NEWSLETTER

February 2018

IN THE NEWS:

Dr. Saha and Mr. Rinaudo were selected by New York State and major tobacco manufacturers to undertake a periodic estimation of Native American cigarettes sold on reservations in New York State. DSP worked closely with the independent investigator, Nardello & Co., to evaluate submissions by the parties, evaluate available data, develop protocols to gather additional data through surveillance and ultimately develop a range of estimates based on rigorous analysis of survey and the other datasets.

RECORD LEVELS OF LEVERAGED LOANS AND MARGIN DEBT:

Gathering Dark Clouds on the Horizon?

Many clients often ask, what is likely to trigger the next wave of securities litigation? This question has become more pertinent in light of the sharp rise in volatility in equity markets this month. While no one has a crystal ball, a stock market downturn, amplified by a meltdown in the leveraged loan marketplace, is a prime candidate to trigger an upsurge of securities lawsuits.

An environment of low interest rates has been driving up the demand for leveraged loans in the U.S. and European markets. Typically, in leveraged loan transactions the proceeds are used for buyouts, acquisitions, or capital distributions. Since they are often issued to highly indebted companies or companies with low earnings potential, these debt instruments are considered relatively risky.

The use of leverage has also increased among equity investors in the form of margin debt. In margin transactions, investors borrow from wealth management firms using securities in their portfolios as collateral. The borrowed amounts are often used to buy more securities to magnify returns.

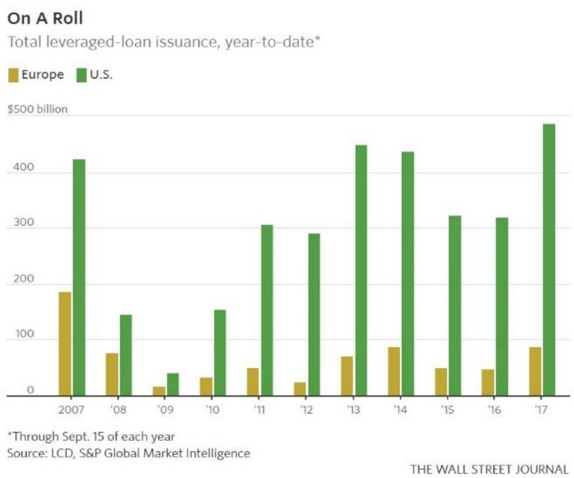
The recent explosive growth in leveraged loan and margin debt issuance is a worrisome cloud on the horizon. While high leverage does not necessarily portend a market meltdown, it can be an incendiary fuel to the fire of a market crisis. In a recent book about financial crises, Richard Bookstaber explains:

"In market crises there are two types of dynamics: asset-based fire sales…or funding-based fire sales…These dynamics are driven by the anvil and hammer of leverage and liquidity…usually it is the effect of leverage that forces selling. And it is illiquidity that causes prices to drop, **creating cascades that turn a simple, one-time shock into something far worse.** Because forced deleveraging leads to asset sales, and asset sales lead to price declines (which then leads to further deleveraging), **both leverage and illiquidity are essential components of a market crisis."** [1] A market's illiquidity is difficult to assess; however, leverage—the focus of this article—can be quantified.

[1] Richard Bookstaber, "The End of Theory: Financial Crises, the Failure of Economics, and the Sweep of Human Interaction", Princeton University Press, 2017, pp.138-140, (emphasis added).

Growth of Leverage Loan Market

The market for leveraged loans is surging. The **annual issuance of leveraged loans in the U.S. in 2017 has exceeded 2007 levels:** [2]



The demand for leveraged loans is primarily driven by yield-starved institutional investors. These investors are increasingly exposed to leveraged loans through Collateralized Loan Obligations (CLOs). These CLOs are portfolios of leveraged loans that are securitized and managed as a fund. Through December of 2017, CLOs comprised 64% of all institutional loan allocations, the highest level in the last ten years.[3]

Legislative Reaction to the Role of Leveraged Loans in the 2008 Financial Crisis

At the height of the 2008 financial crisis, U.S. and European banks had more than $200 billion in illiquid leveraged loans. Many studies have suggested that these illiquid assets played a critical role in sparking and fueling the 2008 financial crisis.[4]

Since 2008, U.S. regulatory guidelines have been revised with the goal of limiting the growth of high-risk issuances by banks. For example, banks which issue loans worth more than 6x the debtor's EBITDA are subjected to extra scrutiny. However, many banks bypass these leverage guidelines by opting to arrange loan deals through parties exempt from these regulations. As a result, the revised guidelines have not slowed leveraged loan issuance.[5]

This increase in issuance is reflected in companies' balance sheets. A recent report by Fitch Ratings sampled 13,000 companies and found that in 2017, more than 37% had debt-to-earnings ratios over 5x, whereas in 2007 this figure was 32%.[6]

Growth of "Covenant-Lite" Loans

High demand for leveraged loans has diluted investor protections included in loan agreements (covenants), such as provisions on a borrower's ability to take on more debt or invest in projects. The "covenant-lite" loans generally contain fewer investor protection provisions.

[2] Hugo Pereira, "Leveraged Loan Monthly: Year-end 2017." Thomson Reuters, January 10, 2018.

[3] "Led by CLOs, Institutional Investors Grab Unprecedented Share of 2017 Leveraged Loan Market." S&P Global Market Intelligence. December 21, 2017.

[4] See for example, Richard Bookstaber, "The End of Theory", Chapter 13.

[5] Miles Johnson, "Investment Banks Ride Leveraged Loan Boom." Financial Times, October 11, 2017.

[6] Narae Kim, "S&P Warns High Corporate Debt Could Trigger Next Default Cycle." Bloomberg, February 5, 2018.

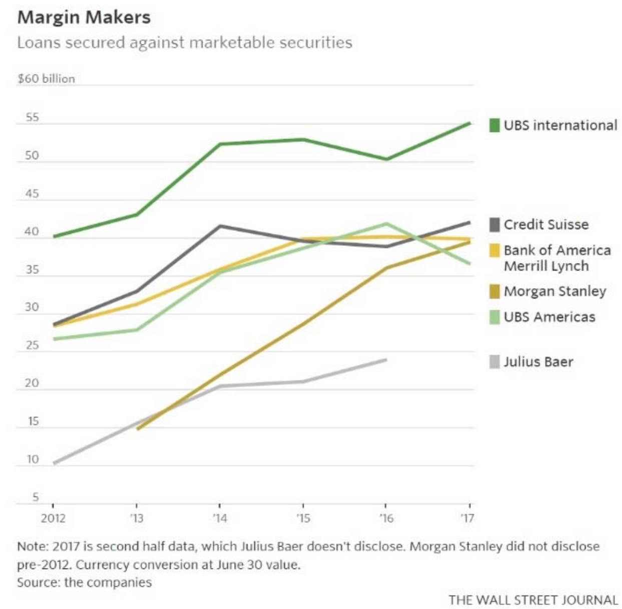
Approximately 75% of leverage loans are considered "covenant-lite" as shown in the above chart.[7,8] A Bloomberg article comments:

> **"Protections have gotten so lax in the $1 trillion market for U.S. leveraged loans that if an offering comes with decent covenants, lenders take it as a sign that something's wrong with the deal."** [9]

The "Margin Makers"

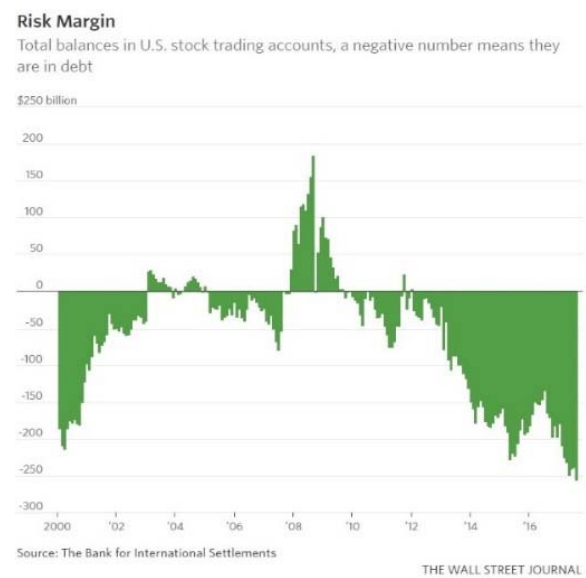
Leverage has also increased among equity investors. They are borrowing record amounts from wealth management firms to juice-up returns on equity investments. Margin debt allows investors to borrow money to invest using the value of their equity portfolio as collateral, thereby 'securing' the loan from the perspective of the bank.

Along with Bank of America and Morgan Stanley, the Swiss private banks have the largest lending operations, and their margin debt businesses have seen marked growth. UBS is the largest player in the margin debt market, with around $55 billion in loans outstanding in 2017. Credit Suisse, Bank of America, and Morgan Stanley follow, each with loans around $40 billion. The chart below shows the growth of margin debt by the major issuers since 2012.[10]



Record Amount of Margin Debt in 2017

In a recent quarterly review, The Bank of International Settlements reported that margin debt outstanding was around 10% higher than its previous peak in 2015.[11] The graph below shows that margin debt began to grow around 2012 and investors have accumulated a record amount through 2017.



[7] Nabila Ahmed, "Safety Becomes Stigma as Leveraged Loans Cut Out Covenants." Bloomberg, September 21, 2017.
[8] Christopher Whittall, "Leveraged Loans Are Back and on Pace to Top Pre-Financial Crisis Records." Wall Street Journal, September 24, 2017.
[9] Nabila Ahmed, "Safety Becomes Stigma as Leveraged Loans Cut Out Covenants." Bloomberg, September 21, 2017.
[10] Davies, Paul, "The Global Stock Market's Hidden Juice." Wall Street Journal, September 24, 2017.
[11] "International Banking and Financial Market Developments", Bank of International Settlements Quarterly Review, September 2017

A WSJ article notes: "**In the U.S., margin debt is more than three-times the level ahead of the 2008 crisis and is greater even than its peak in 2000 before the dot-com crash...**"[12]

In a rising stock market, the increase in equity investors' leverage is accommodated by the growing value of their portfolios against which the loans are secured. But if asset prices begin to drop, this increase in leverage would exacerbate any downward movement and amplify the risks faced by the "margin making" financial institutions.

The same WSJ article observes: "The banks themselves all say that while lending looks high, their own approach is conservative and the general competition for clients is less aggressive than in the past. **But neither the banks nor their investors have a full view of leverage across the system and the risk that may pose.**"

Trigger for the Next Market Downturn?

The dark clouds of increasing leverage in the U.S. and Europe appear to be less threatening as long as the developed economies are humming and the markets are rising. But every bull market ends (see table below). The turmoil in equity markets this month is a stark reminder of the fragility of the 9-year bull run in the U.S.

No one knows what would trigger the next bear market. What we do know is, when a market meltdown begins, high leverage among firms and financial institutions could vastly accelerate and amplify the carnage.

Since 1928, there were five periods when the market rose 5 or more years in a row in the U.S.:

Years	# of Years of Rise	Cumulative Return of S&P 500: During Rise	Cumulative Return of S&P 500: Subsequent Fall
1947-52	6	92%	-1.22%
1982-89	8	137%	-3.11%
1991-99	9	169%	-46.88%
2003-07	5	60%	-45.50%
2009-17	9	126%	?

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[12] Davies, Paul, "The Global Stock Market's Hidden Juice." Wall Street Journal, September 24, 2017.