



# The Global Financial Crisis

The global financial crisis (GFC) refers to the period of extreme stress in global financial markets and banking systems between mid 2007 and early 2009. During the GFC, a downturn in the US housing market was a catalyst for a financial crisis that spread from the United States to the rest of the world through linkages in the global financial system. Many banks around the world incurred large losses and relied on government support to avoid bankruptcy. Millions of people lost their jobs as the major advanced economies experienced their deepest recessions since the Great Depression in the 1930s. Recovery from the crisis was also much slower than past recessions that were not associated with a financial crisis.

## Main Causes of the GFC

As for all financial crises, a range of factors explain the GFC and its severity, and people are still debating the relative importance of each factor. Some of the key aspects include:

### 1. Excessive risk-taking in a favourable macroeconomic environment

In the years leading up to the GFC, economic conditions in the United States and other countries were favourable. Economic growth was strong and stable, and rates of inflation, unemployment and interest were relatively low. In this environment, house prices grew strongly.

Expectations that house prices would continue to rise led households, in the United States especially, to borrow imprudently to purchase

and build houses. A similar expectation on house prices also led property developers and households in European countries (such as Iceland, Ireland, Spain and some countries in Eastern Europe) to borrow excessively. Many of the mortgage loans, especially in the United States, were for amounts close to (or even above) the purchase price of a house. A large share of such risky borrowing was done by investors seeking to make short-term profits by 'flipping' houses and by 'subprime' borrowers (who have higher default risks, mainly because their income and wealth are relatively low and/or they have missed loan repayments in the past).

Banks and other lenders were willing to make increasingly large volumes of risky loans for a range of reasons:

- Competition increased between individual lenders to extend ever-larger amounts of housing loans that, because of the good economic environment, seemed to be very profitable at the time.
- Many lenders providing housing loans did not closely assess borrowers' abilities to make loan repayments. This also reflected the widespread presumption that favourable conditions would continue. Additionally, lenders had little incentive to take care in their lending decisions because they did not expect to bear any losses. Instead, they sold large amounts of loans to investors, usually in the form of loan packages called 'mortgage-backed securities' (MBS), which consisted of thousands of individual mortgage loans of varying quality. Over time,

MBS products became increasingly complex and opaque, but continued to be rated by external agencies as if they were very safe.

- Investors who purchased MBS products mistakenly thought that they were buying a very low risk asset: even if some mortgage loans in the package were not repaid, it was assumed that most loans would continue to be repaid. These investors included large US banks, as well as foreign banks from Europe and other economies that sought higher returns than could be achieved in their local markets.

## 2. Increased borrowing by banks and investors

In the lead up to the GFC, banks and other investors in the United States and abroad borrowed increasing amounts to expand their lending and purchase MBS products. Borrowing money to purchase an asset (known as an increase in leverage) magnifies potential profits but also magnifies potential losses.<sup>1</sup> As a result, when house prices began to fall, banks and investors incurred large losses because they had borrowed so much.

Additionally, banks and some investors increasingly borrowed money for very short periods, including overnight, to purchase assets that could not be sold quickly. Consequently, they became increasingly reliant on lenders – which included other banks – extending new loans as existing short-term loans were repaid.

## 3. Regulation and policy errors

Regulation of subprime lending and MBS products was too lax. In particular, there was insufficient regulation of the institutions that

created and sold the complex and opaque MBS to investors. Not only were many individual borrowers provided with loans so large that they were unlikely to be able to repay them, but fraud was increasingly common – such as overstating a borrower's income and over-promising investors on the safety of the MBS products they were being sold.

In addition, as the crisis unfolded, many central banks and governments did not fully recognise the extent to which bad loans had been extended during the boom and the many ways in which mortgage losses were spreading through the financial system.

## How the GFC Unfolded


### US house prices fell, borrowers missed repayments

The catalysts for the GFC were falling US house prices and a rising number of borrowers unable to repay their loans. House prices in the United States peaked around mid 2006, coinciding with a rapidly rising supply of newly built houses in some areas. As house prices began to fall, the share of borrowers that failed to make their loan repayments began to rise. Loan repayments were particularly sensitive to house prices in the United States because the proportion of US households (both owner-occupiers and investors) with large debts had risen a lot during the boom and was higher than in other countries.

### Stresses in the financial system

Stresses in the financial system first emerged clearly around mid 2007. Some lenders and investors began to incur large losses because many of the houses they repossessed after the

<sup>1</sup> Imagine that Jane buys an asset for \$100 000 using \$10 000 of her own money and \$90 000 of borrowed money. If the asset price increases to \$110 000, then Jane's own money after paying back the loan has doubled to \$20 000 (ignoring interest costs). However, if the asset price falls to \$90 000, then Jane would have lost all of the money she initially had. And if the asset price were to fall to less than \$90 000, then Jane would owe money to her lender.



borrowers missed repayments could only be sold at prices below the loan balance. Relatedly, investors became less willing to purchase MBS products and were actively trying to sell their holdings. As a result, MBS prices declined, which reduced the value of MBS and thus the net worth of MBS investors. In turn, investors who had purchased MBS with short-term loans found it much more difficult to roll over these loans, which further exacerbated MBS selling and declines in MBS prices.

### Spillovers to other countries

As noted above, foreign banks were active participants in the US housing market during the boom, including purchasing MBS (with short-term US dollar funding). US banks also had substantial operations in other countries. These interconnections provided a channel for the problems in the US housing market to spill over to financial systems and economies in other countries.

### Failure of financial firms, panic in financial markets

Financial stresses peaked following the failure of the US financial firm Lehman Brothers in September 2008. Together with the failure or near failure of a range of other financial firms around that time, this triggered a panic in financial markets globally. Investors began pulling their money out of banks and investment funds around the world as they did not know who might be next to fail and how exposed each institution was to subprime and other distressed loans. Consequently, financial markets became dysfunctional as everyone tried to sell at the same time and many institutions wanting new financing could not obtain it. Businesses also became much less willing to invest and households less willing to spend as confidence collapsed. As a result, the United States and some other economies fell into their deepest recessions since the Great Depression.

## Policy Responses

Until September 2008, the main policy response to the crisis came from central banks that lowered interest rates to stimulate economic activity, which began to slow in late 2007. However, the policy response ramped up following the collapse of Lehman Brothers and the downturn in global growth.

### Lower interest rates

Central banks lowered interest rates rapidly to very low levels (often near zero); lent large amounts of money to banks and other institutions with good assets that could not borrow in financial markets; and purchased a substantial amount of financial securities to support dysfunctional markets and to stimulate economic activity once policy interest rates were near zero (known as 'quantitative easing').

### Increased government spending

Governments increased their spending to stimulate demand and support employment throughout the economy; guaranteed deposits and bank bonds to shore up confidence in financial firms; and purchased ownership stakes in some banks and other financial firms to prevent bankruptcies that could have exacerbated the panic in financial markets.

Although the global economy experienced its sharpest slowdown since the Great Depression, the policy response prevented a global depression. Nevertheless, millions of people lost their jobs, their homes and large amounts of their wealth. Many economies also recovered much more slowly from the GFC than previous recessions that were not associated with financial crises. For example, the US unemployment rate only returned to pre-crisis levels in 2016, about nine years after the onset of the crisis.

## Stronger oversight of financial firms

In response to the crisis, regulators strengthened their oversight of banks and other financial institutions. Among many new global regulations, banks must now assess more closely the risk of the loans they are providing and use more resilient funding sources. For example, banks must now operate with lower leverage and can't use as many short-term loans to fund the loans that they make to their customers. Regulators are also more vigilant about the ways in which risks can spread throughout the financial system, and require actions to prevent the spreading of risks.

## Australia and the GFC

### Relatively strong economic performance

Australia did not experience a large economic downturn or a financial crisis during the GFC. However, the pace of economic growth did slow significantly, the unemployment rate rose sharply and there was a period of heightened uncertainty. The relatively strong performance of the Australian economy and financial system during the GFC, compared with other countries, reflected a range of factors, including:

- Australian banks had very small exposures to the US housing market and US banks, partly because domestic lending was very profitable.
- Subprime and other high-risk loans were only a small share of lending in Australia, partly because of the historical focus on lending standards by the Australian banking regulator (the Australian Prudential Regulation Authority (APRA)).
- Australia's economy was buoyed by large resource exports to China, whose economy rebounded quickly after the initial GFC shock (mainly due to expansionary fiscal policy).

### Also a large policy response

Despite the Australian financial system being in a much better position before the GFC, given the magnitude of the shock to the global economy and to confidence more broadly, there was also a large policy response in Australia to ensure that the economy did not suffer a major downturn. In particular, the Reserve Bank lowered the cash rate significantly, and the Australian Government undertook expansionary fiscal policy and provided guarantees on deposits at and bonds issued by Australian banks.

Following the crisis, APRA implemented the stronger global banking regulations in Australia. Together, APRA and the financial market and corporate regulator, the Australian Securities and Investments Commission, have also strengthened lending standards to make the financial and private sectors more resilient.