

Derivative Markets

By Robert Goodwin

Three men enter a horse track. The first man places a bet on an upcoming horse race. The second man looks at the third and makes a side bet that the first man will win the bet he placed. The third man agrees to the bet. These three men just created a basic derivative market. A derivative is defined as an asset that derives its value from another asset. If the original bet the first man made is the market, then the bet between the second and third man is the derivative. This bet derives its asset from the original bet the first man made. Now, imagine that, but done several times over—bets on side bets that seemingly never have an end. It is impossible to tell exactly how much the derivative market is worth, but several estimations have the market valued at around \$1.2 quadrillion.

Why is this a big deal? The problems with derivatives are the complexities, size, and the lack of regulation in the market. Many people have trouble understanding the derivative market, and its complexity makes it very scary. With \$1.2 quadrillion in derivatives being much larger than the \$70 plus trillion that is the world's GDP, one could see how this large amount of money could potentially destroy an economy. Regulation is very difficult in derivative markets. With derivatives virtually being bets on other assets continuously rolling over, it is extremely hard to control what happens. People can get around almost any regulation because of the market's complexity. A derivative can be derived from almost anything. From the housing bubble derivative to people investing in water, one can literally invest in just about anything.

Derivatives date back to Aristotle in 6th century B.C. but became a major problem in the early 2000's. With the housing bubble, people began grouping housing loans together to get a

better rating on all of them as a whole. Mortgages with terrible ratings were being bunched together with mortgages with great ratings in order to get one rating for all of the mortgages. These are called CMO's or Collateralized Mortgage Obligations. People began to see this happening more frequently and formed a derivative market betting against mortgages. The market created was basically betting that people would not pay their mortgages. Bankers gladly took the bet because up until this point mortgages were extremely secure. Long story short, the individuals who helped create this derivative were essentially betting against the entire world economy. At this point, derivatives became extremely complex and dangerous. Derivative markets played a huge part in the recent United States recession.

There are several types of derivatives: options, swaps, futures, and forwards. Options are contracts that give the right, but not the obligation, to buy or sell an asset. These types of derivatives occur when an investor wants to increase his exposure in a market but does not want to risk being in the asset outright. Swaps are another instrument used in derivatives. A swap is where other parties have the ability to exchange cash flows or other variables such as interest rates or commodities. Swaps generally occur when one party has a comparative advantage over another. Forward and futures are basically the same thing. They are contracts to buy or sell something in the future for a specific price. This is virtually a bet to see what the price of a certain asset will be in the future. The main difference between forwards and futures is the regulation. Forwards are more regulated with standardized contracts that trade on exchanges. Futures are not standard contracts and just trade over-the-counter. There are several different variations of each of these four instruments. These four alone are confusing, so imagine all the different types of each of these tools.

To think one can basically gamble on anything in the economy is mind-blowing. The effect these have on the economy is incredible, as well. Most of the reason this past recession was so entrenched was due to the derivative market. The complexity of these are interesting, too. Some derivatives derive from other derivatives. These markets are always evolving, and there will always be something to learn in respect to derivative markets. The ability to evolve and be created so easily is not only the most interesting, but also the most terrifying, thing about these markets.