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### Corporate credit distress and default

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### Agenda

Leveraged finance credit trends **Default outlook** 3 **Refunding conditions** Risks to the outlook Implications for the next default cycle

### **Key Messages**

1

Global credit conditions to weaken this year. Volatility returns to leveraged finance markets and credit conditions are becoming less accommodative

2

Default rates expected to remain low in 2019.

Refinancing risks are manageable, and profitability and liquidity remain solid. However, rising leverage plus weak covenants and structuring imply more downside risks

3

Next credit downturn will reflect higher default rates and lower recoveries. These trends reflect weak rating distribution and changes in capital structure to include more 1st-lien secured debt

# 1

# Leveraged finance credit trends

## Credit conditions for issuers are becoming less accommodative

#### Moody's Credit Cycle Gauge

Leveraged Finance Heat Map

Indicator	Jan '19	Jan '18	LT Avg*	<b>Record Worst</b>
Liquidity Stress Indicator	4.0%	2.7%	6.4%	20.8%
B3-Neg / Lower	192	204	194	291
3-Year Refunding Indicator	2.24	4.4x	6.0x	1.5x
Bond Covenant Quality Indicator	4.36	4.43	4.08	4.52
Loan Covenant Quality Indicator	4.16	3.87	3.82	4.16
	Jan '20	Jan '19		
US Default Rate (forecast)**	2.4%	2.6%	4.7%	14.7%
		<b>Trending Worse</b>	Neutral	Improving

Source: Moody's Investors Service

<sup>\*</sup>LT Avg.: LSI from 2002; CQI from 2011; LCQI from 2012; B3-Neg from 2007; Refunding from 2007; Default Rate from 1990. LCQI is calculated quarterly, with latest data current only through the last published LCQI.

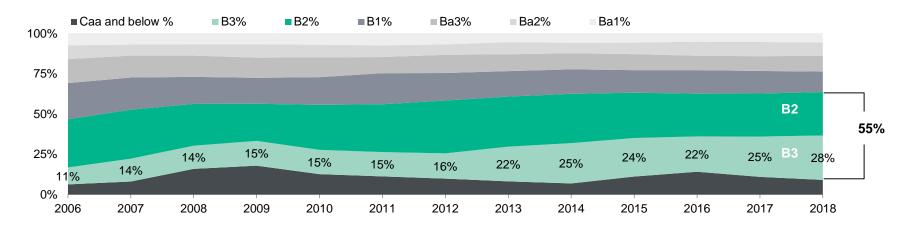
<sup>\*\*</sup> Default rate forecasts are for US non-financial and financial corporates.

# Recent bout of risk aversion has modest impact on credit conditions

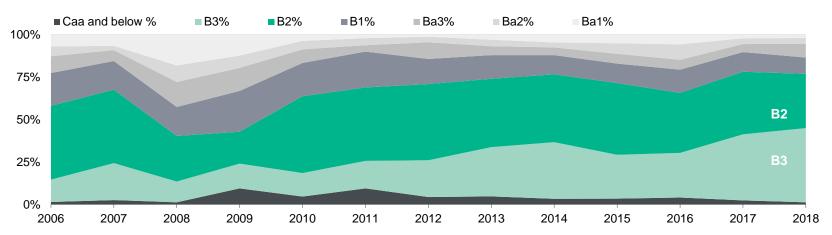
- The credit market remains issuer-friendly with generous terms and weak capital structures
  - Flexible bond structures, covenant lite loans, looser protections
  - Less subordinated debt, high leverage
- » Private equity transactions financed in the loan market are a significant source of new B3 ratings:
  - New LBOs with high leverage
  - Questionable EBITDA adjustments
  - Debt-financed acquisition add-ons increasing integration risk
  - Distributions delay de-leveraging
  - > Future tax bill likely to be higher

#### Rating distribution reflects weak credit quality

#### Speculative grade population already weaker than Great Recession depths



#### Record share of low ratings on first-time issuers - Mostly Leveraged Loans

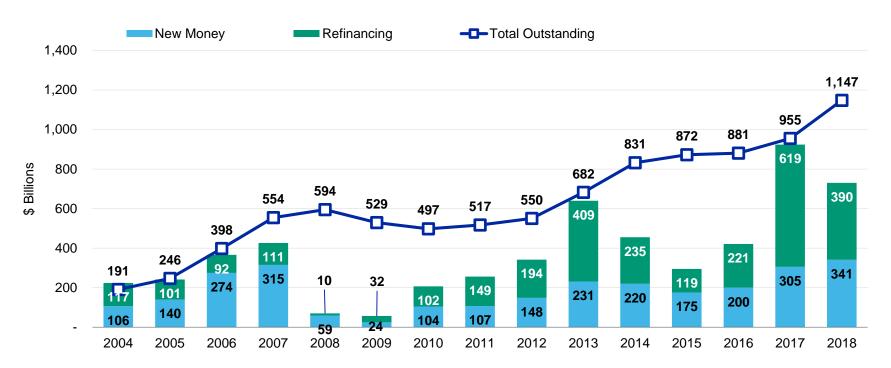


Source: Moody's Investors Service; CFRs of US corporate finance group - top chart is population; bottom chart is new issuers

### Demand for yield and floating rate debt has contributed to attractive conditions for issuers in the loan market

The syndicated leveraged loan market now stands above \$1 trillion, similar in size to the US high-yield bond market

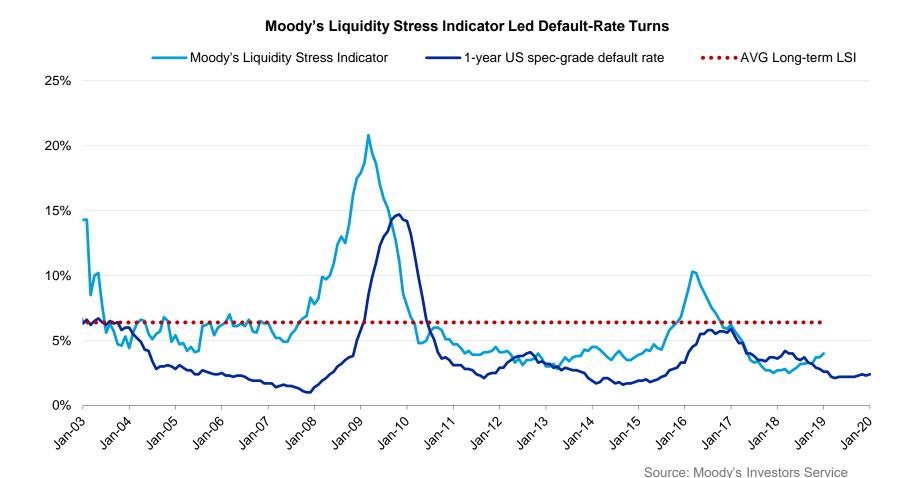
#### Institutional leveraged loan issuance and outstanding



Source: LPC

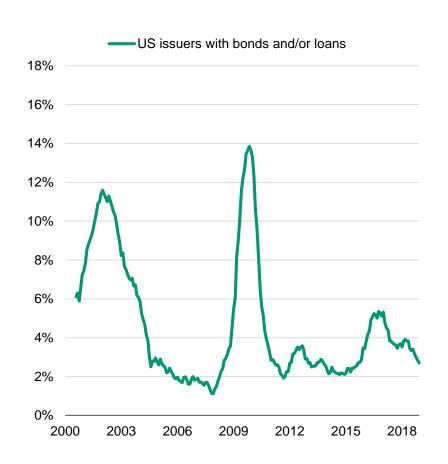
#### Intrinsic liquidity still supports low default forecast

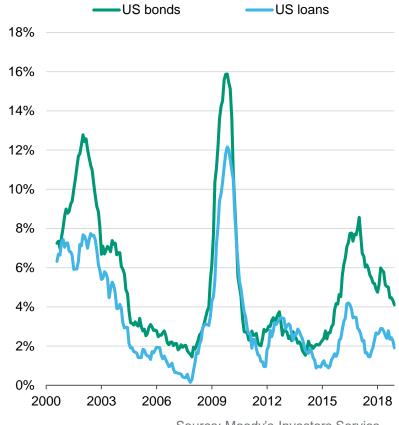
» Moody's Liquidity Stress Indicator (LSI) is increasing slightly and expected to worsen



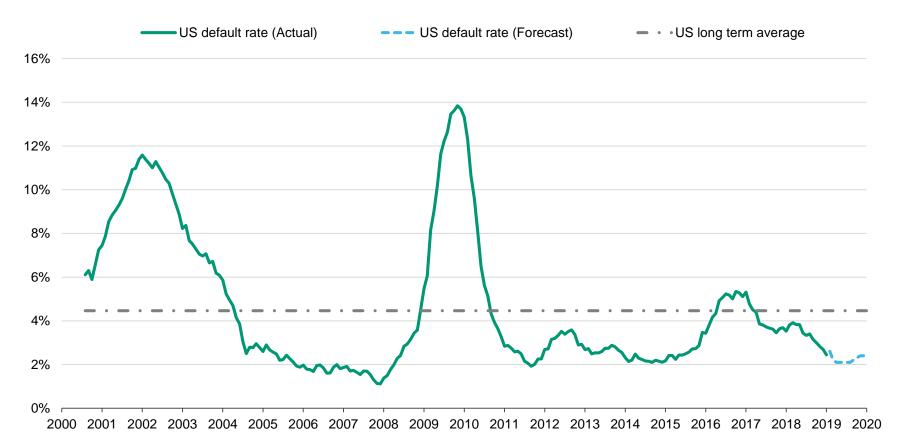
### Default outlook

## Speculative-grade default rates have been low, particularly for loans





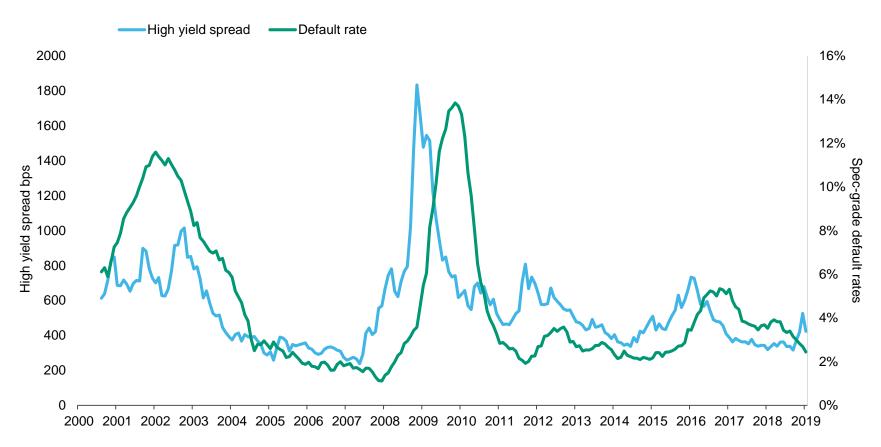
### We expect speculative-grade default rate to remain low in the next 12 months



#### Credit Transition Model and its drivers

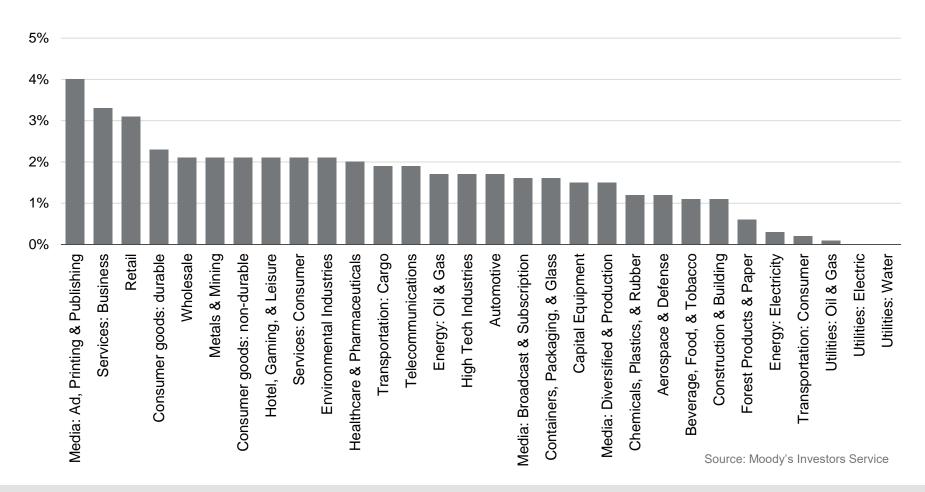
- » CTM is a regression model which conditions on rating factors and the future path of US high yield spread and the US unemployment rate
- The model has performed well since inception in 2008, with very high correlation between the realized default rates and 1-year ago projections
- » Notable model inputs:
  - High yield spread widened from 335 bps to 456 bps in the past 12 months (expect to tighten to 367 bps over the next year)
  - Unemployment rate edged lower from 4.1% to 3.9% (1 year ahead forecast: 3.4%)
  - Rating factors: current conditions slightly weaker than a year ago
    - Share of low-rated issuers: similar
    - Rating history and duration: slight improvement
    - Watchlist/Outlook status: slight deterioration

#### High yield spread is a leading indicator



Source: Moody's Investors Service, Bloomberg

## Media: Advertising, Printing & Publishing to have the highest default rate by January 2020

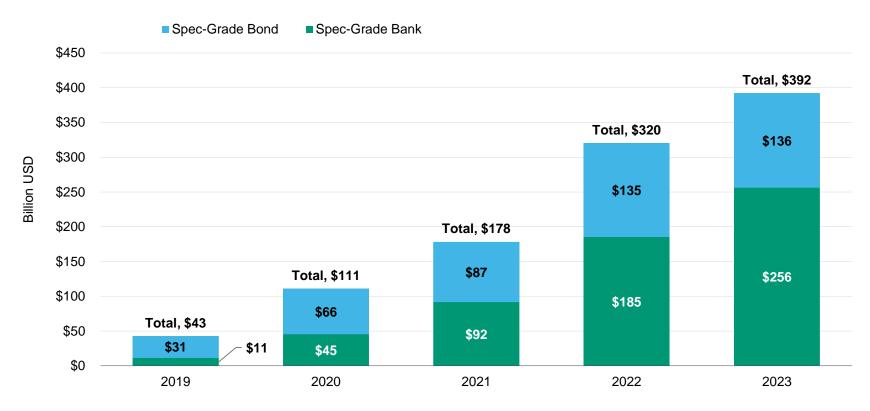


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# Refunding conditions

### Spec-grade maturities top \$1 trillion

- » Only 15% matures in 2019-20, the rest in 2021-23
- » Bond maturities shifted forward and near-term debt rose compared to last year

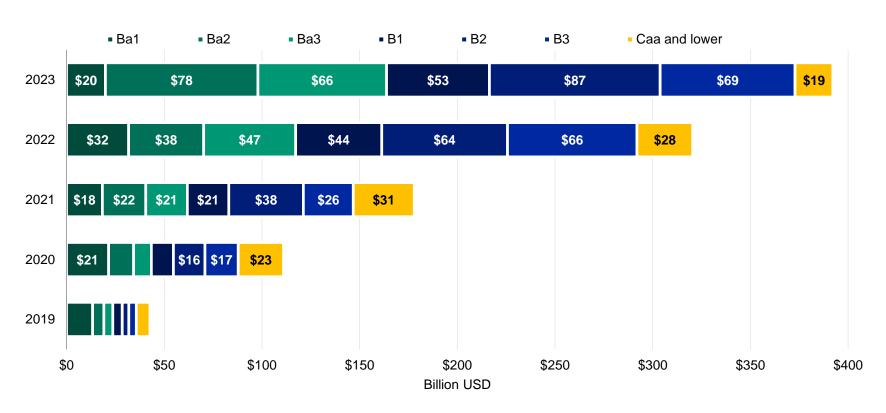


Based on Moody's rated USD denominated debt by non-financial corporate issuers domiciled in the US Source: Moody's Investors Service

### Only 33% of 2019 spec-grade maturities with B2 CFR or lower

» Rating quality worsens in later years

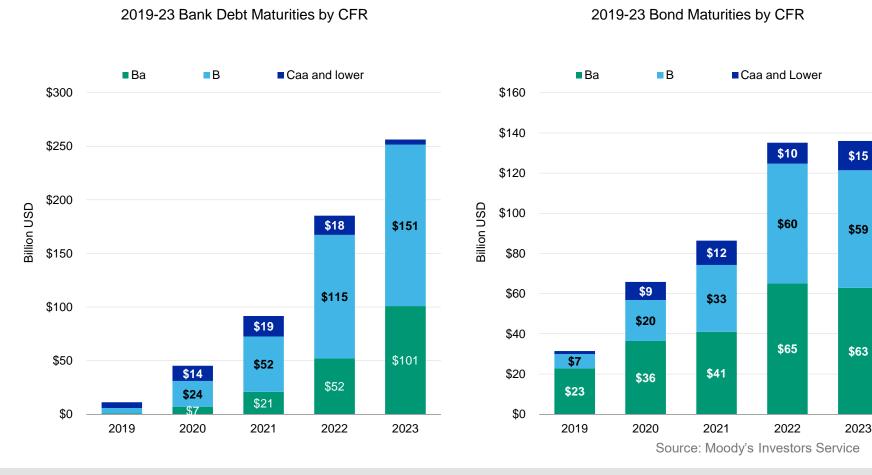
2019–23 Speculative Grade Maturities by Corporate Family Rating (CFR)



Source: Moody's Investors Service

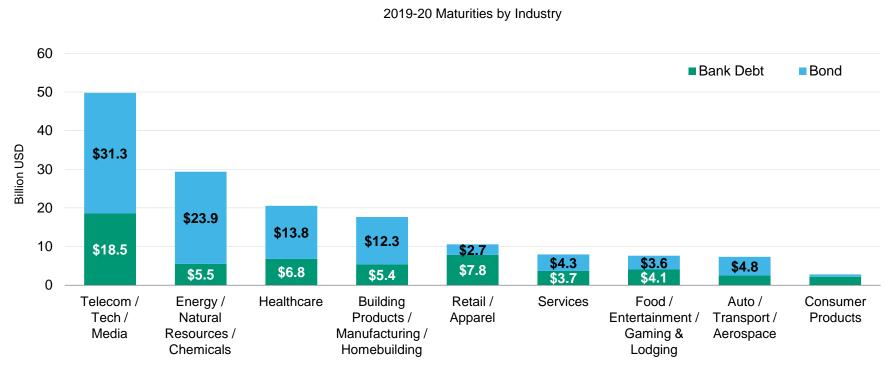
#### Bank debt rating quality worse than that of bonds

» Riskier loans have more near-term maturities



#### Telecom/Tech/Media dominate 2019-20 maturities

Energy and Healthcare are next largest segments of bond maturities

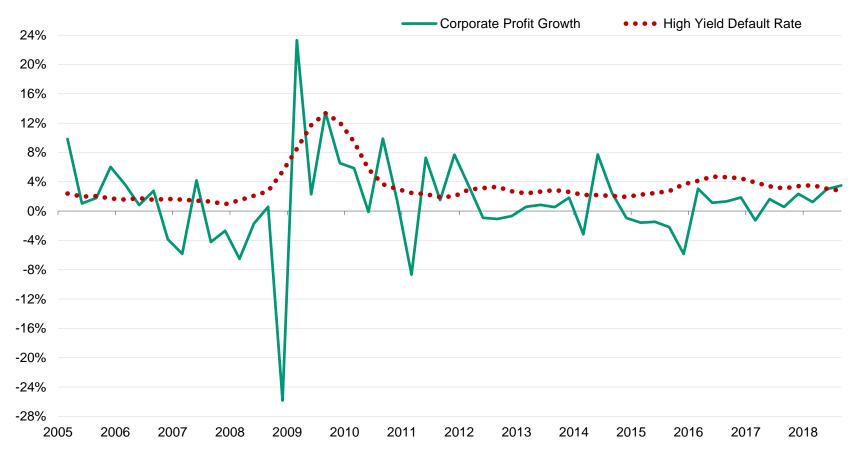


Source: Moody's Investors Service

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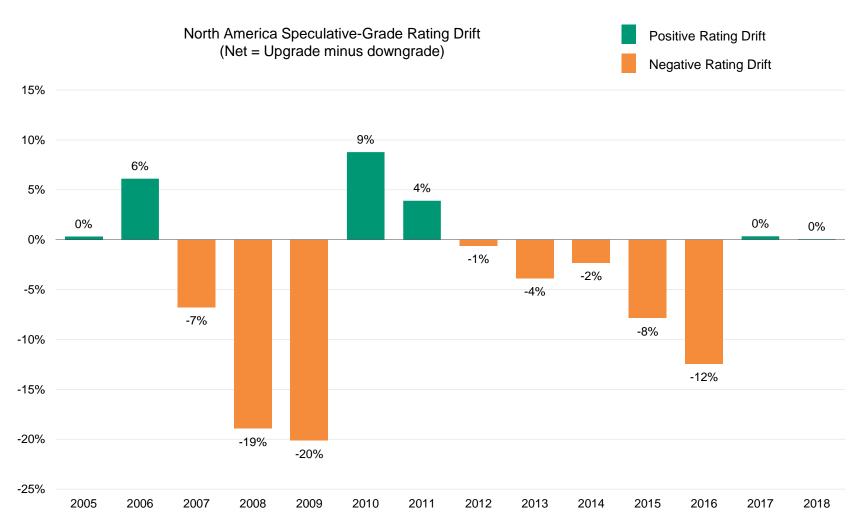
# Risks to the outlook

## Corporate profit growth critical support of low default rate



Source: U.S. Bureau of Economic Analysis, Moody's Investors Service

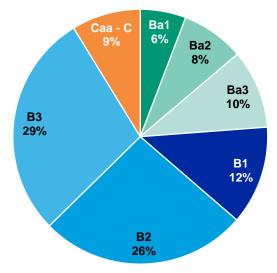
### Rating activity is balanced



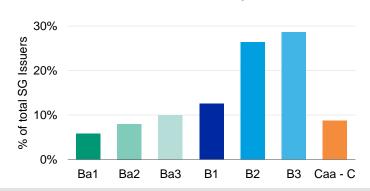
Note: Upgrades Minus Downgrades Source: Moody's Investors Service

#### Pressure point: record low-rated issuers

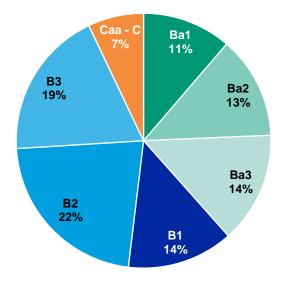
North America Speculative Grade Rating Mix by Issuer Count by CFR



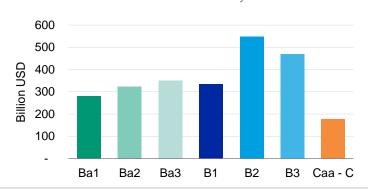
Source: Moody's Investors Service



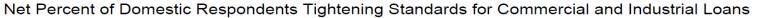
North America Speculative Grade Rating Mix by Total Rated Debt by CFR (\$2.5 Trillion)

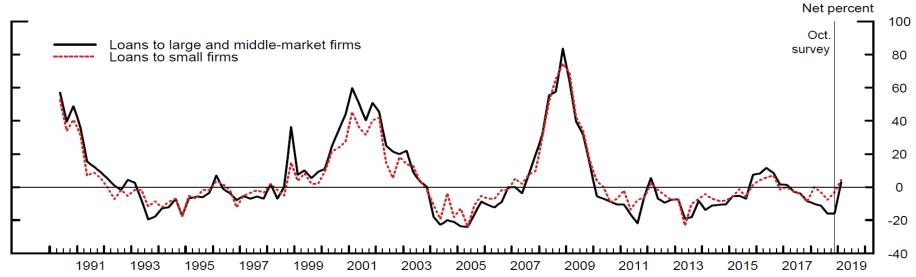


Source: Moody's Investors Service



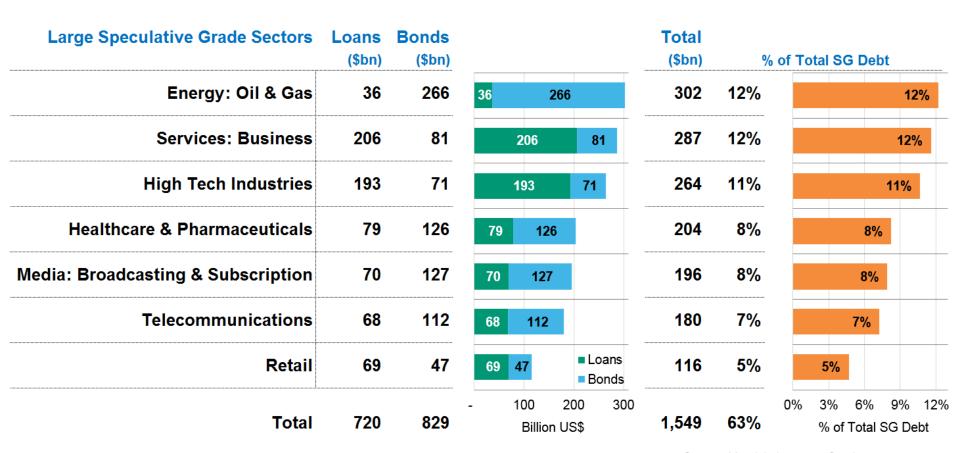
# Pressure point: risk appetite showing signs of strain





Source: Federal Reserve Senior Loan Officer Survey

### Pressure point: industry concentrations



Source: Moody's Investors Service

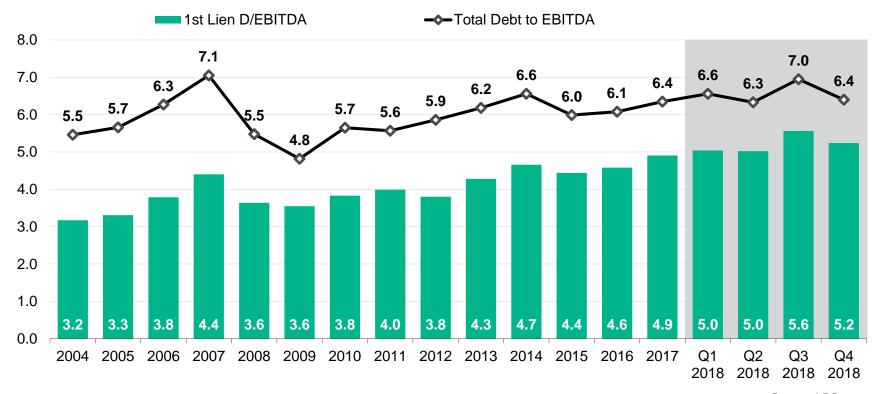
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# Implications for the next default cycle

### Generous market conditions for issuers set stage for more defaults, worse recoveries in next downturn

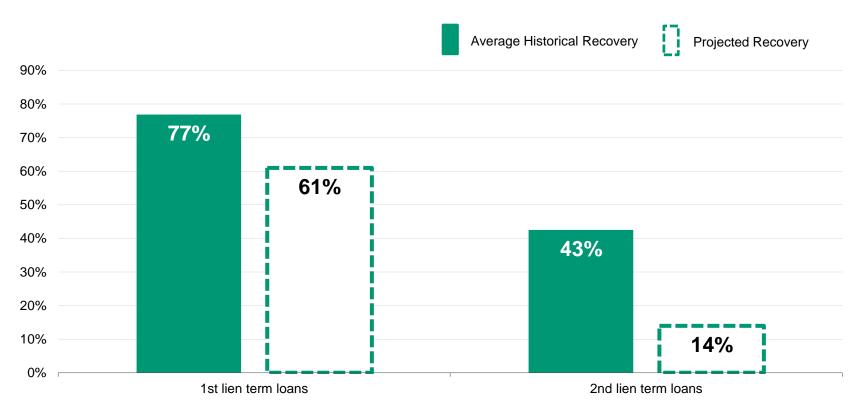
- Demanding borrowers are undermining the strength of credit agreements and capital structures, to the detriment of investors
- » Investors will remain under pressure to keep buying
- » A weak rating distribution will produce more defaults in the next credit downturn
- » Our credit ratings reflect deterioration in debt structures
- Solid liquidity, a low default forecast and a healthy maturity profile allays concerns about risk, for now

### Increase in 1st lien debt in LBOs advantageous for issuers but could result in lower recoveries post-default



Source: LPC

## Given current capital structures, our LGD median estimate points to lower recoveries in the future



Note: Historical recovery based on defaulted instruments in Moody's Ultimate Loss Given Default database; projected recovery based on LGD point estimates for loans issued by companies rated by Moody's US corporate finance group Source: Moody's Investors Service

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