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December 31, 2018

To Our Clients and Friends:

The Monthly Letter covers just one topic this month. This is due to the importance of this month's analysis. Next Month, we will return with our normal format. First, we return with Part II of our analysis of the credit markets begun this past May. Part II focuses on the Corporate debt markets. Corporations levered up over the past decade, adding significant debt to their balance sheets. In addition, Private Equity buyers piled on typical amounts of late cycle debt onto the companies they purchased. At the same time, banks and bond buyers loosened the terms under which they lend money. With a Recession looming on the horizon, the set-up in the credit markets looks more and more like the late 1980s just prior to the 1990 – 1991 Recession. Second, as always, we close with brief comments of interest to our readers.

The Coming Bond Storm, Part II: Leveraged Lending, Covenant Light, and The Coming Credit Cycle

> "*La Plus Ca Change, Plus C'est La Meme Chose*"
>
> *(The More Things Change, The More They Remain The Same)*
>
> Les Guepes
> January, 1849 Issue
> Jean-Baptiste Alphonse Karr

> "*The stock which is lent at interest is always considered as a capital by the lender. He expects that in due time it is to be restored to him, and that in the mean time the borrower is to pay him a certain annual rent for the use of it. The borrower may use it either as a capital, or as a stock reserved for immediate consumption. If he uses it as a capital, he employs it in the maintenance of productive labourers, who reproduce the value with a profit. He can, in this case, both restore the capital and pay the interest without alienating or encroaching upon any other source of revenue. If he uses it as a stock reserved for immediate consumption, he acts the part of prodigal, and dissipates in the maintenance of the idle, what was destined for the support of the industrious. He can, in this case, neither restore the capital nor pay the interest, without either*

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alienating or encroaching upon some other source of revenue, such as the property or the rent of land."

Chapter IV: Of Stock Lent At Interest
Book II: Of The Nature, Accumulation, and Employment of Stock
The Wealth of Nations
By Adam Smith, 1776

"*Balance Sheets don't matter until they matter.*"

Old Wall Street Saying

For those who remember the 1980s and the "Junk Debt" of that era, much of the past decade must seem a rerun. No price appears too high for acquisitions, with multiples routinely reaching 14x – 20x EBITDA (Earnings Before Interest Taxes Depreciation and Amortization). Traditional covenants no longer appear in bond indentures, removing protections for bondholders. Banks, in order to remain competitive, loosened lending standards in order to compete with the bond market and other banks. And companies running negative cash flow found themselves capable of borrowing billions of dollars in high yield debt, despite little or no chance of repaying those funds. All that seems missing is The Predators Ball, with its exclusive list of who's who, handpicked by Michael Milken and his teamd during Drexel Burnham Lambert's height in the 1980s.

Despite this glowing nostalgic image, certain truths stand clear. During the 1990 – 1991 Recession, junk bond prices collapsed as the underlying economics of the companies came to dominate bond prices. Many of these bonds returned pennies on the dollar to investors while even the better quality bonds traded at half their face value. Loan values collapsed creating massive write-downs, bankrupting many financial institutions. And for those banking institutions providing leveraged buyout financing, new departments came into existence to manage the effective bankruptcies and the underlying assets. The damage became so bad that Wall Street changed the name of the debt from LBO (leveraged buyout) Debt to High Yield Debt to remove the stench of what occurred. Ultimately, for those investors intrepid enough to wade into the carnage, huge opportunities presented themselves. But not before huge damage occurred to the financial infrastructure of the US and to numerous companies that were dismembered to satisfy debt holders.

When surveying the current state of the debt markets, the outcome of the 1980s appears likely to reappear over the next few years. However, as always, history rhymes but does not directly repeat itself. In this instance, instead of private LBO Debt standing at risk, the actual public companies as well as venture backed private companies occupy the center of the bullseye this time. The following chart

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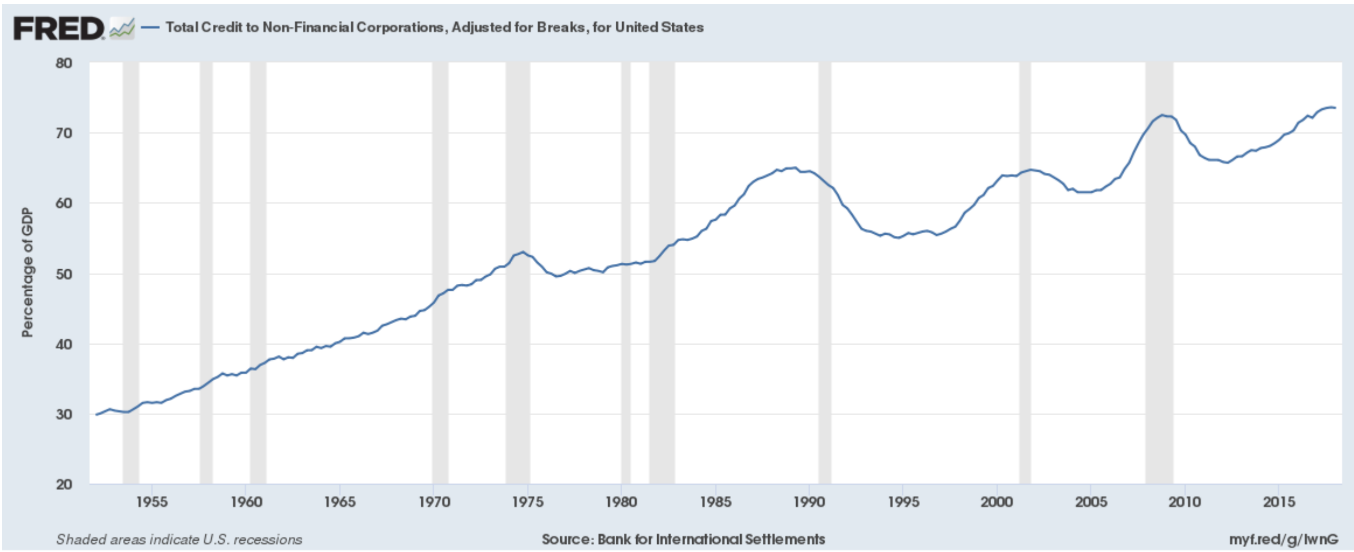
demonstrates the massive amount of debt public corporations took upon themselves to buy back stock over the past 6 years:



As the above chart makes clear, public companies took on a record amount of debt to buy back stock. Now, while there is nothing theoretically wrong with buying back stock with cheap debt, any good idea taken to extremes becomes a bad idea. Over the past 5 years, corporations grew their debt 71%, while the economy grew less than 15%. Total Corporate Debt to GDP rose to almost 75%. And low interest rates, including the drop in corporate borrowing costs hid this leverage. Coverage Ratios today stand at 15%, a low number relative to the 1990s. (Coverage Ratios are a company's Interest Expense as a percent of its Operating Income.) However, in a recession, with a drop of just 20% in corporate profits, this ratio would reach almost 20%, looking more like 1998 than 2018.

The other issue for corporate debt stems from interest rates. At the same time as corporations piled on massive amounts of debt, interest rates dropped significantly. This drop facilitated the buybacks at high multiples of earnings and hid the true costs of this debt. Rates dropped from 8% - 9% in the 1990s to 6% - 7% in the 2000s to just 4.5% - 5.0% over the past few years:

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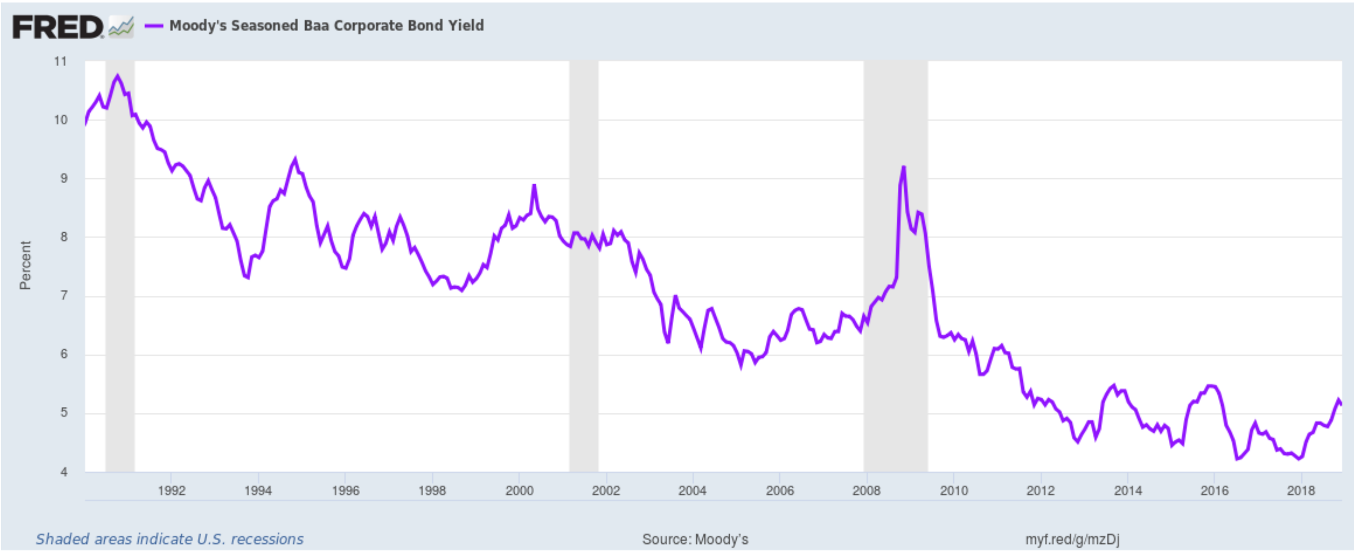

Even should no Recession occur, should interest rates just return to their 2006 – 2007 levels, Coverage Ratios would rise significantly, likely exceeding 20%, putting most companies in a difficult spot as Interest Expense ate into their corporate earnings. For bond holders, the outcome of either of these scenarios would put a serious dent into the value of their portfolios.

Adding fuel to the fire, the massive amount of this debt rated BBB could cause severe agita. The following table illustrates the issue for the $6 trillion Investment Grade Bond Market:

Rating	*2008*	*2018*
BAA and Above	*80%*	*50%*
BBB	*20%*	*50%*

Data from Moodys.

As the table indicates, the quality of corporate credit deteriorated significantly over this cycle. This is not a surprise as corporations bought back stock with the debt instead of putting in place productive assets to service the debt. Or, as Adam Smith would say, corporations used it as a “Stock Reserved For Immediate Consumption” and not “In The Maintenance of Productive Labourers”. As corporations

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cannot "Encroach On Some Other Source of Revenue" to underpin the debt, the bond holder might find him or her self in a difficult spot. With $3 trillion in BBB Bonds and half of these companies possessing higher leverage than BB rated corporations, life could become dicey. Furthermore, many bond funds may only own Investment Grade bonds. Should a small portion of the BBB Market find itself downgraded just one notch to BB, prices could plummet. The High Yield Market size stands at only $1.2 trillion. If just 10% of BBB bonds find themselves downgraded in the next recession, over $300 billion of new High Yield Debt would need to find new homes. As this represents 25%+ of the High Yield Market, a significant increase in yields would occur not only for this debt but for high yield securities, as the marketplace struggled to absorb a massive increase in size.

This analysis does not take into account the Covenant Lite nature of bonds today. For investors, the jungle now reaches into the markets with Caveat Emptor the reigning philosophy. Investors could find themselves playing Gazelle to the bond issuers Lion. Many protective covenants no longer exist to protect bond investors in a downturn. This means the assets investors thought backed their bonds may not actually exist. Instead, they may have limited recourse, leading to lower recoveries than in the past. Should this hold true, the Lion of the issuer will feed well on the investor Gazelle.

The Covenant Lite nature of Bonds extended its claws into the lending market, particularly into Leveraged Lending. These are loans, no surprise, with high leverage. According to the Federal Reserve, this market stands at a little over $1 trillion in size, almost equivalent to the High Yield Markets. With appropriate covenants, lenders stand protected. In 2007, this stood true for a large portion of the market. Today, it does not.

Covenant Structure	*2007*	*2018*
Traditional	*73%*	*22%*
Covenant Lite	*27%*	*78%*

Data from S&P LCD.

For lenders participating in this market, Covenant Lite now dominates. But today's Covenant Lite look nothing like the Covenant Lite of 2007. Recovery Rates differ markedly today from the past. According to S&P, Pre-2010 Recovery Rates for Covenant Lite Loans were 78%. Post-2010 data show Recovery Rates only at 56%. This compares with over 80% for all bank loans.

However, banks may not end up holding the bag. Investors participate heavily in the Leveraged Lending market, buying loans packaged by banks to them. Private Equity companies became very

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aggressive in pushing for lax covenants over the past few years, in a throwback to the 1988 – 1990 period. For example, Blackstone Group gained the ability to selectively sell assets and siphon off cash from the buyout of Thomson Reuter's financial terminal business. With Blackstone looking to sell off the currency unit, the loans fell in value from 100% to less than 94% of their face value recently. A similar fate befell the holders of Envision Healthcare loans, care of KKR. These loans recently suffered a similar fall when it appeared that KKR would sell off the more profitable portion of the company, leaving loan holders with the less profitable division as collateral. These types of hits to valuation occurred in a growing economy, with the wind at investors backs. Should the economy enter a true downturn over the next few years, the value of these loans could drop precipitously, echoing the 1990 – 1991 period.

With the debt environment looking more and more like the late 1980s, investors and institutions find themselves floating down the river with the rapids ahead. And, as the economy moves into its late stages, the roar of the rapids is beginning to grow, yet it still stands some distance away. Should the economy slow significantly or enter a recession, the roar of the rapids could become deafening as defaults soar and values plummet. With no rudder on the ships to take them safely to shore to portage the rapids, numerous ships will end up smashed on the rocks. As Walter Baghot commented in his famous tome, *Lombard Street: A Description of the Money Market*, in 1873:

> "*The fact is, that the owners of savings not finding, in adequate quantities, their usual kind of investments, rush into anything that promises speciously, and when they find that these specious investments can be disposed of at a high profit, they rush into them more and more. The first taste is for high interest, but that taste soon becomes secondary. There is a second appetite for large gains to be made by selling the principal which is to yield the interest. So long as such sales can be effected the mania continues; when it ceases to be possible to effect them, ruin begins.*
> *So long as these savings remain in possession of their owners, these hazardous gamblings in speculative undertakings are almost the whole effect of an excess of accumulation over tested investment. Little effect is produced on the general trade of the country. The owners of the savings are too scattered and far from the market to change the majority of mercantile transactions. But when these savings come to be lodged in the hands of bankers, a much wider result is produced. Bankers are close to mercantile life; they are always ready to lend on good mercantile securities; they wish to lend on such securities a large part of the money entrusted to them. When, therefore, the money so entrusted is unusually large, and when it long continues so, the general trade of the country is, in the course of time, changed. Bankers are daily more and more ready to lend money to mercantile men; more is lent to such men; more bargains are made in consequence; commodities are more sought after; and, in consequence, prices rise more and more.*" *(Chapter VI: Why Lombard Street Is Often Dull, And Sometimes Excited)*

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For investors, who reached for yield as the Federal Reserve drove rates downward and who purchased debt and loans without the protection of traditional covenants, a difficult time lies ahead. The debt markets stand, as in 1989, where they are approaching the point where sales of Covenant Lite debt and Leveraged Loans can no longer "be effected". And, as such a time comes into ascendance, the "ruin begins". With the financial markets headed down the river at a quickening pace with the roar of the rapids growing rapidly, investors best brace themselves for The Coming Bond Storm, lest their ships founder leaving no survivors. (Data from Moodys, S&P, International Monetary Fund, and public sources coupled with Green Drake Advisors analysis.)

Swoosh, Choking on Growth, Zipping Ahead, and Lighting The Path

Finally, we close with brief comments on Swoosh, Choking on Growth, Zipping Ahead, and Lighting The Path. First, while Chinese economic growth may be slowing, Nike continues to plough ahead. Nike's Chinese Footwear sales rose 33% in the latest quarter, accelerating from recent results. Can you say Swoosh. Second, India's pollution reached new heights recently. New Delhi reported pollution levels 12x the recommended level by the World Health Organization. In addition, India hosts the 14 most polluted cities in the world. We see the country Choking on Growth. Third, sales of electric vehicles (EVs) in Norway continue to explode upward with 33% of 2018 car sales comprised of EVs. We see Norway Zipping Ahead in the move to an all electric future. And Fourth, scientists at the European Molecular Biology Laboratories reported using light to control growth in embryonic tissue in fruit flies. This will allow scientists to control organ shape in the future. We see these scientists Lighting The Path to organ regeneration and as another step on the way to The Bionic Human.

In Closing

Should you have any questions on how the above issues or the items discussed in our accompanying cover letter impact your family's financial position or your business's future as well as the potential actions you could take in response, please do not hesitate to contact us. We welcome the opportunity to discuss this with you.

Yours Truly,

Paul L. Sloate Chief Executive Officer & Senior Advisor	Steve Rodia President & Senior Advisor