

2019 Investment Seminar

October 27, 2019

Toronto, Canada



Session 2A: Concentration of Corporate Credit Risk

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2019 Investment Seminar

GLENN GAZDIK

Concentration of Corporate Risk Session

Insurer's View on Investment Grade Corporate Debt

November 2019

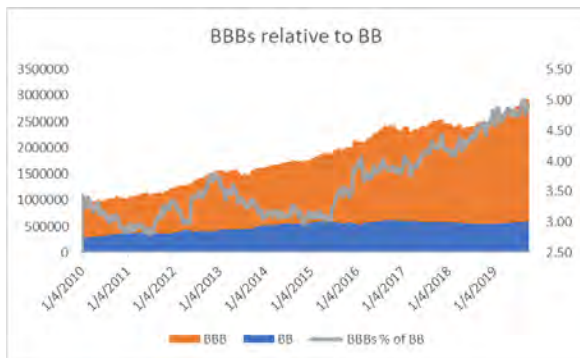


Size of the Corporate Debt Market*



Corporate Debt Market has doubled in size over the past 10 years

BBB percentage of Corporate Debt Market has grown by 10%



BBB to BB ratio has grown from 3.5 to 4.9

*Source: Bloomberg, market value

Outlook on Corporate Bonds



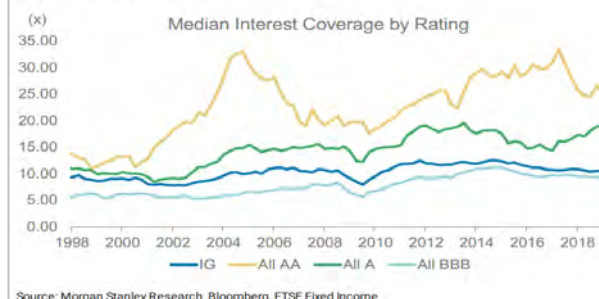
Record low borrowing costs

Interest coverage remains near record highs for high quality

Strong profit margins

Large-cap BBBs have recently demonstrated commitment to ratings at expense of shareholders

Exhibit 28: Interest coverage for high quality IG remains near record highs, while BBBs have declined



Outlook on Corporate Bonds



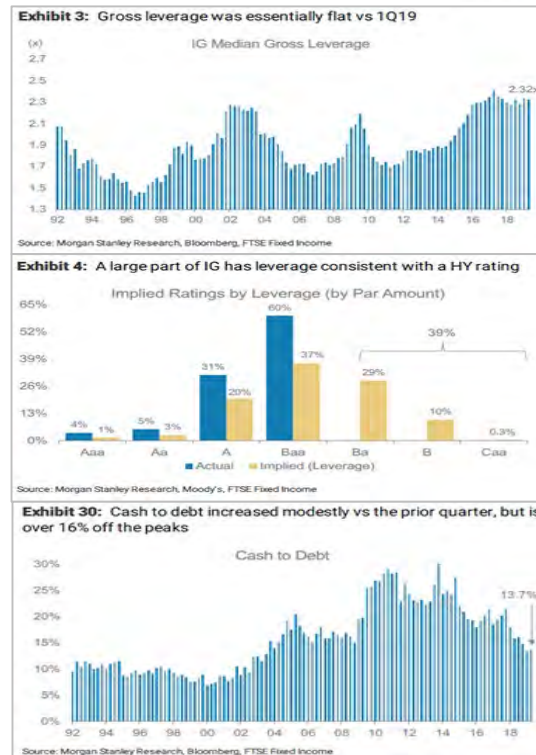
High gross and net leverage

In the next cycle, falling yields won't be a panacea

Implied ratings, based solely on leverage, indicate that ~40% of US IG non-financials consistent with HY rating

Cash to debt ratios headed lower

Tariffs



BBB Corporates Outlook

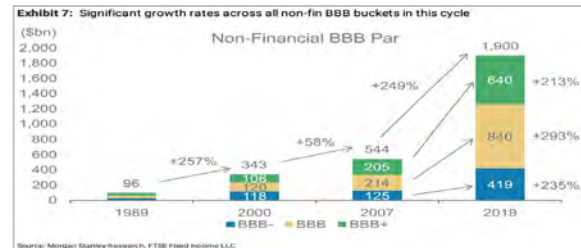
Significant growth in BBB Debt

Potential downgrades in a stress could be as high as \$1Tr

Low BBB credits have reduced debt modestly

Significant impacts if downgraded to High Yield

Spread pickup from A to BBB near tights

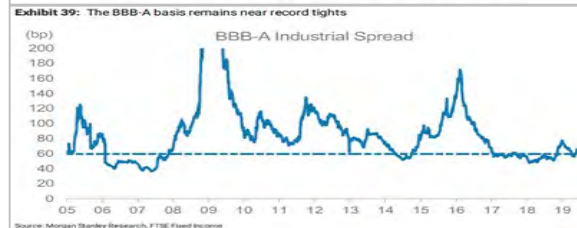


Source: Morgan Stanley Research, FTSE Fixed Income LLC

Exhibit 18: Assuming the downgrade rate remains the same as in the past, downgrade volumes will be significant

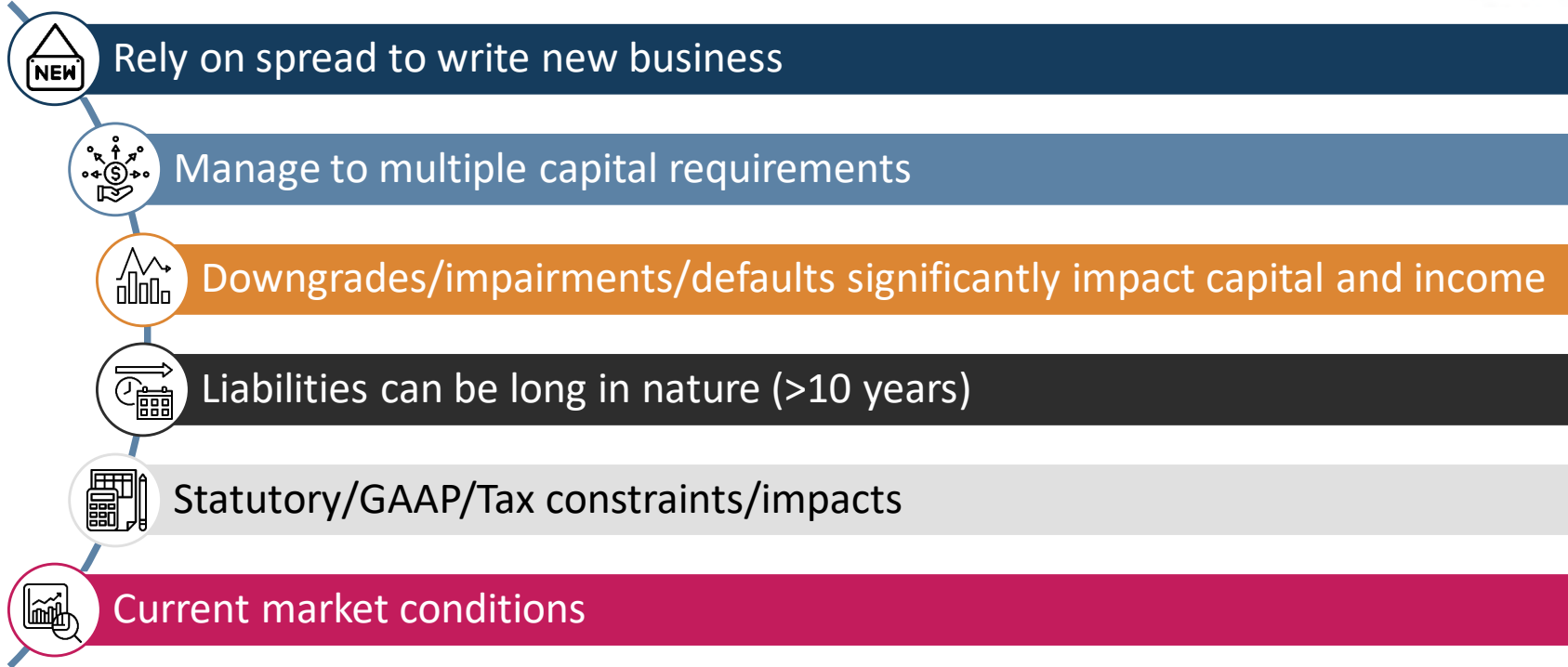
Statistics for Fallen Angels During Previous Credit Cycles					"Implied" Fallen Angels for this cycle* (\$Bn)
Start	End	Length (Qtrs)	Net Fallen Angel Volume (\$Bn)	% of BBB Index	
1Q '89	1Q '91	13	36	34%	850
1Q '00	3Q '03	15	199	45%	1,132
3Q '07	4Q '09	10	156	23%	587

Source: Morgan Stanley Research, FTSE Fixed Income (L.S. Moody's data). The 100% downgrade rate is an estimate and does not represent a prediction of future events. See and Moody's data for further details. *Assuming the downgrade rate remains the same as in the past. *Assuming the downgrade rate remains the same as in the past. *Assuming the downgrade rate remains the same as in the past.

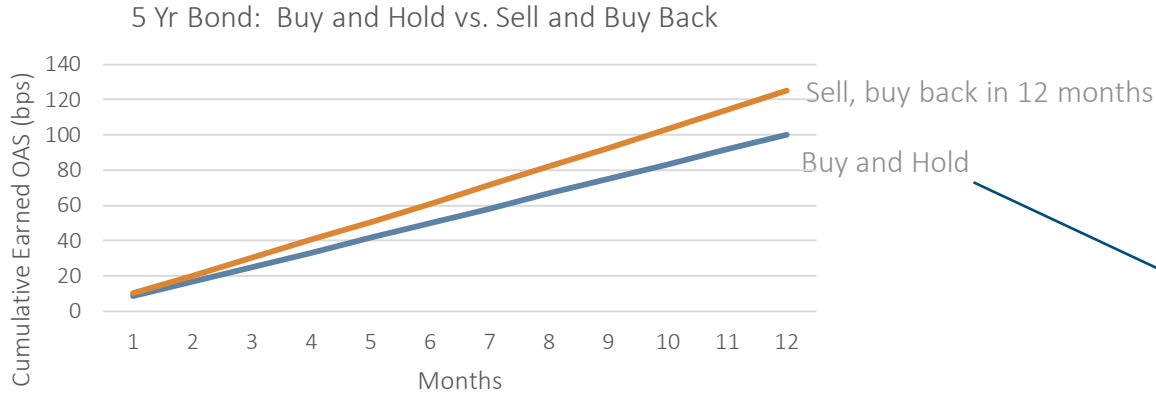


Source: Morgan Stanley Research, FTSE Fixed Income

The Insurance Investment Management Puzzle

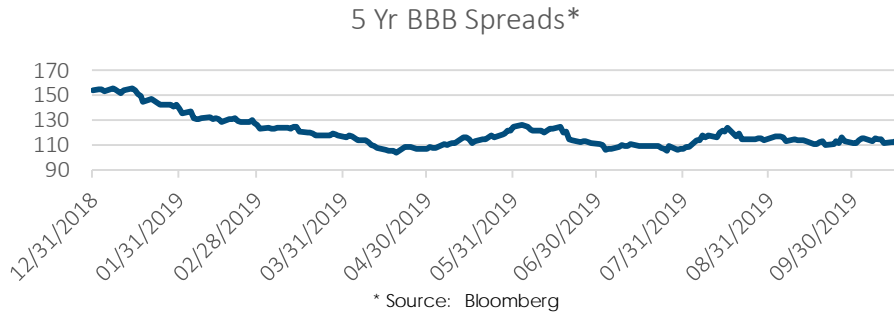


Corporate Bonds: Tough to Time the Market



If invest in Treasuries for 1 year, need to earn 125bps of spread last 4 years

5 year bond earns 100bps spread over 1 year



Spreads tighter by 40bps since end of 2018

Insurer RBC Capital: Downgrades Impactful



5 YR BBB Corporate

RBC Charge	1.06%
Current Spread	1.10%
ROC	103%
Downgrade RBC Charge for BB	3.76%
Updated ROC	29%

5 YR A Corporate

RBC Charge	0.33%
Current Spread	0.75%
ROC	227%
Downgrade RBC Charge for BBB	1.06%
Updated ROC	71%

Tools to Navigate Corporate Market



Steering a ship, not a speedboat

Active Portfolio Management

- Sub-sector and security selection critical as markets play out over next 12-24 months

Employ Credit default swaps to manage exposures

- Preserves Stat/GAAP book yield
- Avoids taxable gain

Structure

- If able to give liquidity, Private Placement Corporate bonds



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Degradation of Corporate Credit

October 27th, 2019

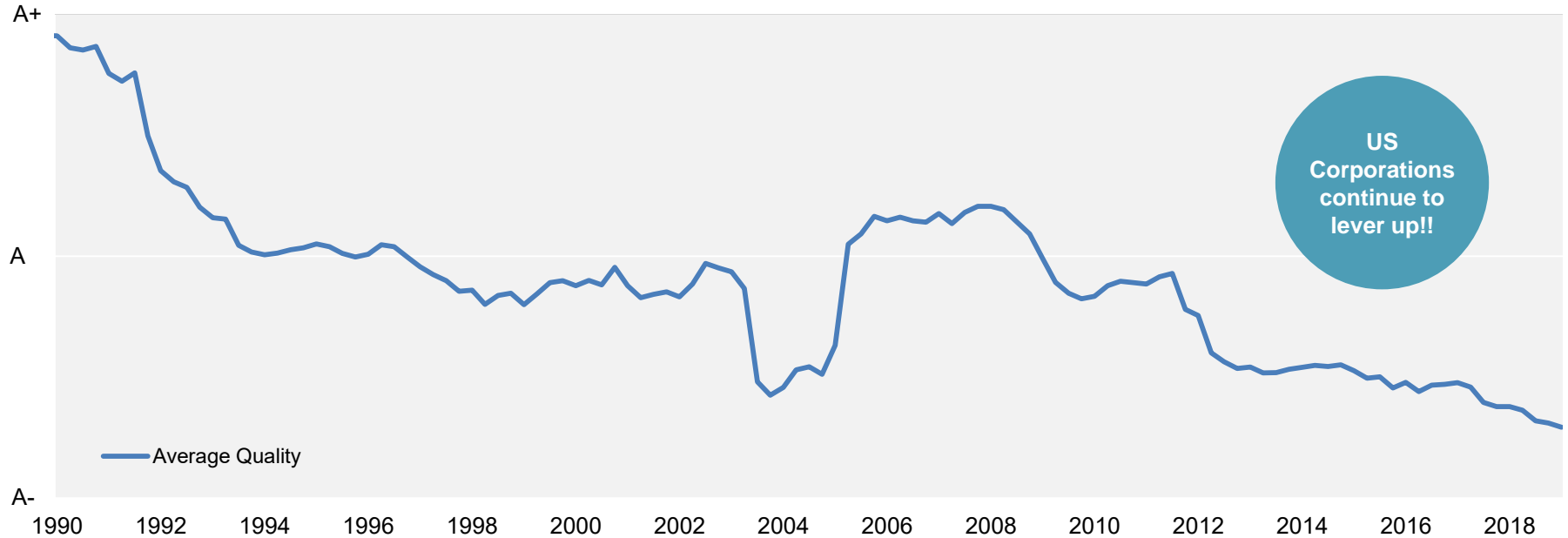
Carl Pappo, CFA – CIO US Fixed
Income

For exclusive use in one-on-one meetings | 981430

Value. Shared.

US Credit Index Quality

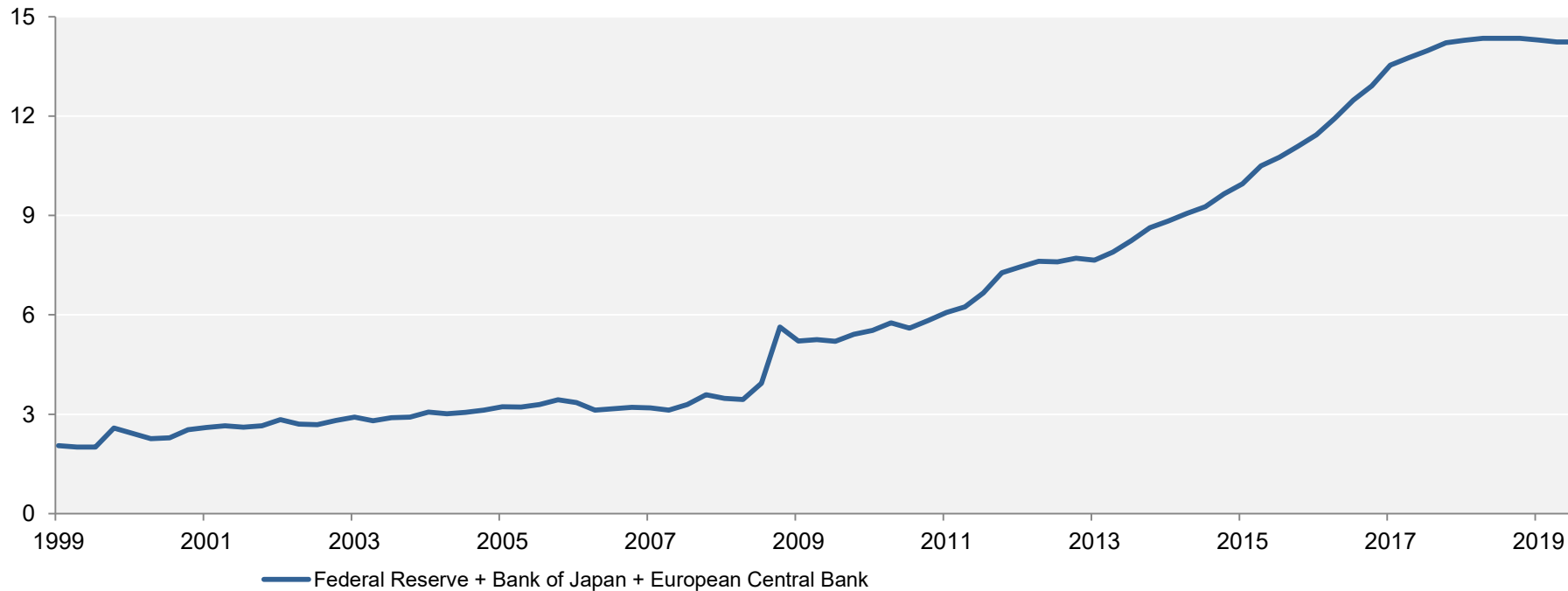
Average quality



- Leverage increases are broad-based across industries.
- Large-scale M&A has been most-pronounced in Healthcare, Food & Beverage, and Telecom/Media.

Central Bank Balance Sheets

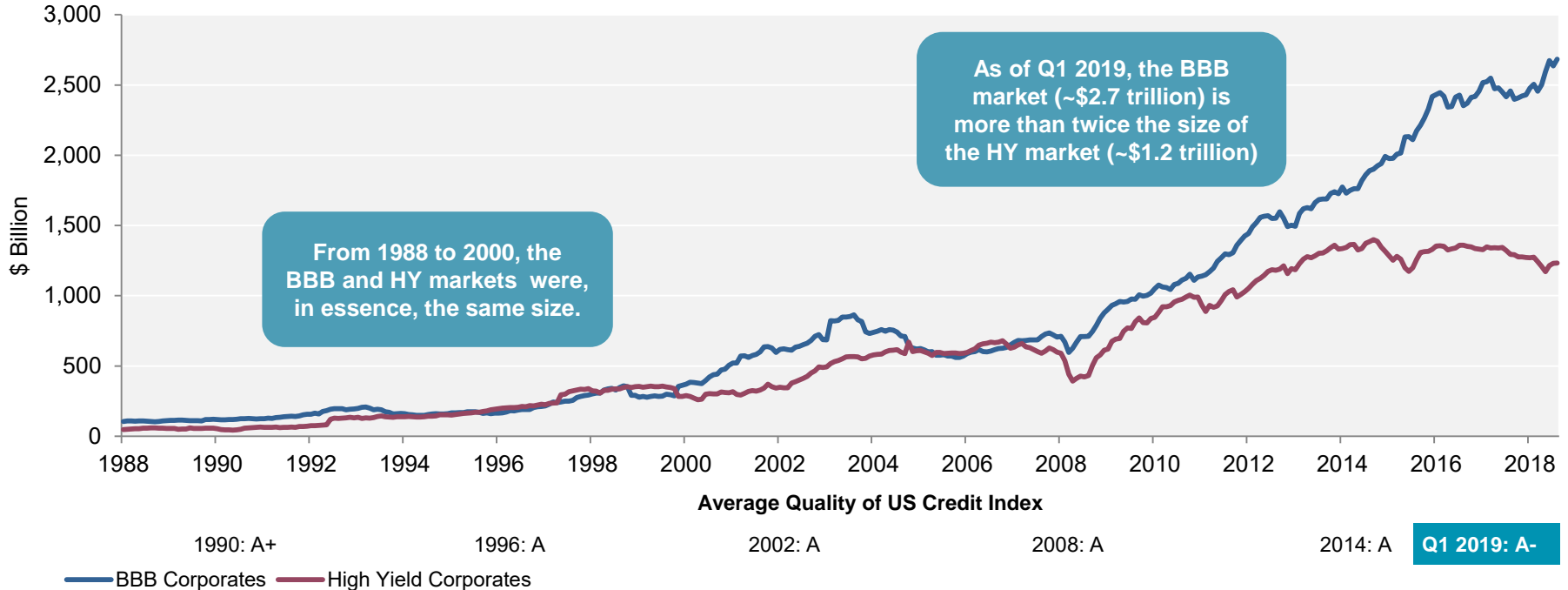
Total Assets on the Combined Balance Sheet of the Major Central Banks (\$ Trillion)



BBB Corporate bond market

BBB rated debt is now twice the size of the high yield market

BBB market size vs. high yield market size (\$billion)



Historically....1987 to 1st quarter 2019

Downgrade cycles have historically offered high yield buying opportunities

Scenario	Historical Fallen Angels/BBB Market	Projected Fallen Angels (\$mm)*	Projected Fallen Angels/HY Market*
Full Cycle	13%	356,918	29%
Recessionary Periods	24%	646,746	52%

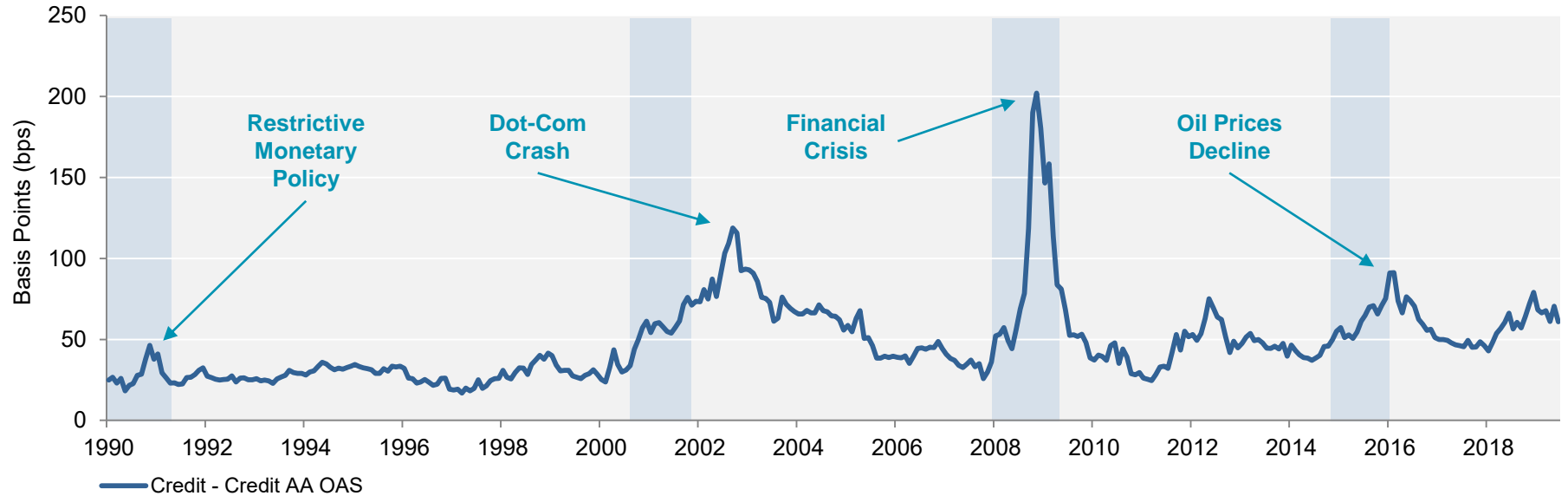
The high yield market could absorb ~ 52% of new bonds given the growth of the BBB market

Source: Moody's Investors Service, Inc. & Bloomberg Index Services Limited.

*Note : All projections utilize March 2019 data for BBB market size (~\$2.7 trillion) and HY market size (~\$1.2 trillion). Item referred to as "projections" were calculated by the investment team utilizing the historic percentages indicated above. See additional disclosure at the end of this document.

Decoupling of Credit Markets from Discount Rate

Credit market spread minus AA discount rate spread (basis points)



- In periods of stress/recession the broad credit market decouples from the liability discount rate
- Lower rated BBB bond spreads widen and underperform the AA discount rate.

Funded Status Impact

Impact to funded status from underperformance of BBB debt (no duration effect):

	No Change	Dot-Com Crash	Financial Crisis
Long Credit	1%	-9%	-18%
Conventional Benchmark (70% long credit & 30% treasuries)	1%	-5%	-8%
Up-in-quality Custom Liability Benchmark (50% long credit A+ & 50% treasuries)	0%	2%	1%



- Underperformance of BBB rated bonds can result in funded status deterioration.
- Up-in-quality custom liability benchmarks can provide stability in funded status.

BBB Stress Analysis

Do BBB companies have levers to pull in an economic downturn?

Bottom Up Analysis:

- Our analysis looked at ~35% of the BBB market. Our estimate of the debt outstanding for credits we believe to be at high risk of a downgrade to high yield under a High Stress Scenario is over \$215B vs. a BB market of approximately \$600B.

Conclusions:

- **Red companies** are those that have already reduced dividends and make minimal use of share repurchases.
- **Yellow companies** are paying stable or growing dividends.
- **Green companies** are those that have significant cash paid to shareholders through buybacks and dividends which gives them flexibility.
- For levers we **determined that dividends and share re-purchases were most relevant**. We considered capital expenditures, but believe that capex is critical to maintaining the earnings power of a business and cutting capex may lead to upfront cash costs that negate the initial cost savings.

BBB Stress Analysis

Ticker	Our 2020 Estimates				Stress Leverage		Amount of Levers	Leverage W/Levers Pulled		Lever Impact on Leverage	
	Revenue	EBITDA	Debt	Leverage	Low	High		Low	High	Percent	Vs. High Stress
GE	114,907	10,302	39,952	3.88x	5.57x	7.12x	367	5.52x	7.05x	1%	-0.07x
F	145,926	5,584	12,494	2.24x	3.84x	6.00x	1,358	3.43x	5.35x	11%	-0.65x
ABIBB	55,644	23,188	95,939	4.14x	4.60x	5.17x	2,002	4.50x	5.06x	2%	-0.11x
KHC	25,353	5,973	26,848	4.49x	4.99x	5.62x	976	4.81x	5.41x	4%	-0.20x
MYL	11,772	3,575	12,765	3.57x	3.97x	4.46x	414	3.84x	4.32x	3%	-0.14x
BDX	18,120	5,436	20,084	3.69x	4.10x	4.62x	443	4.01x	4.52x	2%	-0.10x
PAA	33,168	2,768	9,875	3.57x	4.62x	5.41x	704	4.29x	5.03x	7%	-0.39x
CVS	278,489	23,232	62,235	2.68x	2.98x	3.35x	1,302	2.91x	3.28x	2%	-0.07x
MDLZ	26,666	5,567	18,073	3.25x	3.72x	4.06x	2,842	3.13x	3.42x	16%	-0.64x
TRPCN	15,453	10,525	51,472	4.89x	5.43x	6.11x	1,088	5.32x	5.98x	2%	-0.13x
UTX	80,194	13,967	39,111	2.80x	3.24x	3.52x	1,685	3.10x	3.37x	4%	-0.15x
KMI	15,016	8,192	34,902	4.26x	4.78x	5.33x	1,589	4.56x	5.08x	5%	-0.24x
VZ	134,153	49,503	113,371	2.29x	2.54x	2.86x	5,110	2.43x	2.73x	5%	-0.13x
T	185,819	58,905	160,562	2.73x	3.03x	3.41x	7,618	2.88x	3.25x	5%	-0.16x
ABBV	46,994	23,923	88,260	3.69x	4.10x	4.61x	16,459	3.33x	3.75x	19%	-0.86x
AGN	15,159	7,316	22,054	3.01x	3.35x	3.77x	3,313	2.85x	3.20x	15%	-0.57x
MCD	21,705	11,444	34,748	3.04x	3.37x	3.80x	6,627	2.73x	3.07x	19%	-0.72x
EPD	34,009	7,841	29,010	3.70x	4.11x	4.63x	2,002	3.83x	4.31x	7%	-0.32x
CELG	17,217	9,866	20,751	2.10x	2.34x	2.63x	3,212	1.98x	2.22x	15%	-0.41x
UNP	24,706	12,290	30,112	2.45x	2.78x	3.06x	9,401	1.92x	2.11x	31%	-0.96x
AMGN	22,643	13,074	27,120	2.07x	2.30x	2.59x	11,953	1.29x	1.45x	44%	-1.14x
Total	1,323,113	312,471	949,737	3.04x							

Source: Allianz Global Investors Proprietary Credit Models and Consensus.

Low= 50% of the last case over the past ten years

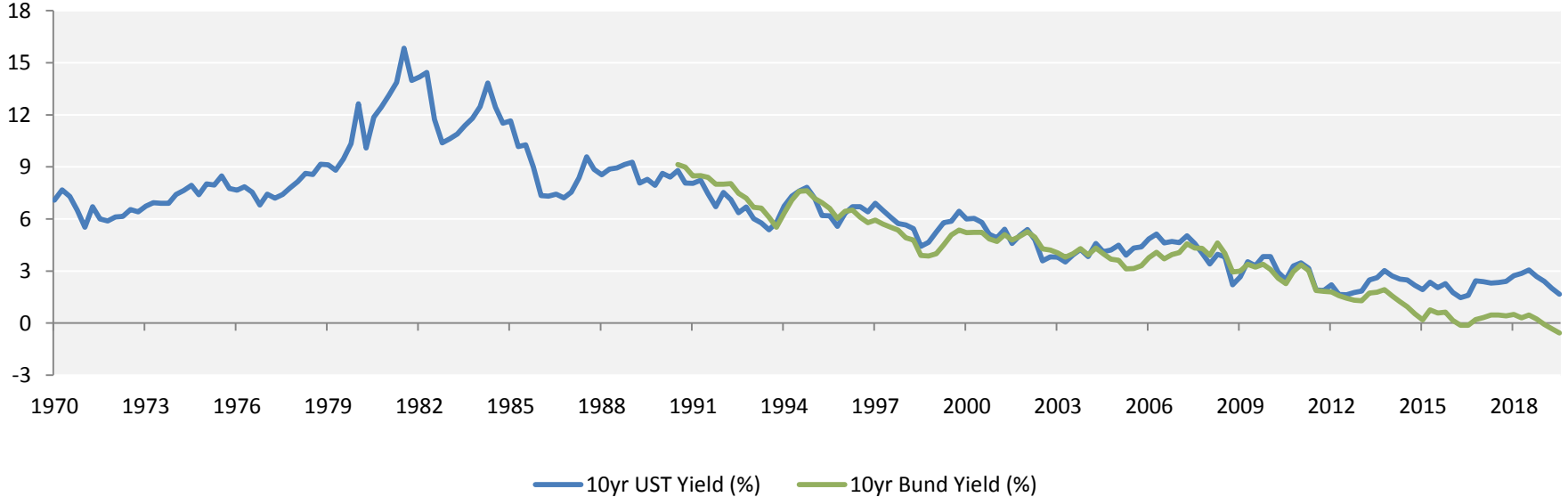
High Case = 150% of the worst case

In the absence of an EBITDA decline over the past ten years, a 10% - 20% EBITDA decline is modeled.

Levers pulled included reducing 50% of the dividend and 100% of buybacks and allocating the cash savings to debt reduction. AGN estimates are stand alone AGN, ABBV includes AGN due to the pending acquisition of AGN by ABBV.

Monetary Policy has driven down yields

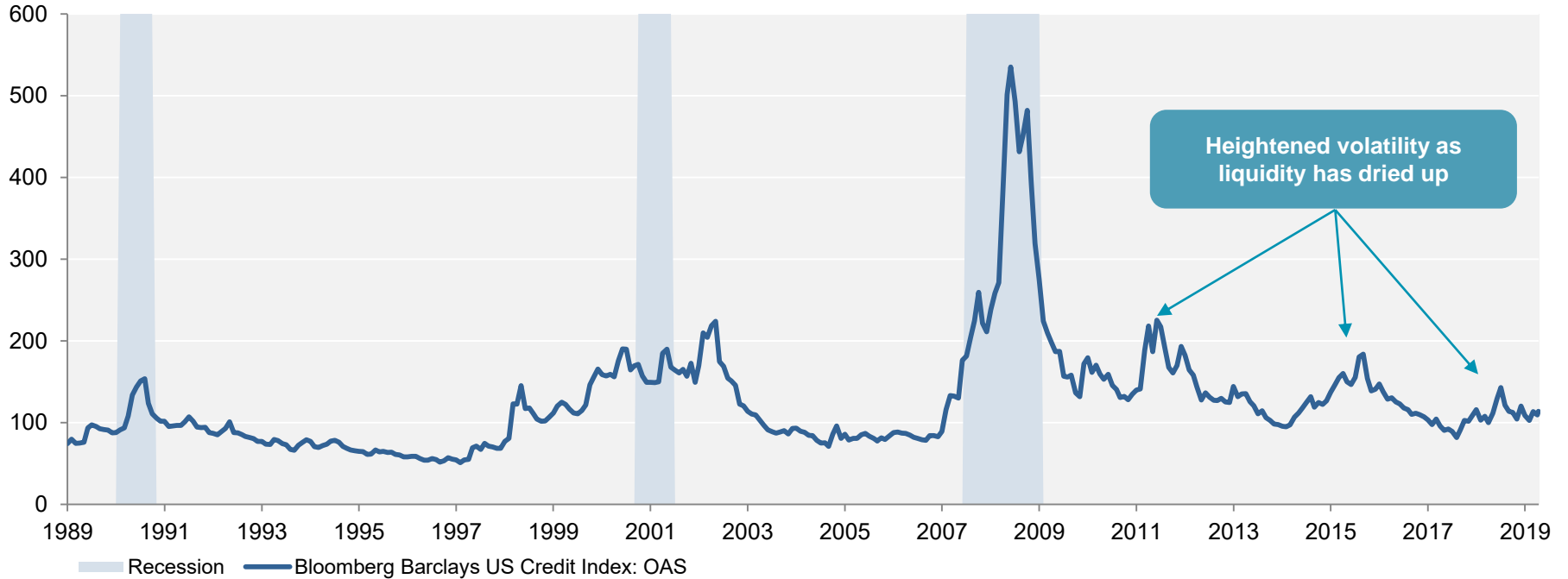
10 Year US Treasury Yield (%) and 10 Year Bund Yield (%)



- Central banks have created an opportunity for governments and corporations to lever up
- Accommodation has extended the business cycle

Corporate Debt Funding Costs

US Credit Index: Heightened Volatility when Liquidity Dries up



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