

The Great Recession + Some key language to understand the crisis

Sources:

- Investopedia

What is a derivative?

What is a derivative in simple terms?

Definition: A derivative is **a contract between two parties which derives its value/price from an underlying asset**. The most common types of derivatives are futures, options, forwards and swaps. Description: It is a financial instrument which derives its value/price from the underlying assets. Derivatives were used to invest in the housing market prior to the crash in 2008 where bundles of mortgages were combined in financial packages (derivatives) that were given AAA ratings as secure financial assets.

It was of course possible to bet against the rising prices in the housing market and the movie “The Big Short” highlight how some financial houses took positions (bought Credit Default Swaps (CDS) believing that the housing market was going to collapse. The movie follows the sale of derivatives that supported the US property market, other derivatives that bet against the property market and at the same time followed the collapse of the property market itself which crashed in 2008 resulting in huge losses for investors and massive bailouts by governments all over the world.sadf

What Is a Credit Default Swap (CDS)?

A credit default swap (CDS) is a financial [derivative](#) or contract that allows an investor to "swap" or offset his or her [credit risk](#) with that of another investor. For example, if a lender is worried that a borrower is going to [default](#) on a loan, the lender could use a CDS to offset or swap that risk.

To swap the risk of default, the lender buys a CDS from another investor who agrees to reimburse the lender in the case the borrower defaults. Most CDS contracts are maintained via an ongoing [premium](#) payment similar to the regular premiums due on an insurance policy.

A credit default swap is the most common form of [credit derivative](#) and may involve [municipal bonds](#), [emerging market](#) bonds, [mortgage-backed securities](#), or [corporate bonds](#).

What Is a Derivatives Time Bomb?

"Derivatives time bomb" is a descriptive term for possible market mayhem if there is a sudden, as opposed to orderly, unwinding of massive [derivatives](#) positions. In 2016 in the annual Berkshire Hathaway company meeting, the legendary investor warned that the state of the derivatives market was "still a potential time bomb in the system if you were to get a discontinuity or severe market stress."¹

Understanding a Derivatives Time Bomb

A derivative is a financial contract whose value is tied to an underlying asset. [Futures](#) and [options](#) are common types of derivatives. Institutional investors use derivatives to either [hedge](#) their existing positions or to speculate on various markets, whether equities, credit, interest rates, or commodities.

The widespread trading of these instruments is both good and bad because although derivatives can mitigate portfolio risk, institutions that are highly leveraged can suffer huge losses if their positions move against them. The world learned this during the [financial crisis](#) that roiled markets in [2008](#), primarily through the [subprime mortgage meltdown](#) with the use of [mortgage-backed securities](#) (MBS).

A number of well-known [hedge funds](#) have imploded as their derivatives positions declined dramatically in value, forcing them to sell their securities at markedly lower prices to meet [margin calls](#) and customer redemptions. One of the largest hedge funds to first collapse as a result of adverse movements in its derivatives positions was [Long Term Capital Management](#) (LTCM). But this late 1990s event was just a mere preview for the main show in 2008.

Investors use the [leverage](#) afforded by derivatives as a means of increasing their investment returns. When used properly, this goal is met. However, when leverage becomes too large, or when the underlying securities decline substantially in value, the loss to the derivative holder is amplified.

The term "derivatives time bomb" relates to the prediction that the large number of derivatives positions and increasing leverage taken on by hedge funds and investment banks can again lead to an industry-wide meltdown.

AIG + Securitization and the Financial Crisis

Securitization, specifically the packaging of mortgage debt into bond-like financial instruments, was a key driver of the 2007-08 global financial crisis. Securitization

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fueled excessive risk-taking that brought many major financial institutions on Wall Street and around the world to their knees when the U.S. real estate bubble burst.

How Securitization Works?

[Securitization](#) is the [packaging of assets into a financial product](#). The securitization of mortgage debt, particularly subprime mortgages, in [mortgage-backed securities](#) (MBS) and [collateralized debt obligations](#) (CDOs), was a major cause of both the U.S. real estate bubble in the early and mid-2000s and the financial havoc that resulted from the popping of that bubble.

Banks and other lenders who issued mortgages to homebuyers then sold those mortgages to bigger banks for repackaging into mortgage-backed securities and CDOs.

Mortgage Securitization and Risk

Over time, because lenders issuing the loans passed them along to big banks for securitization, they were no longer at risk if the homeowner defaulted. So lending standards fell dramatically. This meant that many unqualified or under-qualified borrowers—known as subprime borrowers—were able to secure risky loans.

Down the line, the subprime mortgages in MBS and CDOs made them attractive to big investors because they generated higher returns due to the higher interest rates subprime borrowers were paying. At the same time, that bundling was believed to reduce investors' risk, and the assets consistently received stellar ratings from credit rating firms. So the assets were used as leverage to control many trillions of dollars—many times the face value of the underlying assets.

The Music Plays On

This situation was highly profitable to everyone as the real estate market boomed, with buyers aggressively bidding up the prices of available houses. Places such as California, Florida, Arizona, and Las Vegas saw astronomical home-price increases as more and more easy money flooded in the market.

At first, subprime borrowers who fell behind on their payments could [refinance](#) their mortgages based on higher property values or could sell their homes at a quick profit. The amount of risk in the system was not an issue as long as prices were rising. By 2005, subprime mortgages represented nearly a third of the total mortgage market, [up from 10% only two years earlier](#).

The Music Stops

Things changed when the economy began to weaken and home prices began to drift back toward earth. Adjustable-rate mortgages had already begun to reset at higher rates and mortgage delinquencies surged higher.

By March 2007, the value of subprime mortgages had reached around \$1.3 trillion. A little more than a year later, in July 2008, more than a fifth of subprime mortgages were delinquent, and 29% of adjustable-rate mortgages were seriously delinquent. The housing market was in free fall and the banks holding mortgage-backed securities were in big trouble, scrambling to get rid of them as their value plummeted. The financial crisis was in full swing.

ADVISOR INSIGHT

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I could write a book on this topic because I worked in the business for many years and I had the big short on myself at a hedge fund I worked at during the financial crisis.

Securitization is the packaging of loans or leases and has been around since the 1980s. Securitization really took off in the 1990s and exploded in the 2000s in terms of issuance volume. Used wisely, it's a very effective form of financing for underwriters of loans and leases (auto, mortgage, credit cards, etc.).

The securitizations owned the subprime mortgage loans that eventually defaulted and caused a banking crisis. The number of loans originated in the 2000-2006 period was unusually large because we had a real estate bubble in the United States. The banks that held these securitizations as investments lost tens of billions of dollars which almost caused the US banking system to collapse. The bailout money provided by the US government preserved the banking system that we have today.