## The Big Short and Real Estate duETS

The book "The Big Short" and subsequent movie, illustrated why the real estate market needs our new next generation investment tool called Down-Up Equity Trust Securities or duETS. It highlights 3 issues relevant to our motivation to create duETS:

- 1) the difficulty in hedging or shorting the real estate equity market
- 2) the lack of market pricing of OTC derivatives
- 3) the counterparty risk of OTC swaps and other derivatives were direct causes for the severity of the financial crisis in 2007-2009.

Real estate duETS were designed to solve these problems.

The story is about the financial crisis and some hedge fund management professionals observing there is rampant fraud in the mortgage market and that the fraud is driving home prices to bubble levels. Attempting to short the real estate bubble, they come to the realization there are no investment tools without counterparty risk allowing an investor to short mortgages or real estate equity. The hedge fund professionals are forced to figure out exotic ways to place short positions. Mostly they involve highly leveraged OTC vehicles issued and backed by investment banks. The hedge fund managers have to go to great lengths to get institutions to put on these short positions.

Most institutional investors and all retail investors were precluded from taking or placing "short positions" on real estate since there was no existing real estate hedging investment tools. <u>Real estate duETS provide an investment tool for institutional investors to short the US residential and the US private commercial real estate market. In the future, Global Index Group hopes to have received an exemption through the SEC allowing all investors to publicly trade and hold duETS, providing an efficient way to hedge real estate.</u>

Why is an investment tool such as duETS important for the real estate market? Without them, the market can become irrational and allow bubbles to occur, homeowners are not able to protect their built-up equity and institutional investors can't lock in potential appreciation gains for pensioners' payout.

In an article titled "The Housing Market Still Isn't Rational", the note Noble Award Winner for Economics and Yale Lauriat, Robert Shiller addressed the lack of a hedging tool in real estate. He stated:

"For the second point, in 1977 Edward M. Miller <u>pointed out in The Journal of Finance</u> something that should have been obvious: Efficient markets require the possibility of selling short. In the stock market, for example, with short-selling, people who think the market is overpriced and headed for a fall can borrow shares and sell the borrowed shares at the current high price. If share prices do indeed fall, they can buy the shares back at a lower price and repay the loan, with a profit.

"Short-selling helps prevent bubbles from forming, but such negative bets cannot easily occur in the housing market. You can't routinely borrow a house and sell it, promising to buy back the same house later to repay the loan.

"Markets without the possibility of making these negative bets will be inefficient. That's because if it is not possible to short, the smart money can do no more than avoid holding an overpriced asset. Canny traders are forced to sit on the sidelines, and watch in futility as prices decline as they expected. Without short-sellers, there is nothing to stop a group of ignorant investors — who get some ill-conceived idea that a certain investment is just terrific — from bidding up prices to extravagant levels. In the housing market, that poses an enormous problem." — Robert Shiller, "The Housing Market Still Isn't Rational", New York Times, July 24, 2015

The investment tools used by the hedge fund managers in the Big Short were OTC swaps issued and priced by investment banks. These hedge fund managers were using OTC swaps to bet on the real estate market declining. In July of 2007, near the end of the bubble and the beginning of crisis, the subprime mortgage market was starting to exhibit weakness. However, as shown in the movie, the investment banks asserted that the long positions rose in value and the shorts declined. This manipulation of the prices is far easier to accomplish in OTC securities issued and controlled by a single investment bank as opposed to duETS with their open and transparent markets.

The investment banks issuing the OTC securities were gaming their counterparties, the hedge funds in the movie. <u>duETS can be bought or sold by any eligible investor with transaction prices reported to the public.</u> This makes price manipulation difficult, if not impossible.

Later in the movie, one of the hedge fund operators has a meeting with a Morgan Stanley executive. The hedge fund operator holds OTC derivatives issued by Morgan Stanley. The executive informs him that she is not sure if Morgan Stanley will be able to meet its obligations to the hedge fund. The idea that Morgan Stanley might default on an OTC derivatives contract shocks the hedge fund operator. It is a classic case of counterparty risk.

The investment banks, issuing OTC derivatives, were putting these trades on their balance sheets, as a result if the investment bank went bankrupt, then the holders of these contracts became ordinary creditors of the investment bank. In other words, they would get in line with other creditors to see if you can get paid. duETS are fully collateralized with cash and Treasuries. duETS have no counterparty risk.

A big part of the realized systemic risk, laid bare in the financial crisis, was how much the various banks listed as assets on their balance sheets contracts with other banks. So, if one bank went broke, it affected many other banks and there was the potential for financial implosion.

One way to reduce systemic risk is to reduce the amount of counterparty risk and leverage in the banks. Banks and others using duETS to hedge their positions can reduce their risk as well as the risk of the system.