

GLOBAL FINANCIAL CRISIS 2008 AND BEYOND:
A RUDE AWAKENING

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The global financial crisis which began with the subprime mortgage crisis and exploded in September 2008 with the collapse of Lehman Brothers bank, took much of the macroeconomic profession by surprise, even though there were ample early warning signs. Theorists failed to adequately consider the destabilizing cumulative impacts of financial deregulation, hedge funds, electronic trading, shady financial entrepreneurship, moral hazard, regulatory laxness, regulatory hazard ("mark to market" FAS 157), structural deficits, the shift from Keynesian investment stimulus to general aggregate demand management, Phillip's Curve justified perpetual monetary ease, subprime mortgages, derivatives, one-way-street speculation, "too big to fail" psychology, hard asset speculation (real estate, commodities, natural resources, precious metals, art, antiques, jewelry), fiscal abuses, special interest transfers and stealthy Chinese protectionism, beyond normal business cycle oscillations, because they had come to believe that policymakers had learned how to tame the beast. With the advantage of hindsight, two years after the mast,¹ both the strengths and weaknesses of the third millennium macroeconomic consensus can be discerned and appraised with an eye toward parsing the future.

It appears on reflection that the 2008 global financial crisis and the 2007-09 Great Recession,² stunned the macroeconomic profession because a consensus had emerged that modern state regulatory mechanisms (including automatic stabilizers) had reduced business cycle oscillations in production and employment to a degree where fine tuning could be achieved merely by controlling short (and derivatively long) term interest rates without fiscal assistance or fortified financial regulation. The headline therefore is that we now know better. This doesn't amount to a claim that we understand how to employ fiscal policy and supplementary monetary instruments to optimally recover, or prevent future recurrences, given the often destabilizing aspirations of the business, finance, and government communities. It only means that complacency is no longer tenable, and a

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¹ Allusion to Richard Henry Dana Jr, *Two Years Before the Mast, 1840*. The Mast is quarters for ordinary sailors in the forecandle, and a metaphor for calamity and suffering.

² The National Bureau of Economic Research (NBER) declared on September 10, 2010 that the Great Recession's trough was reached in June 2009. The start date for the decline which lasted 18 months was set at December 2007, making it the longest postwar down draft. The 1973-75 and 1981-82 American recessions lasted 16 months. The Great Recession's end, according to NBER conventions doesn't mean that there has been, nor that there will be a full recovery. It only indicates that any subsequent decline will be classified as a separate recessionary event.

reassessment of past output and employment stabilizing measures is in order. Let us therefore begin with a review of the third millennium macroeconomic consensus and recent refinements, and then proceed with a comparison of the 2008 global financial crisis and its predecessors, taking into account subsequent impacts on production and employment.

Conventional wisdom in 2000-2008 held that business cycle oscillations were primarily caused by productivity shocks that lasted until price- and wage-setters disentangled real from nominal effects.³ These shocks sometimes generated inflation which it was believed was best addressed with monetary policy. Accordingly, central bankers were tasked with the mission of maintaining slow and stable inflation. Zero inflation and deflation were shunned because they purportedly were incompatible with full capacity employment.⁴ Although central bankers were supposed to be less concerned with real economic activity, many came to believe that full employment and two percent inflation could be sustained indefinitely by "divine coincidence." This miracle was said to be made all the better by the discovery that real economic performance could be regulated with a single monetary instrument, the short term interest rate. Happily, arbitrage across time meant that central bankers could control all temporal interest rates, and arbitrage across asset classes implied that the Federal Reserve (Fed) could similarly influence risk adjusted rates for diverse securities. Fiscal policy, which had ruled the roost under the influence of orthodox Keynesianism from 1950-80 in this way was relegated to a subsidiary role aided by theorists' beliefs in the empirical validity of Ricardian equivalence arguments, and skepticism about lags and political priorities. The financial sector likewise was given short shift, (because it was perceived as a regulatory rather than a demand management issue), but this still left room for other kinds of nonmonetary intervention. The consensus view held that automatic stabilizers like unemployment insurance should be retained to share risks; that is to assist in case there were any unpredictable shocks. Commercial bank credit similarly continued to be regulated, and federal deposit insurance preserved to deter bank runs, but otherwise finance was lightly supervised; especially "shadow banks", hedge funds and derivatives.

The convergence of views among macroeconomists was based on post WWII experience with business cycles. But the current cycle is significantly different (see Figure 1).

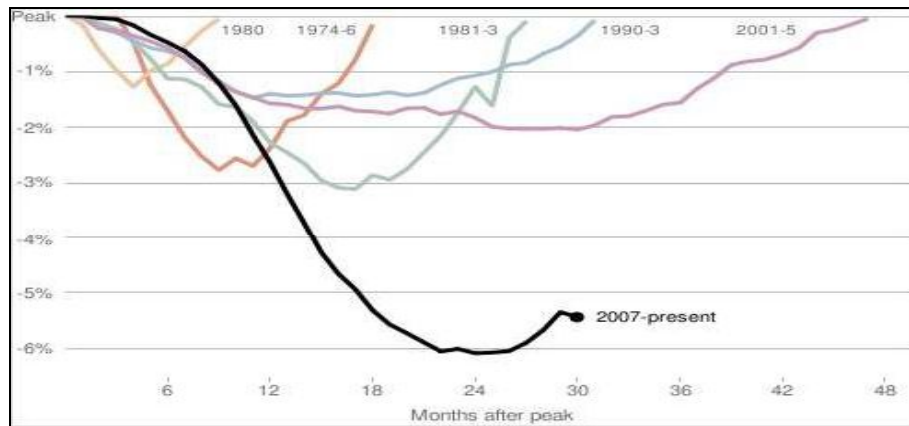
Needless to say, most of the theorists now concede that the monetarist consensus was mistaken, but for the moment the profession has split into two contending camps. Both recognize that with the Fed funds rate near zero, the burden for stimulating recovery and growth falls to non conventional monetary policies, such as quantitative and credit easing, and discretionary fiscal policy, but the agreement stops here. The "Ricardian" faction contends that further over budget spending with deficit to GDP ratios in many large nations like the United States already above 10 percent, will drive up interest rates, crowd out private investment, and have negative stimulatory impact. This could easily cause a double-dip recession (depression) coupled with a bout of high inflation ("deflation"), due to

³ Robert Lucas, Jr., "An Equilibrium Model of the Business Cycle," *Journal of Political Economy*, 83, December 1975, pp. 1113-44.

⁴ William Phillips, "The Relationship Between Unemployment and the Rate of Change of Money Wages in the United Kingdom 1861-1957," *Economica*, 25(100), pp.283-299.

excessive commercial bank liquidity. Similar arguments have been advanced for some EU members like Greece, Spain and Italy, even though Eurozone debts collectively are more manageable.

Figure 1
Employment Declines in Various USA Crises



Source: Federal Reserve Board.

"Keynesian" fiscal bulls however see matters vice versa. They insist that deflation is the present danger (which via the Bernanke doctrine implies a Great Depression with rising real wages and excess savings),⁵ and deduce avoiding disaster hinges on intensified deficit spending (Bush era tax cut extension, December 2010), and continued central bank credit and quantitative easing. They are aware that this could have inflationary ramifications, but brush the inflation peril aside by claiming that speculators will absorb most of the idle cash balances governments are prepared to print; while inflationary expectations are on a downward trend. Moreover, they contend that excess credit can be quickly drained from the system, whenever banks decide to resume lending. And as icing on the cake, they proclaim that large multiplier effects will not only restore full employment, but provide the wherewithal to repay the government debt.

Insofar as communities believe one prognostication or the other, their speculative responses may spark inflation or deflation; increased or decreased long term interest rates, productive recovery or decline, and rising or falling employment. And, if they are bewildered, behavior may become disoriented and perverse, including an "institutional" run on bank repurchase agreements (repos) not covered by the Federal Deposit Insurance Corporation (FDIC).

The bottom line, therefore, is that the pre-crisis faith in one monetary lever assured stability and growth was wishful thinking. Macro dynamics depend on the rational, a-

⁵ Benjamin Bernanke, "Nonmonetary Effects of the Financial Crisis in the Propagation of the Great Depression," *The American Economic Review*, Vol. 73, June, 1983, pp. 257-276.

rational and irrational expectations of erstwhile utility seekers in morally hazardous and incompletely mappable financial environments subject to sundry shocks and epochal changes such as falling populations, increasing per worker social entitlement burdens, and diminishing returns to post-command communist economic catch up. Policy management is correspondingly complex even when the goal is stable general competitive equilibrium, and still more challenging in imperfect regulatory regimes where low inflation is targeted to assure full employment and rapid economic growth, susceptible to moral hazard and adverse selection—the unavoidable characteristics of any financial intermediation. Also, sight should not be lost of the financial sector. Wholesale funding isn't fundamentally different than demand deposits and is subject to unexpected jolts. Fiscal policy too needs serious rethinking. The politically congenial notion that all deficit spending including tax rebates are equally efficacious is not valid, and a consensus needs to be forged on how governments attempting to resolve various conflicting economic and political interests can be disciplined to discharge their obligations responsibly, without squandering the benefits of deficit spending on special interests.

Macroeconomic policy management moreover is further complicated by external shocks and the complexities of international policy coordination. Ben Bernanke, Chairman of the Federal Reserve for one contends that a critical piece of the financial crisis and its perplexing aftermath is global imbalances, often called the global savings glut. This means that some nations like China underconsume and underimport, while other nations like the United States overconsume and overimport, devaluing the latter's currency and pressuring the Fed to keep interest rates too high for the purpose of stimulating recovery.⁶ The contention is valid as far as it goes, but fails to account for the related phenomenon of asset inflation in debtor nations. Asia's liquidity glut flooded into the wide-open, lightly regulated American shadow banking system (including mortgage institutions) and inundated many smaller countries like Iceland, Ireland and Estonia sparking speculation and assets bubbles that soon burst with dramatic adverse effects on risk perceptions in the world's short term interbank loanable funds market. The burst bubble reduced banks' worldwide lending ability, a problem compounded by tightened loan requirements limiting their access to emergency credit infusions. The international dimension coupling the east and west beyond the obvious trade linkages in this way wasn't only important for its restrictive impact on monetary policy. It was a key element in the larger planetary financial crisis. Perhaps, the most important lesson (re) learned from recent events therefore is that policymakers must take account of global leverage in addition to prices and interest rates.⁷

This is particularly important during recessions, when the potency of stimulus induced excess aggregate effective demand wanes, and the full consequences of China's

⁶ Ben Shalom Bernanke, "The Global Savings Glut and the US Current Account Deficit," 2005. Bernanke conjectured that China and other Asian nations amassed huge foreign currency reserves after 1998 to protect themselves against capital flight, causing them to become lenders to rest of the world. This hypothesis ignores the implicit import quota rationale used in Beijing to protect communist party insiders in the importables sector.

⁷ Cf. Hyman Minsky, *Can It Happen Again?: Essays on Instability and Finance*, New York: M. E. Sharpe, 1982. James Tobin and Stephen Golub, *Money Credit and Capital*, New York: Irwin/McGraw Hill, 1998.

underimporting come to the fore. Beijing's 2.6 trillion dollar reserve hoard is primarily a gambit to stealthily protect communist party insider owned importables companies from external competition. In ordinary times, this doesn't matter because monies are lent round-about to third party importers. However, as Keynes emphasized in times of crisis, idle cash balances (such as hoarded dollar reserves) diminish aggregate effective demand dollar for dollar, and inure mass involuntary unemployment. A 2 trillion dollar import order from China [larger and better targeted than America's 1 trillion dollar Troubled Asset Relief Program (TARP) and 600 billion dollar second round quantitative easing (QE2)], should provide a potent antidote. Complete macroeconomic theories and policy management schemes therefore must endogenize both domestic and foreign sources of disequilibrium, which in the present context requires taking full account of Chinese state controlled trading, and the danger posed to the global system by its stealthy beggar-thy-neighbor protectionism.

Consequently, the collapsed New-Keynesian-Perfect-Arbitrage consensus should serve as a clarion call for humility. There is no basis for anyone claiming that he or she "knows" how the new macro system will respond to various intervention strategies. Nor should anyone believe that the past illuminates the present. The "White Swan" cyclical dynamics of yesterday may be irrelevant today due to the combined cumulative effects of structural deficits, quantitative easing, financial deregulation, destructive financial innovation, and the speculative fires they have fanned. Nonetheless, history does appear to provide some broad clues about trans-epochal regularities and the likely efficacy of countercyclical safeguards and policies.

Carmen Reinhart and Kenneth Rogoff have discovered startling qualitative and quantitative parallels across a number of standard financial crisis indicators in 18 postwar banking crises.⁸ They found that banking crises were protracted (output declining on average for two years); asset prices fell steeply, with housing plunging 35 percent on average, and equity prices declining by 55 percent over 3.5 years. Unemployment rises by 7 percentage points over four years, while output falls by 9 percent. Two important common denominators were reduced consumption caused by diminished wealth effects, and impaired balance sheets resistant to monetary expansion (liquidity trap). These regularities indicate that forecasts of a swift V shaped recovery were never justified, and that it is premature to claim that the globe in the midst of a double dip W shaped recovery, or ensnared in a catastrophic "Black Swan" event.⁹ For the same reason, no definitive judgment is possible about liquidity traps at this juncture, even though the housing bubble, subprime mortgage crisis, financial sector toxic assets, and near zero interest rates point to the possibility.

A careful mapping of plummeting GDP in the 2009 and 1929 (see Figure 2) suggests that this time around humanity will be spared the ravages of hyperdepression. The free fall and mass involuntary unemployment will be contained, even if conditions deteriorate

⁸ Carmen Reinhart and Kenneth Rogoff, *This Time is Different: Eight Centuries of Financial Folly*, Princeton, NJ: Princeton University Press, 2009. Edward Chancellor, *Devil Take the Hindmost: A History of Financial Speculation*, New York: Plume, 2000.

⁹ Nassim Taleb, *Black Swan: The Impact of the Highly Improbable*, New York: Random House, 2010.

further because the initial downward momentum has been blunted.¹⁰ We shall not impute credit for this welcome outcome, but it is worth reviewing some important institutional changes that are likely to have forestalled a greater disaster:¹¹

1. The intensity of deflationary expectations has been mitigated by abandoning the gold standard. People no longer have to fret that gold outflows will contract the supply of money and credit.

2. America and the west have become post-industrial societies less dependent on employment in the manufacturing sector. Direct and indirect federal and state employment today is vastly higher than in the twenties, and on balance expanded during the crisis, thanks in part to the wage accommodative effects of furloughs.

3. Business has some, but still less reason today to be fearful of an anti-business, pro-labor, pro-state control, Roosevelt-style government, and revolutionary upheavals abroad than it did in the thirties.¹²

4. Communities justifiably have more confidence today than yesterday that robust scientific and technological progress will ultimately boost productivity, profits and employment, assuring eventual long term recovery and golden age growth.

5. The United States now has a generous unemployment insurance system that reduced the negative purchasing power (multiplier) effects of dismissals.

6. Bank deposit insurance, originally opposed by Franklin Roosevelt,¹³ was nevertheless introduced by him into the American system in 1933. This appears to have greatly dampened the risk of small saver driven bank runs compounding the repo driven 2008 financial crisis.

7. Bank deposit insurance also forestalled financial bankruptcies preserving "informational capital" about creditworthiness essential for recovery.

8. The Federal Deposit Insurance Corporation not only guarantees household bank deposits, it shores up the system's integrity by seizing and auctioning insolvent banks.

Discretionary intervention policies likewise seem to have been constructive:

9. The global community (with the exception of China) responded cooperatively to the crisis, and refrained from adopting "beggar-thy-neighbor" tariff and quota strategies that backfired during the thirties.

¹⁰ America unemployment in 1930 was 25 percent; now it is approaching 10 percent. America output peak-to-trough 1929-33 fell 25 percent compared with a 6.8 percent decline in 2009.

¹¹ Alan Blinder and Mark Zandi, "How the Great Recession Was Brought to An End," July 27, 2010. <http://www.economy.com/mark-zande/documents/End-of-Great>.

¹² Steven Rosefielde, *Red Holocaust*, Oxford: Routledge, 2010.

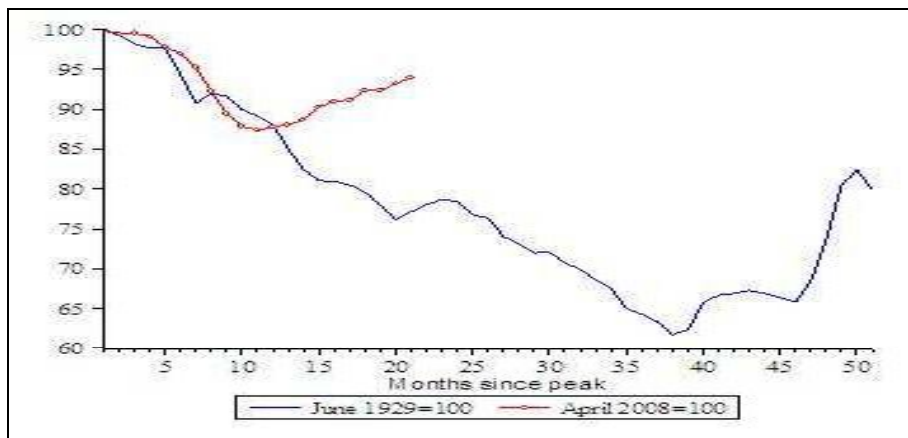
¹³ R.W. Pfouts, "Economic Policy and the New Deal," unpublished manuscript, September 2010. L. V. Chandler, *American Monetary Policy 1928-41*, New York: Harper and Row, 1971.

10. Fiscal and monetary policy responses were swifter and more vigorous, including Geithner's controversial public-private scheme to buy toxic assets from banks.¹⁴

11. America's budgetary deficit during the crisis exceeded ten percent, a striking change from Hoover's balanced federal budget, even though Blinder's and Zandi's data reveal that the real discretionary component of the American fiscal stimulus package was much smaller than headlines indicate.¹⁵

12. Friedman and Schwartz claim that during the first three years of the Great Depression, the Fed tolerated and perhaps abetted a substantial shrinkage in the money base.¹⁶ This time, the money base has doubled. The Great Depression and the Great Recession followed a similar track at the beginning, indicating a similar origin—a huge financial shock. But because policy reactions to the shock were distinctly different the paths diverges considerably after the first 12 months; see Figure 2.¹⁷

Figure 2
World Industrial Production



Source: Barry Eichengreen and Kevin O'Rourke, "A Tale of Two Depressions," VoxEU.org, 6, April 2009.

¹⁴ For every dollar of toxic assets purchased from banks, the FDIC lent 85.7 percent, and the US treasury and private investors each lent 7.15 percent. If toxic assets fall in value below the FDIC loan, the FDIC will get stuck with the toxic asset. Benefits appear to be unconscionably great for private investors, including banks under the Geithner-Summers plan.

¹⁵ Unemployment and medical assistance account for more than a quarter of the entire package. Federal transfers to states to forestall balanced budget mandated state program cuts were nearly as large. See Blinder and Zandi (2010).

¹⁶ Milton Friedman and Anna Schwartz, *A Monetary History of the United States, 1867-1960*, Princeton, N. J.: Princeton University Press, 1963.

¹⁷ Barry Eichengreen and Kevin O'Rourke, "A Tale of Two Depressions," VoxEU.org., 6 April, 2009.

PROSPECTS

We now know that the third millennium new-Keynesian-full-arbitrage consensus was wrong and that the macroeconomics profession is in disarray. We broadly know the particulars of the 2008 financial crisis and its aftermath, but understand very little about the underlying structural model determining aggregate outcomes. There are solid grounds for surmising that the fire this time won't be as dire as 1929, nonetheless, it is essential to appreciate that macroeconomics is an insular discipline, largely purblind to political, financial and epochal factors.¹⁸

The impact of disregarding the cumulative effects of structural deficits, quantitative easing, financial deregulation and destructive speculation in the years ahead is likely to be negative. Ignoring omitted variables, likewise will hamper macro-theory and hobble policymaking. Perhaps, financial variables will be endogenized in macro-theory in the near future, but the empirically verified explanation of how inflation, asset bubbles and bursts are transformed into liquidity shortages, deleveraging and output contractions is still on the drawing board.

Falling populations, shrinking labor forces, creeping state controls, increased political tolerance for speculative rent-seeking by government insiders, businessmen and self-anointed activists, together with diminishing returns to technology transfers and outsourcing to post-command communist nations suggest that effective countercyclical management tomorrow will be even more problematic than today.

¹⁸ Carmen Reinhart and Vincent Reinhart, "After the Fall," unpublished manuscript, August 2010.