SKY HARBOR
CAPITAL MANAGEMENT

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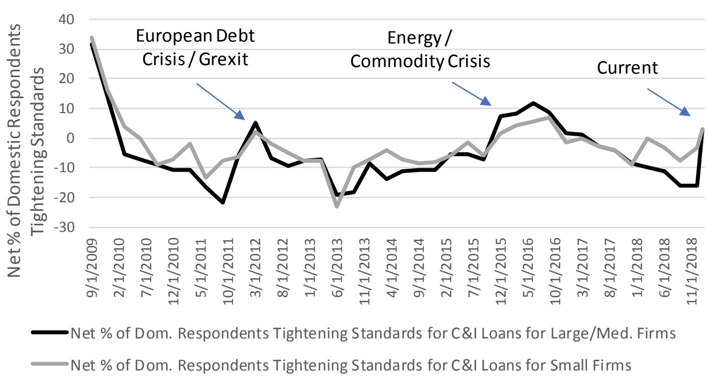
Weekly Briefing

SKYView: Valuations

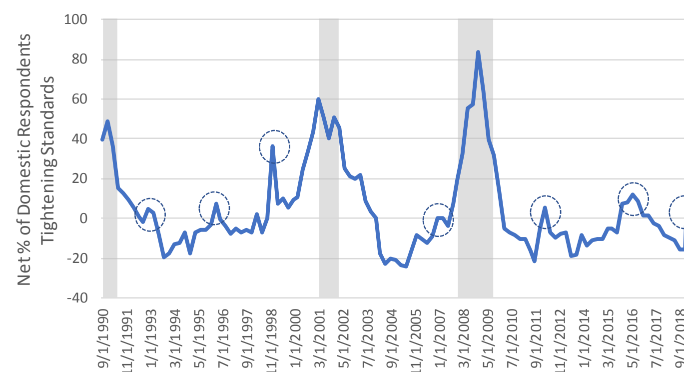
A surprise tightening of bank lending standards via recently released data from the Fed's Senior Loan Officer Survey has served to dampen enthusiasm for risk assets - including US high yield - given the survey's reputation for being a strong leading indicator of economic growth. Highly correlated to future corporate default rates, an inflection toward tightening standards has prompted us to reassess our view on principal loss and fair value of spreads within US high yield markets on a go-forward basis. While survey results merit attention, we caution that competing indicators that have demonstrated similar efficacy in the past have not shown degradation of financial conditions, leaving us unwilling to reposition too cautiously for the time being. We nevertheless discuss an array of market implications stemming from tighter lending conditions in this weekly briefing.

The updated Senior Loan Officer Survey on Bank Lending Practices (Senior Loan Officer Survey, or SLOS) was released this week, showing bank lending standards tightened at their fastest pace since Q2'16. The survey, which canvasses up to eighty large domestic banks and twenty-four US branches of foreign banks, showed that (on a net basis) banks were tightening lending standards, a data point that follows seven consecutive quarters of loosening standards. A comparable survey conducted by the Federal Reserve that focuses on small banks demonstrated a similar trajectory. The SLOS survey has trended above zero (net tightening of standards) only three times during the current cycle, each of which preceded market volatility. Additionally, we acknowledge that tightening of lending standards have typically preceded recessions. However, there have been many false positives over the last thirty years (circled below, along with the current spike).

Senior Loan Officer Opinion Survey on Bank Lending Practices
quarterly data, current cycle



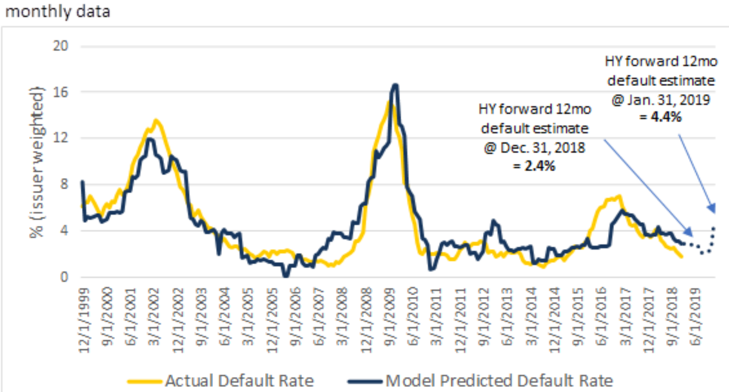
Senior Loan Officer Opinion Survey on Bank Lending Practices
quarterly data, recessions shaded in grey



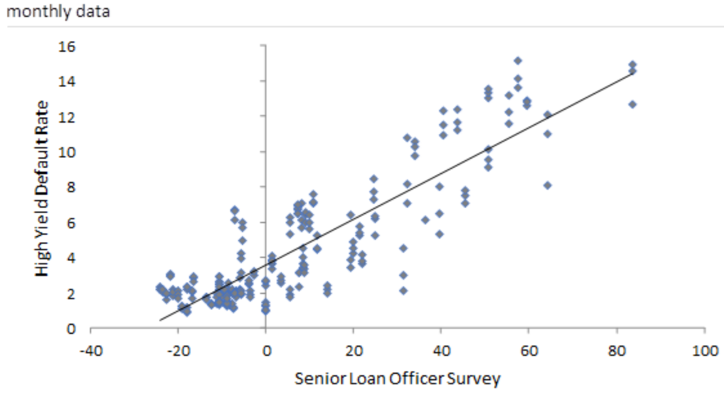
Source: SKY Harbor, Federal Reserve, Bloomberg, NBER

A shift from loosening to tightening standards has the greatest impact on our internal default projection model, a three-factor regression aimed at predicting defaults twelve months into the future. As the single most correlated factor, the change in lending standards caused our forward-looking default expectation to increase to ~ 4.4%, up from a 2.3% projection last month. While the remaining factors in our model continue to trend positively, and defaults are still expected to remain at or below the long-run high yield market average (~ 4.5% per annum), the new outlook could push index spreads wider should the loan survey prove part of a larger trend regarding credit conditions.

SKY Harbor 3-Factor Default Model
monthly data



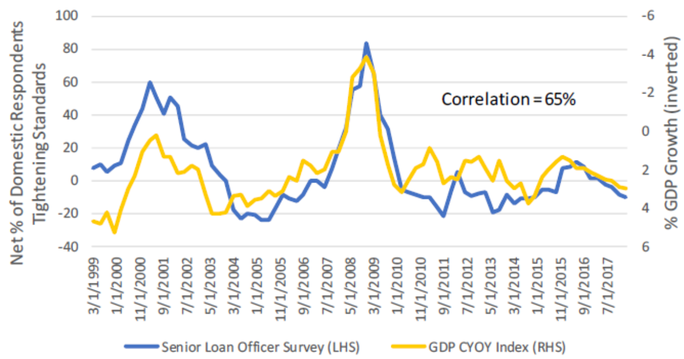
SKY Harbor Default Model Regression Output
monthly data



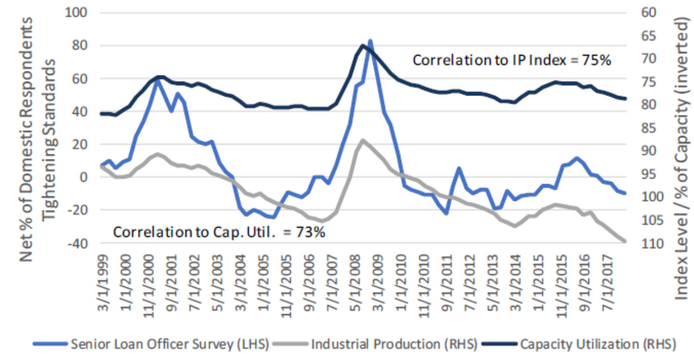
Source: SKY Harbor, ICE BofAML Indices, BofA Merrill Lynch, Federal Reserve

In addition to future default implications, we are cognizant that Senior Loan Officer Survey tightening tends to precede weakening of US GDP growth two quarters in advance and weakening of Industrial Production and Capacity Utilization three quarters in advance. The latter two indicators, which serve as key inputs to our macro regression model, could also influence spreads wider (again, should the loan officer survey trends persist).

Senior Loan Officer Survey vs. US GDP YoY Growth (lagged 2 quarters)
quarterly data



SLOS vs. Industrial Production (lagged 3Qs) and Capacity Utilization (lagged 3Qs)
quarterly data



Source: SKY Harbor, Bloomberg, Federal Reserve

For the purposes of goal-posting spread expectations based on our default model output, we provide the sensitivity analysis below. In general, if we assume a recovery rate of ~ 50% on defaulted securities (above the long-run average of 41%, but below the trailing 12-month value of 60%), and apply an excess spread of 310 bps on top of expected losses (the 20-yr index average), a rise in expected defaults from 2.3% to 4.4% implies the potential for ~ 100 bps of high yield market spread widening. While we concede that 530 bps is well above current market levels, it remains below index OAS as of the start of 2019. Additionally, we would anticipate CCC constituents, by virtue of their greater sensitivity to defaults and risk premiums, should absorb most of the spread widening should this scenario play out. Therefore, while we remain unconvinced (without further corroboration) that the most recent Senior Loan Officer Survey results represent a sustainable trend, we nevertheless remain biased toward B and BB rated securities in case investors begin to incorporate tightening lending standards into their spread outlooks.

Implied Spreads Based on Expected Default and Recovery Rates
assumes excess spreads=**310 bps** (20yr average)

Expected Recovery Rate	Expected Default Rate								
	1.90%	2.00%	2.10%	2.20%	2.30%	2.40%	2.50%	2.60%	2.70%
65%	377	380	384	387	391	394	398	401	405
60%	386	390	394	398	402	406	410	414	418
55%	396	400	405	409	414	418	423	427	432
50%	405	410	415	420	425	430	435	440	445
45%	415	420	426	431	437	442	448	453	459
40%	424	430	436	442	448	454	460	466	472
35%	434	440	447	453	460	466	473	479	486

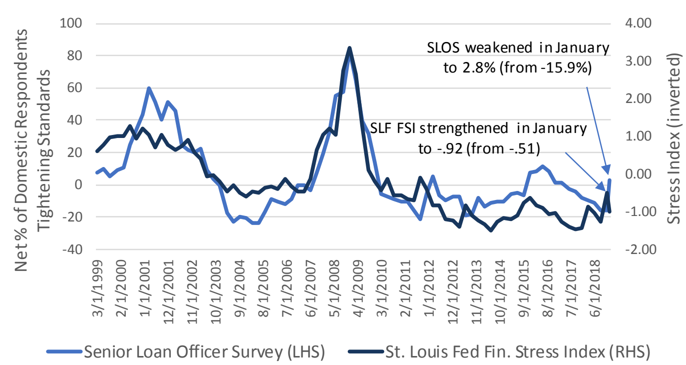
Implied Spreads Based on Expected Default and Recovery Rates
assumes excess spreads=**310 bps** (20yr average)

Expected Recovery Rate	Expected Default Rate								
	4.00%	4.10%	4.20%	4.30%	4.40%	4.50%	4.60%	4.70%	4.80%
65%	450	454	457	461	464	468	471	475	478
60%	470	474	478	482	486	490	494	498	502
55%	490	495	499	504	508	513	517	522	526
50%	510	515	520	525	530	535	540	545	550
45%	530	536	541	547	552	558	563	569	574
40%	550	556	562	568	574	580	586	592	598
35%	570	577	583	590	596	603	609	616	622

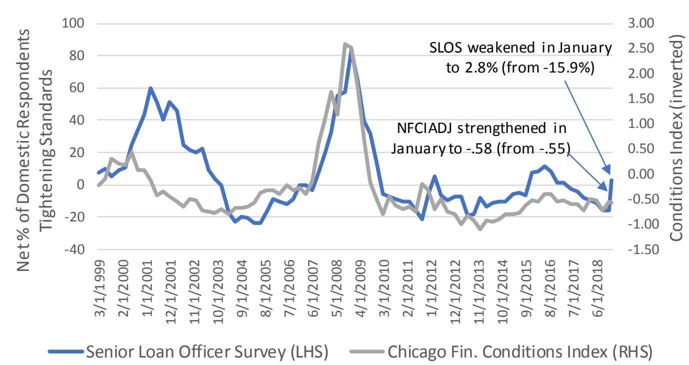
Source: SKY Harbor, Bloomberg, BofA Merrill Lynch, ICE BofAML Indices

The news, however, is not all bad. The two indices we highlight below – the St. Louis Federal Reserve Bank Financial Stress Index (SLF FSI) and the Chicago Fed Adjusted National Financial Conditions Index (NFCIADJ) – have been highly correlated to the Senior Loan Officer Survey over the last twenty years, and neither showed deterioration this past month. Additionally, both indices report weekly, which will allow us to more closely track sentiment in the near term (the Senior Loan Officer Survey won't report until next quarter).

SLOS vs. St. Louis Fed Financial Stress Index
quarterly data



SLOS vs. Chicago Fed Adj. National Financial Conditions Index
quarterly data

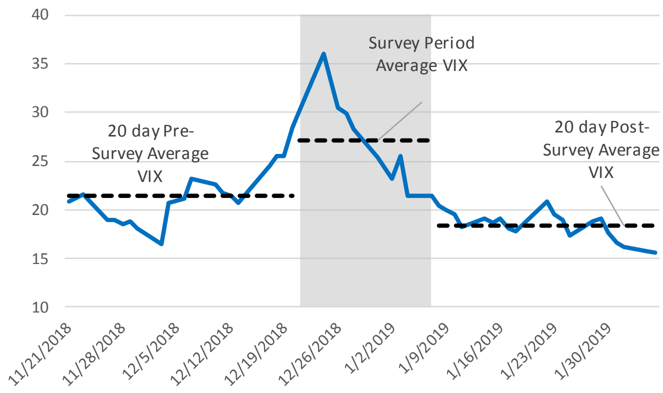


Source: SKY Harbor, Bloomberg, Federal Reserve Bank of St. Louis, Federal Reserve Bank of Chicago

Additionally, note that the Senior Loan Officer Survey was conducted between December 21, 2018 and January 7, 2019, an unambiguously volatile two-week stretch in which global risk assets were generally weak and the US government was in a partial shutdown that began December 22. As demonstrated in the charts below, the survey period (highlighted in grey) came amidst elevated VIX and wider high yield index spreads, with pre and post 20-day averages for both metrics demonstrating far less stress. As such, it is possible that the timing of the Senior Loan Officer Survey had a negative bias on results.

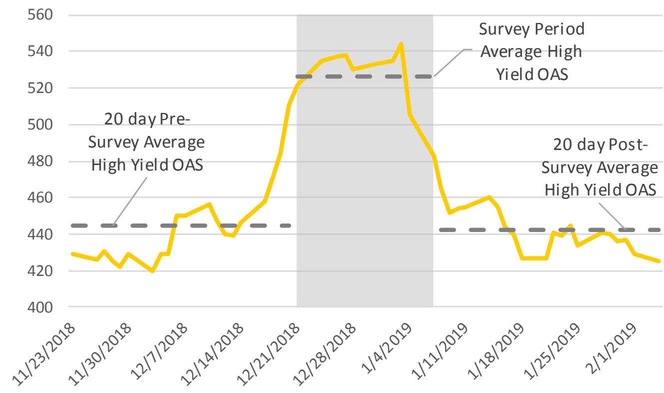
Senior Loan Officer Survey Timing vs. VIX

daily data, survey period shaded grey



Senior Loan Officer Survey Timing vs. US High Yield Spreads

daily data, survey period shaded grey



Source: SKY Harbor, Bloomberg, Federal Reserve, Chicago Board Options Exchange, ICE BofAML Indices

In summary, while we concede that results of the most recent Senior Loan Officer Survey have put upward pressure on our model-driven default expectations over the next twelve months, we think the timing of the survey and lack of corroboration from similar indicators (the SLF FSI and NFCIADJ have not weakened) make it premature to assume impending corporate stress and economic degradation. Mindful, however, of spread sensitivity to increased credit loss expectations, we remain biased toward mid and higher quality credits.

On the Calendar

Occurred

Event	Release Date	Period	Survey	Actual	Prior
Factory Orders	4-Feb-19	Nov	0.3%	-0.6%	-2.1%
Durable Goods Orders	4-Feb-19	Nov	1.5%	0.7%	0.8%
Trade Balance	6-Feb-19	Nov	-$54.0bn	-$49.3bn	-$55.5bn

Upcoming

Event	Release Date	Period	Survey	Actual	Prior
NFIB Small Business Opt.	12-Feb-19	Jan	103.0		104.4
CPI MoM	13-Feb-19	Jan	0.1%		-0.1%
Empire Manufacturing	15-Feb-19	Feb	8.0		3.9

Source: SKY Harbor, Bloomberg

Recommended Reading

Derby, Michael S. (2019, February 7). Fed's Bullard Says No Need to Raise Rates Again. *The Wall Street Journal* (subs. req.), Retrieved from https://www.wsj.com/articles/feds-bullard-reiterates-theres-no-need-to-raise-rates-again-11549585851

Regan, Michael P. (2019, February 8). Does Jay Powell Have the Stock Market's Back? *Bloomberg*, Retrieved from https://www.bloomberg.com/news/articles/2019-02-08/does-jay-powell-have-the-stock-market-s-back?srnd=premium

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