

## Mortgage Pass-Throughs

*Securitization* refers to the conversion of a loan into a marketable security.

Home mortgages are securitized via *mortgage pass-throughs*. For example, 250 mortgages of \$100,000 each might be combined into a single \$25,000,000 pool of mortgages. Then one thousand equal shares in this pool would be sold to investors.

Each month, each investor receives his share of the total cash inflow from the mortgages—the regular monthly payment on each mortgage, plus the repayments from any mortgages paid off in full. These payments are passed through to the investors.

The cash flow resembles a long-term bond, except that the exact timing of the payments is somewhat uncertain. A surge in repayment raises the cash flow now, at the expense of a lower future cash flow.

## **National Market**

Securitization creates a national market for home mortgages. After making a mortgage loan to a local customer, a bank can sell the mortgage via a mortgage pass-through. Each month the bank collects the monthly payment from the customer and then turns it over to the new owners of the mortgage; the bank receives a fee for this service.

Investors in a slow-growing part of the country are able to provide home mortgage financing in fast-growing areas elsewhere.

## **Fannie and Freddie**

Fannie Mae (“Federal National Mortgage Association”) and Freddie Mac (“Federal Home Loan Mortgage Corporation”) are government-chartered and government-backed private companies set up to provide home mortgage financing.

## **Activities**

They carry out two primary activities.

First, they create mortgage pass-throughs by buying home mortgages and reselling them to investors. They guarantee to the investors that the mortgage payments will be made. For this service they receive some profit.

Second, they sell bonds and use the proceeds to buy home mortgages. They then hold these mortgages, using the payments to pay off the bonds, and the surplus is their profit.

## **Unfair Advantage**

Many complain that their government backing gives them an unfair advantage over competitors.

## **Mortgage Guarantee**

The government backing is what makes possible their guarantee that mortgage payments will be made. Without government backing, the guarantee would not be meaningful.

## **Mortgage Investment**

Because Fannie and Freddie are government-backed, they can borrow at a lower interest rate than any other private borrower. Investing these funds in home mortgages, which pay higher interest, they profit from the interest rate spread.



For both activities, the profit is almost automatic.

The fee for the mortgage guarantees is almost pure profit, as under normal economic conditions mortgage default is rare.

The more mortgages they guarantee, the more profit they make.

For the mortgage investment, the spread between the cost of funds and the use of funds is perhaps one-half per cent. The more they borrow and invest, the more profit they make.

## **Aggressive Expansion**

After 1990, both Fannie and Freddie aggressively expanded their operations enormously. By the housing boom, they either guaranteed or owned perhaps half the home mortgages in the country. For each company, the total assets rivaled the largest banks in the country. The profit was immense, as a result of the government backing.

## Who Gains?

If Fannie and Freddie were competitive, they would pass on the gains from their government backing to home mortgage borrowers. The fee for a mortgage guarantee would be very small, and the interest rate spread for mortgage investment would be small.

However they are only slightly competitive. Many economists think that the government backing has benefitted primarily the stockholders of Fannie and Freddie, rather than the home mortgage borrowers.

## **Housing Boom and Crisis**

During the housing boom, Fannie and Freddie expanded their operations further, and held an increasing share of the mortgage market.

When the boom collapsed and the financial crisis came, unfortunately both encountered severe financial trouble. Both companies were remarkably highly leveraged, so even moderate losses would cause insolvency. Both collapsed and were taken over by the government as a conservator, in September, 2008. The government has provided funds to offset their losses, and the total funding now exceeds \$150 billion.

## Greed

Greed was one factor in their collapse. A generation ago each company guaranteed or invested only in mortgage loans to investors with a good credit rating who had made a 20% down payment. During the boom, however, these standards were reduced, in the face of competitors happy to make subprime mortgage loans with no down payment.

## **Politics**

Politics was a second factor in their collapse. The immense profitability stemming from their government backing has made Fannie and Freddie eager to please politicians.

## Inland Empire

An example was their finance of housing during the boom in the “Inland Empire” east of Los Angeles. This area is large, and the population has grown enormously. Average household income is only average; the well-to-do around Los Angeles tend to live along the Pacific coast. During the boom, however, house prices surged.

Congressmen there pressured Fannie and Freddie to make plentiful, cheap, mortgage loans, even to subprime borrowers, as otherwise their constituents could not afford to buy. The two companies obliged. *Many* houses were built and financed during the boom.

When the housing boom ended, house prices collapsed in the Inland Empire, and the number of mortgage foreclosures led the nation. Because so many houses were involved, the total financial loss was immense.



## Financial Crisis

After the government takeover of Fannie and Freddie, one might have anticipated that the government would shrink them and liquidate them. Instead the opposite happened: the government decided to use them as a vehicle for expanded subsidy for housing finance. The market share of Fannie and Freddie rose even higher, and soon they provided almost all mortgage finance. Today more than 90% of home mortgages are financed either directly or indirectly by Fannie and Freddie.

## **Low Mortgage Interest Rate**

Since the financial crisis, the Federal Reserve has steadily channeled funds to home mortgages, to keep the mortgage interest rate low. The mortgage rate is now remarkably low, only about 3%.

A key motive of this policy is to help banks, by reducing mortgage losses. The low mortgage rate has kept house prices from falling even lower, and lower prices would entail more mortgage default and foreclosure.

The current low mortgage interest rate will likely cause an immense loss later to the government.