Financial innovations and monetary policy economics essay

Economics

EC248 Financial Innovations and Monetary PolicyTerm PaperSimona Maslauskaite (1104722)Department of Economics, University of EssexWord count: 03/05/2013

1. Introduction

The current financial crisis is frequently described as the most severe financial meltdown since the Great Depression. However, the modern crisis and the crisis that triggered the Great Depression have more differences than similarities. While some authors argue that the global economy is experiencing the recession as destructive as the Great Depression, it is widely agreed that the U. S. economy is far away from the economic and financial collapse seen in 1930s. Fortunately, the timely, effective and unconventional monetary and fiscal policies in response to the current crisis in U. S. have prevented it from descending into the Great Depression. The purpose of this paper is to compare and contrast the modern crisis with the crisis that led to the Great Depression in the context of the U. S. economy. Several comparisons between the U. S. and global economy during the both episodes are also made. The paper consists of five parts. Part 2 examines the main similarities and differences in evolution of the modern crisis and the crisis of 1930s. Part 3 compares the severity of the two episodes in the context of the U. S. as well as global economy. The policy responses and lessons learnt from the Great Depression are discusses in Part 4 while Part 5 summarises the main points and concludes the paper.

2. Evolution of the Crises

2. 1 Booms and Bursts

The modern crisis and the crisis that started the Great Depression were both preceded by booms and bursts in housing and stock markets. U. S. experienced the housing boom that began to unwind in 1920s and the stock market crash in 1929 that led to the great banking panic. Similarly, the subprime mortgage market that began to collapse in 2006 led to the banking crisis and the stock market crash in 2008. As 2Fishback (2009) indicates, the main similarity between the two episodes is the steep decline in stock prices. However, the magnitude of the declines in 1929 and 2008 differed substantially and will be discussed in the second part of the paper. Falling stock and housing prices damaged households' balance sheets and reduced consumer durable expenditures, consumption and housing investment during the crises. As a result, production, employment and hence output fell sharply (Gjerstad and Smith, 2011). However, differently from the recent crisis that was triggered by the collapse of the subprime mortgage market, the downturn of the mortgage market in 1930s was caused by the economic difficulties (2Fishback, 2009). So the direction of causation was different. In 1920s U. S. experienced the mortgage and consumer credit boom (Gjerstad and Smith, 2011). Credit was widely used to purchase durable goods and housing while the majority of borrowers extended or rolled over their loans. However, when employment and output plummet and banks contracted their lending, borrowers struggled to find new loans and defaulted on their mortgages. Consequently, the foreclosures surged in 1927 and had almost doubled by 1929 (Gjerstad and Smith, 2011). In comparison, a loose

monetary policy and the " ownership society", in which more residents own their own homes, promoted by Bush administration (2Fishback, 2009) fuelled the housing bubble before the modern crisis and encouraged banks to extend loans to subprime borrowers: borrowers that have an above-average default risk. As housing market boomed, banks did not have incentives to monitor and screen the actual risk of borrowers because the value of collateral was rising. Moreover, the originate to distribute model, in which loans are bundled, securitized and sold, allowed banks to pass on the credit risk to investors (Brunnermeier, 2008) which saw mortgage backed securities (MBS) and collateralized debt obligations (CDO) as new profitable investment opportunities (2Fishback, 2009). These financial innovations attracted agents from all around the world and further fuelled the U. S. real estate bubble. Consequently, as the bubble burst the crisis was spread globally.

2. 4 Banking Crises

Both the modern crisis and the crisis that led to the Great Depression were followed by banking crises. The banking crisis of 1930s started as a the liquidity crises and was triggered by the Federal Reserve's failure to act as a lender of last resort. The recent banking crisis, on the other hand, was more insolvency crises caused by the subprime mortgage market meltdown and sharp declines of the prices of MBS, CDO and other mortgage products (Bordo, 2010). The banking crisis of 1930s was worsen by the banking panic as depositors lost confidence in the viability of banks and feared to be " the last in line" to withdraw their deposits (Bordo, 2010). The loss of confidence triggered massive bank runs which increased uncertainty about the state of

the whole financial system. As a result, between 1930 and 1933 bank runs lead to the failure of 7. 2 thousand U. S. banks (2Fishback, 2009). While the public was withdrawing deposits and increasing the currency-deposit ratio, banks contracted their lending and increased the reserve-deposit ratio. Consequently, money multiplier and hence money supply fell sharply increasing deflationary pressures. Deflation in turn increased a real debt burden and further damaged banks' and households' balance sheets. As a result, lending, nominal spending, employment and output contracted significantly. In addition, to meet depositors' demands, banks engaged in fire sales of their assets. These massive sales into the falling market depressed assets prices even further and hence significantly reduced financial institutions' net worth. Consequently, even financially sound and strong institutions became insolvent. Similarly, the collapse of the subprime mortgage market in the wake of the recent crisis led to the panic in the shadow banking and massive deleveraging by investment banks. Investment banks engaged in fire sales of their assets while falling asset prices reduced financial institutions' net worth. However, the main problem in the banking crises of 2007 was the uncertainty about the state of direct and especially indirect counterparties (Bordo, 2010). As financial intermediaries could no longer determine the creditworthiness of other institutions and did not know their indirect counterparties they became reluctant to lend not only to the general public but also to each other. As a result, the repo market seized up. Fortunately, differently from 1930s, there were no runs on the banking system during the recent crisis because deposits were protected by the federal deposit insurance introduced in 1934 after a massive bank runs in

1930s. Additionally, the money supply did not contract but increased during the modern crisis signalling the expansionary monetary policy (Bordo, 2010). However, the problems in the banking sector worsened information asymmetries and hence the problems of moral hazard and adverse selection which crippled the intermediation mechanism and led to the credit crunch. Consequently, investment, aggregate spending, employment and hence output fell sharply during the both crises.

2. 3 Transmission Mechanisms

The 2007 crises was mainly transmitted through the balance sheets of hedge funds, international investment banks and other financial intermediaries that invested heavily in the mortgage-related assets before the crisis (Bordo, 2008). Additionally, the crisis was further spread through international trade as the depressed U. S. economy reduced their imports and weakened the countries that relied on exports to U. S. The Great Depression, on the other hand, was mainly transmitted through the global gold standard that fixed the value of a national currency in terms of the certain amount of gold. Therefore, when the Federal Reserve raised interest rates to mitigate the speculation in the New York stock market in 1928, other countries in gold standard had to raise interest rates in order to maintain the value of their national currencies. As a result, rising interest rates led to the global contraction of money supply and deflation. As Temin (1993) explains, the choice of deflation instead of devaluation was the main transmission mechanism of the crisis of 1930s. Another important transmission channel was international trade. In particular, the Smoot-Hawley Tariff Act, introduced in 1930, intensified the depression and drastically depressed

international trade by rising U. S. tariffs on agricultural and manufacturer products to the historically high levels. In addition, deflation increased the effective tariffs even further. The Act triggered the foreign retaliatory measures all around the world, caused a steep decline in U. S. foreign trade and hence exacerbated the crisis.

3. Severity of the Crises

The modern crisis and the crisis that started the Great Depression had serious negative effects on the U. S. and global economy. Fortunately, the recent crisis did not depress the U. S. economy as deeply as the 1930s crisis did. According to Bordo (2010), in the recent crises U. S. real GDP declined by approximately 5% while the rate of unemployment reached 10% in 2009. In comparison, in 1930s U. S. real GDP fell by approximately 30% and remained below its 1929 level until 1936 (3Fishback, 2009). Similarly, the rate of unemployment reached 25% in 1933 (Bordo, 2010) and remained above 20% for four years (3Fishback, 2009). Additionally, the decline in U. S. stock prices was much more severe in 1930s than in the recent crisis. The Dow Jones Industrial Index fell from 380 to 199 between 1929-1930 and then to 41. 2 in 1932, a fall of 89%. In contrast, the decrease in the Dow Jones Index of 37% between 2007-2008 was a relatively minor event (2Fishback, 2009). However, Eichengreen and O'Rourke (2009) represent a more disturbing picture of the global economy. They show that the world is experiencing the recession as destructive as the Great Depression with global industrial production, stock markets and international trade falling even more sharply in the recent crises than in 1930s. However, it is not clear what effects the recent crisis would have had on the U. S. real economy and

financial system if the Federal Reserve did not serve as a lender of last resort or if the federal deposit insurance was not in place (Bordo, 2010).

4. Policy Responses

4. 1 Monetary and Fiscal Policies

The differences between the monetary and fiscal policies in response to the modern crisis and the crisis that led to the Great Depression are striking. Firstly, the timing of the policies differed substantially. As 2Fishback (2009) notes, in 1930s the first emergency moves were taken after three years in depression with real GDP 70% below its 1929 level and the rate of unemployment exceeding 20%. In contrast, the Federal Reserve and the federal government reacted promptly to the recent crises and took emergency moves before the real GDP started to contract and the rate of unemployment increased to 8% (2Fishback, 2009). Many economist argue that US could have avoided the Great Depression if the Federal Reserve served as a lender of last resort. Kindleberger (1973) argues that any stock market crash alone cannot bring about the depression unless it is supplemented by the collapse of money stock. Therefore, when the stock market bubble burst causing the banking panic and contraction of money supply, the Federal Reserve should have increased the money supply to prevent the liquidity crisis. However, the Federal Reserve was constrained by the gold standard and only a single open-market purchase of one billion dollars in bonds was made in 1932 (2Fishback, 2009). Additionally, to ease the liquidity problems in the banking sector, the Federal Reserve decreased the nominal discount rate: the interest rate at which banks borrow funds from the Federal Reserve. However, the Fed ignored the distinction between

the real and nominal discount rates (Bordo, 1986). As a result, when the nominal rate was falling, the real rate, nominal discount rate plus the deflation rate, was rising (2Fishback, 2009). The real discount rate rose from 4. 5 to 10. 5 between 1930 and 1931 (2Fishback, 2009). Clearly, the Federal Reserve followed a highly contractionary monetary policy which further depressed the U. S. economy. In contrast, the Federal Reserve adopted the aggressive expansionary monetary policy to mitigate the recent crisis. It engaged in the massive open-market purchases of long maturity Treasuries and MBS, Quantitative Easing, and cut the federal funds rate to almost zero (Bordo, 2010). However, banks are historically unwilling to use the discount window because it indicates the low creditworthiness on the interbank market (Brunnermeier, 2008). Therefore, the Term Auction Facility was introduced in 2007 which allowed banks to borrow anonymously from the Federal Reserve against a wide range of collateral (Brunnermeier, 2008). During the Great Depression, on the other hand, the Fed could only make loans to member banks against a narrow range of collateral. Fortunately, the Glass-Steagall Act of 1932 and the Emergency Banking Act of 1933 eased the restrictions and allowed reserve banks to lend to non member banks against a bit broader set of collateral (Carlson et al., 2012). Additionally, the Reconstruction Finance Corporation created in 1932 by Hoover administration provided the financial aid to troubled banks (Bordo, 2008). However, for the purpose of transparency, the banks which received the funds were announced. The announcement in turn led to the massive runs on these banks while other banks became reluctant to participate (Bordo, 2008). After the massive runs on the banking sector in 1930s, the federal

deposit insurance was introduced and helped to avoid bank runs during the modern crisis. However, the Hawley-Sooth Tariff Act, already discussed in the first section, depressed the international trade and further deepened the crisis that led to the Great Depression. Additionally, National Recovery Administration that allowed employers and employees in every industry to create codes of " fair competition" worsened the economic situation even further (1Fishback, 2009). Roosevelt believed that the policy would help to increase wages and prices in the economy. However, it led to the reduced competition, higher wages and lower working hours. The higher competition, on the other hand, would have helped to lower wages, increase employment, consumption and hence output. In addition, the New Deal federal government spending increases that would have eased the depression of 1930s were accompanied by tax increases (1Fishback, 2009). It was misleadingly interpreted as a Keynesian stimulus policy. However, the increase in federal spending can never be an effective policy unless it is matched by the decrease in taxes and hence an increase in the budget deficit. In contrast, the fiscal moves taken in response to the current crisis is a real example of the true Keynesian stimulus. The president Bush initiated the tax cuts and then gave tax rebates when the crises deepened (1Fishback, 2009) while the president Obama and the Congress negotiated the $800 billion stimulus package to boost the economy (1Fishback, 2009). Luckily, the policy makers had learned the lessons from the Great Depression and responded more actively to the modern crisis preventing it from descending into the depression experienced in 1930s.

4. 2 Bank Failures

As discussed in the first section of the paper, 7. 2 thousand U. S. banks were allowed to fail during the Great Depression. In contrast, only Lehman Brothers, a global investment bank, was allowed to fail during the recent crises. The failure of Lehman Brothers discouraged the belief that all big financial institutions would be bailed out and triggered the panic in the financial system. The panic in turn led to the collapse of the interbank market and the stock market crash (Bordo, 2010). Therefore, after the failure of Lehman Brothers, the Federal Reserve together with other U. S. monetary authorities bailed out insolvent financial institutions which were considered too interconnected to fail meaning that they are so systemically important that their failure may bring the whole financial system to the brink of collapse. The institutions such as AIG, Fannie and Freddie were bailed out while Bear Stearns was sold to JPMorgan Chase in 2008 (Bordo, 2008). In comparison, to stop the massive bank runs of 1930s, Roosevelt announced a federal bank holiday during which banks were examined and only strong and financially sound banks were allowed to reopen while the weak banks were merged into stronger ones (2Fishback, 2009). Clearly, the more aggressive policies were taken during the recent crisis to mitigate the systemic risk arising from the complex financial network and highly interconnected financial intermediaries. However, the too big to fail phenomenon creates serious moral hazard problem and encourages an excessive risk that may lead to even more serious banking crisis in the future.

5. Conclusion

The paper discussed the main similarities and differences between the modern crisis and the crises that led to the Great Depression in the context of the U. S. economy. Although both crises had damaging impacts on the U. S. economy, the data on the key economic variables indicate that the modern crisis is milder than the Great Depression. Fortunately, the policy makers learned the lessons from the Great Depression and adopted timely and effective policies in response to the current crises. The Federal Reserve served as a lender of last resort and provided liquidity to the financial system preventing the monetary collapse and deflation experienced in 1930s while the federal deposit insurance introduced by the federal government allowed to avoid the destructive bank runs. Hopefully, the future monetary and fiscal policies will also provide a way out of the current global recession.