

## Myrmikan Research

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## **Fraudulent Transformation**

Let us review the insanity that is our banking system: a saver deposits \$100 into a fractional reserve bank. The bank opens a demand account for the depositor, which means it must pay him back immediately whenever he so demands. Assuming the law requires a 10 percent reserve, as is common, the bank can lend \$90 of the deposit to someone else, for example, the buyer of a house. The home buyer agrees to repay the loan over ten or even thirty years, notwithstanding that the depositor's loan to the bank is payable on demand! This alchemy is called "maturity transformation": the depositor's current funds come to finance a bid on long-term, illiquid assets. A better word would be "fraud." If any person tried this trick beyond the safety of a bank charter, he would go straight to prison.

Maturity transformation is only the beginning of the story—the home buyer borrowing \$90 from the bank for thirty years (financed by the depositor's \$100 demand money) pays it to the seller, who then deposits it back at a bank as current funds. This bank, whether it is the same or different, treats this deposit the same way the original deposit was treated: it lends out 90 percent of it at term, adding an additional \$81 of term debt and another \$81 of demand deposits. The process repeats—\$72.90 of debt is created, then \$65.61, then \$59.05, *ad infinitum*—until there is \$1000 of debt financed by the \$100 deposit. In this way, when a bank receives a deposit of \$100, the banking system doesn't lend out half, or even 90 percent of it—it lends out ten times the amount! The \$900 surplus is conjured out of thin air, *ex nihilo*. If reserve requirements decline to 5 percent, then the banking system can lend out \$2,000 of term loans from a \$100 demand deposit.

Reread the last sentence. The brain almost forces a reconsideration of the process. Try explaining the paragraph above to the branch manager at your local bank and you will receive a blank stare or perhaps hostility.<sup>1</sup> No one can dispute John Kenneth Galbraith's assessment: "The process by which banks create money is so simple that the mind is repelled."

Keynesians and monetarists (who differ from Keynesians only in that they prefer their central planning to be done by central bankers instead of by Congressmen) see no danger with the fractional reserve process. So what if \$100 is transformed into \$2000, as long as that \$2000 figure remain constant. If prices start rising, the central planners

<sup>1</sup> The author has tested this proportion personally.

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can raise reserve requirements to squelch the process and reduce the amount of money. If pesky depositors ask for their money back, threatening to unwind the entire credit structure, then the central bank can print up more of the stuff (unlike under the gold standard, under which banks had no choice but to call in loans to meet depositors' demands).

The error in the Keynesian/monetarist view is that it confuses credit with money and ignores the effects the fractional reserve process has on the structure of production. In a hypothetical "evenly rotating economy," as Ludwig von Mises put it, individuals would allocate their spending between current consumption and investment, which is nothing more than enhanced future consumption.<sup>2</sup> The maturity transformation feature of modern banking takes current funds, held as such, ready to be used for current needs, and uses it instead to fund investments in long-term assets for which consumers have expressed no demand, and then uses the fractional reserve process to increase that funding by ten or twenty fold. Eventually, overcapacity in these classes of assets drives rents below what is required to meet interest payments, the investments fail, the banks collapse, and depositors lose everything.

The dirty secret of banking is that it does not allocate credit—it creates artificial credit that directs entrepreneurs to build assets that consumers don't want based on savings that don't exist. In every other field of human endeavor, declining marginal utility eliminates super-profits. There will never be a second Henry Ford in the auto industry or Steve Jobs in the personal computer industry or Larry Page and Sergey Brin of the search engine industry. But banking, and banking alone, has made men rich for thousands of years (excepting political patronage). Operating under the so-called "3-6-3 rule" (bankers pay depositors 3 percent, lend their money out at 6 percent, and hit the golf course by 3 o'clock), the \$100 transformed into \$2000 of debt generates a profit of \$60 per year.<sup>3</sup>

Fractional reserve banking cannot survive in a free market. When banks overissue their notes and deposits, they depreciate, and customers race to the bank to convert their holdings back into gold to earn an arbitrage. Even if the right of redemption is suspended, the bank's depreciated liabilities will not circulate. Unless, of course, the state accepts the deposits of its various banks at face value in the payment of taxes, which is nearly always. In that case, Gresham's Law directs that the market hoard good money, like gold, and spend the bad money. The shaky deposits of the most aggressive banks become the standard of value.

While the fractional reserve process is progressing, the economy booms politicians take the credit and distribute the largess of surging tax revenues. When the process retrogrades, as it must, they blame the bankers. Usually only the bottom of the

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<sup>2</sup> As Keynes's professor Alfred Marshall wrote in 1879: "The whole of a man's income is expended in the purchase of services and of commodities. It is indeed commonly said that a man spends some portion of his income and saves another. But it is a familiar economic axiom that a man purchases labour and commodities with that portion of his income which he saves just as much as he does with that he is said to spend. He is said to spend when he seeks to obtain present enjoyment from the services and commodities which he purchases. He is said to save when he causes the labour and the commodities which he purchases to be devoted to the production of wealth from which he expects to derive the means of enjoyment in the future."

<sup>3</sup> This interest rate arbitrage works when government constrains the chartering of banks, which is most of the time. In other regimes, fees, such as brokerage and investment banking fees, dominate bank earnings. For example, from 1986 to 2003 the percentage of U.S. commercial banking operating income comprised of net interest income fell from 70 percent to 53 percent even as total operating income increased by 57 percent. DeYoung, R., and T. Rice. 2004. "How do banks make money? The fallacies of fee income". *ECONOMIC PERSPECTIVES- FEDERAL RESERVE BANK OF CHICAGO*. 28 (4): 34-51.

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cycle is the very system questioned. It is somewhat extraordinary, then, that Mervyn King, Governor of the Bank of England from 2003 to 2013, should write in his recent book:

The idea that paper money could replace intrinsically valuable gold and precious metals, and that banks could take secure short-term deposits and transform them into long-term risky investments, came into its own with the Industrial Revolution in the eighteenth century. It was both revolutionary and immensely seductive. It was in fact financial alchemy—the creation of extraordinary financial power that defy reality and common sense. Pursuit of this monetary elixir has brought a series of economic disasters—from hyperinflation to banking collapses.

How true. But what to do now? We are not at the bottom of the cycle, as in 1933 or 1981, wondering which policies to implement to prevent it from happening again. We are near the top, with the central banks having saved the malivestments from liquidation in 2008 and encouraged more. There is nothing to be done, in fact. The malinvestments will liquidate, and it will be ugly. As Hayek lamented in 1979:

I had preached for forty years that the time to prevent the coming of a depression is during the boom. During the boom nobody listened to me. Now people again turn to me and ask how we can avoid the consequences of a policy about which I had constantly warned. I must witness the heads of governments of all Western industrial countries promising their people that they will stop the inflation and preserve full employment. But I know that they cannot do this. I even fear that attempts to postpone the inevitable crises by new inflationary path may temporarily succeed and make the eventual breakdown even worse...

The breakdown has already begun. In our system, it isn't just banks that convert current funds into a bid on long-term capital. Case in point: various property funds offer monthly or even daily liquidity to their investors. The funds use the cash to buy office buildings, the yields on which far surpass other investments precisely because such investments are illiquid and risky.

It was such funds that led the way in 2008 crisis: on July 17, 2007 Bear Stearns informed investors in two of its real estate funds that they had been wiped out. Bear Stearns stock had reached a record high of \$172 per share the previous January and, despite the ominous news, the company's stock fell only to \$140. In fact, as late as October, three months later, Bear Stearns stock remained in the \$130s and the Dow Jones Industrial Average would reach a new all-time high. Lehman Brothers wouldn't fail for another eleven months after that.

Similarly, in the last few weeks six UK property fund have been forced to suspend redemptions as investors suddenly realized that though their shares in these funds may be shiftable to others when the market is hot, the underlying assets are highly illiquid. The broader markets have not reacted to this tell-tale sign of gathering crisis for the same reason the market kept rising after Bear Stearns first got into trouble: property funds engage in maturity transformation, but they do not create money through the fractional reserve process, so their failure does not commence cascading defaults—it is merely a symptom that credit creation has gone into reverse.

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London real estate is not the only market to slide suddenly. Former New York City Mayor Bloomberg changed the zoning laws to allow his billionaire friends to build the super-tall tower at 432 Park Avenue, his parting middle finger to the city that showered him with riches. According to one broker to the superrich interviewed by *The New York Times*, "it's not just slow—it's come to a complete halt." Already the \$80 million flats are being split into \$40 million bargains half the size, but to no avail. Similarly, Town & Country Real Estate reports that total sales volume in East Hampton in the second quarter fell 53 percent from a year ago as the median sale price plunged 54 percent to \$2.38 million.

A few less-rich plutocrats does not a financial crisis make, but, again, it signals that credit is contracting. A clearer signal still is the performance of bank shares. The free money minted during the boom turns into unlimited losses in the bust. Since equity holders' claims on profit must defer to bond holders' rights, bank equity prices are a good gauge of credit health.

The chart shows a survey of American banks to be down around 20 percent over the past year. European banks, however, are far worse off, with the behemoth Deutsche Bank having collapsed by over half during the past year (Deutsche Bank shares are, in fact, down over 80 percent from post-2008 crisis highs).



As overcapacity bites and the economy sputters, the prospect that borrowers will repay becomes ever more remote. And it's not that all of the borrowers have to default—Deutsche Bank, for example, is levered up 40-to-1; this means that if the bank loses 2.5 percent of its asset value, it becomes insolvent.

The concern over Deutsche Bank in particular has been driven by its roughly \$75 trillion derivatives exposure. Market sophisticates ignore this figure, pointing out, correctly, that such ludicrous figures reflect gross, not net, exposure. But the figure is scary not because it measures the credit hole, but because it measures counter-party risk—other banks have that magnitude of bets with Deutsche Bank, so when it fails and can't pay, the whole system will freeze up, as it did when AIG teetered.<sup>4</sup> This is why the failure of a large European bank will also bring down the U.S. banking system, why in a recent report the International Monetary Fund labeled Deutsche Bank "the most important net contributor to systemic risks," and why the chief economist of Deutsche Bank has called for a €150 billion bailout program, a ploy to send more taxpayer money to bankers. However, no amount of bailout can solve the problem of overcapacity—all it would do is delay the crisis and make it worse, as Hayek saw.

<sup>4</sup> For a more detailed discussion of derivatives, see Myrmikan Research Report dated November 16, 2003.

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Myrmikan's letter from last August detailing the similarities between 1929 and today remains apposite: the essential features of a credit cycle is always the same because the cause is always the same: fractional reserve banking. Real estate always plays a role because that it was banks primarily finance. The downward trajectory is slower in our current cycle since the gold standard no longer serves as a hard limit to credit creation. But, again, as Hayek pointed out, the overall schema doesn't change:

> I always knew that in principle there was no definite time limit for the period for which you could stimulate expansion by rapidly accelerating inflation. But I just took it for granted that there was a built-in stop in the form of the gold standard, and in that I was a little mistaken in my diagnosis of the postwar development. I knew the boom would break down, but I didn't give it as long as it actually lasted. That you could maintain an inflationary boom for something like twenty years I did not anticipate ... Of course, it has lasted very much longer than I expected. The end result was the same.

The end result of our credit expansion will be the same, only worse since the magnitude of the debt debauch has been so much greater. So, too, will, the increase in the price of gold. As tirelessly discussed in this pages, gold always underperforms in a credit boom and outperforms during the bust, the magnitude determined by the virulence of the cycle.

Most investors think of the gold price in terms nominal dollars, as shown on the blue line below: the parabolic shape from 2001 to 2011 looks highly dangerous, and the peak above \$1800 still far distant. In a regime in which the central bank is depreciating the currency by a certain *percentage* each year, however, the proper way to view asset prices is on a logarithmic scale, which measures rates of change. The straightness of the red line from 2001 to 2011 reveals that the rate of change was nearly constant over that time period, and it shows that, on a percentage basis, the correction from 2011 to 2015 was long-lasting, but relatively mild.



97 98 99 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16

Now that gold has broken free from its downtrend, it can resume its ascentgold can clear its prior peak with relatively little effort, and if it rallies back to its old trendline, prices will soon be in the \$4000s.

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The miners is where the real action has been, with the unhedged, large-cap HUI gold miners index rallying an incredible 140 percent year-to-date. Again, observing the action from the proper perspective makes the move less anomalous. As the following chart reveals, the ratio of the HUI to gold remains below the depth of the 2008 crisis and comparable to where it was at the generational bottom in 2001. If gold were to double (which is easy to imagine), the HUI could quadruple (from current levels), and still be only at the mid-point of where it has been over the past twenty years. The junior miners presumably would fare far better.



RATIO OF THE HUI GOLD MINERES INDEX TO GOLD



A prominent gold fund suggests in its marketing material that buying gold is like buying fire insurance on a house—you always need to own some because you never know when your house might burn down. The analogy is incorrect. The house may never burn down. A better analogy would be that a 40 year-old goes to buy term life insurance for himself and discovers that the company will give him the same rate if he insures his 104 year-old grandfather. And the grandfather has kidney failure.

Credit cycles are just that: cycles. To paraphrase Lord Macaulay, they are puffed into existence, rise buoyant, shine bright, burst, and are forgotten. There is no such thing as a goldilocks economy when Gresham's Law allows the fractional reserve banking system to operate. Like a ball that is tossed into the air, stops, and falls, once the expansion of a bubble economy halts, it must collapse.

Myrmikan's error in 2011 was an underappreciation of the forces the central banks brought to bear to reverse the credit collapse. Quantitative Easing was the least of the tools: it was the trillions of dollars of guarantees and the suspension of market-tomarket accounting that allowed the banks to puff the bubble even larger. And, there may remain policies that can lead into another round of even greater insanity, which would weigh on gold. Former Chairman Ben Bernanke, for example, recently traveled to Japan to educate them on "helicopter money." According to Bloomberg, Bernanke suggested the government issue non-marketable, perpetual bonds with no maturity date and that the Bank of Japan directly buy them to finance more bridges to nowhere.

Politicians love the idea. As one Congressman ejaculated during the hyperinflation of the continental currency in 1775: "Do you think, gentlemen, that I will consent to

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load my constituents with taxes, when we can send to our printer, and get a waggon load of money, one quire of which will pay for the whole!" And, indeed, such a policy may well delay the collapse. But, of course, it would only make it more spectacular.

The equities of properly run gold mining companies behave as unexpiring options on the approaching credit collapse. Their huge rise since the beginning of the year make them difficult to buy, even hold. But the market always makes the right choice difficult. Corrections will come—the sharpest movements are usually counter-trend but only those with the fortitude to hang on will save their capital and be able to deploy it when everything else trades down to a generational low.



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