the Treasury market in a modern day bank run.

<sup>43</sup> Huerta de Soto, J.H. *Money, Bank Credit and Economic Cycles*. Ludwig von Mises Institute, Translation of 2<sup>nd</sup> edition, 2009. p. 255 and p. 260.

by historical standards”<sup>44</sup>. He explained that “weaker demand for loans from small businesses” and “restricted credit availability” were both factors in the reduction of credit issuance<sup>45</sup>. That is, exactly those *extraordinary* conditions that would produce a bank credit deflation described by Huerta de Soto have been present since 2008.

Responding to the contraction of credit, and recognizing the inefficacy of lowering the federal funds rate to spur further credit expansion, the Federal Reserve intervened in the market’s natural process of liquidating misallocated capital by embarking on an unprecedented program of quantitative easing. The potential effects of this program have alarmed many Austrian economists who are worried that it may cause inflation or even hyperinflation. An investigation of the effects of quantitative easing will provide a key to answering the inflation versus deflation debate.

## 7. Will Quantitative Easing Cause Mass Inflation?

Quantitative easing is a policy whereby the Federal Reserve purchases assets with newly created money in an attempt to reignite a credit expansion. The Federal Reserve’s purchase of assets in the open market expands its balance sheet and injects money into the economy in the form of new deposits in the banking system. Quantitative easing was first employed in

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<sup>44</sup> Bernanke, B. “[Restoring the Flow of Credit to Small Businesses](#).” Speech at the Federal Reserve Meeting Series: “Addressing the Financing Needs of Small Businesses,” Washington, DC. July 12, 2010

<sup>45</sup> The restricted credit availability cited by Bernanke is another expected consequence of the bust phase of the business cycle, according to Austrian theory. As Huerta de Soto explains in *Money, Bank Credit and Economic Cycles*, pp. 260–261:

The crisis and economic recession reveal that a highly significant number of investment projects financed under new loans created by banks *are not profitable* because they do not correspond to the true desires of consumers. Therefore many investment processes fail, which ultimately has a profound effect on the banking system. The harmful consequences are evidenced by *a widespread repayment of loans* by many demoralized businessmen assessing their losses and liquidating unsound investment projects (thus provoking deflation and the tightening of credit); they are also demonstrated by an alarming and atypical rise in payment arrears on loans (adversely affecting the banks’ solvency).

... In short, bank customers’ economic difficulties, one of the inevitable consequences of all credit expansion, render many loans irrecoverable, accelerating even more the credit tightening process (the inverse of the expansion process).

2008 because the Federal Reserve's standard policy of reducing short term interest rates proved ineffective in encouraging bank lending<sup>46</sup>.

It is precisely the expansion of the Federal Reserve's balance sheet, and attendant creation of new reserves, that has many Austrian economists concerned about the possibility of mass inflation. For if the money multiplier theory of lending were correct, the creation of new reserves would be followed by a manifold increase in credit issuance as banks sought to profit from the availability of new funds to lend. However, as we have seen in the section on credit expansion, the correct direction of lending causality is in fact the reverse of that posited by the money multiplier theory; the issuance of loans precedes the creation of reserves. Given that banks do not wait for reserves to make loans, the creation of new reserves *per se* tells us little about whether banks will increase their lending.

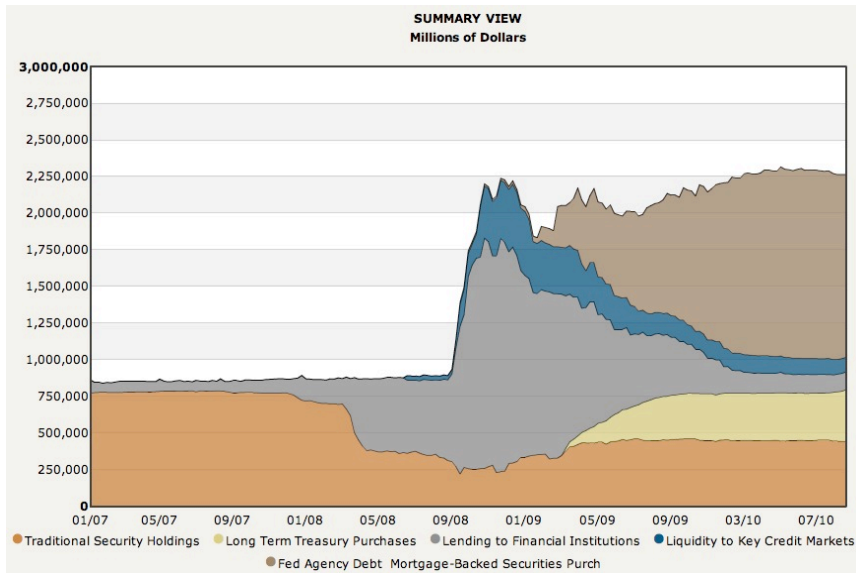
What, then, is the Federal Reserve's purpose in employing quantitative easing, and what are its likely effects? The purpose has morphed in the years since the program began and this is reflected in the changing composition of the Federal Reserve's balance sheet during this period, as illustrated in the chart below<sup>47</sup>.

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<sup>46</sup> Bernanke, B. "Federal Reserve Policies in the Financial Crisis." Speech at the At the Greater Austin Chamber of Commerce, Austin, Texas, December 1, 2008. Cf. "Regarding interest rate policy, although further reductions from the current federal funds rate target of 1 percent are certainly feasible, at this point the scope for using conventional interest rate policies to support the economy is obviously limited."

<sup>47</sup> The chart was obtained from the [Federal Reserve Bank of Cleveland](#).





*Federal Reserve balance sheet*

In the first stages of the housing bust the Fed's program of quantitative easing mostly involved emergency lending to banks and other financial institutions. In a speech given at Princeton University on September 24<sup>th</sup>, 2010, Chairman Bernanke explained the purpose of this lending, stating that the housing bust of 2008

bore a striking resemblance to the bank runs [of the 19th century]" ... The crisis showed ... that risk aversion, imperfect information, and market dynamics can scare away buyers and badly impair price discovery. Market illiquidity ... interacted with financial panic in dangerous ways. Notably, a vicious circle sometimes developed in which investor concerns about the solvency of financial firms led to runs: To obtain critically needed liquidity, firms were forced to sell assets quickly, but these "fire sales" drove down asset prices and reinforced investor concerns about the solvency of the firms. Importantly, this dynamic contributed to the profound blurring of the distinction between illiquidity and insolvency during the crisis.<sup>48</sup>

The theory advanced by Bernanke is that the losses suffered by the banking system were the result of a panic, so that prices and market liquidity

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<sup>48</sup> Bernanke, B. "[Implications of the Financial Crisis for Economics](#)." Speech at the Conference Co-sponsored by the Center for Economic Policy Studies and the Bendheim Center for Finance, Princeton University, September 24, 2010.

were driven by fear rather than rational concern for the solvency of the banking system. Under this theory, Bernanke explained, the Federal Reserve's policy of quantitative easing was simply following the old dictum of Walter Bagehot, that "[t]o avert or contain panics, central banks should lend freely to solvent institutions, against good collateral".

Bernanke's theory does not withstand scrutiny, however. Despite massive emergency lending during 2008 and 2009, banks continued to suffer losses on the mortgage loans they had made in the preceding boom years<sup>49</sup>. That is, the underlying problem was the insolvency of the banking system, rather than a temporary dearth of liquidity. Recognizing that its emergency lending had failed to stay losses on the mortgage loans made during the housing boom, the Federal Reserve switched the focus of its quantitative easing to supporting the mortgage loan market directly.

In late 2008, as the Federal Funds Rate approached the zero bound, Chairman Bernanke explained that the Fed still had the power to ease monetary conditions and increase demand for loans by

[purchasing] longer-term Treasury or agency securities on the open market in substantial quantities. This approach might influence the yields on these securities, thus helping to spur aggregate demand. Indeed, last week the Fed announced plans to purchase up to \$100 billion in GSE debt and up to \$500 billion in GSE mortgage-backed securities over the next few quarters. It is encouraging that the announcement of that action was met by a fall in mortgage interest rates.<sup>50</sup>

The purchase of mortgage debt has been the primary means of monetary stimulus employed by the Federal Reserve since mid 2009. While the lowering of mortgage interest rates increases demand for mortgages at the margin, the pace of loan issuance may still not be sufficient to prevent the type of bank credit deflation discussed in the prior section on the Austrian

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<sup>49</sup> Appelbaum, B. "[Cautious about the economy, big banks report slow lending.](#)" Washington Post, January 21, 2010. Cf. "But the banking industry's central challenge remains the inability of many customers to repay loans, as the financial health of many Americans continues to be strained by high unemployment and low housing values. The nation's largest retail banks, including [J.P. Morgan Chase](#) and [Citigroup](#), which already reported annual results, continue to lose billions of dollars, in particular on mortgage and credit card loans. Executives said that the scale of losses is no longer increasing with each passing quarter, but the sums remain vast by historical standards."

<sup>50</sup> Bernanke, B. "[Federal Reserve Policies in the Financial Crisis.](#)" Speech at the At the Greater Austin Chamber of Commerce, Austin, Texas, December 1, 2008.

Business Cycle. Huerta de Soto describes the reluctance to lend in terms of the losses caused by the credit expansionary boom:

bank customers' economic difficulties, one of the inevitable consequences of all credit expansion, render many loans irrecoverable, accelerating even more the credit tightening process (the inverse of the expansion process).<sup>51</sup>

That is, in the corrective phase of the business cycle, when there are still losses to be recognized by the banking system, banks may remain cautious about lending despite artificially stimulated credit demand.

The biggest effect of the lowering of mortgage interest rates by the Federal Reserve has been the refinancing of mortgages<sup>52</sup>. But even in this regard, the effect has been circumscribed by losses related to the business cycle. Banks are quite sensibly reluctant to refinance mortgages for customers who have negative equity in their homes<sup>53</sup>. Mortgage recipients are more likely to default on their loan when in negative equity<sup>54</sup>, especially when they are deeply “underwater”, and it has been estimated that over 4 million homeowners have greater than 50% negative equity<sup>55</sup>.

The overall impact of quantitative easing has not been the mass inflation that many Austrian economists feared. Rather it has put the mortgage market in a stasis; the market's tendency to liquidate losses has been balanced by the Federal Reserve's policy to prevent that from happening. A full liquidation of losses caused in the housing boom would require much lower prices for mortgage debt and correspondingly higher interest rates. Furthermore, by preventing a full liquidation of mortgage losses, the Federal Reserve has stymied the reallocation that needs to take place in the labor market. Ferreira et al. conclude that homeowners in negative equity have significantly reduced mobility and that “[s]ubstantially lower household mobility arising from negative equity is likely to have various social costs including poorer labor market matches”<sup>56</sup>. Indeed, the number of

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<sup>51</sup> *Money, Bank Credit and Economic Cycles*. p. 261.

<sup>52</sup> Haggerty, M. “[Reasons Not to Refinance a Mortgage](#).” *New York Times*, September 17<sup>th</sup>, 2010. Cf. “With mortgage rates at historical lows, almost all the loans being written these days are refinancings — 80.5 percent of applications in the week ended Sept. 10, according to the Mortgage Bankers Association.”

<sup>53</sup> Streitfeld, D. “[Interest Rates Are Low, but Banks Balk at Refinancing](#).” *New York Times*, December 12, 2009.

<sup>54</sup> Elul, R., Souleles, N., Glennon, D. and Hunt, R. “[What Triggers Mortgage Default?](#)” Federal Reserve Bank of Philadelphia working paper 10-13, 2010.

<sup>55</sup> “[Negative Equity Breakdown](#).” *Calculated Risk Blog*, July 31, 2010.

<sup>56</sup> Ferreira, F. Gyourko, J. and Tracy, J. “[Housing Busts and Household Mobility](#).” *Journal of Urban Economics*, 2010, vol. 68(1), p. 34–45.

American workers who are either unemployed or working part time with a desire for a full time job has persistently remained above 18%<sup>57</sup>.

In light of its failure to meaningfully reduce systemic unemployment through quantitative easing, the Federal Reserve has announced its intention to renew the policy of monetary easing. Whether this second dose of monetary nostrum will produce the mass inflation feared by many is still up for debate. What should not be under debate is the *theoretical* capacity of the Federal Reserve to create inflation, if it so chooses. In a paper from which he earned the sobriquet “Helicopter Ben”, Chairman Bernanke provided a thought experiment to demonstrate that any deflation could be defeated:

most economists would agree that a large enough helicopter drop [of newly created money] must raise the price level ... at some point the public would attempt to convert its increased real wealth into goods and services, spending that would increase aggregate demand and prices.<sup>58</sup>

In a speech a few years later, Bernanke detailed the policy mechanism by which the circulation of dollars might be increased at will:

If the Treasury issued debt to purchase private assets and the Fed then purchased an equal amount of Treasury debt with newly created money, the whole operation would be the economic equivalent of direct open-market operations in private assets.

... We conclude that, under a paper-money system, a determined government can always generate higher spending and hence positive inflation.<sup>59</sup>

Yet the capacity to achieve an inflationary end is no guarantee the Fed would employ this mechanism. Observing that the Bank of Japan had the same tools at its disposal as the Federal Reserve, Bernanke suggested that “Japan’s deflation problem is real and serious; but, in my view, political constraints, rather than a lack of policy instruments, explain why its deflation has persisted for as long as it has.” Thus Bernanke wends us to the final subject we must investigate if we are to provide an answer to the inflation versus deflation debate: the politics of deflation.

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<sup>57</sup> [Gallup Unemployment Survey](#), October 7, 2010.

<sup>58</sup> Bernanke, B. “[Japanese Monetary Policy: A Case of Self-Induced Paralysis?](#)” In Adam Posen and Ryoichi Mikitani, eds., *Japan’s Financial Crisis and Its Parallels to U.S. Experience*, Special Report 13, Institute for International Economics, Washington, D.C., 2000.

<sup>59</sup> Bernanke, B. “[Deflation: Making Sure “It” Doesn’t Happen Here.](#)” Speech Before the National Economists Club, Washington, D.C., November 21, 2002.

## 8. The Politics of Deflation

The reason that public sentiment has always been biased against monetary deflation<sup>60</sup> can be found in the manner in which wealth transfer occurs under inflationary and deflationary environments. During an inflationary credit expansion, wealth is transferred from the public in general to the earliest recipients of the newly created credit money. In practice the earliest recipients are interest groups with the strongest political connections to the State and, in particular, the State institutions that control monetary policy (i.e., the Federal Reserve in the United States). Importantly, the wealth transfer that takes place during an inflation is hidden and largely unrecognized by the majority of the population. The population is unaware that the supply of money is increasing and the attendant rise in prices, ostensibly beneficial to business, initially

produces [a] general state of euphoria, a false sense of wellbeing, in which everybody seems to prosper. Those who without inflation would have made high profits make still higher ones. Those who would have made normal profits make unusually high ones. And not only businesses which were near failure but even some which ought to fail are kept above water by the unexpected boom. There is a general excess of demand over supply—all is saleable and everybody can continue what he had been doing.<sup>61</sup>

In an inflationary environment wealth transfer proceeds insidiously and is masked by a perceived prosperity. The unmasking finally occurs at the end of the credit boom when the market's deflationary tendency to clear prior losses takes hold. Failed businesses are liquidated and their capital is transferred, usually through bankruptcy, to creditors who must acknowledge losses on these misguided investments. Unemployment soars and social unrest replaces the former sense of euphoria attending the credit boom. Professor Hülsmann summarizes the differences between the transfers of wealth occurring under and inflation and deflation as such:

In short, the true crux of deflation is that it does not hide the redistribution going hand in hand with changes in the quantity of

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<sup>60</sup> *Human Action*. p. 573: Cf. "Public opinion has always been biased against creditors. It identifies creditors with the idle rich and debtors with the industrious poor. It abhors the former as ruthless exploiters and pities the latter as innocent victims of oppression. It considers government action designed to curtail the claims of the creditors as measures extremely beneficial to the immense majority at the expense of a small minority of hardboiled usurers."

<sup>61</sup> Hayek, F.A. "[Can We Still Avoid Inflation?](#)" This essay was originally given as a lecture before the Trustees and guests of the Foundation for Economic Education at Tarrytown, New York on May 18, 1970.

money. It entails visible misery for many people, to the benefit of equally visible winners. This starkly contrasts with inflation, which creates anonymous winners at the expense of anonymous losers.

... [Inflation] is a secret rip-off and thus the perfect vehicle for the exploitation of a population through its (false) elites, whereas deflation means open redistribution through bankruptcy according to the law.<sup>62</sup>

And here precisely lies the answer to why the State prefers a policy of controlled inflation. Only in an inflationary environment can State largesse be conferred to the politically well-connected without raising public ire. The widespread and visible transfers of property through bankruptcy that must take place during a deflation are often politically destabilizing and thus highly unappealing to any regime. A sense of injustice grows within the population as banks are saved from the folly of their misguided investments with taxpayer-funded bailouts, while debtors with no political clout have property seized in bankruptcy.

The sense of public outrage sometimes flares in acts of violence and anti-establishment rioting; a fact cited repeatedly in history as a rationale for preventing deflations from running their full course. In 1931 Lord Keynes took part in writing the Macmillan report for the British government, which warned that a reduction in wages resulting from an unimpeded deflation “might be expected to produce social chaos”<sup>63</sup> On January 7<sup>th</sup>, 1811 economist Mathew Carey published a series of letters he had sent to Congressman Adam Seybert warning that the failure to renew the charter for the Bank of America, and the resulting destruction of credit, would produce “an awful scene of destruction, the consequences or termination of which elude the power of calculation”.<sup>64</sup> The scaremongering and agitation of the past is echoed in warnings that followed the housing bust and global recession of 2008. For instance, the International Monetary Fund’s managing director Dominique Strauss-Kahn warned that the rise in unemployment following the US housing bust might cause “an explosion of social unrest”.<sup>65</sup>

The dire socio-political consequences attributed to an untrammelled deflation superficially suggest that the Federal Reserve would do everything in its power to force the resumption of a credit expansion. For example, it

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<sup>62</sup> Hülsmann, J.G. *Deflation and Liberty*. p. 27.

<sup>63</sup> Keynes, J.M. et al. *Macmillan Report*. 1931. p. 195.

<sup>64</sup> Carey, M. *Letters to Dr Adam Seybert, Representative in Congress for the City of Philadelphia, on the Subject of the Renewal of the Charter of the Bank of the United States*. Second Edition, January 7, 1811.

<sup>65</sup> Pritchard. A.E. “[IMF fears ‘social explosion’ from world jobs crisis.](#)” September 13, 2010.

was a political analysis which led Austrian economist Peter Schiff to conclude that a hyperinflation may be on the horizon:

If the Fed drops enough money from helicopters it will eventually reverse the nominal declines in asset prices. Unfortunately, that road leads to hyper-inflation and disaster. ... The big problem politically is that hyper-inflation may superficially appear to be the lesser evil. If asset prices are allowed to collapse, ownership of those assets will pass to our creditors. If instead we repay our debts with debased currency, we retain ownership of our assets and shift the losses to our creditors. Since American debtors can vote in U.S. elections and foreign creditors cannot, the choice seems obvious.

Schiff errs in his analysis by implying that monetary policy in the United States is directed by the democratic voting mechanism; it is not. The Federal Reserve is an independent, quasi-private institution within the State that is nominally overseen by Congress. In practice, however, the Fed directs the passing of legislation pertaining to monetary policy rather than being directed by it<sup>66</sup>. To elucidate the importance of who controls monetary policy, it will be useful to define two classes that operate within the institution of the State:

- The class of people whose power derives from popular mandate, which we will call the political class. In the United States the political class is constituted of members of Congress, the President and appointees to the Executive branch of the United States government.
- The class of people whose interests are aligned with and whose main constituency is the banking industry, which we will call the banking class. In the United States this is the Federal Reserve.

It has been asserted that there is essentially no difference between which class controls monetary policy. In his widely used text book *Economics*, Samuelson declares with almost childish naïveté that “whenever any conflict arises between [the Federal Reserve] making a profit and promoting the public interest, it acts unswervingly in the public interest”<sup>67</sup>. The ludicrous notion that an institution granted a monopoly to counterfeit money could ever act in the public interest does not warrant scrutiny in an Austrian analysis. However, the more specific question of whether monetary policy controlled by the banking class is indistinguishable from monetary policy

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<sup>66</sup> As Liaquat Ahmed trenchantly observed in *Lords of Finance*, “senators and congressmen are rarely informed enough to be persuasive advocates for changes in monetary policy.”—p. 278, Penguin Press, 2009.

<sup>67</sup> *Economics*. p. 495.

controlled by the political class is of critical importance to a settlement of the inflation versus deflation debate. In *What Has Government Done to Our Money*, Rothbard contends that

The American Continentals, the Greenbacks, and Confederate notes of the Civil War period, the French *assignats*, were all fiat currencies issued by the Treasuries. But whether Treasury or Central Bank, the effect of fiat issue is the same: the monetary standard is now at the mercy of the government.<sup>68</sup>

In other words, Rothbard claims it is of no consequence whether the political class or the banking class controls monetary policy. Yet Rothbard undermines his own argument by recognizing that in all the cited instances of hyperinflation, monetary policy was controlled by a Treasury—i.e., by the political class. Furthermore, in tracing the origins of the Federal Reserve, Rothbard reveals the difference between the monetary ideologies of the banking class, which agitated for the creation of a central bank, and the populists of the day:

The Morgans were strongly opposed to Bryanism, which was not only populist and inflationist, but also anti-Wall Street bank; the Bryanites, much like populists of the present day, preferred Congressional, greenback inflationism to the more subtle, and more privileged, big bank-controlled variety.<sup>69</sup>

The key difference between the motivation of the banking class and the political class, which is hinted at by Rothbard, is that the former prefers a monetary policy which allows them to profit from the economic activity of the population in a subtle and insidious manner. A policy of open inflation conducted by the political class is the path to hyperinflation, the breakdown of the division of labor and destruction of the monetary system itself. Unlike the political class, the banking class is savvy enough to recognize policies that will lead to mass inflation and the death of the monetary system from which it parasitically profits. A clear illustration of the different motivations of the two classes can be found in the history of the Weimar Republic's hyperinflation.

The Reichsbank of Germany was established in 1876 and, from its inception, was directly controlled by the Chancellor of the nation<sup>70</sup>. The importance of the political class controlling monetary policy became manifest

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<sup>68</sup> *What Has Government Done To Our Money?* p. 77.

<sup>69</sup> Rothbard, M. "Origins of the Federal Reserve." *Quarterly Journal of Austrian Economics*, Vol. 2, No. 3 (Fall 1999), pp. 3–51.

<sup>70</sup> The United States National Monetary Commission. [\*The Reichsbank 1876—1900\*](#). Government Printing Office, Washington, 1910. p. 42.



in 1914 “when Germany dropped the gold standard at the outbreak of the First World War”, whereupon the “government demanded from the Reichsbank practically unlimited lender-of-last-resort financing, first of war then of postwar expenditures”<sup>71</sup>. The drain of capital to fund reparations demanded by the Allies in the punitive peace settlement of Versailles made it politically infeasible for the German State to fund itself through taxation. Instead the State turned to the printing presses to cover the shortfall in revenue<sup>72</sup>, leading to a massive rise in prices and the famous hyperinflation of the Weimar Republic. On May 26<sup>th</sup>, 1922 the Reichsbank was nominally granted autonomy as a condition of the Allies for granting a moratorium on reparations. However, the Reichsbank remained under the direction of its President, Rudolph Havenstein, who had been appointed when the central bank was still controlled by the Chancellor. A letter from the Reichsbankdirektorium to the Minister of Finance shows that as late as August 23<sup>rd</sup>, 1923, in the last months of the hyperinflation, the Reichsbank was still beholden to the political class within the German state. The letter stated that despite the impending destruction of the German currency the bank could not “be deaf to the conviction that necessities of state were involved and must be satisfied”<sup>73</sup>. It was only the appointment of Hjalmar Schacht, “who enjoyed the full backing of the international financial world” which arrested the Weimar hyperinflation. Schacht, who was a product of the banking class, was able to finally assert the independence of the Reichsbank from the political class. According to German economic historian Holtferich the “Reichsbank under Schacht has even been called a *Nebenregierung*, a supplementary government, due to its successes in imposing its will on the

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<sup>71</sup> Holtferich, C-L. “[Monetary policy in Germany since 1948: national tradition, international best practice or ideology?](#)” In *Central Banks as Economic Institutions* edited by Jean-Philippe Touffut 2008. p. 24.

<sup>72</sup> Holtferich explains the preference of the political class to fund the operation of the State using the printing press, rather than taxation, with a quote from a Hamburg bank director, Friedrich Bendixen, written in 1919: “The same citizen who would react to tax exactions on this scale with complaints of victimization at the hands of authorities hostile to property will accept the doubling of prices with demur if he be spared new tax demands, even though the government’s monetary policy is manifestly to blame. Only in taxation do people discern the arbitrary incursions of the state; the movement of prices, on the other hand, seems to them sometimes the outcome of traders’ sordid machinations, more often a dispensation which, like frost and hail, mankind must simply accept. The statesman’s opportunity lies in appreciating this mental disposition.”

<sup>73</sup> Holtferich, C-L. *The German Hyperinflation 1914—1923: causes and effects*. 1986. pp 168–169.

regular government and its legislators, and thereby creating a state-within-the-state situation”<sup>74</sup>.

In the light of the historical example of the Weimar hyperinflation and how the actions of the two classes shaped its beginning and denouement, we may return with new understanding to Chairman Bernanke’s contention that “political constraints, rather than a lack of policy instruments, explain why [Japan’s] deflation has persisted for as long as it has.” In fact, the disinclination to monetize enough debt to spur a resumption of a credit expansion can be explained by the banking class maintaining control of monetary policy in Japan. The differing motivations of the banking class and the political class and the fact that the former maintains control of monetary policy is illustrated by the refusal of the head of the Bank of Japan, Mr Shirakawa, to accede to the request of the Japanese Prime Minister, Mr Kan, to employ a massive monetary stimulus to devalue the Yen:

Mr Kan would like to see a repeat of such “shock and awe” action but has failed to convince Mr Shirakawa that the risks are worth it. Bank officials fear that a monetary blast might disturb a fragile equilibrium, bringing unwelcome attention on Japan’s debts. Haunted by memories of Japan’s hyperinflation, the bank is moving gingerly<sup>75</sup>.

Much has been made of Chairman Bernanke’s criticism of Japan’s response to the deflation it suffered in the wake of its own real estate bubble. Bernanke’s academic expatiation on the dangers of deflation has been taken as proof that he will “not allow [the US economy] to go into deflation”<sup>76</sup>. Further, many Austrian economists have taken Bernanke’s musing on a theoretical helicopter drop of money to stimulate inflation as an ominous warning that mass inflation will be the likely policy path chosen by the Federal Reserve. Yet it would be misleading to conflate the beliefs and motivations of Ben Bernanke *qua* academic with the actions of Ben Bernanke *qua* Federal Reserve Chairman. For instance, Chairman Bernanke’s predecessor Alan Greenspan wrote trenchantly on the need for a gold standard, explaining that “[in] the absence of the gold standard, there is no way to protect savings from confiscation through inflation”<sup>77</sup>. One might have concluded that from his personal desire for a gold standard, Greenspan

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<sup>74</sup> [“Monetary policy in Germany since 1948: national tradition, international best practice or ideology?”](#) p. 24.

<sup>75</sup> Pritchard, A.E. [“Japan renews QE as recovery falters.”](#) August 30, 2010.

<sup>76</sup> Lynch, D.J. [“Bernanke may discuss new techniques to revive economy.”](#) USA Today, August 26, 2010.

<sup>77</sup> Greenspan, A. “Gold and Economic Freedom.” In *Capitalism: The Unknown Ideal*. Signet, July 15 1986. p. 107.

would have used his influence as Federal Reserve Chairman to agitate toward that end. Yet no such thing ever occurred. In Congressional testimony he confessed that:

I am one of the rare people who have still some nostalgic view about the old gold standard, as you know, but I must tell you, I am in a very small minority among my colleagues on that issue.<sup>78</sup>

Greenspan's admission suggests that the Federal Reserve's institutional structure is likely to be more significant in determining monetary policy than the economic doctrine espoused by its Chairman. Given that the Federal Reserve was created by and for the benefit of the banking class, it is unlikely to pursue a policy that would be detrimental to that class. It is therefore unlikely that the Federal Reserve will monetize enough debt to completely paper over the losses caused during the housing boom. For, as Ludwig von Mises explained:

There is no means of avoiding the final collapse of a boom brought about by credit expansion. The alternative is only whether the crisis should come sooner as the result of a voluntary abandonment of further credit expansion, or later as a final and total catastrophe of the currency system involved.

## 10. Conclusion

The inflation versus deflation debate has captured the attention of the economics profession in the years following the US housing bust. Much of the analysis done by Austrian economists in regard to the debate has focused on the massive expansion of the Federal Reserve's balance sheet, in a policy known as quantitative easing. Several Austrians have predicted that the expansion of the Fed's balance sheet, and attendant creation of new reserves, will result in a significant growth in the issuance of credit and, eventually, a commensurately large increase in prices. Some have even predicted that the massive creation of new reserves will cause hyperinflation. However, as explained in the section on Federal Reserve policy and credit expansion, commercial banks are not constrained by reserves when making loans. Prior to the housing bust, the creation of reserves *followed*, rather than preceded, an increase in the aggregate issuance of loans. Thus, the creation of new reserves *per se* tells us little about whether banks will be willing to issue new loans.

The enormity of the credit expansion that took place during the housing boom and the corresponding scale of the misallocation of capital left

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<sup>78</sup> [Hearing before the U.S. House of Representatives' Committee on Financial Services, July 22, 1998.](#)

trillions of dollars of loans losses sitting on the balance sheets of commercial banks when the bust arrived. The losses, which rendered many banks insolvent and many others capital constrained, severely restricted the willingness of banks to issue loans to the public, both for regulatory and prudential reasons. The reduced rate of loan issuance and reduced public desire to take on more debt, resulted in a decrease in the aggregate amount of credit in the economy.

While the Federal Reserve has the theoretical power to force the resumption in credit expansion by monetizing enough public debt that the losses from the housing bust were wiped away, it is unlikely to do so. The Fed was created for the benefit of the banking class and while it remains under the control of that class it will not pursue a policy that would lead to a breakdown in the monetary system from which the banking class profits. However, the Fed is also unlikely to allow an untrammelled deflation to run its full course, given the risk of political unrest that might arise. Therefore, the Federal Reserve's most likely course of action is to keep the mortgage market, in which most of the losses are concentrated, in a sort of stasis, where losses are acknowledged slowly over time. Such a policy, which might well be called "controlled deflation," would lead to a prolonged period of high unemployment and slow growth, as capital was only slowly reallocated to satisfy consumer preferences. Further, the insufficient or barely sufficient creation of new credit to make up for debt paid down, or defaulted on, would cause a low growth in aggregate prices, which might occasionally become negative. Not until the losses of the housing boom are fully cleared—which might takes years under a policy of controlled deflation—should we expect an inflationary credit expansion and a significant rise in prices.