
Joshua Rosner

646/652-6207

jrosner@graham-fisher.com

Twitter: @joshrosner

Banks, BDCs, C&I and the Yield Curve

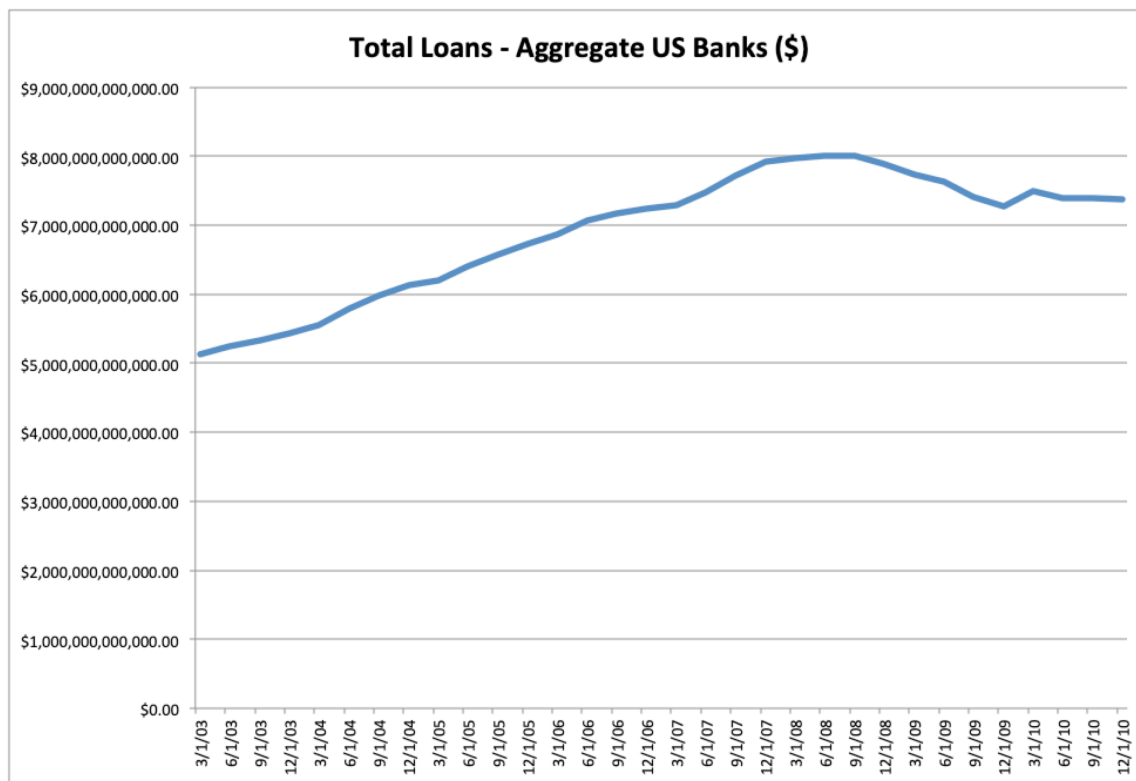
This report is the first in an ongoing series

History Sucks

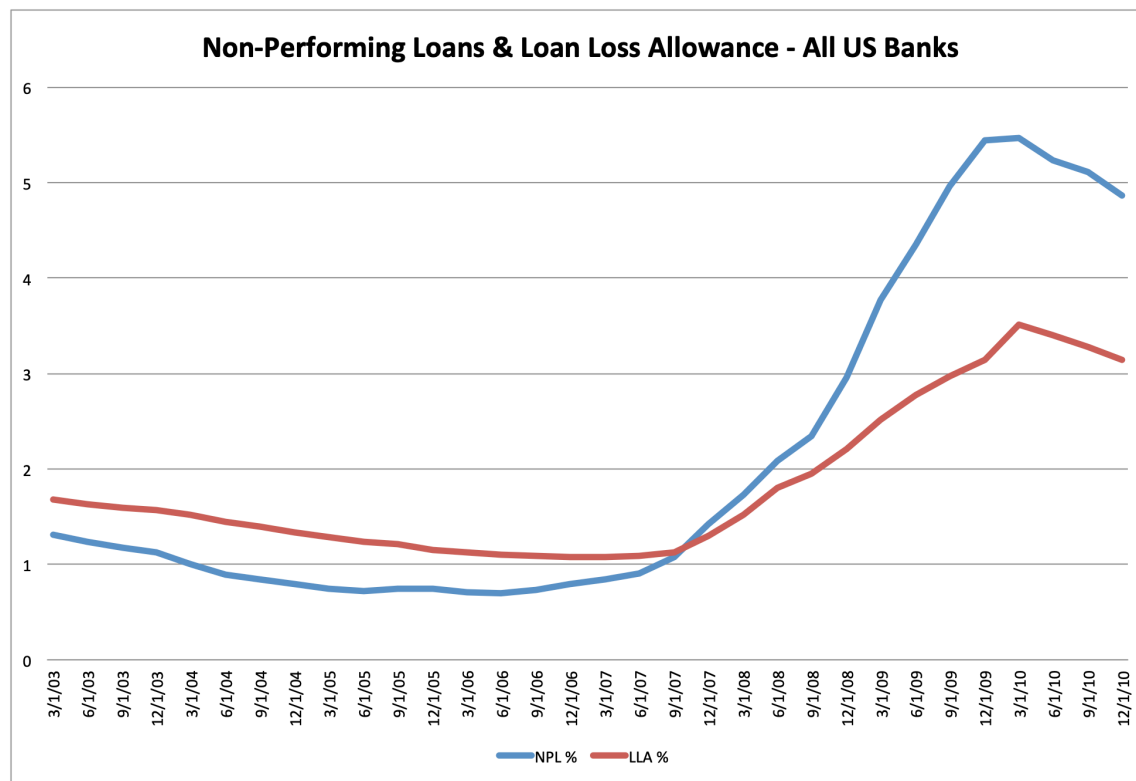
Memories are short and recent lessons are quickly unlearned. Market participants have so quickly forgotten that the financial crisis did not descend upon us out of nowhere. It was the result of seven-years of artificially low interest rates. It was the result of herding behaviors that reduced consideration of credit and liquidity risks coupled with demands, by investors, for instruments with higher yields than could be gotten on an unlevered basis. As a result, issuers benefitted from an ability to originate riskier loans and sell much of those volumes to charter constrained investors who forgot that “risk is the price you never thought you would have to pay”.

The Federal Reserve began raising rates in the third quarter of 2004 and, within 24 months banks had withdrawn liquidity to third party mortgage originators and had tightened underwriting standards. As liquidity reversed and homeowners lost their ability to refinance (on an economic basis) investors began to wake up to the withdrawal of liquidity and the risks of rising credit losses which then reinforced the negative feedback loop that claimed homeowners, investors, financial institutions and Main Street.

As investor appetite for securitized mortgage assets collapsed, and banks were neither able or willing to hold loans they once had either been able to package into MBS, or as the non-investment grade tranches of MBS packaged into CDOs, we then saw bank loan growth – long supported by mortgage origination and refinancing – collapse.



Only then did most investors realize that prepayment risk as a result of refinancing was of lesser concern than the probability of defaults and the losses given defaults. As usual, the sell-side research machine and the credit rating agencies were late to issue proper warning.



Now, ten-years later, as the Fed has begun to drain liquidity from the system, investors are ignoring structural changes in bank lending markets that have occurred during this economic expansion. If the Fed is successful in reshaping the yield-curve we will again be faced with new and expressible opportunities in many banks, private equity firms, business development corporations (BDCs) and underlying commercial credits. Assuming the Fed continues on its stated path we are approaching the prelude to one of the most significant distressed and restructuring cycles in modern history. As shown in the chart above, the lag between Federal Reserve rate hikes and their impacts on the real economy is usually 12-24 months. As a result, it is time to begin identifying the resulting current and future opportunities. We have begun to drill down into the specific exposures of the publicly traded BDCs and those banks which have been most reliant to C&I originations.

Caveat: It is worth noting that if one believes that the Fed is likely to change course out of concern for the domestic economy, or as a result of global instabilities, then the concerns stated here are premature and investors should be focused on a different set of risks to financial markets and financial institutions that were taught by the 1997 Russian Debt Crisis. As a result of the Russian Debt Crisis global capital flew to safety and flowed into the United States. The result was downward pressure on rates. This pressure had negative impacts on the gain on sale assumptions of thinly capitalized independent mortgage lenders and on bank MSR. Given the consolidation of these businesses and

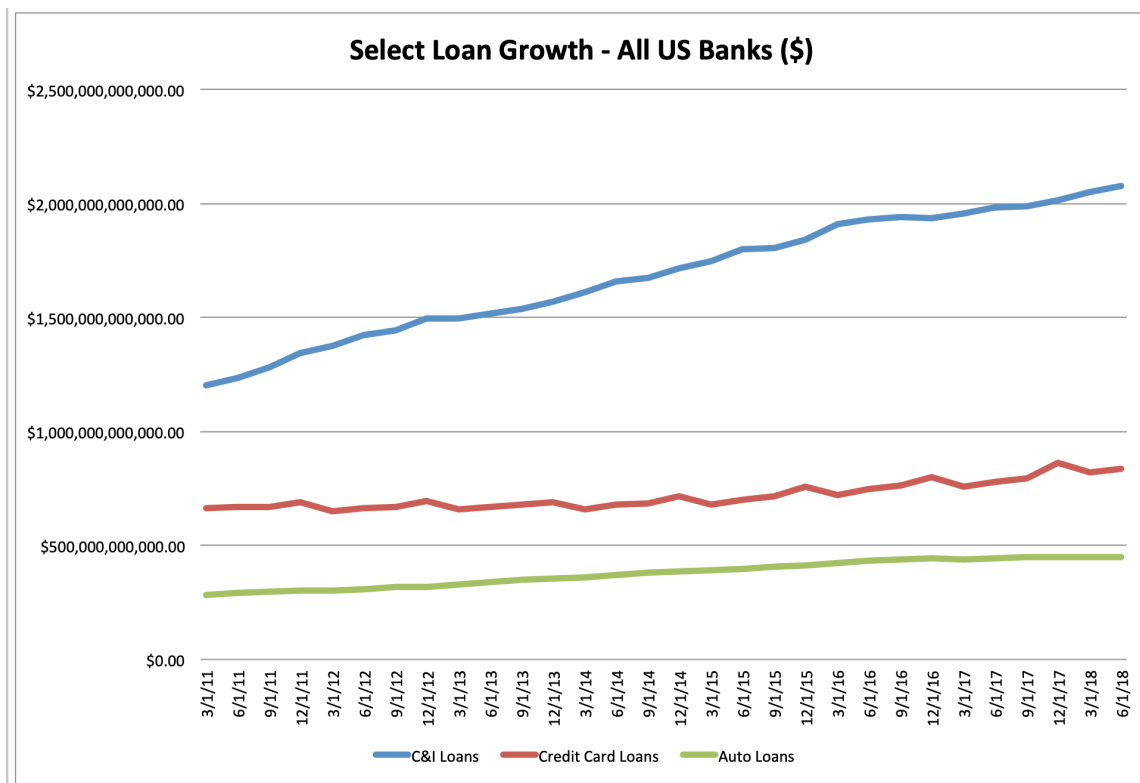
changes to gain on sale accounting requirements these risks are diminished but, for a few of the largest banks, the impact on MSRs should be felt in downward revisions to earnings estimates.

Residential Real Estate Problems are so 2008, C&I is Today

Between 2001 and the financial crisis the same money-center banks that finished the millennium promising to exit consumer lines of credit realized that there was little commercial loan demand and the demand that existed was too risky to hold in portfolios. Further, the demand was generally not from the largest borrowers for whom banks typically syndicated loans. So, in search of loan growth these banks ramped up their mortgage origination capacity through increased purchases of third-party originations, sales to the GSEs and securitized-asset sales to a market increasingly interested in purchasing higher-yielding assets.

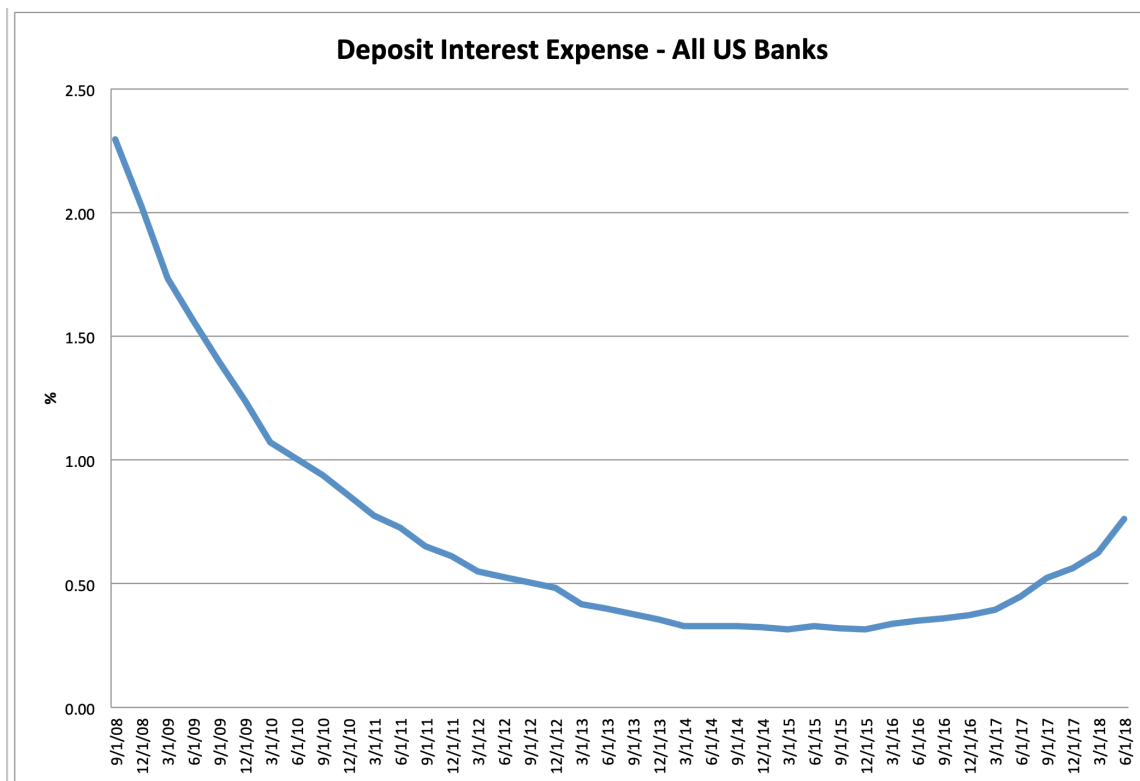
By the end of the cycle the banks had scraped the bottom of the barrel of borrowers and, as rates rose, there were no new borrowers available to underwrite to offset rising credit impairments. The banks had shut down most of the third-party originators, changes to the Basel Accord created disincentives for banks to hold mortgage loans, the GSEs were constrained by conservatorship and the private-label securitization market was dead.

Rather than accepting utility-like returns, the banks sought new markets to exploit. Subprime auto loans and student lending, expense reductions and reserve release could provide some support of growth, but they would not support market expected top-line returns. But there was an asset class that could - commercial and industrial lending. On a ten-year basis, C&I has become the largest portfolio asset for the banking industry. (21.07% vs 20.73% for 1-4 family first liens)



When short-term rates were falling, or flat, lenders competed for loan growth and borrowers took comfort knowing they could refinance. Just as we saw during the residential real-estate bubble the competition for loan growth led lenders to reduce their underwriting standards. During this period, investors understood their key risk was duration not credit.

As the Fed more began to indicate a change to its rate trajectory we began to see an acceleration of that refinance activity. That is largely behind us and banks are now forced to choose between losing deposits or paying more for them.

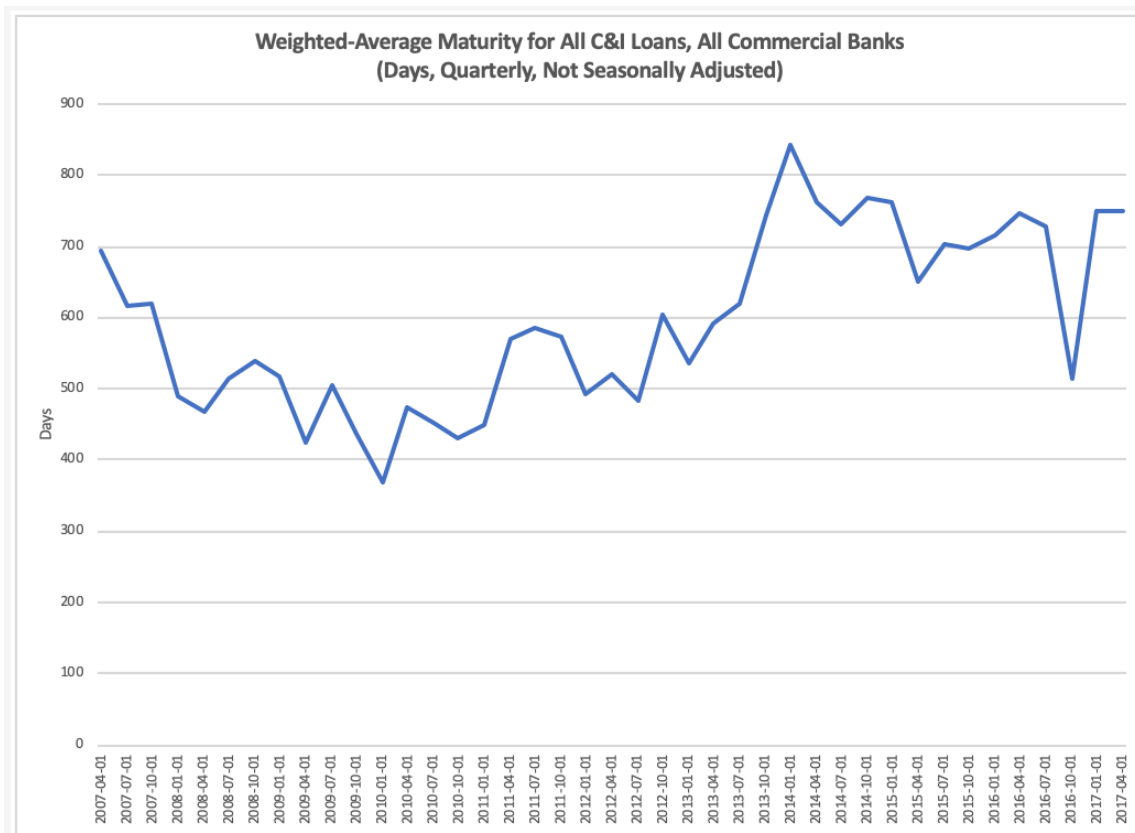


Perhaps rather than telling us what the Fed is doing, the long end is coming down because debt-market participants are warning the Fed about what it needs to do at the short end. If debt markets are correct we will continue to inflate an already full bubble. If the Fed overrules the markets, then we are in for a troubling credit-cycle where many underlying borrowers who are unable to economically refinance will become distressed.

Focus on C&I

This commercial loan cycle is different than prior commercial lending expansions. Due to market appetite and low-interest-rates the largest commercial enterprises who had strong balance sheets were able to lock in long-term and low-rate debt directly through the capital markets. No longer did they need to significantly rely on larger syndicated bank loans (*Note: purchases of C&I syndications are included in the reported C&I lines in call reports*). As a result, for banks to exploit C&I loan growth, they were increasingly reliant on smaller and less credit-worthy borrowers and borrowers who sought debt-capital for merger and arbitrage activity. As banks competed for volume they relaxed their lending standards, competed by underpricing loans and shortening loan durations.

While there is no more recent date to which to compare, by Q1 2012 only 44% of corporate loans were secured and 75% of commercial loans had floating interest rates.¹ With the increased competition it is all but certain that, today, fewer loans are secured, more have floating rates and banks have begun to try to lengthen durations and increase rates.

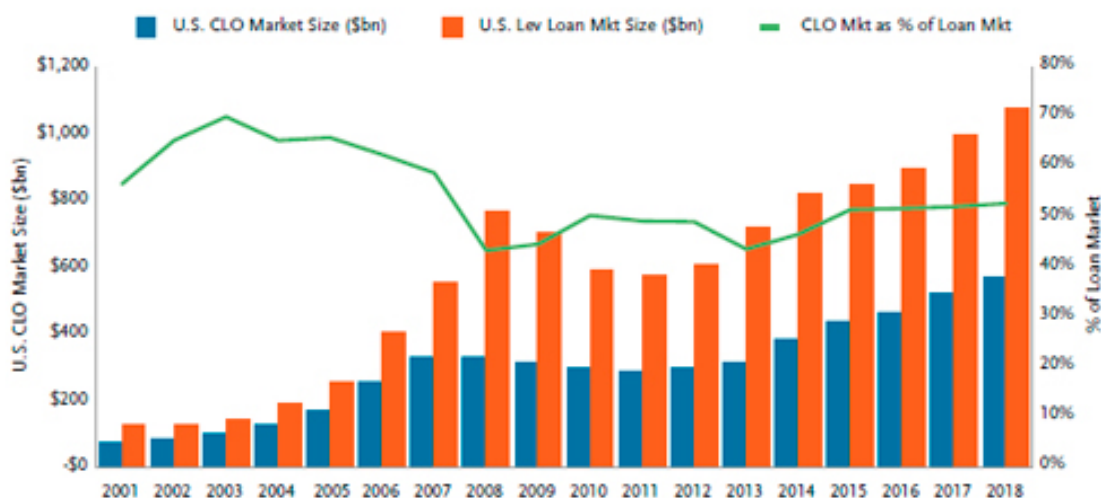


Just as we saw in the prior cycle, investor demand often leads banks to over-lend and to throw risk to the wind. Thus, here we are again with bank lending having scraped the bottom of the barrel by lending to borrowers who, while financially weaker, could service their debts in a low-rate environment and refinance their debt with ease. The CLO and LLO markets have also played a part in the psychographic market group-think. Importantly, C&I originations that are intended to be structured into CLOs are reported in the C&I line in the call report unless they are treated as a trading asset (in other words, the C&I line includes both Available for Sale and Held to Maturity). Therefore, as market demand for higher-yielding whole loans, CLOs and LLOs further weakens banks will be forced to hold more of the loans they had intended to sell. The risk of having to eat what

¹ Brian Gordon, Federal Reserve Bank of Chicago, Stress Testing Modeling Symposium, “Corporate Loans: Challenges in modeling heterogeneity”, 2012

was cooked for others was a risk that cost several banks and investment banks to choke during the financial crisis.

Amazingly, there is no way for regulators - or anyone else - to use the available data to track either purchased syndications, sold syndications or assets put into CLOs. Also, amazingly, there is no way to use the reported data to assess the duration and terms (floating/fixed/resets/covenant lite) of C&I (or structured or syndicated) loans on bank books. In other words, just as regulators were flying blind in their oversight of CDOs, they are doing so with CLOs. If one looks at the CLO market size as a percent of the loan market they might see a strong parallel to the residential real estate securitization market relative to the residential real estate loan market in the leadup of the financial crisis.



As bank call report loan performance analysis shows most banks have become much more efficient, than in past cycles, at unloading credits early (30-90 days delinquent) - therefore improving their performance data. Since the bottom in C&I portfolio yields (Q12015) banks have been able to increase average yields on the C&I portfolios from 3.69% to 4.73%. While there is no publicly available call report information available to assess, it is the feeling of many regulatory sources that much of the more recent volumes is in the form of shorter-term debt and floating rate debt with step-ups. As a result, many creditors who haven't, or couldn't refi are approaching maturity of these shorter duration loans (+/- 3.5 years). This increase will result in a roughly \$35 billion in annualized increases in interest costs payable, this year, by the corporate sector. While that may seem to be a positive for the banks it is partially offset by the interest expenses for deposits and is only then positive if already strapped commercial borrowers can meet the rapid increase.

Based on conversations with examiners and bank management it seems investor demand for high yield debt has allowed many banks to sell questionable CRE and C&I credits earlier to avoid rising non-accruals and NPLs but if rates continue to rise risk appetites will diminish. Further, over the past couple of years many smaller banks have been able to sell higher yielding C&I credits, at origination, to PE investors who were starving for yield. Given these changes to bank efficiencies in management of problem credits we will not see increases in PD, non-accrual or NPLs until banks can no longer find the liquidity into which to sell.

Assuming the Fed continues to increase short-term rates, or liquidity concerns increase, and performance erodes, banks will seek to move more and more of these assets off their balance sheets and into structured products. Unfortunately, like with CDOs and MBS' in the last cycle, this becomes more difficult when investor appetite weakens.

While bank capital ratios, liquidity and ALLL are currently strong the same cannot be said of other market participants. This is especially a concern for externally managed BDCs, some insurers, some foreign banks, ETFs and other market participants who hold BB and lower exposures that are at risk of downgrades.

The BDCs as Key Aggregators of Main Street Risk

As a result of low rates, externally managed BDCs and others were incentivized to chase yields and take on smaller and riskier credits – most of which are marked to model, dealer desk quotes or held for sale. These firms have benefitted from a tightening of spreads in the face of rising rates. When spreads eventually widen the marks will change - that will be followed by deteriorating credit performance which will further weigh on these stocks.

It is an important side-note for investors to remember that Dodd Frank explicitly carved out bank investment and affiliation with business development corporations from its list of prohibited investments. As a result, the BDC industry has grown from a small handful of companies at the beginning of the cycle to over three-dozen publicly traded BDC and dozens of private BDCs. Given that several dozens of these are publicly traded we can look through to their portfolio compositions for sectors and specific exposures.

By definition, most of these firms hold discreet credits, mostly in smaller enterprises, and are paid based on yield and AUM so credit quality has not been an important factor in a benign rate environment. Furthermore, because of the illiquidity of their holdings these firms have fairly broad latitude in marking their positions.

Below is an example of the types of credits many public BDCs hold:

Type of Investment	Interest Rate(9)	Acquisition Date	Maturity/Expiration Date	Principal Amount, Par Value or Shares	Cost	Fair Value	Percent of Net Assets
Second lien (3)	10.94% (L+ 9.50%4/Q)	1/30/2015	1/31/2023	40,000	\$39,033.00	\$39,000.00	3.77%
Second lien (3)	8.88% (L + 7.50%/Q)	9/25/2017	1D/3/2025	40,353	\$40,056.00	\$40,656.00	3.93%
				80,353	\$79,089.00	\$79,656.00	7.70%
Second lien (3)	8.32% (L + 6.75%1M)	1/19/2017	1/25/2025	57,000	\$56,804.00	\$57,606.00	5.57%
Second lien (3)(10)	10.19% (L -h 8.50%/Q)	4/28/2017	10/30/2023	23,500	\$23,500.00	\$23,500.00	
Second lien (4)(10)	10.19% (L+ 8.50%,70/Q)	4/28/2017	10/30/2023	22,500	\$22,500.00	\$22,500.00	
				46,000	\$46,000.00	\$46,000.00	4.44%
First lien (2)(10)	7.69% (L. -h 6.00%/Q)	6/8/2017	6/8/2023	34,527	\$34,409.00	\$34,872.00	
First lien (3)(10)(11)							
Drawn	7.55% (L + 6.00%/Q)	6/8/2017	6/8/2023	8,646	\$8,616.00	\$8,733.00	
First lien (3)(10)(11)							
Drawn	9.50% (P+500%/Q)	6/8/2017	6/8/2023	2,200	\$2,192.00	\$2,200.00	
				45,373	\$45,217.00	\$45,805.00	4.43%
First lien (2.)	716% (L + 5.75%/Q)	10/9/2015	10/31/2022	34,873	\$34,601.00	\$34,786.00	
	10.63% (L + 9.25%/Q)						

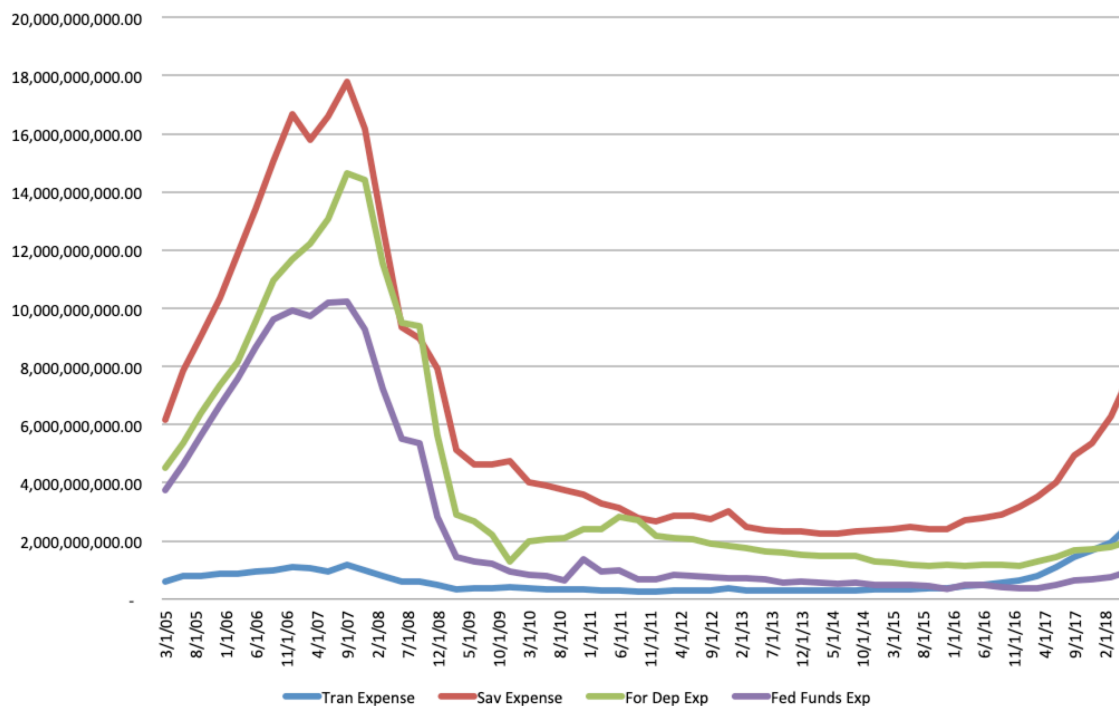
If the short end rises many of the BDCs, which have been stretching quality for yield will be caught with rising numbers of troubled credits. The regulatory reform bill the President signed earlier this year allows BDCs to lever up to 200x but such increase require approval by the boards and notice to BDC investors. The net result may have lengthened the runway, but it won't put those planes already in flight back on the runway.

We can expect that, by the time that the rating agencies and sell-side speak publicly, it will be too late to position for the problems. We are likely at the beginning of a negative cycle that will play out over the coming 12-24 months. Having scraped the bottom of the borrower-quality barrel it is likely that if rates rise, or market participants withdraw liquidity, delinquencies and defaults will begin to rise as fewer credits will be able to be rolled and there will be lower volumes to support future growth. This will hit the banks last, but it will hit many of them hard and it should raise questions about the sustainability of growth in an environment where loans roll off and there is little new available demand from quality credits to replace it.

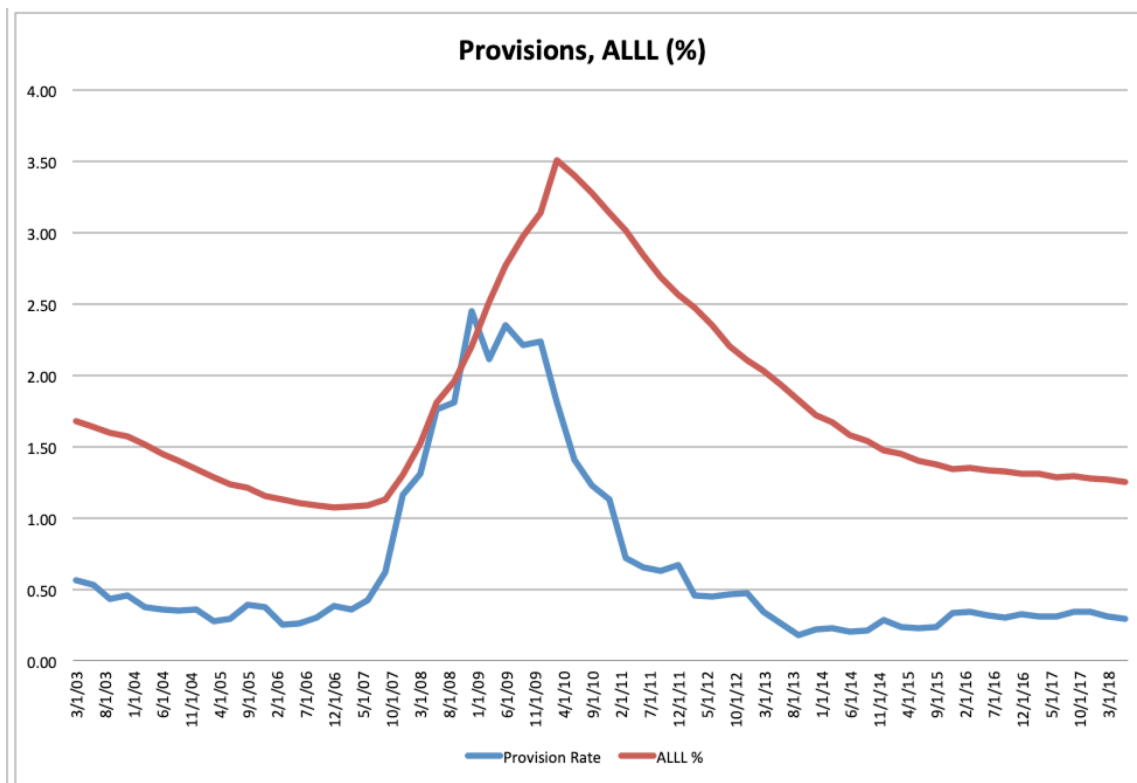
Flight to Quality or Higher Short-Term Rates – the “E” of P/E may be at Risk

It is unfair to speak of “the banks” in monolithic terms, and we can identify specific banks that will buck the trends and prosper due to the uniqueness of their businesses. Broadly speaking, the reality is that bank loan growth is near its cyclical peak and expense cutting appears to be past its cyclical peak. As the Fed raises rates banks will continue to be forced to choose between paying more for deposits or losing those depositors – these pressures are already mounting. Cost cutting and reserve releases that helped the banks earlier in the cycle will become less accretive to earnings.

Key Funding Expenses - All Banks (\$)



Loss reserves will have to begin to ramp up in the next 12-24 months. While the debt markets already understand the script, equity markets are just waking up to these realities.



Remember, Banks Aggregate & Allocate Capital throughout the Economy

On a macro level, we are already seeing weaker trends in corporate earnings revisions. While quarterly earnings remain strong, in the latest quarter, more of these gains are coming from factors beyond top line growth. Of the S&P 500 companies that have reported so far, we saw a 22% increase in earnings on an 8.7% increase in revenues. Tight labor markets and continued upward pressure on wage growth, without continued increases in liquidity to Main Street will further threaten corporate earnings. Add the possibilities that trade tensions remain unresolved and we have the makings of a recession in late 2019 and stagflation with a Fed that has limited tools.

All of the issues raised here could be part of the reason we are seeing weaker support for Treasury auctions. I will not conjecture to guess the risks to future Treasury auctions, as there are people far more qualified than I to do so, but weaker demand may well be the debt markets notice that the Government would be less able to continue to support growth as the private sector retrenches.

Feel free to call if you would like to discuss the risks to specific BDCs or banks.

1- This report is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would subject Graham Fisher or its subsidiaries or affiliates to any registration or licensing requirement within such jurisdiction. All material presented within this report, unless specifically indicated otherwise, is under copyright to Graham Fisher & Co. (GF&Co). None of the material, or its content, nor any copy of it, may be altered in any way, transmitted to, or distributed to any other party, without the prior express written permission of Graham Fisher & Co. (GF&Co).

2- The information, tools and material presented in this report are provided to you for information purposes only and are not to be used or considered as an offer or the solicitation of an offer to sell or buy or subscribe for securities or financial instruments. GF&Co. has not taken any steps to ensure that the securities referred to in this report are suitable for any particular investor. The contents of this report are not intended to be used as investment advice.

3- Information and opinions presented in this report have been obtained or derived from sources believed by GF&Co to be reliable, but GF&Co makes no representation as to their accuracy or completeness and GF&Co accepts no liability for loss arising from the use of the material presented in this report where permitted by law and/or regulation. This report is not to be relied upon in substitution for the exercise of independent judgment. GF&Co may have issued other reports that are inconsistent with, and reach different conclusions from, the information presented in this report. Those reports reflect different assumptions, views and analytical methods of the analysts who prepared them.

4- Past performance should not be taken as an indication or guarantee of future performance, and no representation or warranty, express or implied is made regarding future performance. Information, opinions and estimates contained in this report reflect a judgment at its original date of publication by GF&Co and are subject to change. The value and income of any of the securities or financial instruments mentioned in this report can fall as well as rise, and is subject to exchange rate fluctuations that may have a positive or adverse effect on the price or income of such securities or financial instruments. Investors in securities such as ADRs, the values of which are influenced by currency fluctuation, effectively assume this risk.