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Barclays Tuesday Credit Call

Law of Supply and Demand Still Applies

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Agenda

- **Presenter**
  - Riz Hussain, US High Yield Strategy
- **Credit Trading**
  - Brian Wendell, US HY Credit Trading
  - Rice Naylor, US IG Credit Trading
  - Anibal Valdes, LatAm Credit Trading

Conference Call Information

Wednesday, 7:45am (EST)

Conference ID: 6094948

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→ Credit

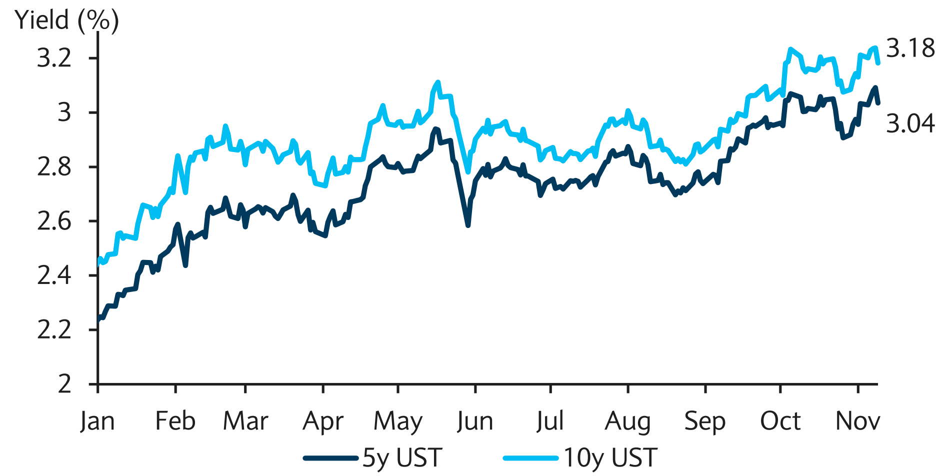
→ Conference Calls

Last week, risk assets rallied sharply following the US election but have since sold off, with credit derivatives underperforming

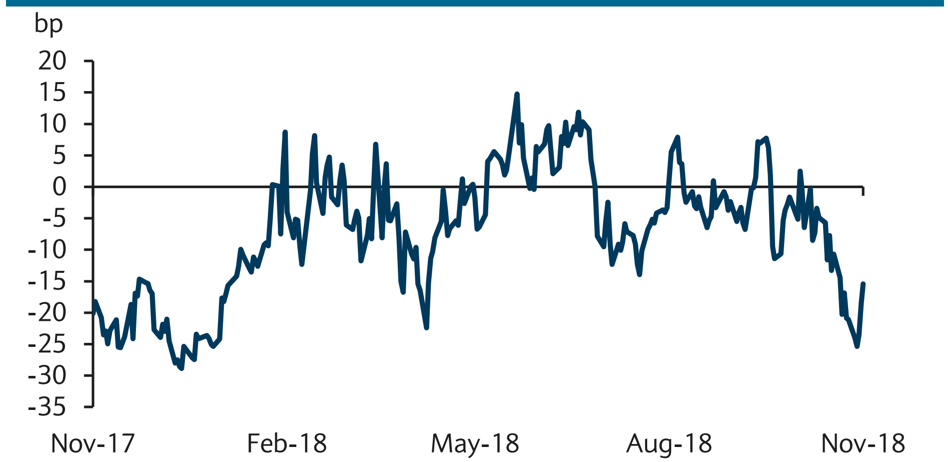
Markets Last Week

	9-Nov	Δ Week	Δ YTD
US Inv Grade	115 bp	-2 bp	22 bp
US High Yield	$96.71	($0.02)	($4.20)
CDX.IG	67 bp	1 bp	2 bp
Itraxx Main	70 bp	-1 bp	3 bp
CDX.HY	$105.52	($0.21)	($1.71)
Itraxx Crossover	288 bp	-2 bp	26 bp
CDX.EM	$95.75	($0.05)	($1.20)
10yr Treasury	3.18%	-3 bp	78 bp
5yr Treasury	3.04%	0 bp	83 bp
S&P 500	2781	2.1%	4.0%
Euro Stoxx 600	366	0.5%	-6.0%
Dollar Exchange Rate Index	96.91	0.4%	5.2%
WTI Crude Oil	60.19	-4.7%	-0.4%
Gold Spot	1210	-1.9%	-7.1%

5yr UST Yield now Above 3%



CDX.HY Skew Has Widened Significantly



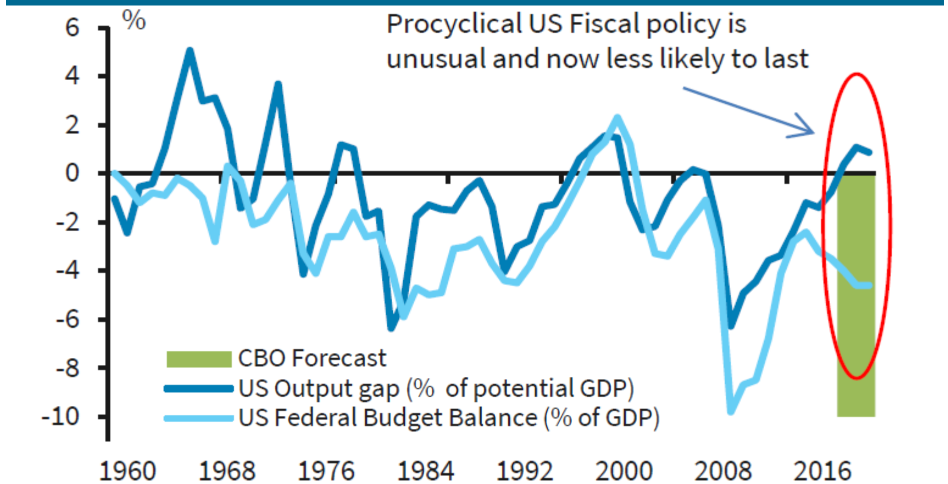
Source for all charts: Bloomberg, Bloomberg Barclays Indices, Barclays Research

Looking back at prior midterm elections, equity and credit performance has been mixed going into year-end

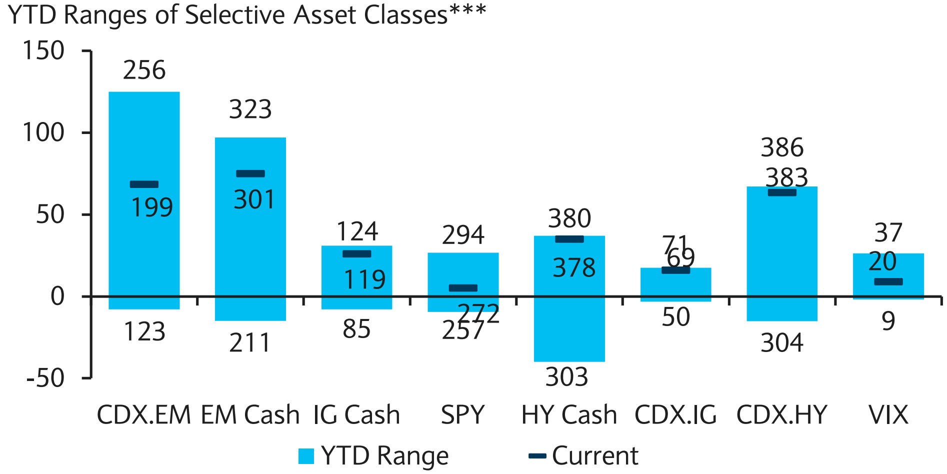
Credit Performance after Mid-terms to YE

Mid-term year	Q4 central bank activity	SPX Price Return (%)	IG Cash ER (%)	HY Cash TR (%)
1990	easing	7.91	-0.47	6.05
1994	tightening	-0.82	-0.06	-0.54
1998	easing	8.76	2.15	4.49
2002	move from easing to neutral	-2.53	2.19	6.37
2006	move from tightening to neutral	2.56	0.24	2.2
2010	easing	2.81	0.84	-0.25
2014	neutral (ECB aggressive easing)	1.33	-0.66	-2.03
2018*	tightening	-3.26	-0.45	-0.72

More Fiscal Easing is Less Likely Now



YTD Ranges for Asset Classes



Note: * HY total return data available as of November end. **: First two weeks of Nov for 2018. ***: Unit: Spread (bp) for cash credit and CDX, and level for SPY and VIX. Data as of Tuesday Close.
Source for all charts: CBO, Bloomberg, Bloomberg Barclays Indices, Barclays Research

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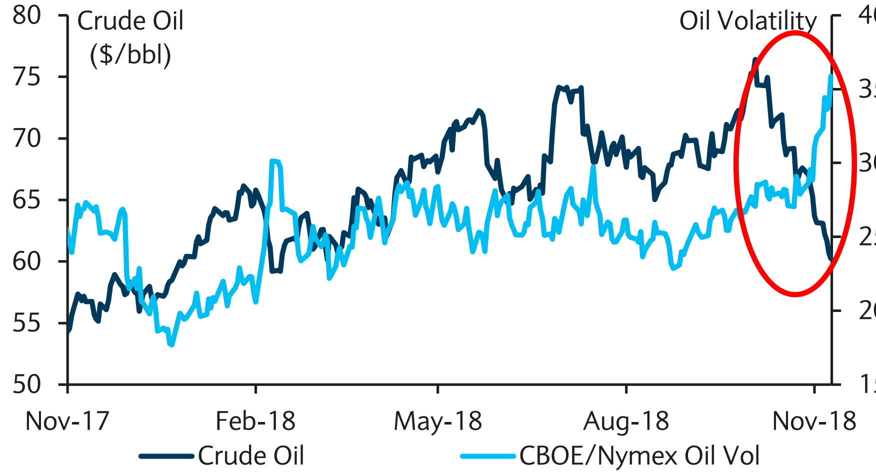
As oil enters a bear market, we see the market as range-bound and update our sensitivity analysis for oil-biased HY names

Crude Oil is in Bear Market Territory



Thoughts from Our Commodities Team*

- **We have been skeptical of $85/b Brent prices for some** time now and flagged this high correction risk
- **Non-OPEC production and specifically US production will** singlehandedly meet the rise in oil demand next year… market back to surplus despite the sharp declines in Iran and Venezuela
- **We see the market as range-bound a**nd think that Brent prices above $80 or below $70 are unlikely to be sustainable
- **Our forecast remains $72/b for next year ($65/b WTI**). We flag upside risks in Q1 (Nigeria) and in Q4 (IMO implementation). We are bullish on prices in the long term ($75 in 2020 and $80 in 2025)

2019 Est. Net Leverage Including Hedges for Oil-Biased Producers*

WTI Est. ($/bbl)	$50.00	$55.00	$60.00	$65.00
Natural Gas Est. (HH)($/mmbtu)	$2.80	$2.80	$2.80	$2.80
CRC	5.1x	4.5x	3.8x	3.3x
DNR (PF)	3.1x	2.8x	2.5x	2.2x
EPENEG	6.4x	5.5x	4.8x	4.3x
HILCRP	1.6x	1.4x	1.2x	1.0x
HK	4.1x	3.6x	3.0x	2.8x
LPI	2.5x	2.1x	1.8x	1.6x
OAS	3.3x	2.8x	2.3x	2.0x
PDCE	1.7x	1.4x	1.0x	0.9x
SM	4.0x	3.3x	2.6x	2.3x
SN	7.7x	6.8x	6.1x	5.4x
WLL	2.2x	1.9x	1.6x	1.3x
WPX	2.1x	1.9x	1.5x	1.4x
Group Mean:	3.7x	3.2x	2.7x	2.4x

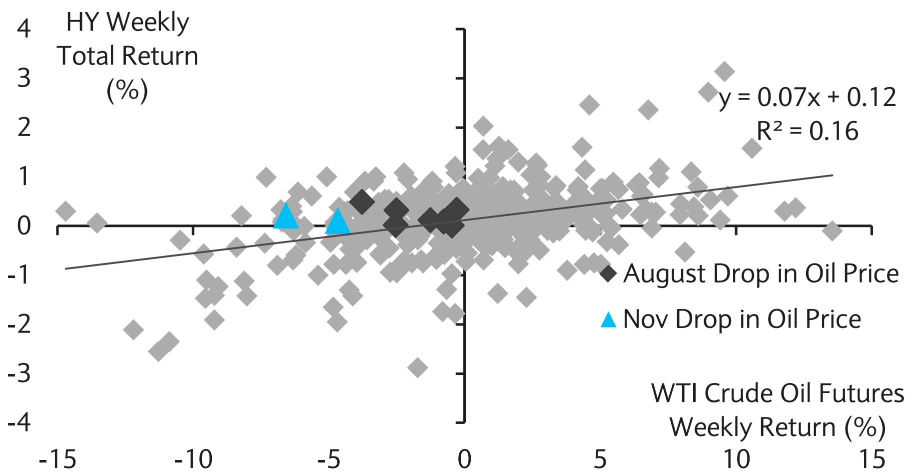
Our assumptions at **$55/bbl: 10% reduction in estimated capex** and **2019 growth targets cut in half**. For **$50/bbl**, **20% reduction** in capex and no liquids growth for oil-biased producers

At $55/bbl oil, **Denbury (pro forma), WPX, and Whiting (WLL)** screen as **less sensitive relative to their peers**

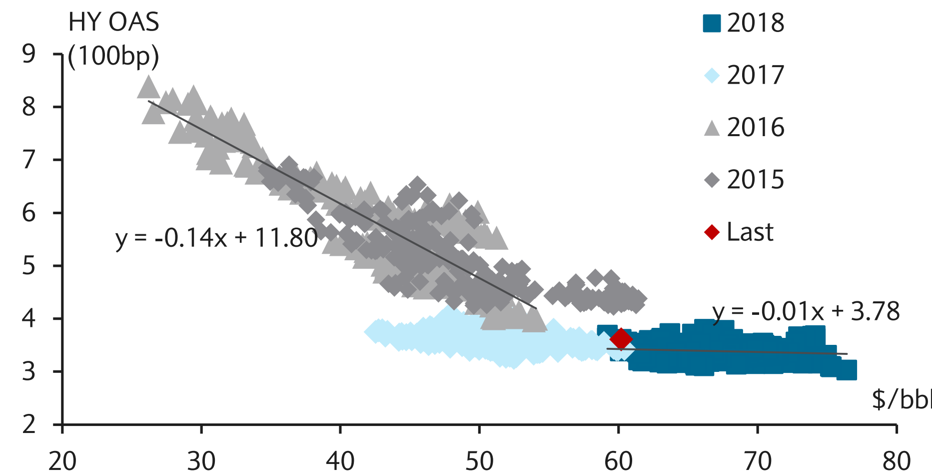
For more detail, see "The Blue Drum: Balance is in the eye of the beholder", Nov 2, 2018, and "Why So Sensitive?", Nov 13, 2018. Source for all charts: EIA, Company Reports, Bloomberg, Barclays Research

HY has outperformed its energy beta recently and spreads have shown less sensitivity to energy prices given improved balance sheets

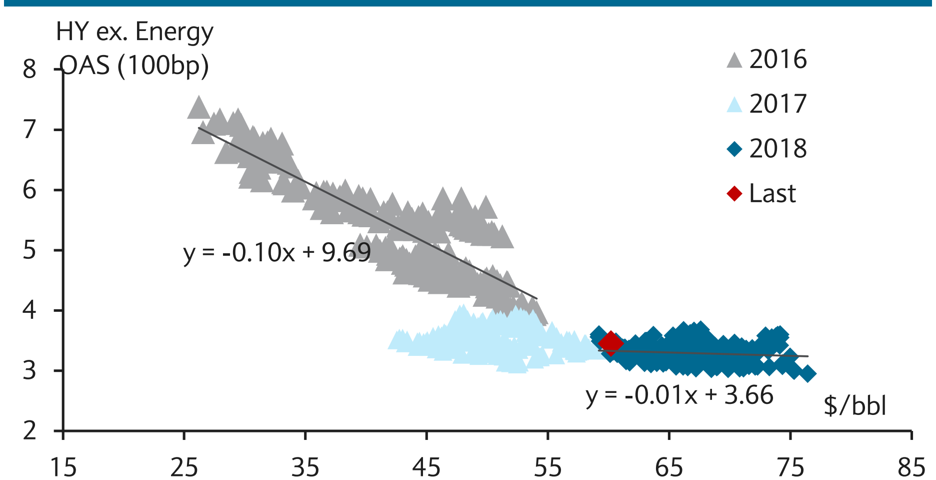
HY Outperformed its Energy Beta Recently



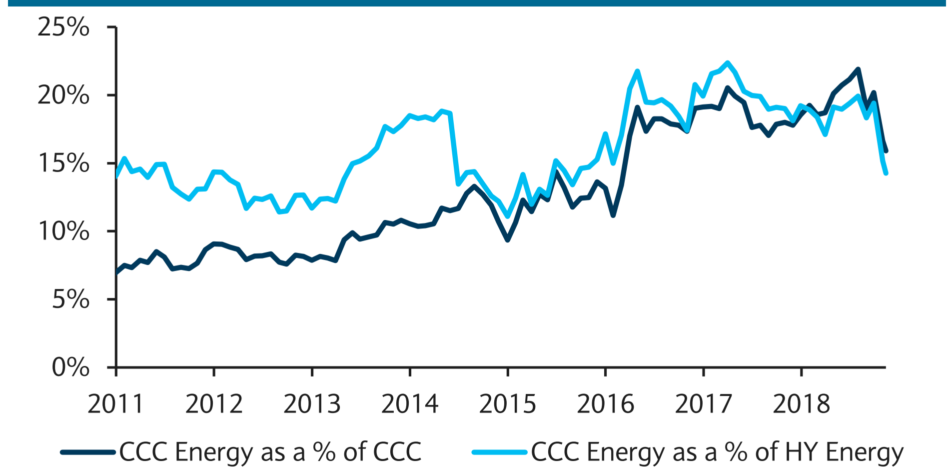
HY Spreads Less Sensitive to Energy Px Now



Same for HY Ex-Energy Cohort



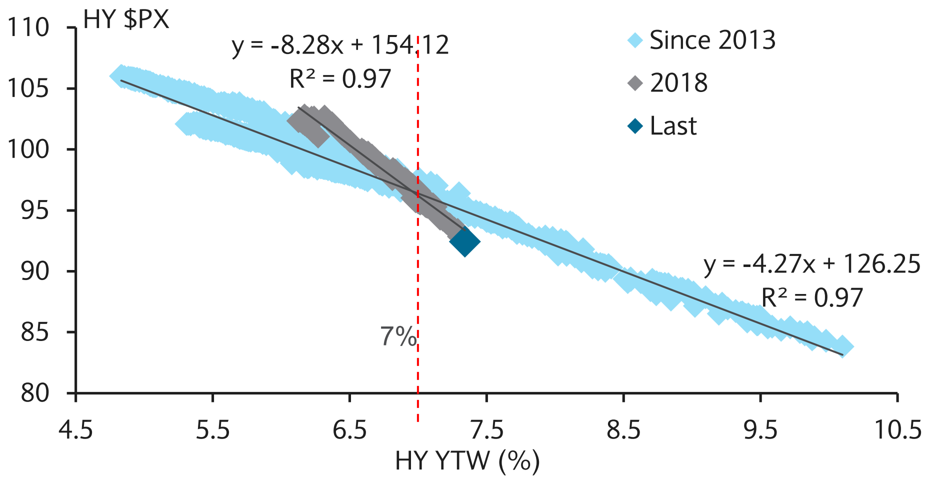
CCC Energy Concentration Has Declined



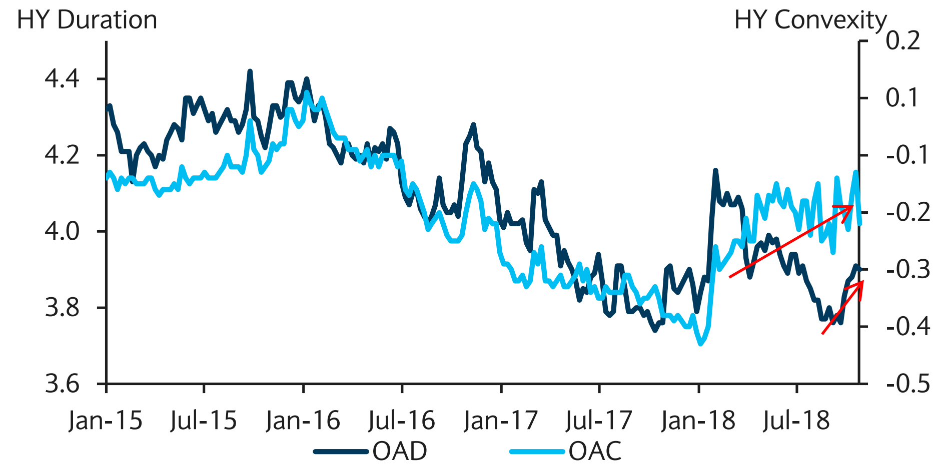
Source for all charts: Bloomberg, Bloomberg Barclays Indices, Barclays Research

The rise in rates has relieved call constraints on much of the HY market; financials show the greatest breadth of trading above calls

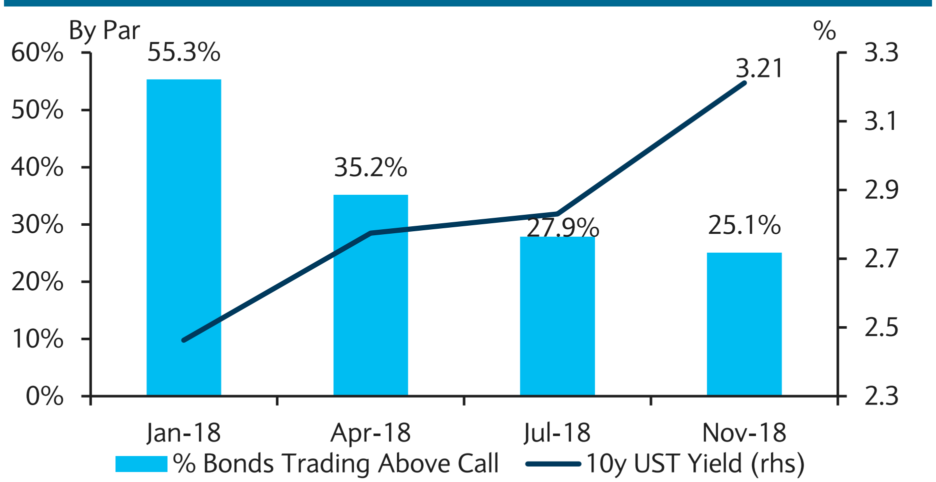
HY Bonds are Now Trading at Lower $PX



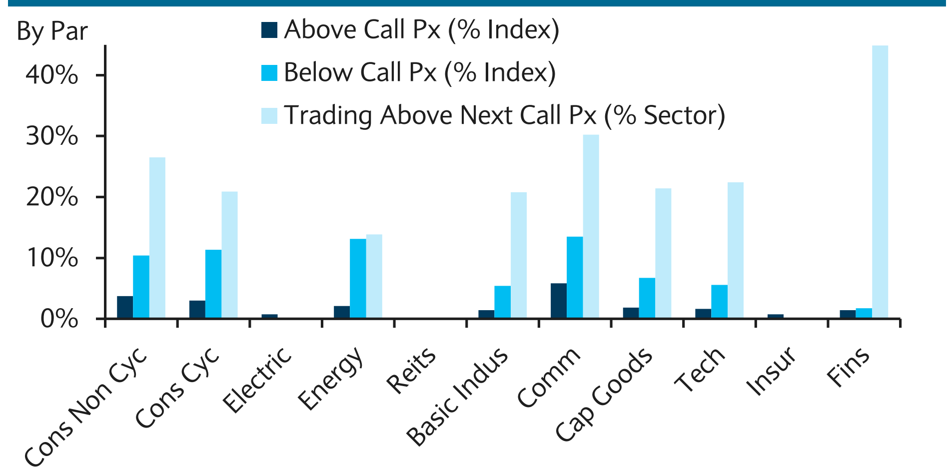
Higher Dur. and Less Negative Convexity



% of Call Constrained Bonds Declined



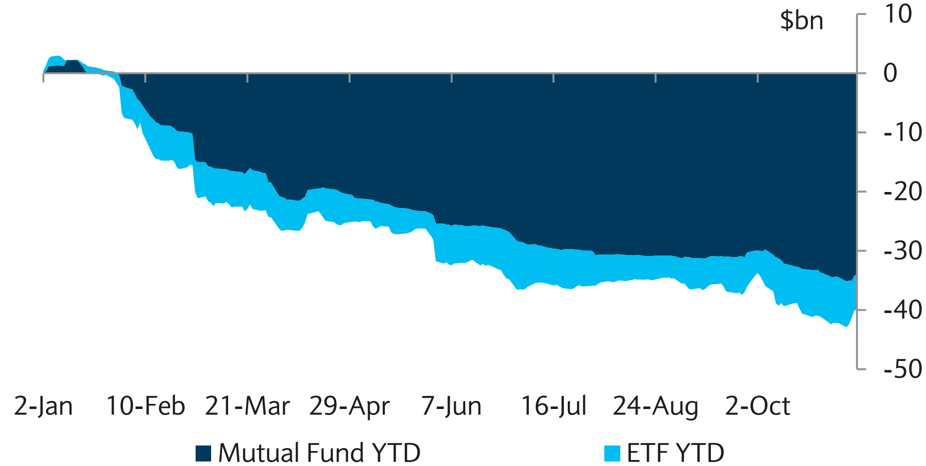
Breakdown of Bonds Trading Above Call



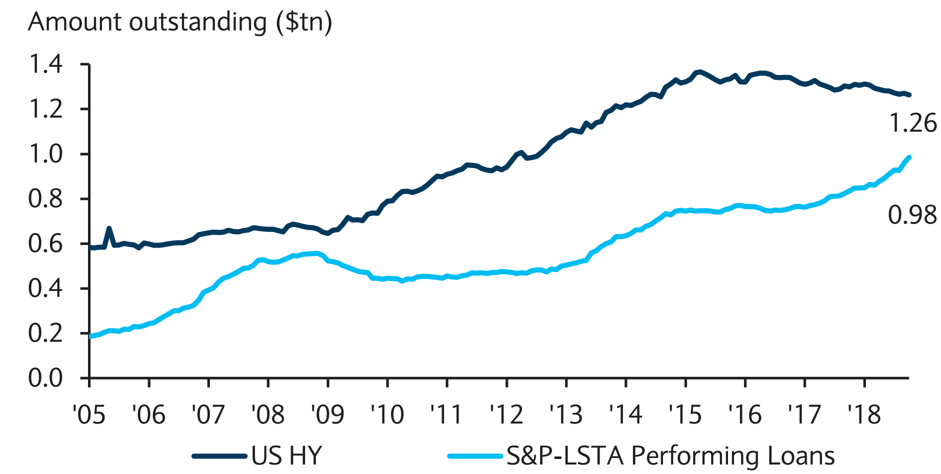
Source for all charts: Bloomberg Barclays Indices, Barclays Research

In HY, the outsized retail outflows this year have only slightly outpaced the decline in market size; hedge funds have gained ownership share in ‘18

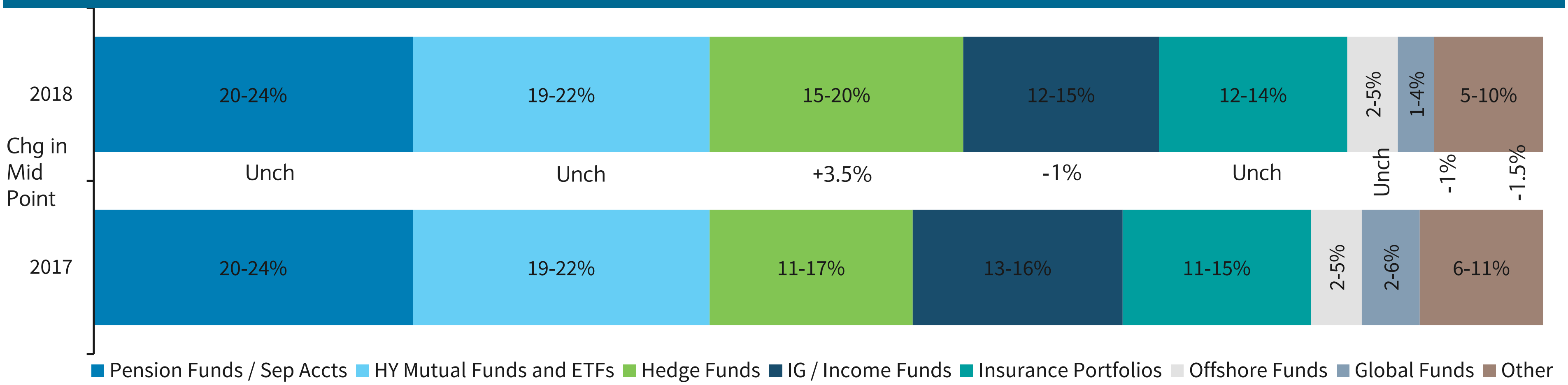
Record Outflow from HY Retail Funds YTD



Largely In Line with Shrinking Market Size



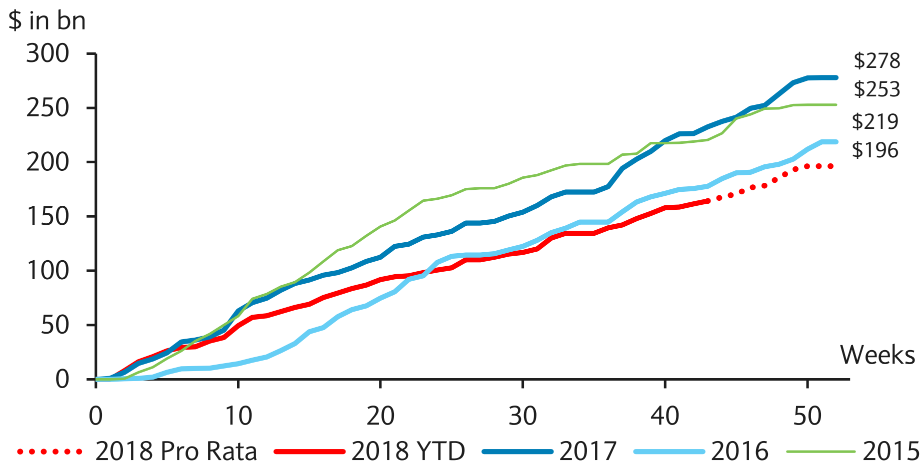
HY Buyer Base: Up in HF and Down in IG/Income and Global Funds



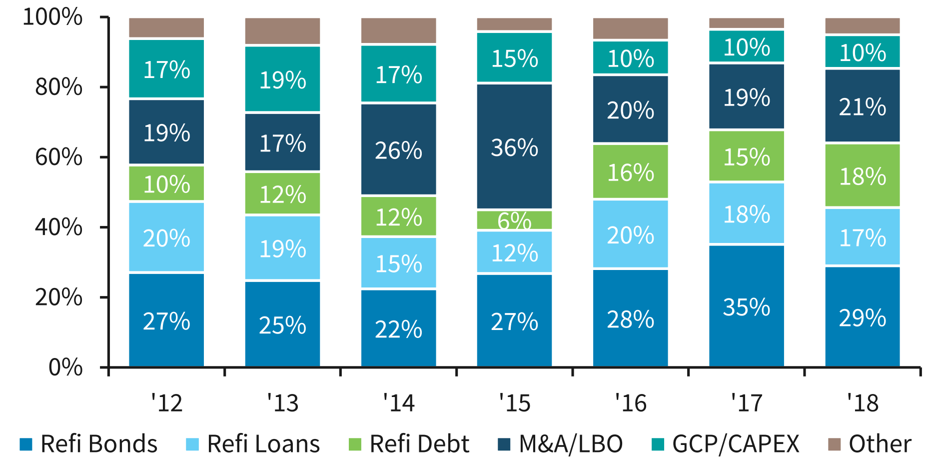
For more detail, see "Mapping Demand to a Shrinking Market", Nov 9. 2018.
Source for all charts: S&P LCD, Lipper, EPFR, HFR, Credit Flux, Federal Reserve, Refinitiv, Kaneri, Bloomberg Barclays Indices, Bloomberg, Barclays Research

The lack of supply has supported HY performance for most of 2018; we expect another year of subdued issuance in 2019

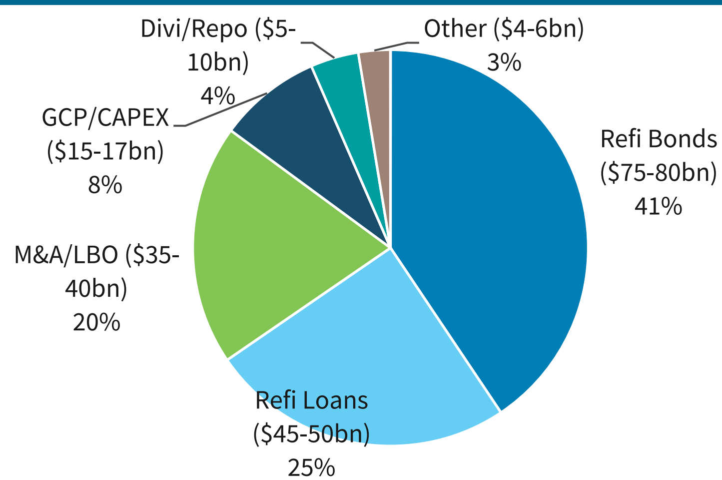
Gross Supply Trending to Lowest in Years*



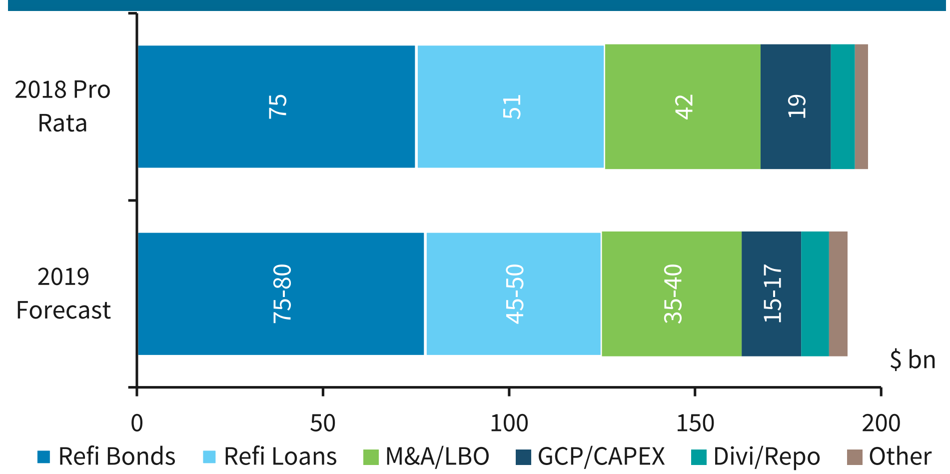
HY: Refi Portion Lower, but Still Elevated**



2019 Supply Forecast by UoP



2019 Forecast rel. to 2018 Ann. Volume



Note: *:2018 pro rata number calculated using 2017 cadence. **: Refi debt category is for bonds issued to refinance both bonds and loans.
For more detail, see "2019 High Yield Supply Outlook: Another Year of Subdued Levels", Nov 9. 2018. Source for all charts: S&P LCD, Lipper, Kaneri, Bloomberg, EPFR, HFR, Credit Flux, Federal Reserve, Refinitiv, Bloomberg Barclays Indices, Barclays Research

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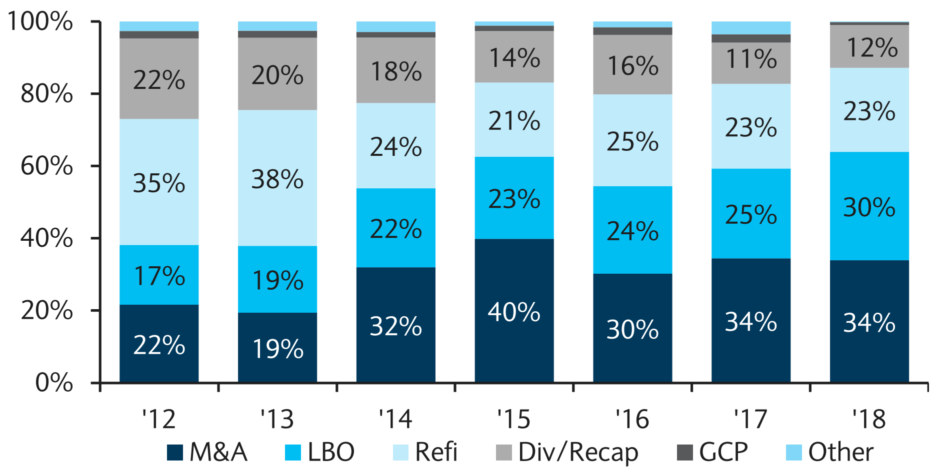
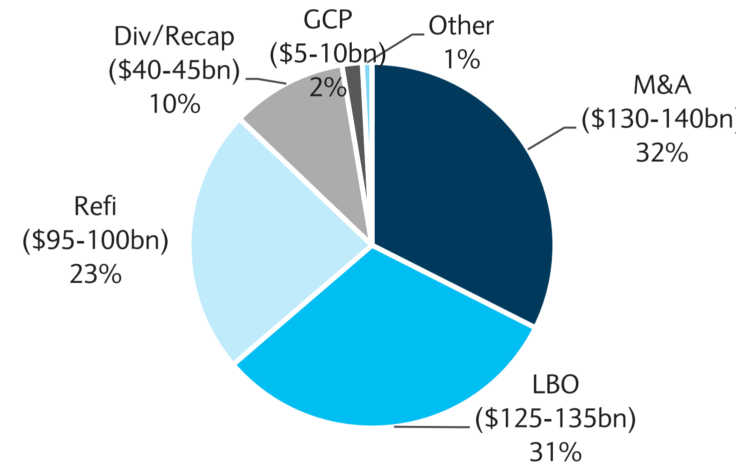
In contrast, the loan market has experienced a pickup in supply, primarily driven by M&A and LBO financing needs

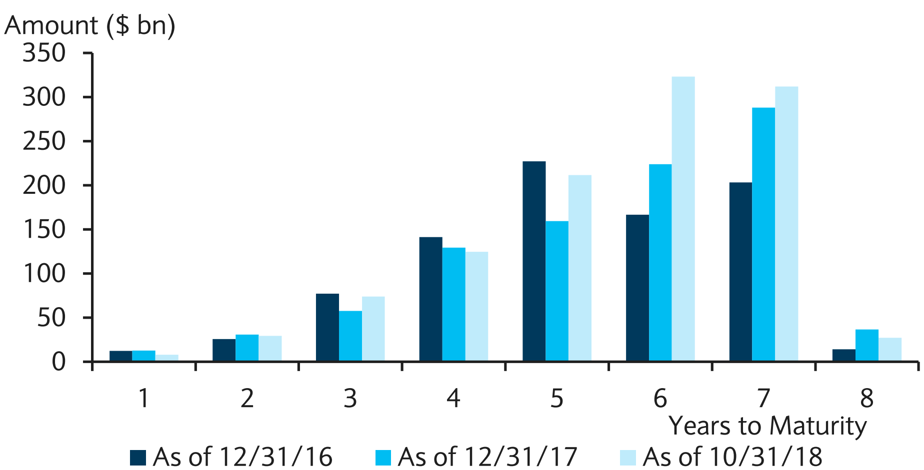
M&A and LBO Financing at Highest in 7yrs



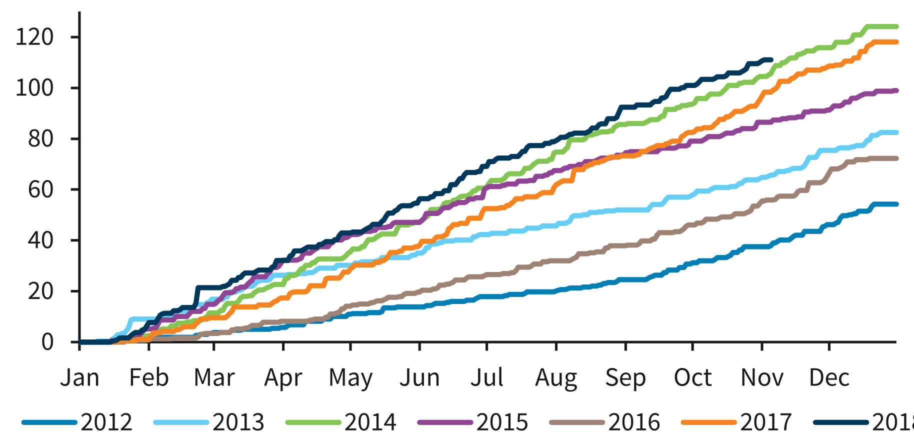
2019 Supply Forecast by Bucket



Evolution of the Loan Maturity Wall*



CLO New Issue Volume Trend ($bn)



Note: * 2018 data through Oct 31. For more detail, see "2019 Loan Supply Outlook: The Growth Goes On", Nov 9, 2018.
Source for all charts: S&P LCD, Bloomberg Barclays Indices, Barclays Research

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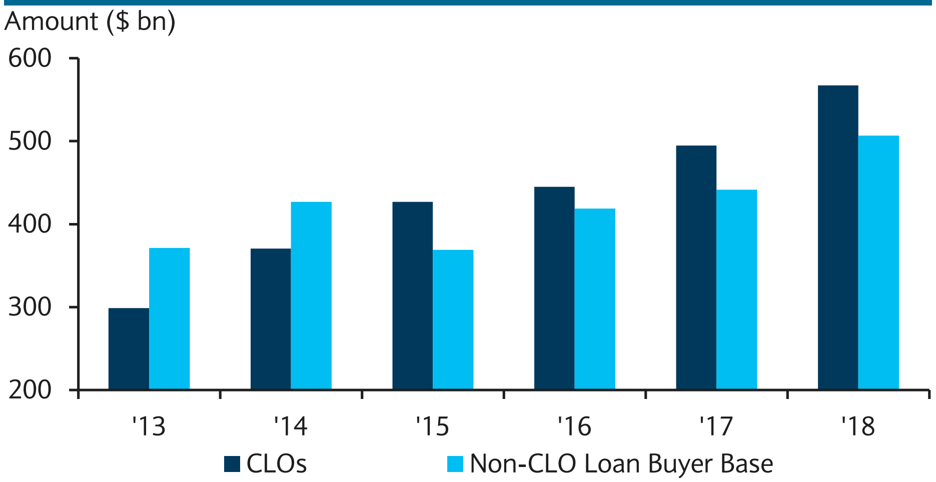
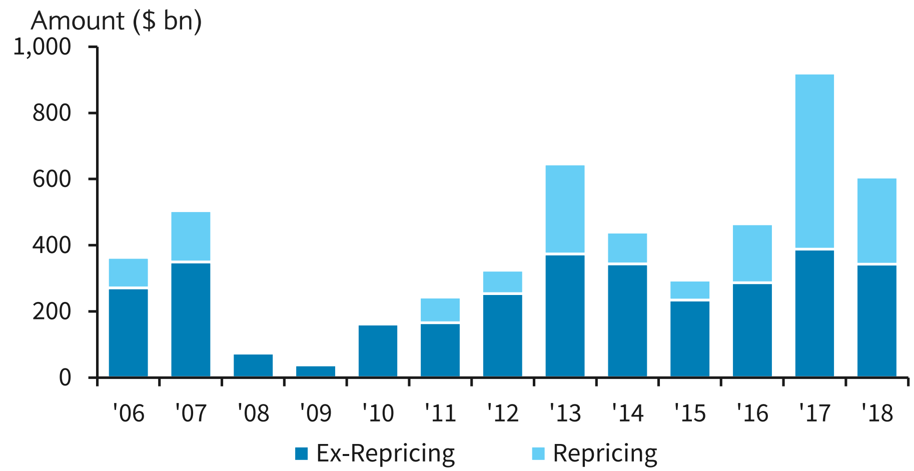
The climb in loan issuance has been met with strong demand, especially from CLOs

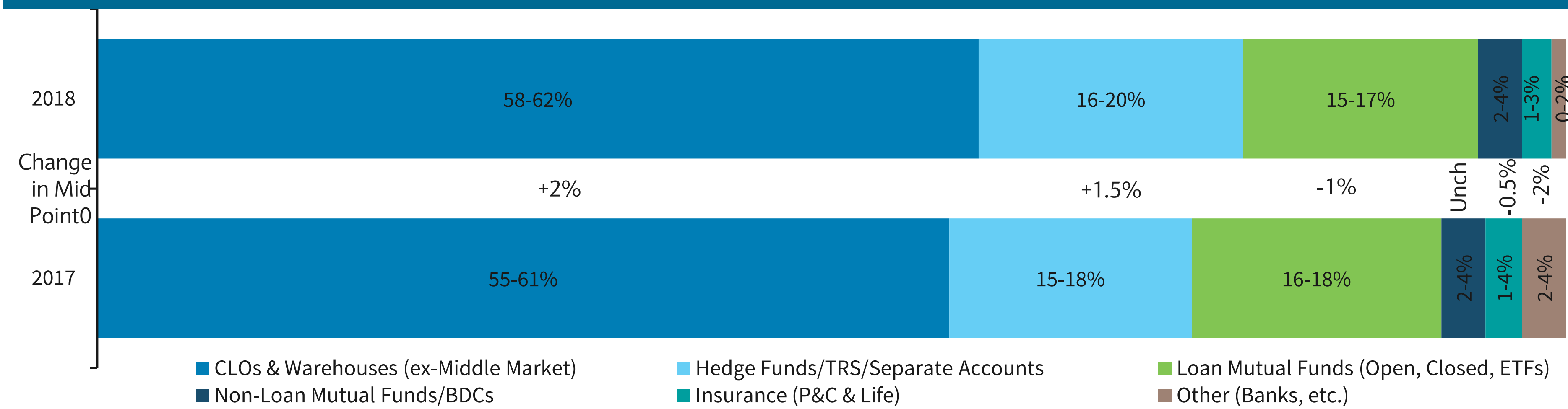
Demand from CLOs Has Been Robust*



Ex-Repricing Supply Remains Strong



Breakdown of US Leveraged Loan Buyer Base



Note: * CLO demand includes middle market. For more detail, see "Mapping Demand: CLOs Continue to Grow", Oct 26, 2018, and "2019 Loan Supply Outlook: The Growth Goes On", Nov 9, 2018.
Source for all charts: S&P LCD, Lipper, Kaneri, Bloomberg, EPFR, HFR, Credit Flux, Federal Reserve, Refinitiv, Bloomberg Barclays Indices, Barclays Research

Summary

- Last week, risk assets rallied sharply following the US election but have since sold off, with credit derivatives underperforming
- Looking back at prior midterm elections, equity and credit performance has been mixed going into year-end
- As oil enters a bear market, we see the market as range-bound and update our sensitivity analysis for oil-biased HY names.
- HY has outperformed its energy beta recently and spreads are now less sensitive to energy prices given improved balance sheets
- The rise in rates has relieved call constraints on much of the HY market; financials show the greatest breadth of trading above calls
- In HY, the outsized retail outflows this year have only slightly outpaced the decline in market size; hedge funds have gained ownership share in 2018
- The lack of supply has supported HY performance for most of 2018; we expect another year of subdued issuance in 2019
- In contrast, the loan market has experienced a pickup in supply, primarily driven by M&A and LBO financing needs, which was met with strong demand from CLOs

Analyst Certifications and Important Disclosures

Analyst Certification(s)

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Important Disclosures

Materially Mentioned Issuers/Bonds

DENBURY RESOURCES INC, CD/CE/FA/J
DNR 4 5/8 07/15/23, Overweight (USD 78.00, 13-Nov-2018)
DNR 5 1/2 05/01/22, Overweight (USD 83.00, 13-Nov-2018)
DNR 6 3/8 08/15/21, Overweight (USD 90.50, 13-Nov-2018)
DNR 9 05/15/21, Overweight (USD 101.50, 13-Nov-2018)
DNR 9 1/4 03/31/22, Overweight (USD 100.75, 13-Nov-2018)
Valuation Methodology: We retain our Overweight rating on DNR bonds across our coverage. DNR bonds have steadily outperformed as they became rerated investors. Operating FCF, debt reduction and even two secured exchanges have all led to DNR bonds outperforming. We see this outperformance continuing with the potential for asset sales in 2018 and 2019, coupled with strong FCF in 2018 and 2019 (even assuming $55/bbl for 2019). We estimate DNR's net leverage drops to 3.8x in 2018 compared to the average for CCC-rated energy companies of 4.8x. Our 2019 net leverage estimate is 3.4x. If we were to use the current strip price for oil, it would be 2.2x.
Risks that May Impede Achievement of the Rating: A significant oil price sell-off as the company is highly leveraged to WTI.

WHITING PETROLEUM CORP, CD/CE/J
WLL 6 1/4 04/01/23, Overweight (USD 98.00, 13-Nov-2018)
Valuation Methodology: We see WLL bonds as attractive here as the company has transformed into a FCF biased company.
Risks that May Impede Achievement of the Rating: Lower oil prices

WLL 5 3/4 03/15/21, Overweight (USD 99.00, 13-Nov-2018)
WLL 6 5/8 01/15/26, Overweight (USD 95.75, 13-Nov-2018)
Valuation Methodology: We see WLL bonds as attractive here as the company has transformed into a FCF biased company.
Risks that May Impede Achievement of the Rating: Lower oil prices

WPX ENERGY INC, A/CD/CE/D/J/K/L/M/N
Other Material Conflicts: Barclays Bank PLC and/or its affiliate is serving as exclusive financial advisor to WPX Energy, Inc. (NYSE:WPX) on its strategic partnership with Howard Energy Partners to jointly develop oil gathering and natural gas processing infrastructure in the Stateline area of the Permian's Delaware Basin.
WPX 5 1/4 09/15/24, Market Weight (USD 96.00, 13-Nov-2018)
WPX 5 3/4 06/01/26, Market Weight (USD 97.25, 13-Nov-2018)
WPX 6 01/15/22, Market Weight (USD 101.00, 13-Nov-2018)
WPX 8 1/4 08/01/23, Market Weight (USD 111.00, 13-Nov-2018)
Valuation Methodology: We remain Market Weight on WPX bonds. WPX has similar net leverage to its B-rated (composite) peers, yet with an OAS 120bp tight of this group.
Risks that May Impede Achievement of the Rating: Large swing in WTI prices to either the upside or the downside.

All pricing information is indicative only. Prices are sourced from Thomson Reuters as of the last available closing price at the time of production of the research report, unless another time and source is indicated.

Important Disclosures (continued)

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Explanation of the Barclays Research Corporate Credit Sector Rating System

Overweight (OW):

For sectors rated against the Bloomberg Barclays U.S. Credit Index, the Bloomberg Barclays Pan-European Credit Index, the Bloomberg Barclays EM Asia USD High Grade Credit Index or the Bloomberg Barclays EM USD Corporate and Quasi-Sovereign Index, the analyst expects the six-month excess return of the sector to exceed the six-month excess return of the relevant index.

For sectors rated against the Bloomberg Barclays U.S. High Yield 2% Issuer Capped Credit Index, the Bloomberg Barclays Pan-European High Yield 3% Issuer Capped Credit Index excluding Financials, the Bloomberg Barclays Pan-European High Yield Finance Index or the Bloomberg Barclays EM Asia USD High Yield Corporate Credit Index, the analyst expects the six-month total return of the sector to exceed the six-month total return of the relevant index.

Market Weight (MW):

For sectors rated against the Bloomberg Barclays U.S. Credit Index, the Bloomberg Barclays Pan-European Credit Index, the Bloomberg Barclays EM Asia USD High Grade Credit Index or the Bloomberg Barclays EM USD Corporate and Quasi-Sovereign Index, the analyst expects the six-month excess return of the sector to be in line with the six-month excess return of the relevant index.

For sectors rated against the Bloomberg Barclays U.S. High Yield 2% Issuer Capped Credit Index, the Bloomberg Barclays Pan-European High Yield 3% Issuer Capped Credit Index excluding Financials, the Bloomberg Barclays Pan-European High Yield Finance Index or the Bloomberg Barclays EM Asia USD High Yield Corporate Credit Index, the analyst expects the six-month total return of the sector to be in line with the six-month total return of the relevant index.

Underweight (UW):

For sectors rated against the Bloomberg Barclays U.S. Credit Index, the Bloomberg Barclays Pan-European Credit Index, the Bloomberg Barclays EM Asia USD High Grade Credit Index or the Bloomberg Barclays EM USD Corporate and Quasi-Sovereign Index, the analyst expects the six-month excess return of the sector to be less than the six-month excess return of the relevant index.

For sectors rated against the Bloomberg Barclays U.S. High Yield 2% Issuer Capped Credit Index, the Bloomberg Barclays Pan-European High Yield 3% Issuer Capped Credit Index excluding Financials, the Bloomberg Barclays Pan-European High Yield Finance Index or the Bloomberg Barclays EM Asia USD High Yield Corporate Credit Index, the analyst expects the six-month total return of the sector to be less than the six-month total return of the relevant index.

Sector definitions:

Sectors in U.S. High Grade Research are defined using the sector definitions of the Bloomberg Barclays U.S. Credit Index and are rated against the Bloomberg Barclays U.S. Credit Index.

Sectors in U.S. High Yield Research are defined using the sector definitions of the Bloomberg Barclays U.S. High Yield 2% Issuer Capped Credit Index and are rated against the Bloomberg Barclays U.S. High Yield 2% Issuer Capped Credit Index.

Sectors in European High Grade Research are defined using the sector definitions of the Bloomberg Barclays Pan-European Credit Index and are rated against the Bloomberg Barclays Pan-European Credit Index.

Sectors in Industrials and Utilities in European High Yield Research are defined using the sector definitions of the Bloomberg Barclays Pan-European High Yield 3% Issuer Capped Credit Index excluding Financials and are rated against the Bloomberg Barclays Pan-European High Yield 3% Issuer Capped Credit Index excluding Financials.

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Sectors in Asia High Yield Research are defined on Barclays Live and are rated against the Bloomberg Barclays EM Asia USD High Yield Corporate Credit Index.

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To view sector definitions and monthly sector returns for Asia, EEMEA and Latin America Research, go to https://live.barcap.com/go/research/EMSectorReturns on Barclays Live.

Important Disclosures (continued)

Explanation of the Barclays Research Corporate Credit Rating System

For all High Grade issuers covered in the US, Europe or Asia, and for all issuers in Latin America and EEMEA, the credit rating system is based on the analyst's view of the expected excess return over a six-month period of the issuer's index-eligible corporate debt securities* relative to the expected excess return of the relevant sector, as specified on the report.

Overweight (OW): The analyst expects the six-month excess return of the issuer's index-eligible corporate debt securities to exceed the six-month expected excess return of the relevant sector.

Market Weight (MW): The analyst expects the six-month excess return of the issuer's index-eligible corporate debt securities to be in line with the six-month expected excess return of the relevant sector.

Underweight (UW): The analyst expects the six-month excess return of the issuer's index-eligible corporate debt securities to be less than the six-month expected excess return of the relevant sector.

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For all High Yield issuers (excluding those covered in EEMEA or Latin America), the credit rating system is based on the analyst's view of the expected total returns over a six-month period of the rated debt security relative to the expected total return of the relevant sector, as specified on the report.

Overweight (OW): The analyst expects the six-month total return of the debt security subject to this rating to exceed the six-month expected total return of the relevant sector.

Market Weight (MW): The analyst expects the six-month total return of the debt security subject to this rating to be in line with the six-month expected total return of the relevant sector.

Underweight (UW): The analyst expects the six-month total return of the rated debt security subject to this rating to be less than the six-month expected total return of the relevant sector.

Rating Suspended (RS): The rating has been suspended temporarily due to market events that make coverage impracticable or to comply with applicable regulations and/or firm policies in certain circumstances including where the Investment Bank of Barclays Bank PLC is acting in an advisory capacity in a merger or strategic transaction involving the company.

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