WEEKLY CASE STUDY-3

Overview

In the previous chapter, you read about how the world was plunged into a crash because of the sustained overvaluation of a sector. Well, the story of the Global Financial Crisis of 2008 is not much different. In this chapter, we dive deeper into the systemic weaknesses that allowed a crash in a single sector to spiral into a macroeconomic catastrophe.

Opening Remarks

The Global Financial Crisis of 2008 will go down in history as a testament to the helplessness of quantitative techniques, Ivy League graduates and complex bureaucracies against simple human greed and negligence. What started as a simple cyclical contraction in the housing market spiralled into the worst recession in the largest economy of its time, simply due to a sheer lack of risk management and excess financial exposure. Now that we have mentioned it, let us visit where it all started: the housing market.

Understanding the Housing Bubble

As you perhaps know already, the flow of credit disproportionately drives the housing market more than most other consumer industries. This is because most people have to take loans to pay for the high price per house.

Simultaneously, once you buy a house, you can mortgage that house for further credit, i.e. you can take a loan by putting the house up as collateral. The credit quality of these mortgages depends on the house price. For example, if the price of the house is getting higher, then you can avail loans at a lower interest. However, if the house prices suddenly drop, then the house's capability to act as collateral also drops, leading to an increased likelihood of defaults.

Furthermore, if a bank has given out many mortgages and they all suddenly drop in value, then the value of those mortgages also falls, leading to an increase in the bank's risk profile. Thereafter, if a large proportion of the debtors also start failing to pay back the loans, as even selling the house does not fully pay back the loan, then the lender bank may eventually see a fall in its income and cash flow, eventually leading to bankruptcy. This is exactly what happened.

Low-quality mortgage loans were one of the key issues that contributed to the financial implosion. In simple terms, a lot of banks gave housing loans to a whole lot of people who may not have been capable of paying it back on time. The credit quality of these low-quality or 'Subprime' loans was not represented properly in multiple documents. The excess credit was not a problem as long as the house prices were soaring, as people could pay back those loans based on the capital gains.

However, this excess credit led to a housing bubble, i.e. the housing sector was too overvalued. To put it simply, as more people got loans to buy houses, the demand for houses increased, leading to a rise in its price. As house prices rose, people could take out a higher mortgage and buy even more houses. This created an upward cyclical price movement.

Even if the debtors were about to default, the banks were allowed to sell off that loan to someone else and thus passing on the risk to the new investor. Now, this worked only as long as the interest rates were falling. As the rates fell, the price of the existing loans increased, allowing the debtor a liquid market for selling the loan. But post-2004, as Federal Reserve rates began to rise from 1% to an eventual 5.25%, the prices of the loans fell, and banks were no longer able to sell off these loans easily. Eventually, when the bubble burst, i.e. markets started seeing a rapid downward spiral as a part of a correction, these mortgages started getting defaulted en masse.

Additional Factor: Credit Default Swaps

Now, a simple drop in house prices should have affected only the housing market, the homeowners, and the real estate categories of the banks' loan books. It reached beyond these sectoral boundaries because of the existence of CDS or Credit Default

Swaps.

Imagine insurance for your investments. That's essentially what Credit Default Swaps (CDS) are. They're contracts where one party (buyer) pays another (seller) a fee to shield them from losses if a specific debt (from a company or government) goes bad. Think of it like paying rent on a safety net. The buyer makes regular payments, and if the debt defaults, the seller coughs up cash to offset losses. This lets investors manage risk, hedge bets, or even speculate on creditworthiness. When the subprime mortgage crisis hit, these mortgage-backed securities started getting activated, and a large number of investors suddenly had to pay up.

Start of the Crisis

2007 saw a slowdown in the flow of credit into the housing market due to a rise in the interest rates of the Federal Reserve Bank. As mentioned earlier, the number of defaults mounted and over-leveraged banks started to collapse, starting with Bear Stearns in March 2008. The bank got acquired by JP Morgan at only 6% of its 52-week high.

Then, September 2008 saw things get even more serious, with the collapse of the 4th largest investment bank in the USA, Lehman Brothers. The next day, CitiGroup and Bank of America sought state support from the Treasury and Federal Deposit Insurance Corporation. By now, the news of the financial crisis had become widespread enough for the US economy to start slowing down, especially due to a cycle of rolling back of credit flows and consequent fall in economic activity and stock prices.

Impact Beyond the USA

The falling economic activity and curtailing of credit in the USA impacted other countries in the following ways:

- **Falling exports:**

Countries whose main income came from exporting to the USA saw a sudden drop in in the foreign exchanges earned from exports as the purchasing power of the customers in the US fell. As a result, there were a number of currency crises and economic slowdowns in Europe.

- **Financial exposure:**

Many major European banks had partaken in the trading of mortgage-backed securities in the USA. They were now exposed to the housing bubble crash. Moreover, many of these European banks also depended on lending operations with American banks for their sustenance. When the American banks stopped lending out, these banks also started seeing their operations constricted, creating a shortage of credit in Europe as well.

A Look at the Numbers

The USA saw the initial impact of the recession. As per the Bureau of Labour, the US saw the loss of 8.7 million jobs and as per the Treasury Department, American households lost $19 trillion worth of wealth. In the period between October 2007 and March 2009, the Dow Jones Industrial Average fell by around 50%.

Government reaction, convictions and bailouts

The US government responded in a 3-step process, i.e. bailouts, quantitative easing and subsequent regulatory tightening.

- **Bailouts**

In September 2008, the federally-backed home mortgage companies Fannie Mae and Freddie Mac were essentially nationalised based on the Economic Recovery Act of 2008, which was used to insure $300 billion in mortgages.

A month later, Congress and the then U.S. President George W. Bush passed the Emergency Economic Stabilisation Act of 2008, which included $700 billion in government-led bailouts under the Troubled Asset Relief Program (TARP).

Some of the companies that received bailouts under the TARP program included the insurance company American International Group, the auto company General Motors and certain major banks like JPMorgan, Citigroup, Bank of America and Wells Fargo. This event created the term ‘too big to fail’, i.e. certain organisations had become so important to the government that the latter would bear any cost to keep these organisations running.

- **Quantitative Easing**

This essentially involved the Federal Reserve Bank reducing the interest rate from 5.25% to nearly 0 over the next few months in order to increase the flow of credit into the economy.

- **Regulations**

In 2010, Barack Obama signed the Dod-Frank Act, which put greater regulatory powers in the hands of the government to control financial institutions that were on the brink of failing. It also made some attempts to control predatory lending by financial institutions.

There were other federal legislation, such as the 2009 American Recovery and Reinvestment Act (ARRA), to create and preserve jobs as well as provide unemployment insurance and other safety net programs, such as food stamps.

Late Realisations

The recession of 2008 emerged from a number of underlying factors that the governments had ignored for a long time:

- **Lack of oversight:**

Over the years, there has been an increase in the phenomenon of shadow banking, i.e., unregulated forms of banking by both banks and mortgage lenders, private equity, hedge funds, etc.

- **Predatory Lending:**

Banks and other financial institutions were found to be performing excessive leding operations involving loans that had a high likelihood of default and loan books that were highly leveraged.

- **Irresponsible personal finances:**

One must also remember that the housing bubble was created by a large number of people being willing to take on loans without being certain whether they could pay them back. They ignored the very real possibility of a crash in housing prices.

Final Words

Reading about two crashes back to back may have dampened your mood a little. Let us change that by talking about a positive event that impacted our very own India, i.e. the liberalisation of the economy in the 1990s. It stabilised our finances, bolstered businesses and lifted millions from poverty. Check out the next chapter to know more!