

### Federal Reserve Monetary Policy

To prevent recession, earlier this decade the Federal Reserve’s monetary policy pushed down the short-term interest rate to just 1%, the lowest level for many decades. Long-term interest rates also fell, but much less.

Typically a fall in interest rates sets off a boom in housing, as mortgage loans are cheaper. Indeed a boom occurred: house prices rose, and many new houses were built.

### Leveraged Speculation

Many speculators saw this situation as a splendid opportunity for leveraged profit. Banks and hedge funds with access to short-term credit borrowed cheaply and invested in long-term debt, especially in home mortgages.

### Example

Consider a bank or a hedge fund that can borrow short-term at 2% and invest in mortgages at 6%. Suppose that very high leverage—thirty to one—is possible: twenty-nine dollars can be borrowed short-term for every one dollar of equity, and the thirty dollars invested in mortgages.

Per dollar of equity, the cost of borrowed funds is 29 times 2%, namely 58%. The return on the mortgage investment is 30 times 6%, namely 180%. The net profit is 122%, 180% less 58%. The leveraged speculator more than doubles his money each year!

This opportunity is better than stock speculation. For a stock investment, the investor must pick what stock will go up, and stock prices are unpredictable. In contrast, the mortgage speculator makes money as long as the situation is steady. As long as the cost of borrowed funds stays low and the mortgage payments are made by the homeowner, the profit is enormous.

The profit opportunity explains why so many mortgage loans were made. The return seemed easy and huge. The more one bought, the more one profited. Lenders reduced their credit standards for borrowers, to maximize their profit.

### Housing Bubble

Although the housing boom was expected because interest rates were low, an unexpected event was a bubble, as house prices soared to unsustainable levels, especially in certain cities.

Under normal conditions, nearly all single-family home purchases are made by the occupant. There is a strong tax advantage to owner-occupied housing, and investment in rental housing is typically profitable only for lower-priced houses or apartments.

During the bubble, however, a substantial fraction of house purchases (but less than half) were made by ordinary people, speculating on a further price increase. Such a purchase is one of the few leveraged investments permitted by law for an ordinary person, and many hoped for an easy profit.

These speculative purchases added to the demand and pushed prices higher.

### Subprime Mortgages

A new development was subprime mortgage lending. For the first time, almost anyone could readily buy a house with nothing down; not long ago, a 20% down payment was deemed minimal. In 2005 and 2006, a high fraction of all home purchases (but less than half) had no down payment.

A person with a poor credit record could buy with nothing down, without even having to provide documentation that his income was sufficient to repay the loan. The word *subprime* refers to his poor credit record—less than prime. The lender anticipates that the higher interest charged will offset some defaults.

These mortgages were often structured to have low initial monthly payments, with much higher monthly payments later. The common 2/28 mortgage has low payments for two years, and higher payments for the next 28 years.

The capability to buy with no down payment and low income further fueled the demand for housing, and pushed up prices still more.

### A Gain for All?

The homebuilder gains by selling even more homes, at still higher prices, with a very high profit margin. The real estate agent and the mortgage broker gain commissions. The mortgage lender gains by his leveraged investment, financed by cheap short-term borrowing.

The home buyer—who knows that he cannot afford the house—gets to live in a nice house for two years, perhaps without paying any more than the rental on an apartment.

As long as house prices rise, there is no risk to anyone. A homeowner who cannot make his monthly payment just sells the house, for a profit.

### Collapse

The peak of the housing frenzy was 2005. House prices stopped rising in 2006, and started falling in 2007. This fall caused a collapse of the house and mortgage markets.

If a homeowner has made no down payment, he may choose to abandon the house if its price falls, as the house is worth less than the mortgage. In many states, a mortgage is a “no recourse loan:” the lender’s only recourse for repayment is from the sale of the house, but not from any other assets of the homeowner.

The drop in house prices beginning in 2007 has triggered many defaults and foreclosures. The market has crumbled, especially for subprime mortgages.

### **A Puzzle**

Since there was no down payment, the mortgage lender is a big loser. A puzzle is why any lender ever agreed to no-down-payment loans on overpriced houses that the buyer could not afford. Perhaps during the housing bubble the profit from a leveraged investment in mortgages was so great that the risk of a collapse was seen as worth taking.

In addition, many homeowners lost, by overpaying for a house.

### **Bailout**

The Federal Reserve has responded to the crisis by bailing out large commercial and investment banks that made highly leveraged mortgage investments. The Federal Reserve is making short-term loans freely available to them, at low interest rates. Without this support, perhaps these banks would not be able to refinance their short-term borrowing, even at a much higher interest rate.