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Moody's Credit Trends Webinar, February 12, 2019

Corporate credit distress and default

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Agenda

1. Leveraged finance credit trends
2. Default outlook
3. Refunding conditions
4. Risks to the outlook
5. 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*	Record Worst
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%

Trending Worse	Neutral	Improving

*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.
** Default rate forecasts are for US non-financial and financial corporates.

Source: Moody's Investors Service

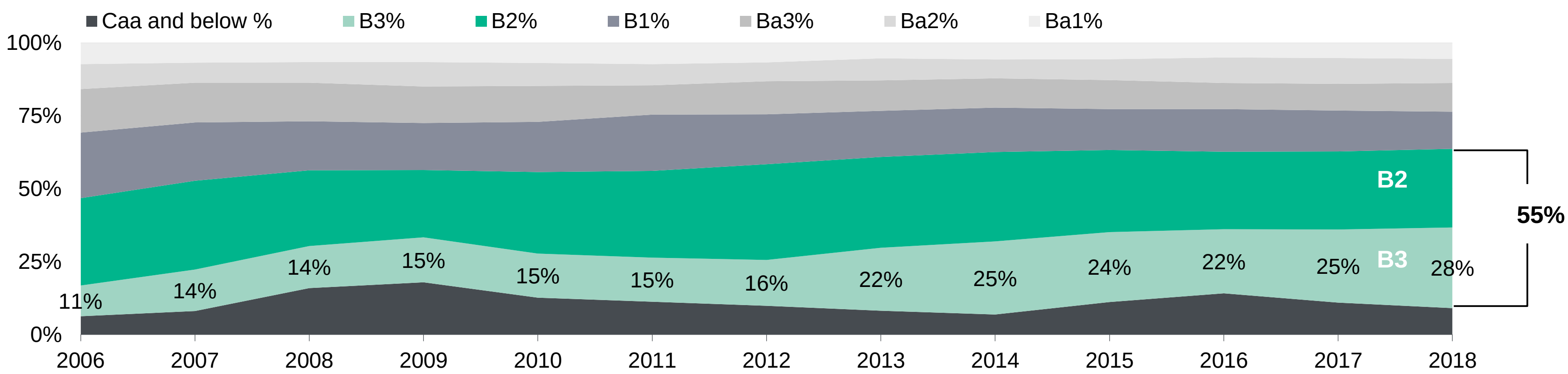
Recent bout of risk aversion has modest impact on credit conditions

- 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

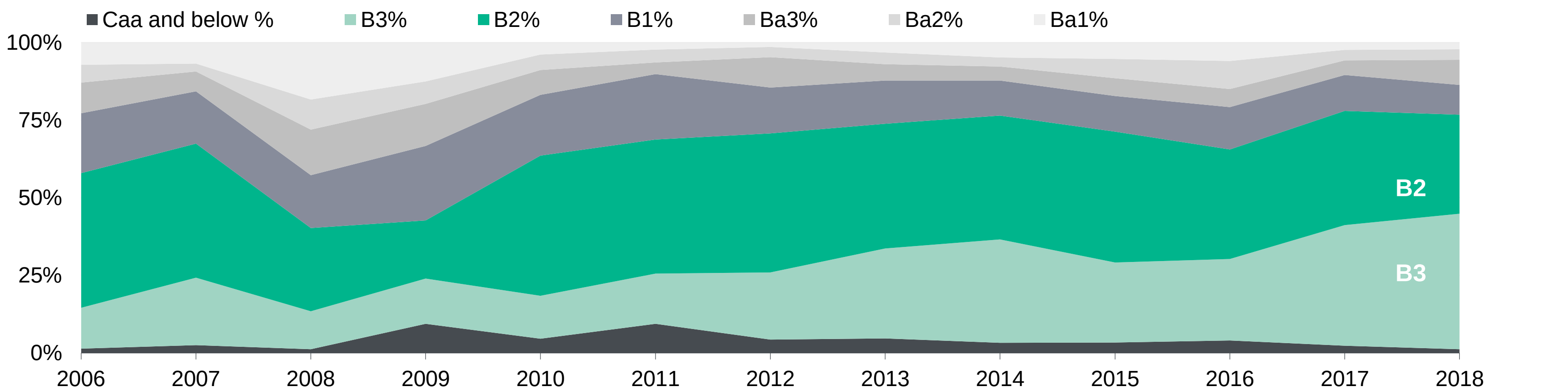
- Private equity transactions financed in the loan market are a significant source of new B3 ratings:
  - New LBOs with high leverage
  - Questionable EBITDA adjustments
  - Debt-financed acquisition add-ons increasing integration risk
  - Distributions delay de-leveraging
  - Future tax bill likely to be higher

Rating distribution reflects weak credit quality

Speculative grade population already weaker than Great Recession depths



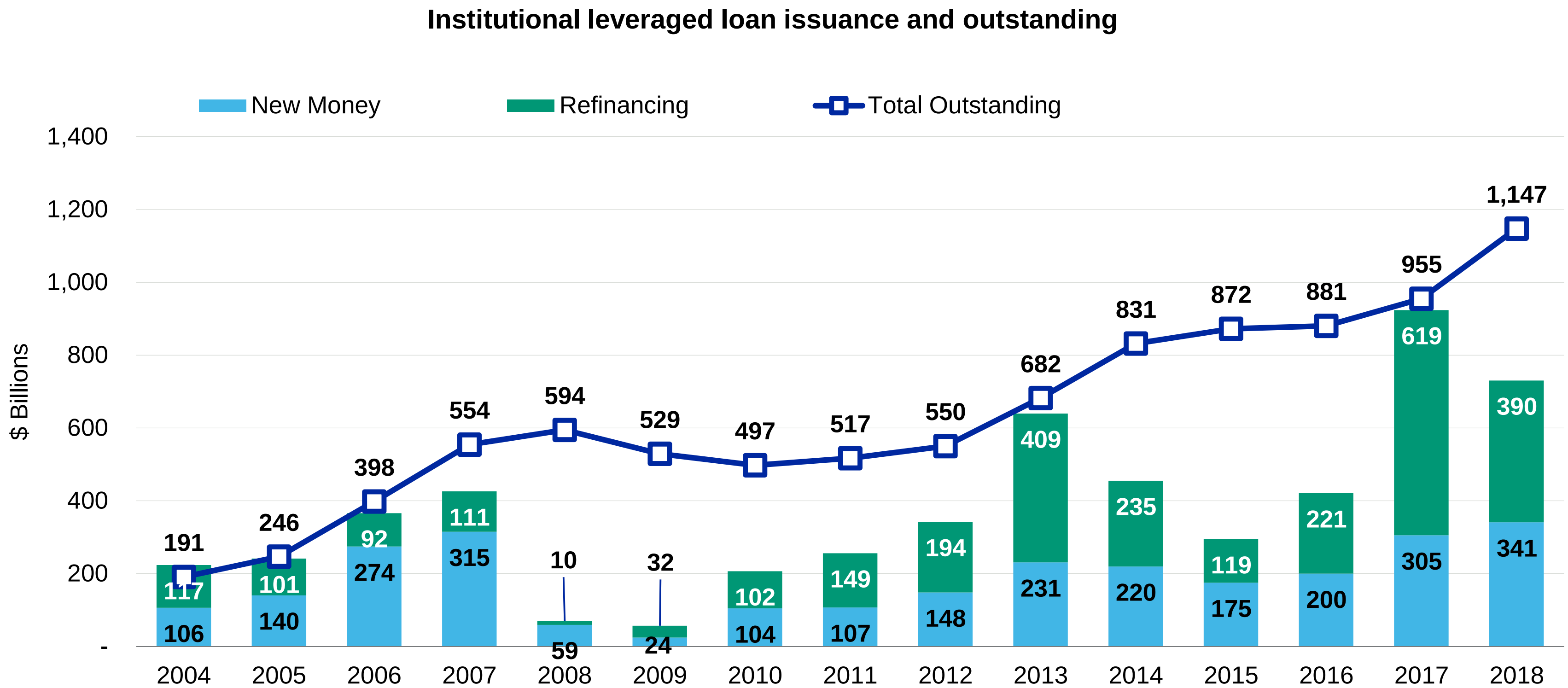
Record share of low ratings on first-time issuers – Mostly Leveraged Loans



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

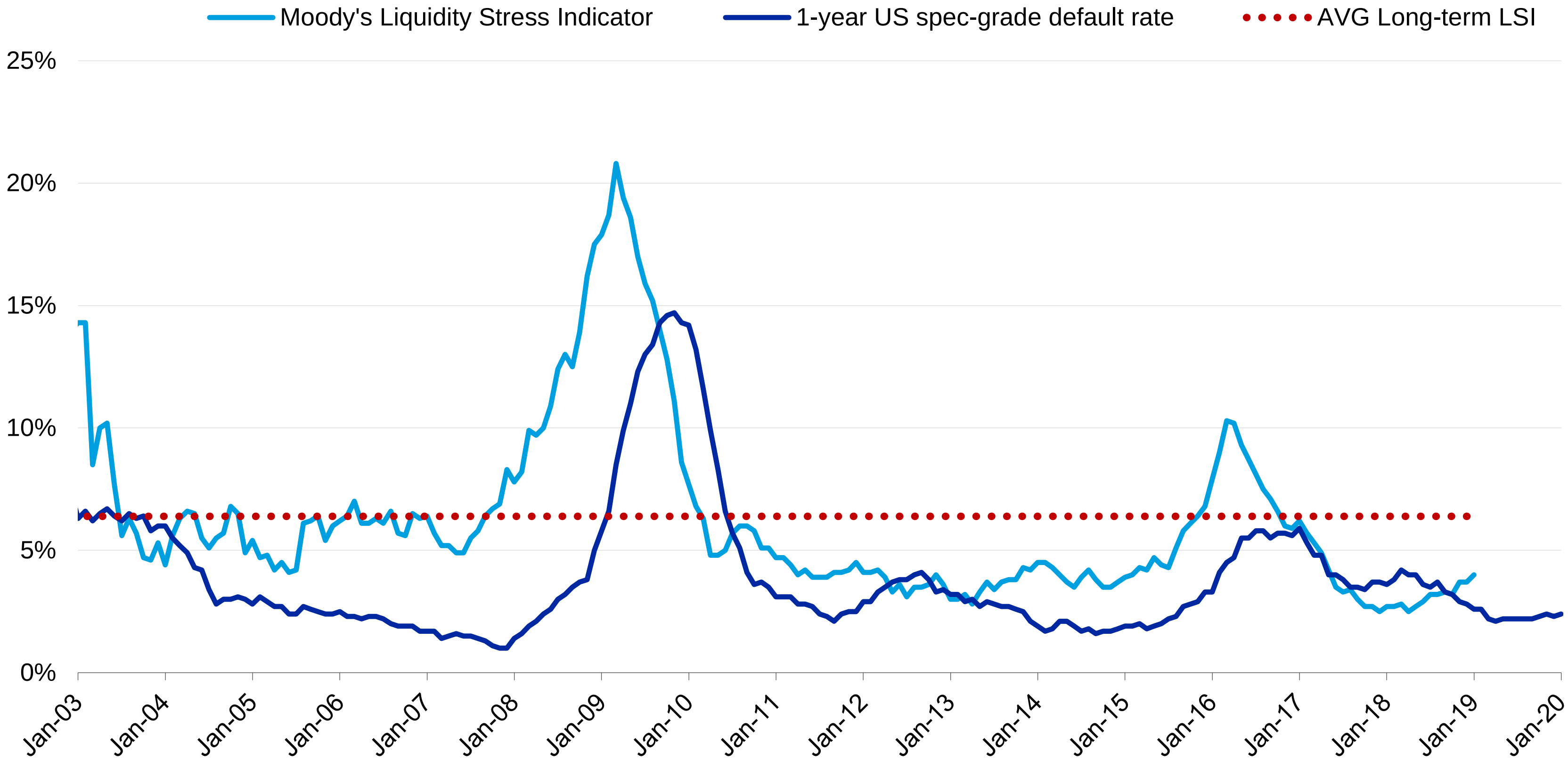


Source: LPC

Intrinsic liquidity still supports low default forecast

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

Moody’s Liquidity Stress Indicator Led Default-Rate Turns



Source: Moody’s Investors Service

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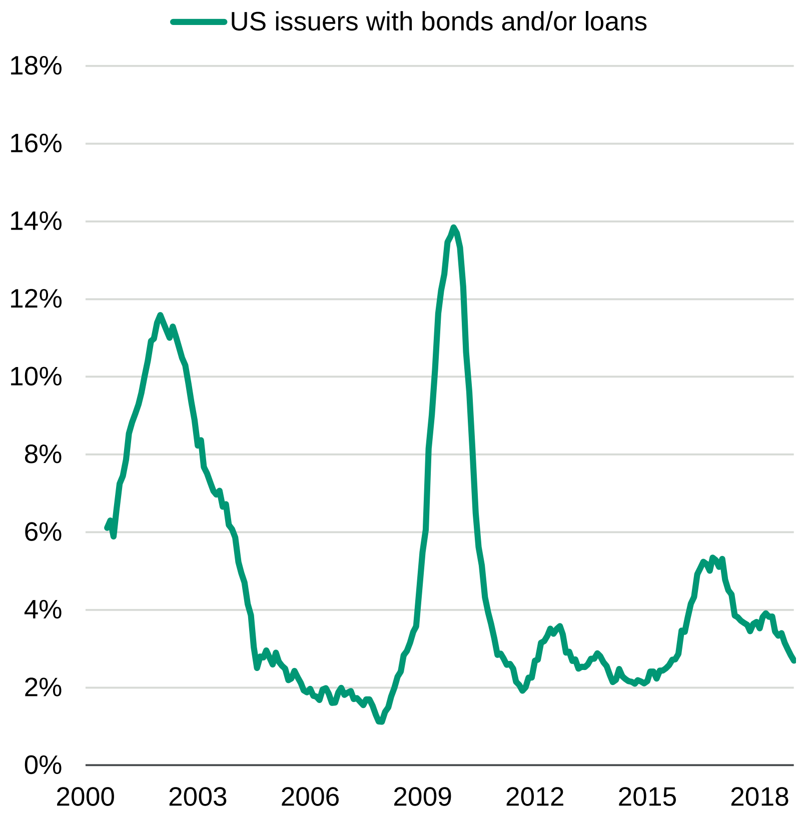
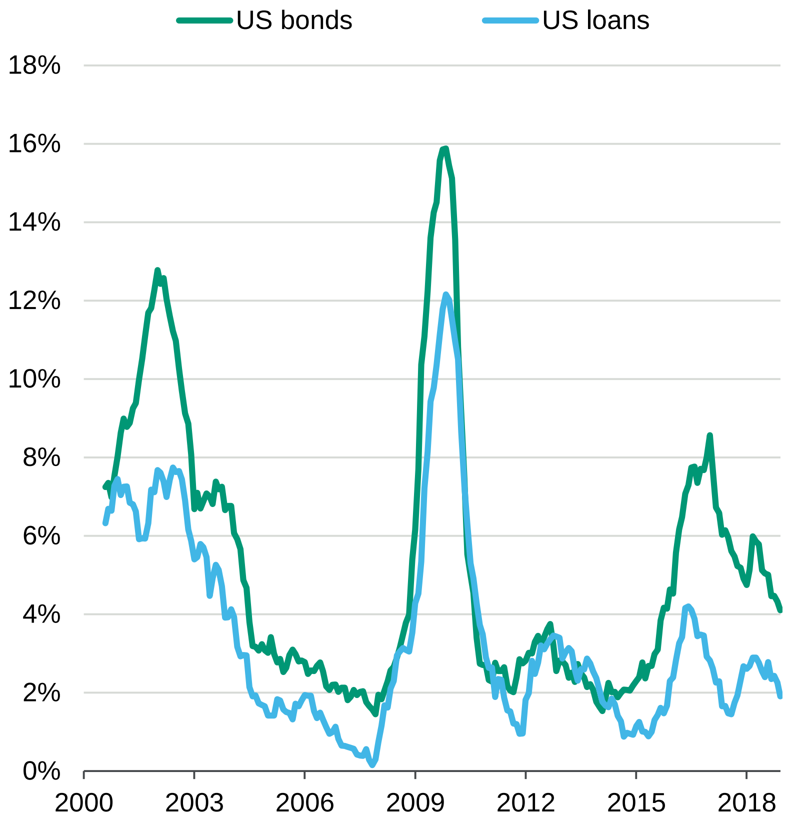
Default outlook

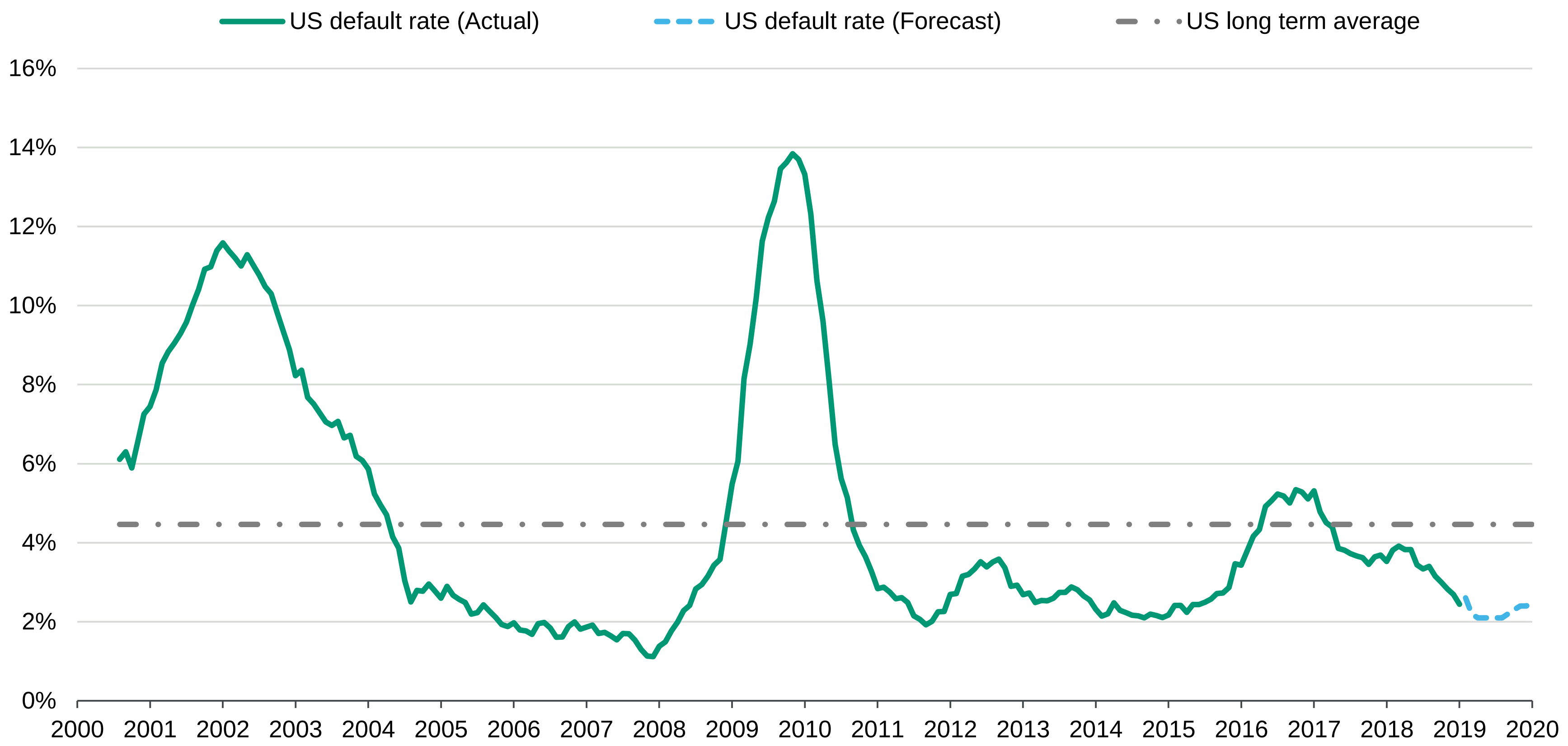
Speculative-grade default rates have been low, particularly for loans





Source: Moody's Investors Service

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



Source: Moody's Investors Service

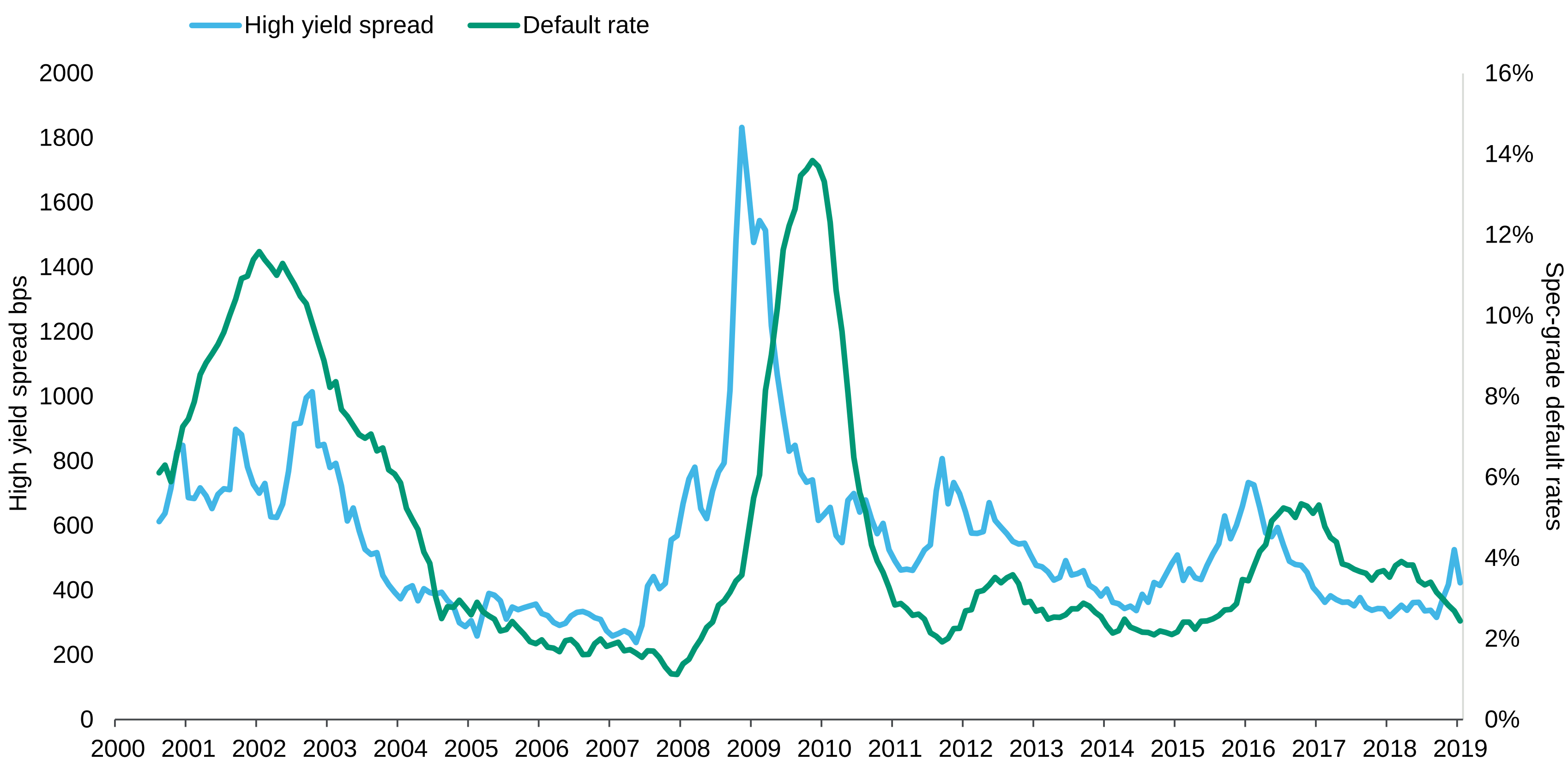
Credit Transition Model and its drivers

- 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

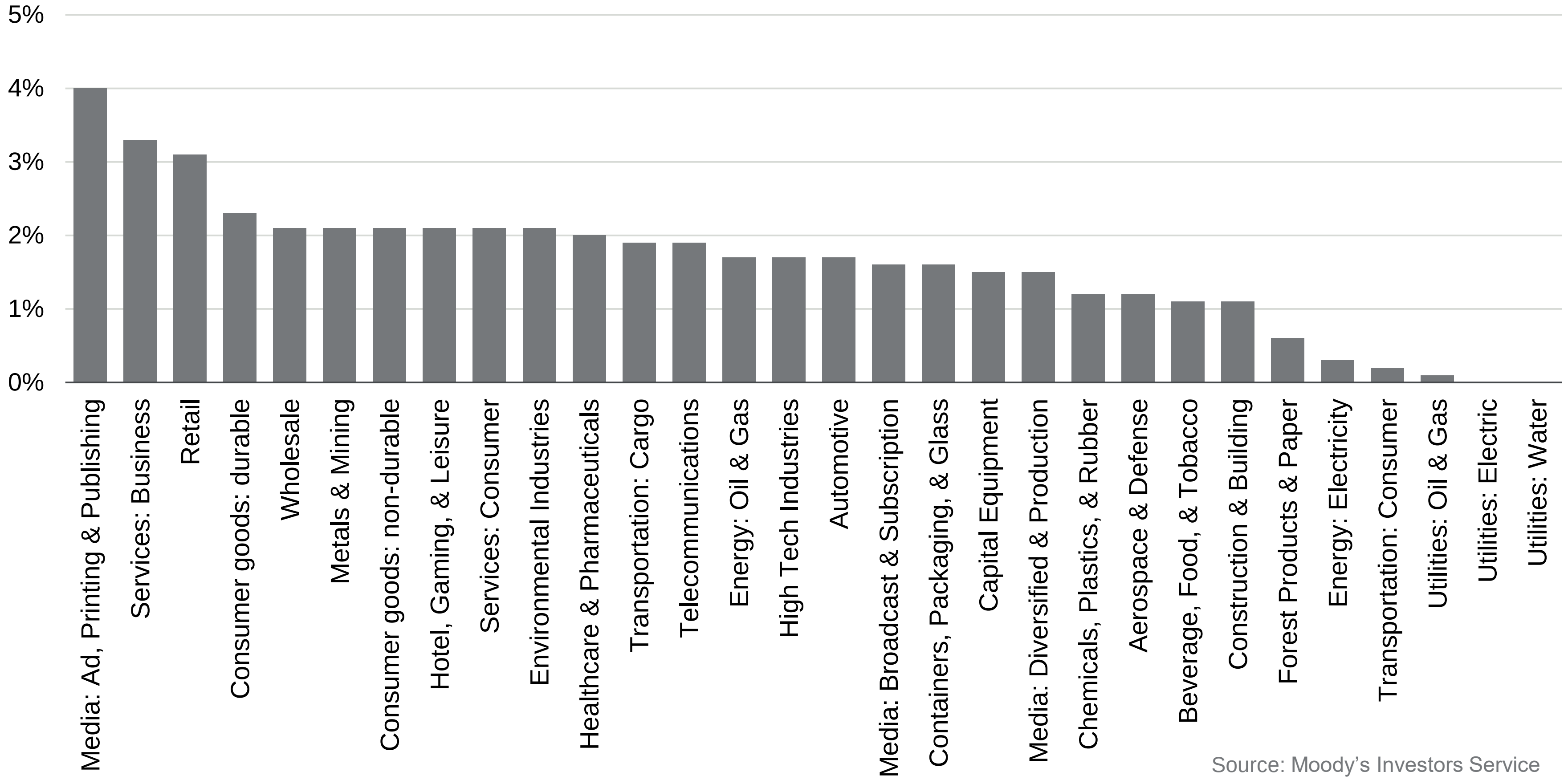
- Notable model inputs:
  - **High yield spread** widened from 335 bps to 456 bps in the past 12 months (expect to tighten to 367 bps over the next year)
  - **Unemployment rate** edged lower from 4.1% to 3.9% (1 year ahead forecast: 3.4%)
  - **Rating factors**: current conditions slightly weaker than 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



Source: Moody's Investors Service

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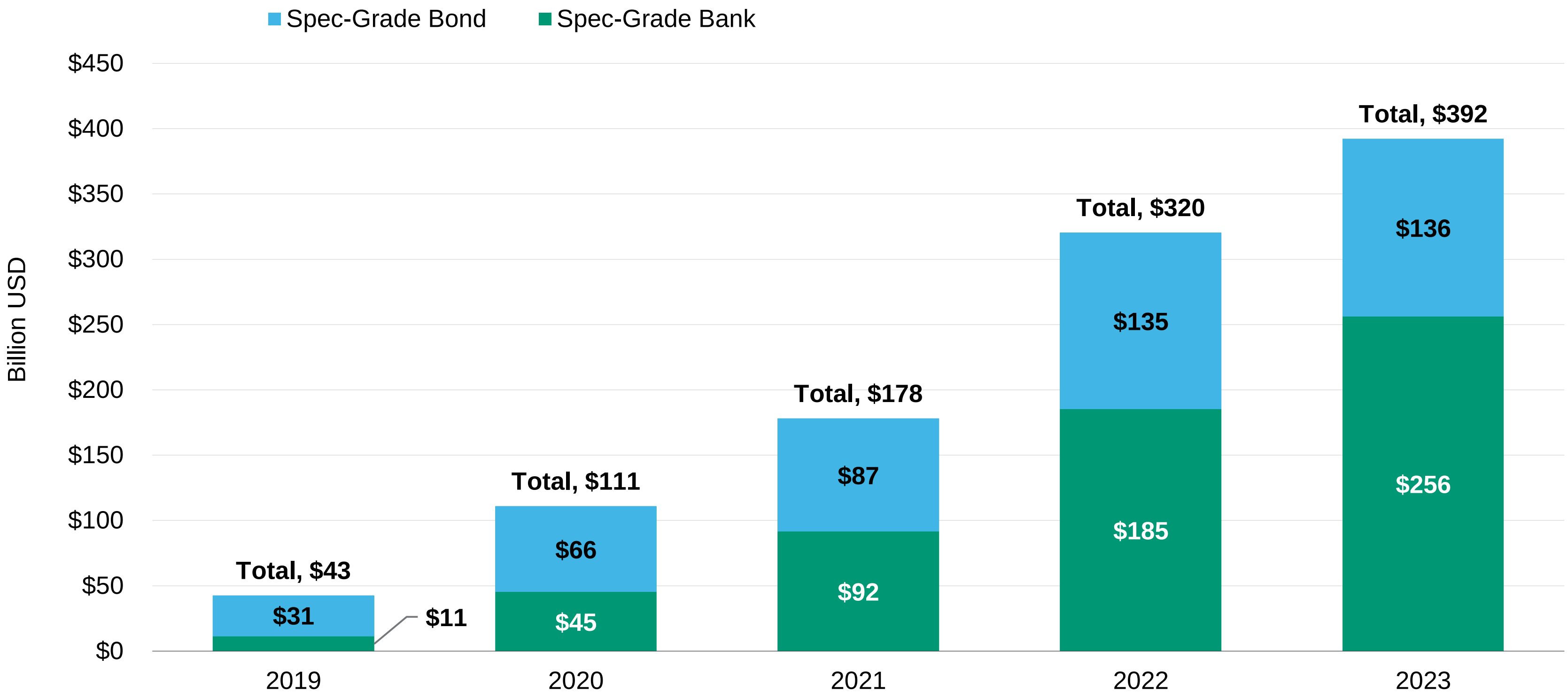
Refunding conditions

Spec-grade maturities top $1 trillion

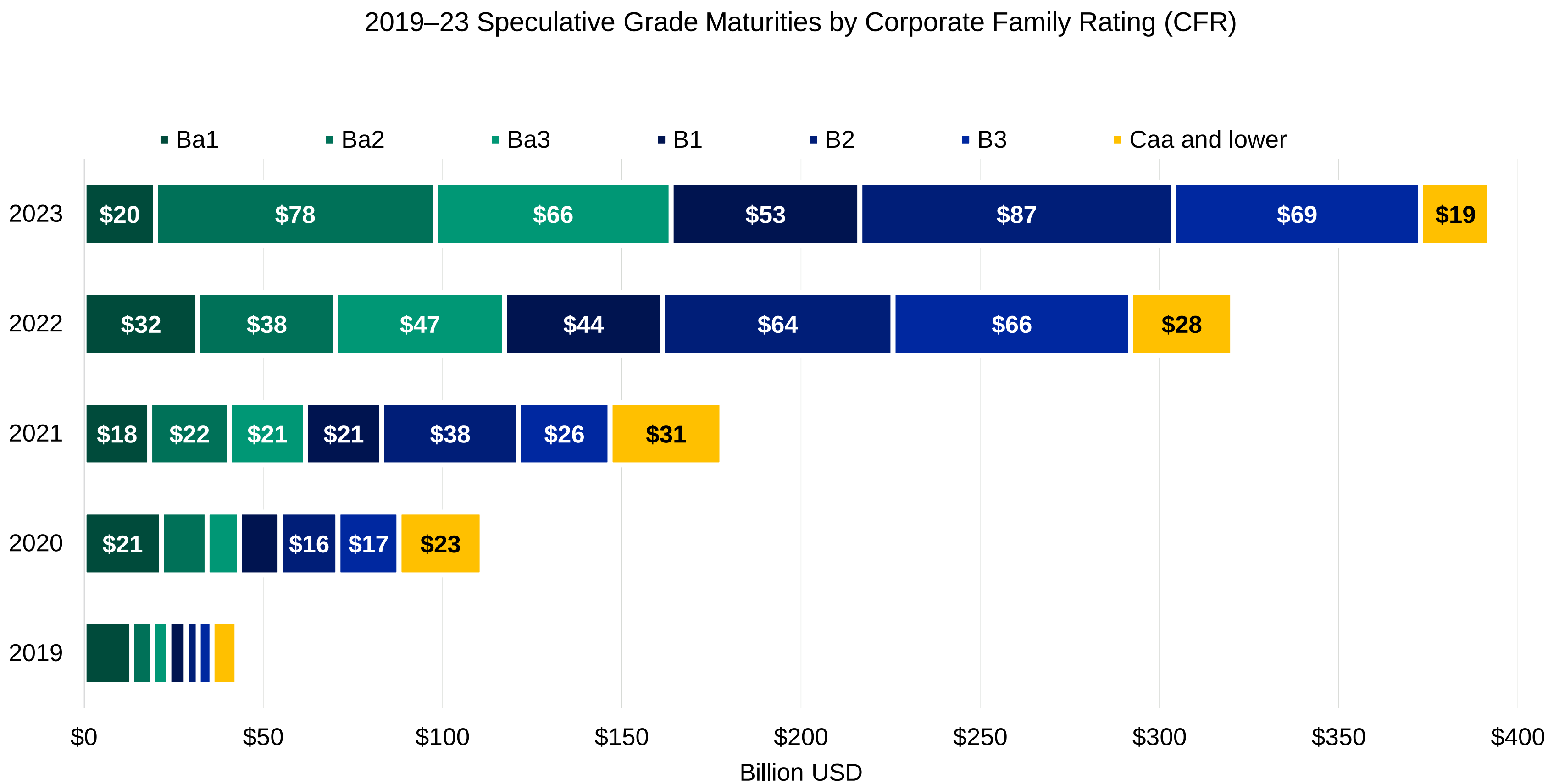
- Only 15% matures in 2019-20, the rest in 2021-23
- Bond maturities shifted forward and near-term debt rose compared to last year



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

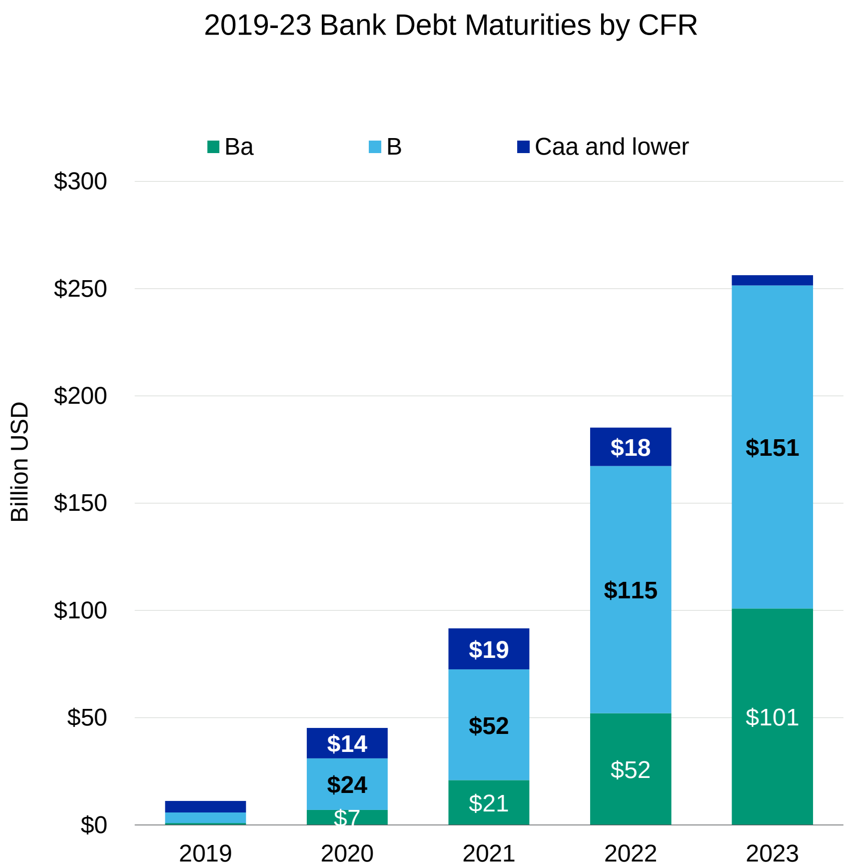
» Rating quality worsens in later years

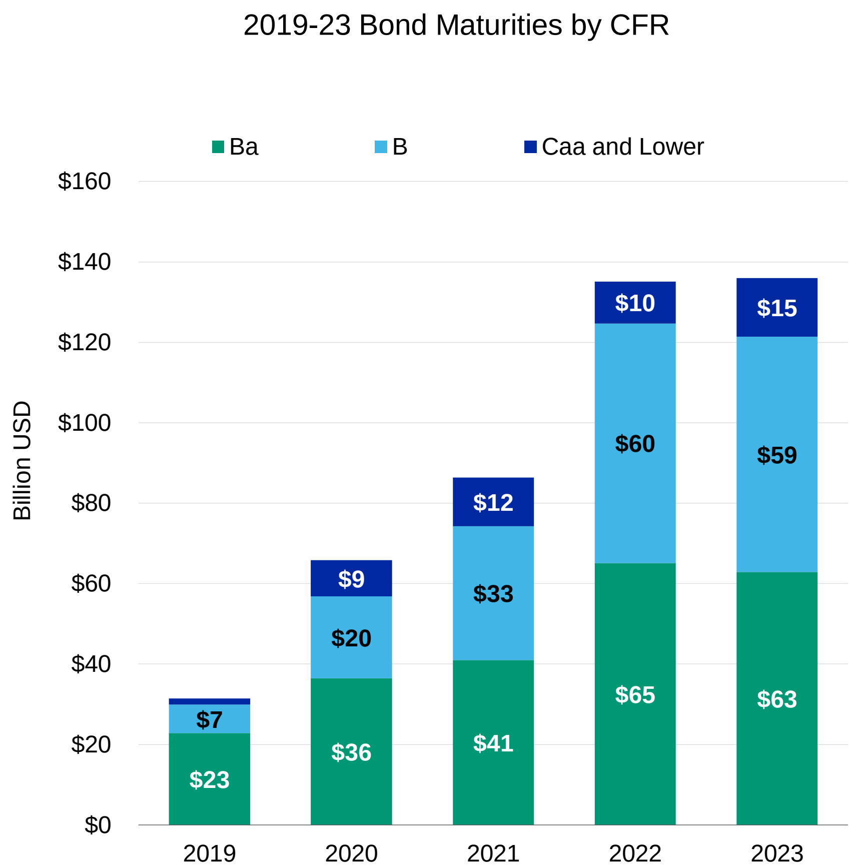


Source: Moody's Investors Service

Bank debt rating quality worse than that of bonds

» Riskier loans have more near-term maturities

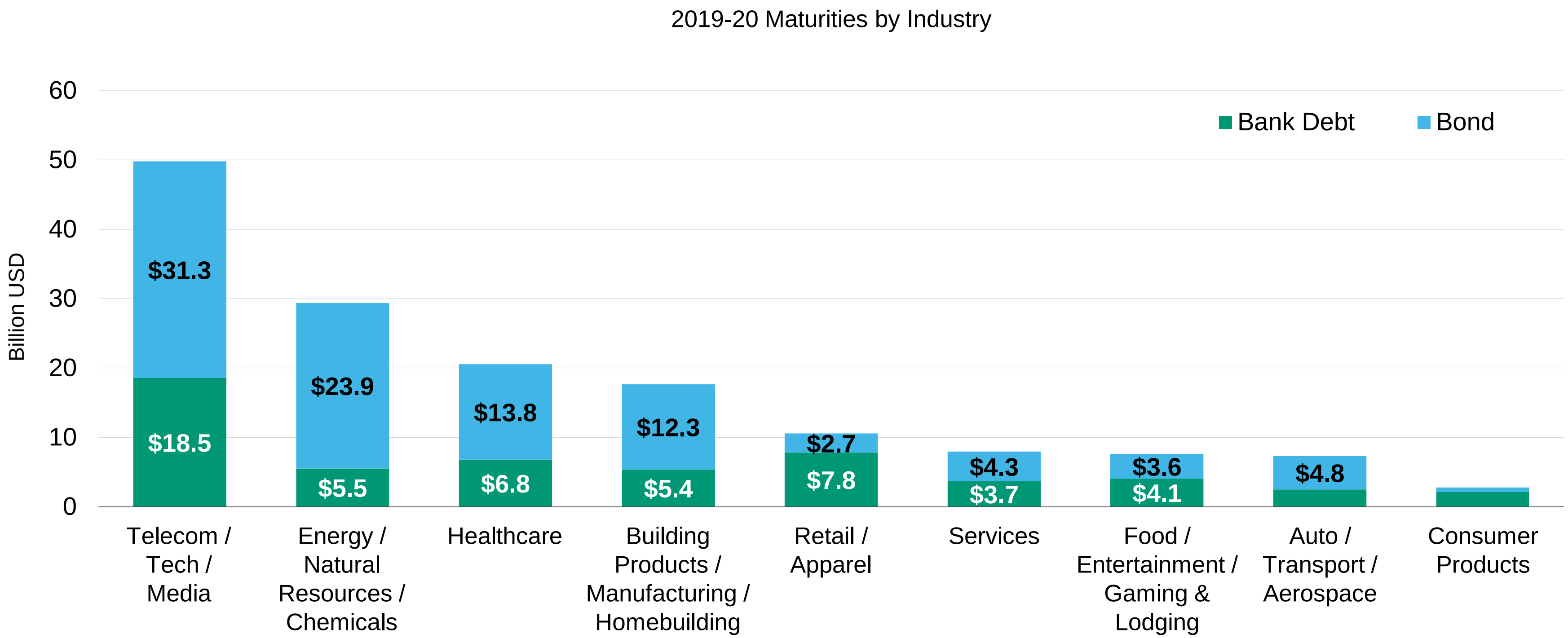




Source: Moody's Investors Service

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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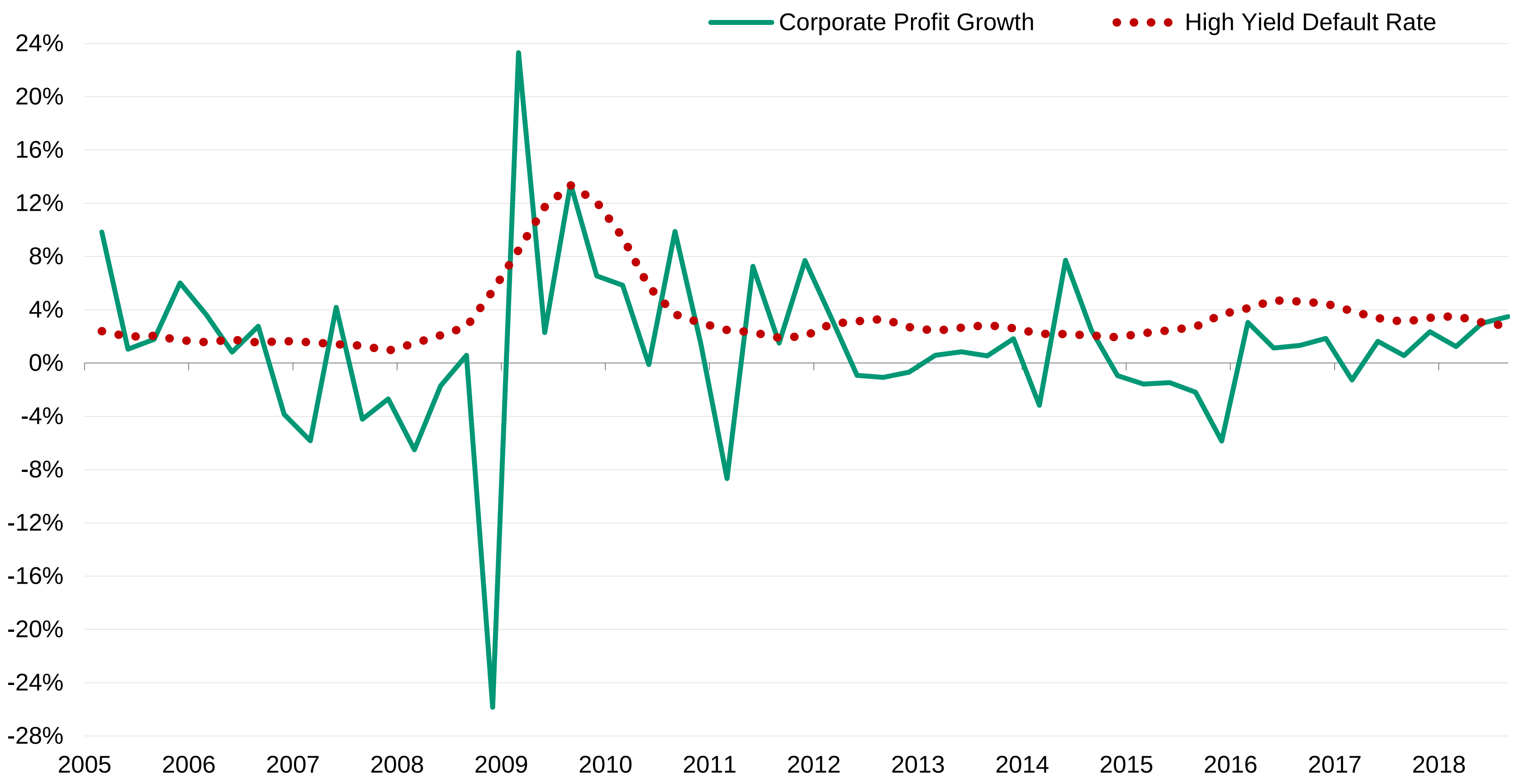
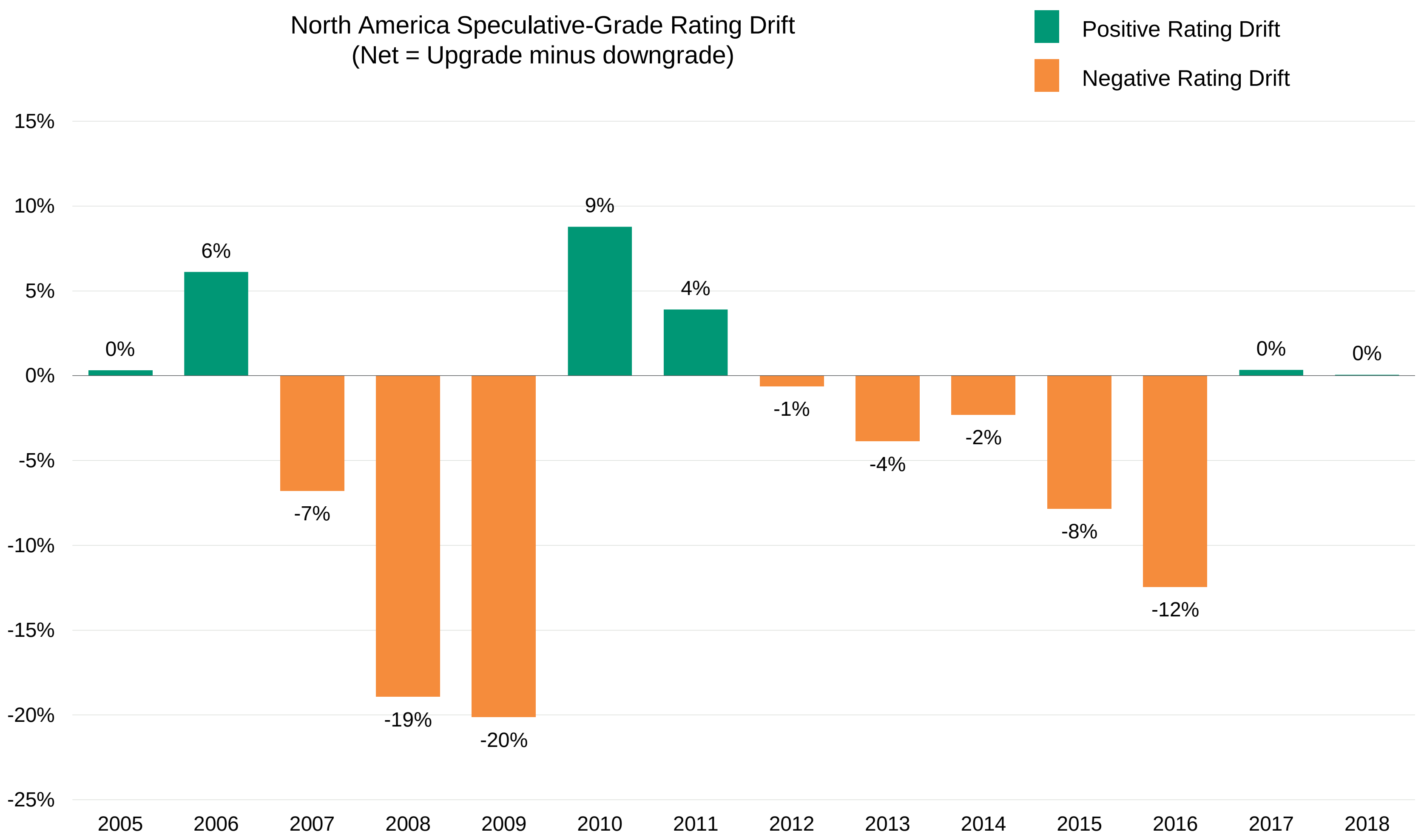
Risks to the outlook

Corporate profit growth critical support of low default rate



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

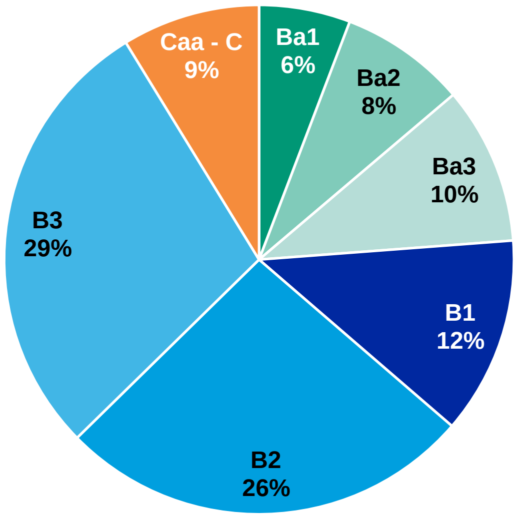
Rating activity is balanced



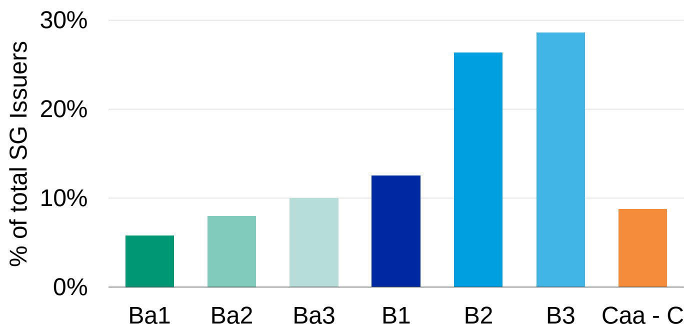
Note: Upgrades Minus Downgrades
Source: Moody's Investors Service

Pressure point: record low-rated issuers

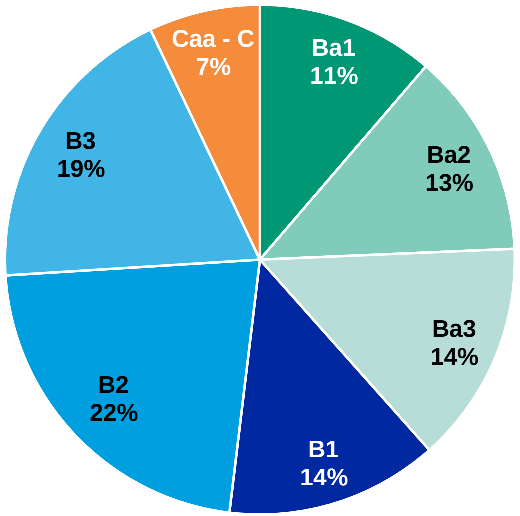
North America Speculative Grade Rating Mix
by Issuer Count by CFR



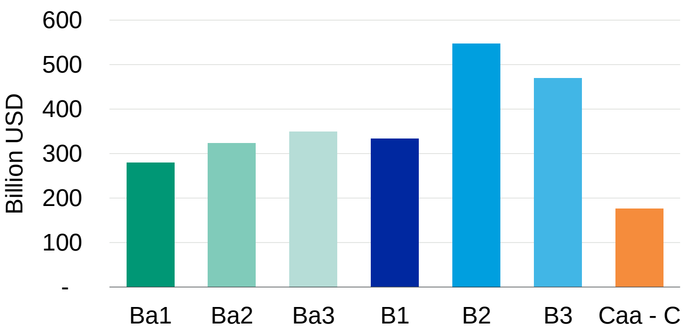
Source: Moody's Investors Service



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

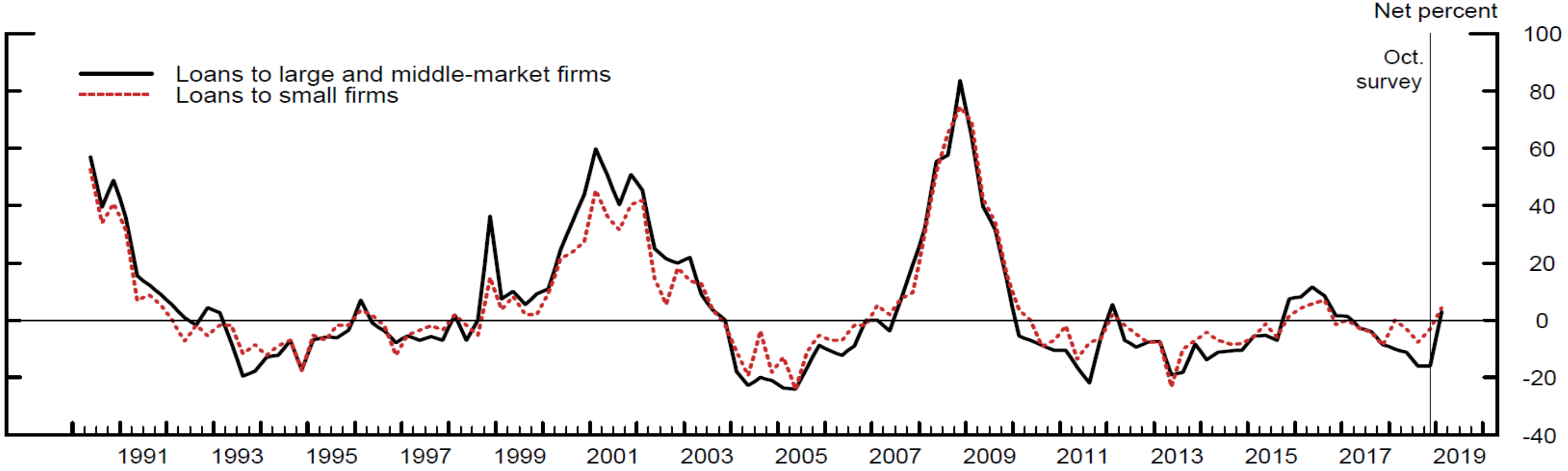


Source: Moody's Investors Service



Pressure point: risk appetite showing signs of strain

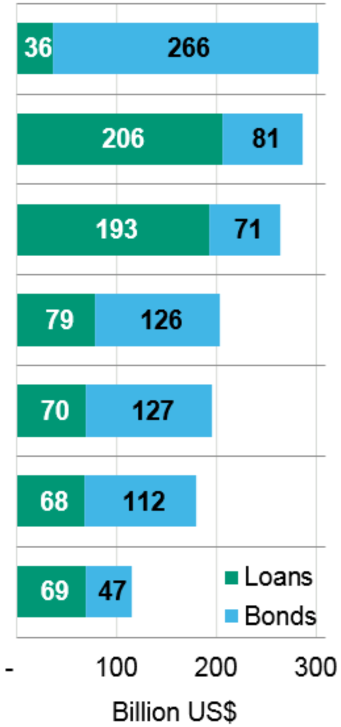
Net Percent of Domestic Respondents Tightening Standards for Commercial and Industrial Loans

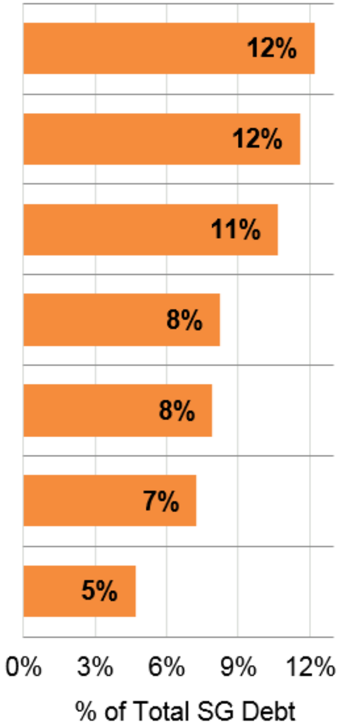


Source: Federal Reserve Senior Loan Officer Survey

Pressure point: industry concentrations

Large Speculative Grade Sectors	Loans ($bn)	Bonds ($bn)	Total ($bn)	% of Total SG Debt
Energy: Oil & Gas	36	266	302	12%
Services: Business	206	81	287	12%
High Tech Industries	193	71	264	11%
Healthcare & Pharmaceuticals	79	126	204	8%
Media: Broadcasting & Subscription	70	127	196	8%
Telecommunications	68	112	180	7%
Retail	69	47	116	5%
Total	720	829	1,549	63%





Source: Moody's Investors Service

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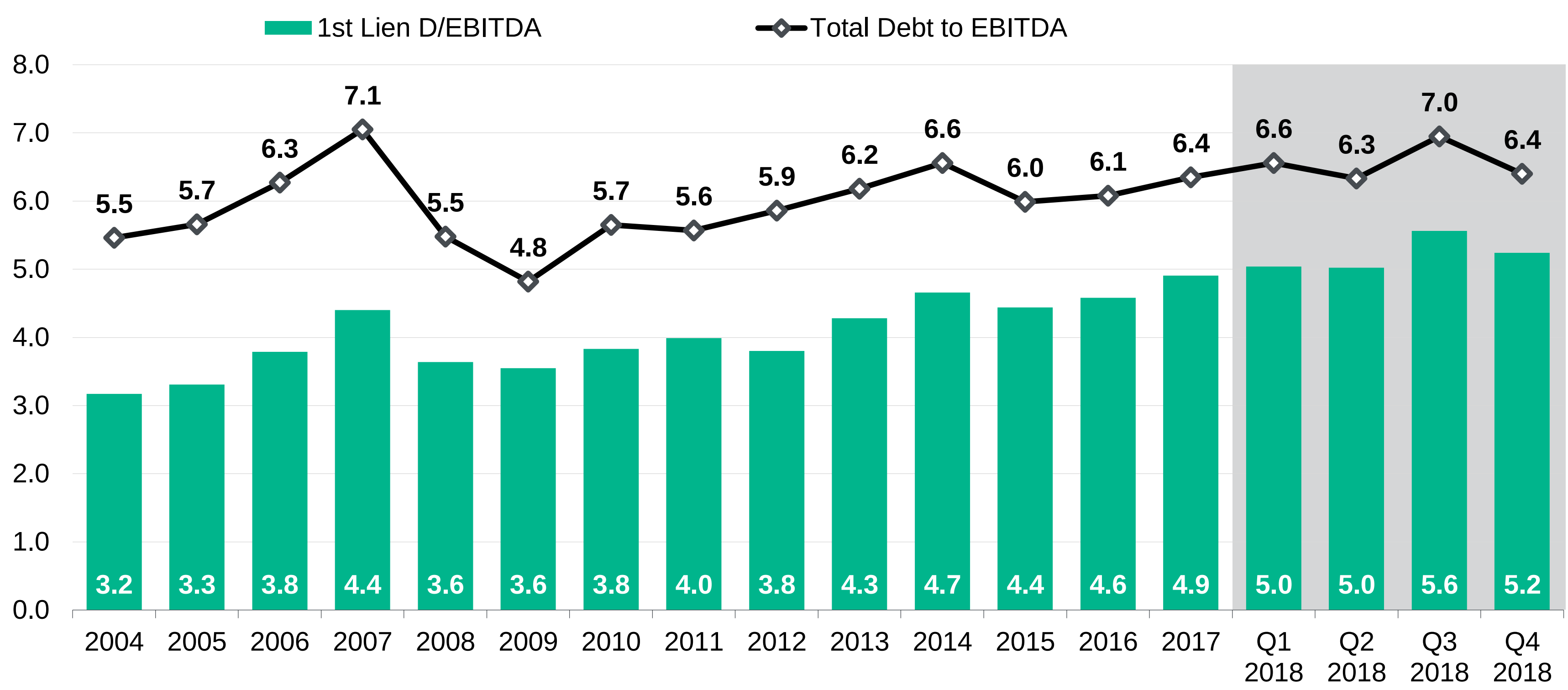
Implications for the next default cycle

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

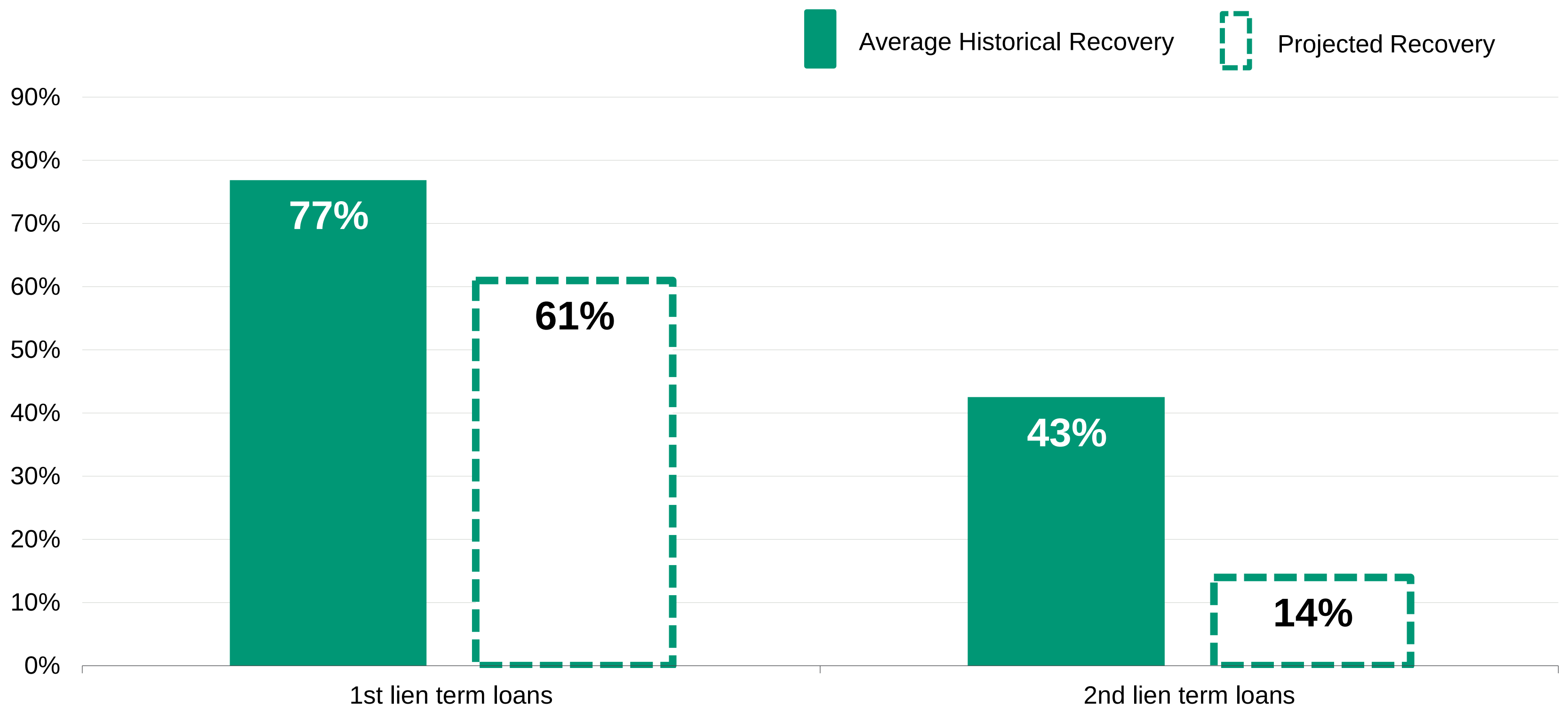
- Demanding borrowers are undermining the strength of credit agreements and capital structures, to the detriment of investors
- Investors will remain under pressure to keep buying
- A weak rating distribution will produce more defaults in the next credit downturn
- Our credit ratings reflect deterioration 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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