Tortoise QuickTake
Credit Podcast

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Welcome to the Tortoise QuickTake podcast. Thank you for joining us. Today, senior members of Tortoise provide a timely update on trending topics in the market.

Welcome to the weekly Tortoise credit podcast. I'm Greg Haendel, Senior Portfolio Manager at Tortoise. Anniversaries are a big deal as I have come to learn after having been married for almost 10 years. Big wedding anniversaries are often celebrated with gifts and special parties although probably the most important part of an anniversary is reflecting upon the past, learning from our mistakes and committing to not get too complacent going forward. Similarly, the global financial markets are currently reflecting on a big anniversary of their own; notably the 10 year anniversary of the global financial crisis. In today's podcast, rather than celebrate this anniversary with gifts or a party, we will reflect upon some of the lessons learned from the financial crisis while also addressing some of the future risks occurring due to some pockets of complacency.

One of the biggest lessons from an asset structuring and investor standpoint is simply that an asset underwriter or owner must have some ***skin in the game***. Leading up to the financial crisis, some homebuyers purchased homes without having to use a down payment, leading to the mantra "Heads I win tails you lose." Further, several Wall Street investment banks were originating loans and creating new and innovative securitized pools of assets without actually having any equity interest or residual interest incentivizing them to underwrite good loans. Along those same lines from an asset structuring and investor standpoint, other lessons include ***"If it sounds too good to be true it probably is"*** and ***correlations amongst assets tend to converge toward one during times of market stress***. Leading up to the financial crisis, financial innovation was the name of the game, culminating in products such as the synthetic CDO squared. This was essentially a security that derived its value from the subordinate or first loss pieces of a pool of other securities that were structured using credit default swap contracts and all of which derived their value and credit ratings using asset correlation assumptions. Many of these assets provided a yield pick-up above more traditional assets while sporting the same credit rating due to these alleged correlation models. In hind sight, that was too good to be true as both correlations trend toward one during times of financial stress and you can't combine lots of different types of financial sludge and use correlations to "voila" create gold from it. Additionally, most folks in the financial markets didn't fully understand these products which makes you wonder why would anyone buy it. I like to return to a quote from Warren Buffet who once said ***"I only buy what I understand."***

Using the same example of the synthetic CDO squared, two additional lessons from the financial crisis include ***you must get compensated properly for risk*** and ***beware of the counterparty risk and the interconnectedness of the financial markets.*** As it relates to securities such as the synthetic CDO squared or subprime mortgages, investors were receiving in some cases less than 10 basis points of additional yield versus traditional cash bonds or versus prime mortgages while incurring substantial additional risks. These additional risks can come from credit risk, default risk, structure risk, counterparty risk, convexity risk and liquidity risk to name a few. Additionally, as some of these assets deteriorated in quality, it also exposed the vast interconnection amongst the financial markets globally due to what was a largely unregulated and immense global derivatives market. Additionally, the lack of structure or centralized clearing within the derivatives market made one investor's problems permeate into other investor's problems when the solvency of the original counterparty of the derivatives contract was called into question.

Continuing on with other lessons, leverage isn't necessarily bad, however, ***having too much leverage can have dire consequences***. Leading up to the financial crisis both banks as well as the consumer in general were too leveraged and both paid the price during the financial crisis. Luckily today many banks have more than doubled their tier one capital levels while on aggregate debt-to-income for U.S. consumers is now at a 30-year low and consumer debt-to-GDP has fallen steadily over the past decade. Further, on the corporate and banking front, the financial crisis taught us to ***diversify our***

funding sources and never be overly reliant upon short term market based funding sources especially as a financial institution. Financial institutions such as Lehman Brothers and Bear Stearns relied almost entirely upon market-based funding sources and further relied heavily upon short term funding, such as commercial paper and repos. When providers of that funding, such as money market funds, become concerned, they stop lending which can lead to serious problems refinancing maturing liabilities, as Lehman Brothers painfully found out. Today, industrial and financial companies have decreased their reliance on short term financing and now utilize a greater proportion of non-market based funding solutions, such as insured deposits, term borrowing ,etc., although they are still reliant upon some portion of market-based funding. This leads to another lesson that ***markets require confidence*** and ***markets tend to overshoot in each direction***. When the providers of capital and the markets in general lose confidence, markets can freeze up and the risk premium required to finance anything can skyrocket. Similarly when the market is overly confident, money is easy and risk premiums tend to be too thin.

Two additional lessons worth noting include ***you never want to be a forced seller (similarly be mindful of liquidity risk)*** and ***easy monetary and regulatory policy typically sows the seeds for tomorrow's problems.*** Some open-ended mutual funds that were too aggressive or hedge funds or other investors that utilized excessive leverage were forced to liquidate portions of their portfolio during the crisis due to investor redemptions, an inability to finance leverage, margin calls, etc. Not only did that exacerbate the selling pressure but it also generated forced selling at overly bearish valuations, contributing to the tendency of markets to overshoot. Lastly, the easy monetary policy (Fed Funds near 1% for several years) and a loosening of financial regulations leading up to the crisis were some of the causes of the crisis.

Have we become too complacent with some of these lessons we learned 10 years ago? In some cases we have learned our lesson. For example, homebuyers and asset underwriters are now required to have skin in the game and the financial markets are less reliant upon short-term market-based funding. Consumer leverage and banking leverage appear to be much better than they were 10 years ago however non-financial corporate leverage in general and sovereign leverage has deteriorated substantially over that same timeframe. Various new forms of financial regulation, such as money market fund reform and SEC rule 22e-4, either have been enacted or are being enacted with the intention of improving liquidity risk management and disclosure. Conversely, other new post crisis regulations such as the Volcker Rule, have restricted the ability of large financial institutions to provide substantial liquidity to the financial markets. Additionally, the rapid growth in fixed income ETFs post the crisis could exacerbate selling pressure in a downturn as discussed in our podcast dated October 10th, 2017. As such, liquidity risk in some markets, for example corporate bonds, has increased as dealer balance sheets have shrunk while outstanding debt has almost tripled. In our opinion, valuations appear stretched for some financial assets, and hence investors may not be getting properly compensated for the risks incurred. Unfortunately markets can also stay irrational for longer than many anticipate. Lastly, after almost a decade of excessively accommodative monetary policy, financial bubbles are being created globally which, similar to last decade, will likely sow the seeds for the next financial downturn.

Over time, as an investor and as a husband, I have learned lessons both from my successes and failures. As we reflect upon our anniversaries we must remember these lessons, learn new ones and never get too complacent so we don't make the same mistakes twice.

Thank you for listening, we'll talk to you again next week.

Thank you for joining us. And stay tuned for our next cast. Have topics you want covered or other feedback to share? Write us at info@tortoiseadvisors.com.

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