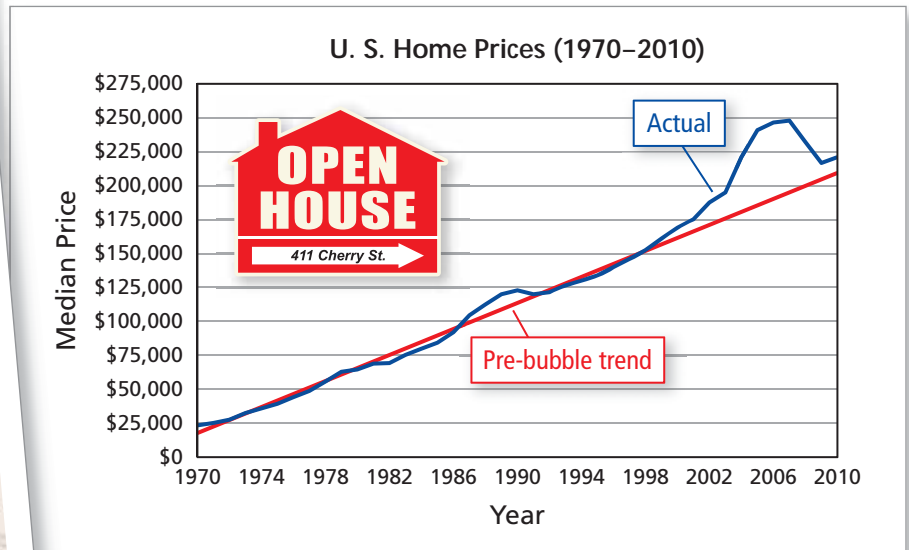


**EXAMPLE 6** Analyzing a Housing Bubble

In the graph, the curve shows that around 1998, the prices of homes began to increase abnormally, which is called a *bubble*. Around 2007, the bubble burst. Explain why this caused a record number of foreclosures throughout the United States.

**SOLUTION**

At first glance, you would think that a drop in the value of your home would not be much of a concern. However, during the early 2000s, banks were offering *subprime* and *adjustable-rate* mortgages to entice more and more people to buy homes. Here is a hypothetical, but all too common, example.

It is 2005. You have been looking at a home that was sold for \$200,000 in 1999. The home is being sold again and is listed for \$400,000. That is a compound increase of about 12.2% per year. You feel like you have to take out a mortgage now or you will never be able to afford a home. Your bank offers you a 10% down mortgage with a *subprime* rate of 4%. The rate will be adjusted in 3 years, but at that time, the home should be worth more money and you can refinance, using the equity you have built up.

Monthly payment: \$1718.70 (2005–2008)

It is now 2008. The rate on your mortgage increases to 6.5%, raising your mortgage payment to \$2275.44. You still owe about \$340,000 on your mortgage but the value of your home has dropped to \$300,000. You cannot afford the increased mortgage payment, and you owe more on your home than you can sell it for. What do you do? For many homeowners in 2008, the answer was to let the bank foreclose on the home.

**Study Tip**

Foreclosure filings include default notices, scheduled auctions, and bank repossessions. In 2010, 2,871,891 properties received a foreclosure filing.

**✓ Checkpoint**

How are banks affected by foreclosures?

Help at [Math.andYOU.com](http://Math.andYOU.com)