

Original Research Article

What Do the Two Global Crises Tell us: History as a Mirror

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Abstract: History typically does repeat with similar processes. Routes to both The Great Depression in 1929 and the Subprime Crisis (the Great Recession) in 2007 are similar: central banks implemented lax monetary policy and governments adopt populist policies to expand credit, economic growth drives public and private debt to increase sharply and asset illiquidity is caused due to the financial system's borrowing short-term funding to lend long-term loans for high profits. The key factors involved in both crises will be analysed from the following dimensions prior to the two crises: interest rates, credit booms, leverage and liquidity in the banking system. Human nature is one main reason to explain these crises. The primary cause of this phenomenon is that animal spirits such as confidence cannot be entirely eliminated, with significant subsequent effects upon the economy.

Keywords: The Great Depression; The Great Recession; Interest rates; Credit Booms; History as a Mirror

1. Introduction

History repeats itself in both linear and non-linear ways. However, key factors involved in history tend not to change. During the last century, the world experienced two of its largest booms and bursts. The Great Depression began in the fall of 1929 with the market crash on Wall Street, and then spread to the rest of the U.S. economy and eventually the entire world. The 2007 Subprime Crisis caused significant losses to the global economy and reminded regulators of the need to introduce stricter regulations. This essay compares the features of both crises and illustrates that although lessons are to some extent learnt from financial mistakes in the past, history typically does repeat with similar processes. The primary cause of this phenomenon is that animal spirits such as confidence cannot be entirely eliminated, with significant subsequent effects upon the economy.

Social and economic development cycles come first in the form of boom-bust alternation in a sufficiently long period. Routes to both crises are similar: central banks implemented lax monetary policy and governments adopt populist policies to expand credit. Then, economic growth drives public and private debt to increase sharply, and the cycle repeats. The core of the financial system—banking—borrows short-term funding to lend long-term loans for high profits, causing asset illiquidity. Any shocks in the banking system lead to financial crises spreading throughout the entire economy. Thus, this paper will focus on the following aspects prior to the two aforementioned crises: interest rates, credit booms, leverage and liquidity in the banking system.

2. Low interest rates

In the prelude to the large international crises, the natural interest rate was considerably lower than its trend for an

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extended period^[1]. The central bank may have underestimated the influence of inflationary pressures and kept short-term interest rates too low. Lower short-term interest rates caused banks to borrow in the short term and lend in the long term to take the advantage of arbitrage opportunity. Moreover, due to banks increasingly offering long-term loans, even those with bad credit or low income were able to buy houses.

Stiglitz and Weiss (1981) argued that risk-taking becomes more apparent when interest rates decline, with a flight to quality when such rates rise, with the consequent availability of external funding. Interest rates were kept low for the long term prior to the two financial crises, whereas the Federal Reserve adopted a different monetary policy to reply to these crises^[2].

While floods of credit prior to the Great Depression generated asset bubbles, the Fed's extremely lax monetary policy fuelled the hyperinflation of economic bubbles^[3]. To handle the pressure of bubble-induced consumer price rises, the monetary authority had to tighten their policies and lead the bubble to bursting point without explicit macroeconomic guidance. During the Great Depression, the Fed maintained high interest rates to keep the dollar at the gold standard point, as a way of controlling inflation^[4]. This policy slowed down the recovery of the economy because such a tight policy was not able to stimulate economic development.

Prior to 2007, although there was a booming property market, most central banks around the world kept interest rates low. Alan Greenspan, the former chairman of the Fed, held the opinion that it was good to wait until bubbles burst naturally rather than intervene with monetary policy^[5]. The monetary authorities tend to have clearer policies in the US today. Ben Bernanke—a proficient researcher and scholar on the Great Depression—was head of the Fed during the recent crisis and injected money into the financial system, as well as cutting interest rates repeatedly. The Fed provided emergency liquidity assistance for several large financial institutions which were 'too big to fail' as lenders of last resort^[6].

In the 1930s, the gold standard restricted most central banks to conduct open market operations^[7]. By prohibiting the banks from holding or dealing in significant quantities of government securitisations, and thus making monetization of deficits more difficult, the stabilization aimed to prevent future inflation. Central banks only had to rely on discount policies to affect domestic money supply. This severely limited the ability of banks to translate their gold inflows into monetary expansion during the depression. In contrast, today's Fed has more discretion to inject significantly large amounts of money into the financial system. However, they should adjust interest rates to a stable level appropriate for economic development.

Credit booms

Credit growth predicts strongly that some financial crises are 'credit booms gone wrong' and that policymakers underestimate the danger of credit booms^[1]. Banks and financial institutions provide much credits to support the economic development, where regulation is lax. Investors tend to behave in a riskier manner as lending expands. Credit expansion not only supports real economic gains but also amplifies and propagates shocks hitting the financial system. Credit booms appeared with similar factors and drove the housing bubbles prior to both financial crises.

US President Calvin Coolidge had adhered to a 'laissez-faire' economic policy and the government remained silent on market operations. The financial liberalized policy allowed financial interest groups to play a critical role in pushing the easing of regulation^[4]. In addition, the structure and operation of the interwar gold standard played a role in the credit expansion phase, when the strongly pro-cyclical behaviour of the foreign exchange component of global international reserves allowed credit to expand more rapidly than would have been possible under the more rigid rules-based gold standard arrangements of the earlier era^[8].

In a similar way, in 1995, President Bill Clinton released the 'National Homeownership Strategy' with the goal of 'reaching all-time high national homeownership levels by the end of the century'^[9]. Fannie Mae and Freddie Mac, which privatized their profits and socialized their risks, relaxing credit requirements on the loans they would purchase from other banks and lenders. Through easing these restrictions, available loans would increase for minority and low-income buyers^[5]. Excess supply of liquidity from the emerging markets such as China reduced the borrowing cost to non-prime mortgage holders, as less underwriting standards applied to check whether the holders' salaries could af-

ford debt.

Three concurrently observed factors are frequently associated with the onset of credit booms^[10]. The first factor is financial reforms. A third of booms happen with financial liberalization. The second one is surges in capital inflows, often in the aftermath of capital account liberalization. This generally leads to an increase in the funds available to banks. The third one is buoyant economic growth. Lagged GDP growth is often positively associated with the probability of credit booms.

Bad booms, which often lead to banking crises, relate to low-quality bank supervision and faster asset prices. From experience, policymakers should tighten when they see credit expanding rapidly in the asset market. Moreover, they should supervise financial institutions closely if they see signs that loan quality is deteriorating. Finally, they should prevent credit booms by increasing capital and liquidity requirements that heighten the vulnerability of the economy and the financial system.

3. Leverage

Excessive leverage signals financial fragility. Implicit government guarantees created incentives for excessive leverage and failed to control the leverage prior to and during the financial crisis. Institutions which take high leverage tend to be susceptible to later distress^[11].

High leverage in the public utility sector amplified the swing of the stock market, which was the main reason for the 1929 Great Depression^[12]. Public utilities were an important segment of the stock market, and sharp decrease in public stock values resulted in larger decreases in equity wealth. Investors were highly leveraged in the public utility sector. The decreases in utility stock prices resulted in general selling panic, referring to **figure 3**.

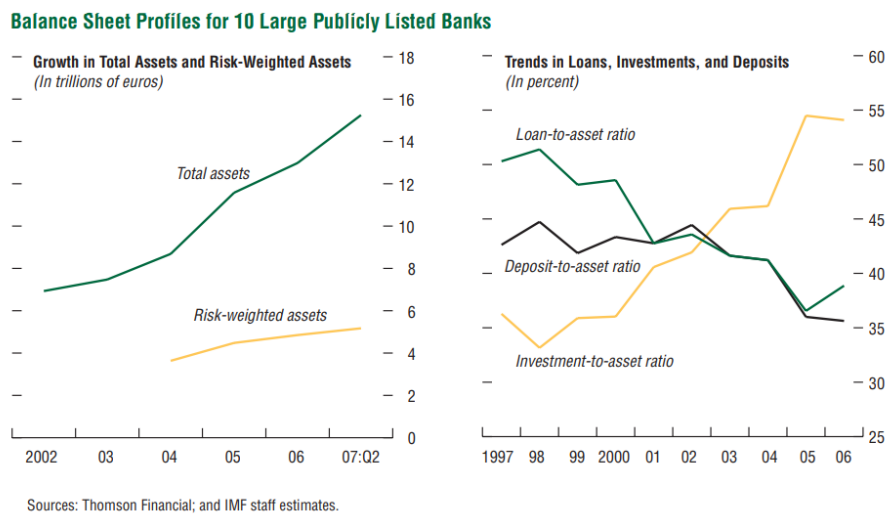


Figure 1. Balance Sheet Profiles for 10 Large Publicly Listed Banks during the 1929 Great Depression

Source: <https://www.imf.org>

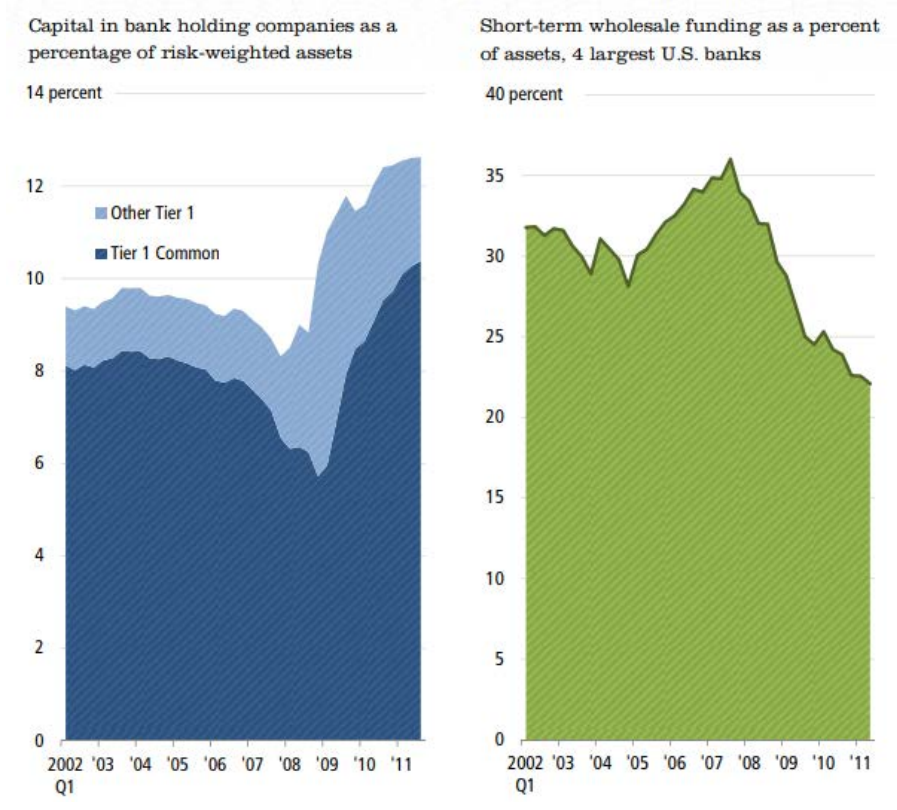


Figure 2. Risk-weighted assets and Short-term wholesale funding of Banks during the 2007 Great Recession

Source: U.S. Department of the Treasury. (2019). *The Financial Crisis Response In Charts.* https://www.treasury.gov/resource-center/data-chart-center/Documents/20120413_FinancialCrisisResponse.pdf

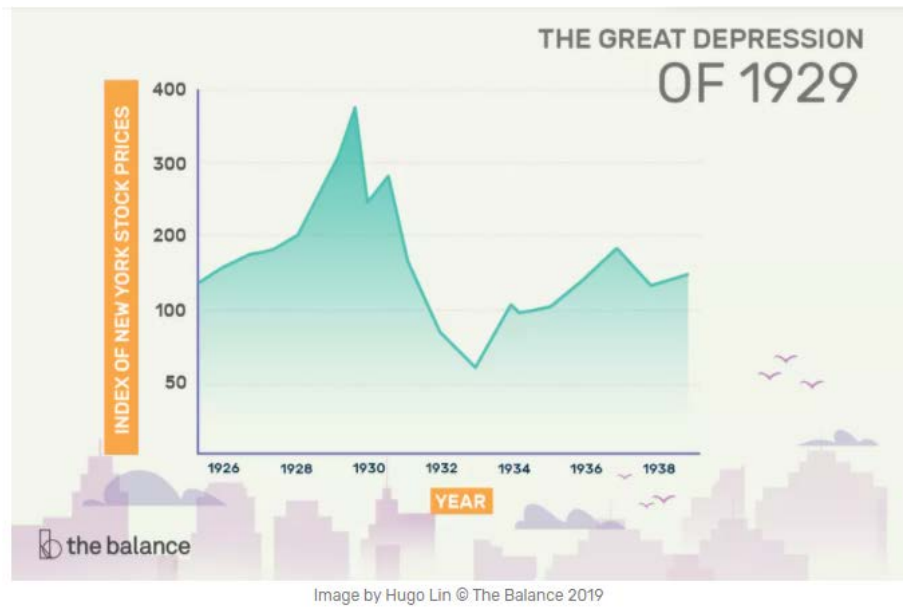


Figure 3. Index of New Yoik Stock Price during the 1929 Great Depression

Source: Amadeo, K.& Estevez, E. (May 27, 2020). *The Great Depression, What Happened, What Caused It, How It Ended.* <https://www.thebalance.com/the-great-depression-of-1929-3306033>

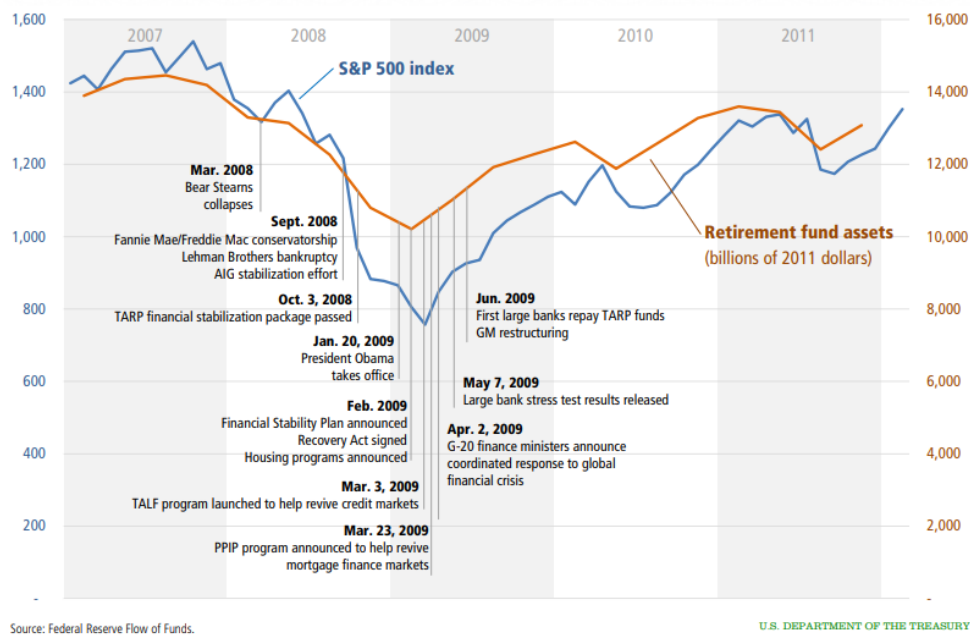


Figure 4. S&P 500 Index during the 2007 Great Recession

Source: U.S. Department of the Treasury. (2019). *The Financial Crisis Response In Charts*. https://www.treasury.gov/resource-center/data-chart-center/Documents/20120413_FinancialCrisisResponse.pdf

In 2008, banks increased effective leverage by availing of credit risk transfer mechanisms such as securitization^[5]. Banks made more loans without retaining them on the balance sheet. They transferred them into off-balance-sheet vehicles such as special purpose vehicles and relied on short-term rollover debt. The securitisation vehicles grew tremendously as the financial fragility increased within the regulatory leveraged requirement. As **Figure 1** illustrates, their risk-weighted assets, which represent safer assets, increased more slowly than total asset growth from 2004 to 2007. Banks took advantage of loopholes in the regulatory system by regulatory arbitrage, referring to **figure 4**. Capital requirements were near to risk-weighted assets, during the boom before the Great Recession in 2007^[13].

Investors took leverage prior to the Great Depression and the financial institutions also took leverage in 2008. After 1929, the government stepped in and changed many rules and put several new agencies in place to prevent a repeat in the future^[14]. Today, it is generally recognized that the authorities should ensure that the debt level of the complete financial system is under control. To counter regulatory arbitrage, regulations should focus on more ratios of shadow banking balance sheets such as liquidity-to-asset ratio.

4. Insufficient management of liquidity in the banking system

Higher capital ratios are not equivalent to lower systemic financial crisis risks^[15]. Liquidity indicators are more reliable than capital ratios for measuring financial fragility on balance sheets. Moreover, the Federal Reserve determined heavy withdrawals as a primary cause for almost all failed banks which depleted their cash reserves during 1931^[16]. Because depositors are usually risk-intolerant, even small shocks to asset values can cause solvent banks to fail through large deposit withdrawals^[17].

Lack of liquidity led to one of the highest urban bank suspension rates in Illinois during the Depression. go banks held large real estate mortgages in the pre-crisis period^[18] Long-term loans can be riskier and more illiquid than short-term lending, due to increased maturity mismatch. Real estate loans increased as a share of total assets for all banks during the Depression, while whole assets were declining. As bank runs occurred in the 1930s, Chicago was probably one of the worst hit cities^[19].

The funding liquidity problem also existed in Northern Rock (NR)'s business model, which set long-term securitization as a central strategy, and relied on short-term money market funding, referring to **figure 2**^[20]. During 2007, the

decline in house prices led to sharper decline in the prices of MBS. NR had to keep new securitized mortgage assets on the balance sheet while facing increased interest rates on the money market. The most serious factor was the run on deposits at NR. The main cause of this run was doubt regarding the solvency of NR spread among depositors.

Banking failed liquidity management has become a serious problem. During the Great Depression, retail banking experienced runs and panics among depositors. However, the banking system now is different to the 1929 era. In 2008, the wholesale banking market was freezing so that banks could not use short-term funding. Retail banking services for the individuals or small business, while wholesale banking focuses on transactions between merchant banks and other financial institutions.

The introduction of a federal deposit insurance scheme in 1933 guaranteed most people's savings and prevented further banking runs in the US. The collapse of Washington Mutual did not give rise to panic spread among depositors because nobody felt that their money was in danger.

More recently, to improve banking system funding liquidity, financial regulators have introduced a stressed Liquidity Coverage Ratio (LCR) requirement and a longer-term Net Stable Funding Ratio (NSFR). The LCR should ensure that banks have a sufficient amount of liquid assets to survive 30 days of stressed liquidity conditions characterized by several funding shocks. The NSFR will require banks to have stable funding in relation to the liquidity of the banks' assets^[21].

5. Why did this happen?

Human nature is one main reason to explain these crises. Confidence as a type of animal spirit would play a crucial role in economic development^[22]. In good times, people trust that the economy will expand and they then increase their consumption and credits. In bad times, people reduce their demands and withdraw their deposits. Changes in confidence will affect the income and confidence in the next round, and each of these changes will in turn affect income and confidence yet in the further round.

The irrational exuberance that appeared prior to both crises created an illusion that the economy was strong and that a depression would not occur. Overconfidence is a fundamental cause of an overheated economy. People have a tendency to trust that they are doing the right thing and expressing opinions on matters they know little about, and they often act on these opinions. The central bank underestimated the money supply change to maintain low interest rates for the long term. The government ignored the impacts of credit booms brought to the economy. Investors and financial institutions undertook too much leverage with increased fragility in the financial system. Retail and wholesale banks failed to manage their liquidity. There is no doubt that history will repeat if people ignore the root causes.

6. Conclusion

Before the two financial crises, interest rates were kept low for the long term. In addition, credit booms appeared with similar factors and drove the housing bubbles. Moreover, high leverage in the public utility sector amplified the swing of the stock market. More importantly, before the two financial crises, the banking system has insufficient management of liquidity. The root cause of the two crises is human nature. Overconfidence contributes to the overheated economy in 1929 or that in 2007. The stakeholders tend to trust that they are doing the right thing. The central bank underestimated the money supply change to maintain low interest rates for the long term. The government ignored the impacts of credit booms brought to the economy. Investors and financial institutions undertook too much leverage with increased fragility in the financial system. Retail and wholesale banks failed to manage their liquidity. The two crises show that history typically does repeat with similar process. There is no doubt that history will repeat if people ignore the root causes. Therefore, we should take history as a mirror, learning lessons from financial mistakes in the past.

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