Corporate Credit’s Historic Tightening
Assessing the impact of COVID recovery tailwinds & Fed policy headwinds
Global Corporate & Investment Banking
Capital Markets Strategy Team

Tom Joyce
Managing Director
Capital Markets Strategist
New York, NY
Tom.Joyce@mufgsecurities.com
(212) 405-7472

Hailey Orr
Director
Capital Markets Strategist
New York, NY
Hailey.Orr@mufgsecurities.com
(212) 405-7429

Stephanie Kendal
Associate
Capital Markets Strategist
New York, NY
Stephanie.Kendal@mufgsecurities.com
(212) 405-7443
Assessing the Impact of COVID Recovery Tailwinds & Fed Policy Headwinds

I. Notable Themes in Corporate Credit
II. Credit Spreads & Yields at Historic Tights
III. Sector and Rating Analysis
IV. Fed Policy & Financial Conditions
V. Improving Fundamentals & Technicals
I. Notable Themes in Corporate Credit
“That men do not learn very much from the lessons of history is the most important of all the lessons of history.”

Aldous Huxley, English writer and philosopher, & author of *Brave New World* (1894 - 1963)
US Credit Markets > $50 Trillion

Corporate debt accounts for over $10 trillion of the $51 trillion in US fixed income markets

Total amount of US fixed income securities outstanding, USD tn

Notable Themes for Corporate Credit Spreads

1. USD corporate IG and HY spreads ended Q2 2021 at their tightest levels since before the global financial crisis, even as the Fed has shifted policy and interest rates have risen in 2021. IG and HY spreads are at their tightest levels since 2005 and 2007, respectively.

2. Fundamentals have improved rapidly as a reopening economy, strong corporate earnings, record fiscal stimulus, extraordinary Fed accommodation and historically low interest rates have suppressed the default cycle near term.

3. Technical demand for USD corporate credit and Treasuries has remained exceptionally strong given the dearth of strong yield-producing balance sheets in global markets.

4. With regulatory changes related to risk weight factors for life insurance companies expected by year end, insurance companies could significantly increase their demand for higher risk and longer duration corporate bonds.
Notable Themes for Corporate Credit Spreads

5. Recent spread tightening has thus far been largely unphased by inflation fears, rising rates (since January) and the recent Fed policy pivot.

While Fed accommodation (M2 money supply) peaked in February, US financial conditions remain close to their easiest levels on record. Sub investment grade bond yields have fallen below inflation for the first time on record, offering another sign of easy financial conditions.

6. Credit spreads and risk assets have historically performed well during high growth Fed tightening cycles, so long as the policy pivot is orderly and well communicated.

7. Historically, HY spreads have generally outperformed IG in tightening cycles, though both can perform well. A reopening economy, lower default rates and valuations that are perhaps not quite as high as IG all favor HY outperformance into the 2H of 2021.
Notable Themes for Corporate Credit Spreads

9. High valuations, a hawkish Fed and potential rate volatility all represent key risks for spread performance into late 2021 and early 2022, with spread widening risk marginally higher for IG than HY at the current moment.

10. The historic tightening of credit spreads through the recovery has also been broad-based with 12 of 19 industry sectors now at record tights.

11. Across the ratings spectrum, credit market outperformance in this historic tightening has come from the longer end of the curve and lower rated indices as investors seek to maximize yield (BBB within IG, CCC within HY).

12. While spread compression across the ratings spectrum has been stronger than historical averages, BBB-BB differentials remain closer to historical medians given the prominence of certain pandemic related sectors in the BB segment (leisure, transportation, real estate).
Who Owns Corporate Credit?

Foreign investors, life insurance companies and mutual funds have sharply increased their holdings of corporate bonds since 2007. Looking ahead, regulatory changes related to risk weight factors for life insurance companies expected by year-end could dramatically increase the demand for higher risk and longer duration US corporate bonds. Currently, life insurance companies own $3.2 trillion of IG bonds, or one third of the index, and $240 bn of HY bonds, a new record (up from $195 bn in 2020).

<table>
<thead>
<tr>
<th>Holders of Corporate Bonds</th>
<th>Amount ($bn)</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life, Property &amp; Casualty Insurance Companies</td>
<td>$4.0 tn</td>
<td>26%</td>
</tr>
<tr>
<td>Mutual Funds</td>
<td>$2.6 tn</td>
<td>17%</td>
</tr>
<tr>
<td>Private Pension Funds</td>
<td>$991 bn</td>
<td>6%</td>
</tr>
<tr>
<td>US Banks</td>
<td>$625 bn</td>
<td>4%</td>
</tr>
<tr>
<td>ETFs</td>
<td>$731 bn</td>
<td>5%</td>
</tr>
<tr>
<td>Public Retirement Funds</td>
<td>$458 bn</td>
<td>3%</td>
</tr>
<tr>
<td>Households &amp; Misc.</td>
<td>$1.1 tn</td>
<td>7%</td>
</tr>
<tr>
<td>Other</td>
<td>$843 bn</td>
<td>5%</td>
</tr>
<tr>
<td>Rest of the World</td>
<td>$4.2 tn</td>
<td>27%</td>
</tr>
</tbody>
</table>

Source: (1) Credit Sights (Lyons). Federal Reserve Z tables. Insurance companies includes life, property & casualty insurance. Households & misc. includes hedge funds and non-profits. Other includes closed-end funds, money market funds and other holders. Public retirement funds includes federal, state and local retirement funds.
II. Credit Spreads & Yields at Historic Tights
“When growth is slower than expected, stocks go down. When inflation is higher than expected, bonds go down. When inflation is lower than expected, bonds go up.”

Ray Dalio, Co-Chief Investment Officer, Bridgewater Associates
Corporate Credit Spreads at Post GFC Tights

US dollar IG and HY spreads tightened to 86 and 303 bps at the end of the second quarter, their lowest levels since 2005 and 2007, respectively. While the recent Fed policy pivot could have introduced volatility to the detriment of HY spreads, investors have instead expressed confidence in the ability of the Fed to derail a rise in inflation that could curtail the recovery.

USD credit spreads have tightened in 13 of the 15 months since the wides of COVID related weakness in March 2020.

Corporate Bond Yields Near Historic Lows

USD corporate bond yields have declined in 2021, even as rates have risen.

Record Low Yield

IG yield: 2.06%
IG OAS: 86 bps
Implied treasury: 1.20%

Source: (1) CreditSights. FRED. Data as of June 30, 2021.
# Key Drivers of Historic Spread Tightening

With US interest rates near multi-century lows, and corporate credit spreads at their lowest levels since before the financial crisis, the cost of debt financing for corporates has declined to historic lows.

## Key drivers of this historic credit spread tightening

1. Robust US economic, corporate earnings and credit quality recovery
2. Investor confidence in Fed’s ability to curtail inflation
3. Strong historic performance of HY credit spreads in high growth Fed tightening cycles
4. US financial conditions near easiest levels on record (despite peak in Fed accommodation (M2 money supply) in February)
5. Extraordinary technical demand for yield-producing assets amidst historic global policy accommodation
6. Sharp rise in oil prices supporting energy related sectors
Credit Spreads Trading in a Narrow Range

Year to date, USD investment grade spreads have traded in range of only 17 bps, their tightest trading range since 2007. High yield spreads have also traded in a narrow range of just 90 bps.

III. Sector and Rating Analysis
“Both from the standpoint of stocks and bonds, an investor wants to go where the growth is.”

Bill Gross, nicknamed the “Bond King,” & Co-Founder of PIMCO
Higher Oil Prices Driving HY Markets Tighter

Higher oil prices have played an important role in the sharp tightening in high yield markets over the last year.

Source: (1) Bloomberg. Data as of June 30, 2021. (2-3) FRED. Index is ICE BAML. Data as of June 30, 2021.
Broad-Based Sector Tightening

The tightening of USD corporate credit markets during the COVID recovery has been broad-based across sectors. 12 of the 19 sectors tracked by ICE BofA are currently trading at post financial crisis lows, with several additional sectors (consumer goods, tech, transportation and utilities) trading within several basis points of post crisis tights.

![YTD performance by IG sector, bps]

Source: (1) IFR. YTD change as of June 29, 2021.
Lower Rated Credits Outperforming

Across the ratings spectrum, credit market outperformance has come from the longer end of the curve and lower rated indices as investors seek to maximize yield (BBB within IG, CCC within HY)

Source: (1-2) FRED. Data as of June 30, 2021.
Relative Value Assessment by Rating

According to CreditSights, BB spreads are currently particularly attractive for investors across multiple dimensions, including their lower duration and trading levels vis-à-vis historical trading averages.

Source: (1-2) CreditSights, FRED. Data as of June 30, 2021.
Spread Compression Across the Ratings Spectrum

While spread compression across the ratings spectrum has been stronger than historical averages, BBB-BB differentials remain closer to historical medians than other rating differentials given the prominence of certain pandemic related sectors in the BB segment (leisure, transportation, real estate).

**Source:** (1-4) CreditSights. FRED. Data as of June 30, 2021.
Historically Low Yields Across the Ratings Spectrum

Source: (1-8) FRED. Data as of June 30, 2021.

Corporate Credit’s Historic Tightening / JUL 2021 / page 24
IV. Fed Policy & Financial Conditions
“With the Fed having switched its approach on monetary policy to being dependent on outcomes in economic data rather than the traditional forecast-based approach, it is likely to be very late in adjusting strategy should its transitory inflation call not materialize. A late slamming of the brakes, rather than an earlier easing off the accelerator, would significantly increase the risk of an unnecessary economic recession.”

Mohamed El-Erian, President of Queens College, Cambridge and advisor to Allianz and Gramercy (in the FT on June 30, 2021)
Financial Conditions Still Accommodative

While we have past peak Fed policy accommodation, as evidenced by the peak in M2 money supply in February, US financial conditions remain close to their easiest levels on record.

Source: (1-2) Bloomberg. Data as of June 30, 2021. Financial conditions index is Goldman Sachs FCI.
HY Bonds Signaling Easy Financial Conditions

Ahead of the Fed’s hawkish pivot at the June FOMC meeting, sub-investment grade bond yields fell below inflation for the first time on record, a sign of exceptionally easy financial conditions.

Source: (1) Bloomberg. Data as of June 30, 2021. US high yield effective yield is yield to maturity.
Credit’s Performance in Fed Tightening Cycles

Historically, HY spreads have generally outperformed IG in tightening cycles, though both can perform well. A reopening economy, lower default rates and valuations that are perhaps not quite as high as IG all favor HY outperformance into the 2H of 2021.

<table>
<thead>
<tr>
<th>Year</th>
<th>Change in IG OAS 12 months after Fed tightening</th>
<th>Change in HY OAS 12 months after Fed tightening</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>(-13 bps)</td>
<td>(-0.5 bps)</td>
</tr>
<tr>
<td>1999</td>
<td>59 bps</td>
<td>135 bps</td>
</tr>
<tr>
<td>2004</td>
<td>(-13 bps)</td>
<td>(-38 bps)</td>
</tr>
<tr>
<td>2015</td>
<td>(-37 bps)</td>
<td>(-249 bps)</td>
</tr>
</tbody>
</table>

Sustainability of Tighter Credit Spreads

A closer look at average HY spreads on a quarterly basis helps to smooth out the month-to-month volatility in markets, and lends credence to the notion that spreads can remain sustainably tight during policy transitions.

USD HY OAS quarterly averages, bps

Average: 509 bps

Source: (1) FRED. Indices are ICE BofA effective yields. Data as of June 30, 2021. CreditSights.
The Monetary & Fiscal Policy Conundrum

Excess Monetary & Fiscal Policy
- COVID relief
- Running economy “hot”
- Redefining infrastructure (tech, care, green)

Recession
- Tightening financial conditions
- Asset price volatility
- Credit default cycle turns
- Transmission to real economy (confidence, spending, jobs)

Central Bank Response
- Verbal tightening signals
- Tapering asset purchases
- Raising interest rates
- Increasing reserve requirements

Asset Price Distortions
- Risk assets (oil, equity, HY)
- Alternative assets (crypto, SPACs)
- Supply chain disruptions
- TINA / FOMO

Above Trend GDP Growth
- Strongest growth in 40 years
- Re-engaged consumer
- Accelerating business investment
- Labor market shortages

Rising Inflation
- Durable goods
- Commodities / transportation
- Housing & wages

Corporate Credit’s Historic Tightening / JUL 2021 / page 31
Tightening Cycles Pose Risks for Markets

Monetary policy tightening and credit cycle turns have accounted for nearly half of G7 recessions since 1960. While recession risk remains low near term, policy risk nonetheless remains high, with potentially adverse economic and market consequences at a time when risk asset-valuations are already at late cycle levels.

Factors contributing to 46 recessions in G7 economies since 1960

- Tight monetary policy: 29
- Burst credit bubble: 19
- Oil price shock: 13
- Burst housing bubble: 13
- Banking crisis: 11
- Tight fiscal policy: 10
- External demand shock: 9
- Exchange rate shock: 8

Source: (1) WSJ. Capital Economics. Factors contributing to 46 recessions in G7 economies since 1960. Bars will not sum to 46 due to multiple factors for specific recessions.
V. Improving Fundamentals & Technicals
“Capital does not leave the market, rather, it just finds another place to go.”

Mike Wilson, Chief US Equity Strategist, Morgan Stanley
Improving Fundamentals: Default Rates Declining

The reopening of the US economy, combined with extraordinary fiscal and monetary stimulus, drove the global and US 12 month trailing default rate down to 4.9% and 5.5% in May. Looking ahead, Moody's expects default rates to fall below 2% by year end if the economic recovery continues and funding conditions remain benign.

Marginal Impact of Record New Issue Supply

HY bond issuance had its strongest first half ever in 2021, while IG bond issuance was the second busiest on record. Record first half issuance levels, however, have not been a meaningful technical headwind for credit spreads, which continued to grind tighter throughout the quarter.

Source: (1-2) MUFG DCM. New issuance data through June 30, 2021.
Extraordinary Global Demand for Fixed Income

In examining the largest 500 global asset managers and the Financial Stability Board’s universe of developed market economies, there are over $200 trillion of global funds identifiable and theoretically available for investment in global fixed income markets.

Limited Supply of Strong Yield-Producing Balance Sheets

Global government and corporate negative yielding debt outstanding is now $13 trillion, down from its December 2020 high of over $18 trillion. Against this backdrop, investors in 2021 continue to move out along duration and credit spectrums in a search for yield.

Global rate curves

<table>
<thead>
<tr>
<th>Benchmark policy rate</th>
<th>1 yr</th>
<th>2 yr</th>
<th>5 yr</th>
<th>10 yr</th>
<th>15 yr</th>
<th>20 yr</th>
<th>30 yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switzerland (-0.75%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(-0.27%)</td>
</tr>
<tr>
<td>Germany (-0.50%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(-0.20%)</td>
</tr>
<tr>
<td>Netherlands (-0.50%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(-0.09%)</td>
</tr>
<tr>
<td>Finland (-0.50%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(-0.07%)</td>
</tr>
<tr>
<td>Austria (-0.50%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(-0.001%)</td>
</tr>
<tr>
<td>Japan (-0.10%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.05%</td>
<td></td>
</tr>
<tr>
<td>Denmark (-0.50%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.06%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belgium (-0.50%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.11%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>France (-0.50%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.13%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ireland (-0.50%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.16%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sweden 0.00%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.31%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spain (-0.50%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.43%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UK 0.10%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.72%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Italy (-0.50%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.83%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>US 0.25%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.45%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: (1) Bloomberg. Data as of June 30, 2021. US benchmark is upper bound. ECB is deposit facility rate. Switzerland is sight deposit rate. Denmark is certificates of deposit rate.
About the Authors

**Tom Joyce**
Managing Director
Capital Markets Strategist
New York, NY

Tom.Joyce@mufgsecurities.com
(212) 405-7472

Tom Joyce is a Managing Director and Capital Markets Strategist within MUFG’s global capital markets and investment banking business. Based in New York, Tom heads a team that creates customized analytical content for multi-national US corporates and Fortune 500 companies. His team provides in-depth analysis on the impact of economic, political, public policy and regulatory dynamics on the US credit, foreign exchange, rates and commodities markets.

Tom has over 25 years of Investment Banking experience in New York, London, Hong Kong, and San Francisco. Over the last 15 years, Tom created and built the Capital Markets Strategy role, advising corporate C-Suite executives (Boards, CEOs, CFOs, and Treasurers) on the pervasive macro forces driving markets. Tom also presents at dozens of corporate events each year including Board meetings, CEO ExCo sessions, CFO and Treasury off-sites, corporate leadership events and conferences.

Tom’s educational background includes a year of study at Oxford University from 1991 - 1992, a Bachelor of Arts in Political Science from Holy Cross College in 1993, and a MBA from Kellogg Business School, Northwestern University in 2000.

Tom resides in New Canaan, CT with his wife and four sons, where he coaches youth basketball and serves on the Board of Trustees of the New Canaan Library, as well as the Board of the New Canaan Football (Soccer) Club.
About the Authors

**Hailey Orr**
Director
Capital Markets Strategist
New York, NY
Hailey.Orr@mufgsecurities.com
(212) 405-7429

Hailey Orr is a Director in MUFG’s Capital Markets Strategy group within the global capital markets and investment banking business. The team provides market based content for corporate clients to assist in strategic decision making. Focus areas include the impact of economic, political, public policy and regulatory dynamics on the US credit, foreign exchange, rates and commodities markets.

Hailey has a decade of Wall Street experience, including three years as a Consumer Sector Specialist in Equity Sales and seven years as a Capital Markets Strategist. Hailey is also a member of MUFG’s Inclusion & Diversity Council and has devoted years to participating in and developing Wall Street recruiting programs.

Hailey graduated with honors from the University of Michigan’s Ross School of Business with a BBA and a minor in International Studies.

In March 2020, Crain’s New York Business Magazine named Hailey one of the “Rising Stars in Banking and Finance”.

**Stephanie Kendal**
Associate
Capital Markets Strategist
New York, NY
Stephanie.Kendal@mufgsecurities.com
(212) 405-7443

Stephanie Kendal is an associate in MUFG’s Capital Markets Strategy group within the global capital markets and investment banking business. The team provides market based content for corporate clients to assist in strategic decision making. Focus areas include the impact of economic, political, public policy and regulatory dynamics on the US credit, foreign exchange, rates and commodities markets.

Stephanie has spent over three years as a Capital Markets Strategist. At her prior firm, Stephanie was a part of the Americas Women’s Network Junior Council and was an active member of the University of Michigan recruiting team.

Stephanie graduated with honors from the University of Michigan’s Ross School of Business with a BBA.
MUFG’s Capital Markets Strategy Team

The MUFG Capital Markets Strategy team provides monthly publications and weekly policy notes, presenting to Boards and C-Suite executives, on a broad range of transformative themes driving the FX, rates and credit markets including: the COVID-19 recovery, ESG’s acceleration, tax code policy changes, US-China decoupling, corporate strategy, geopolitical risk and central bank monetary policy.
The information herein provided is for information purposes only, and is not to be used or considered as investment research, a proposal or the solicitation of an offer to sell or to buy or subscribe for securities or other financial instruments. Neither this nor any other communication prepared by MUFG Bank, Ltd. (“MUFG Bank”), MUFG Union Bank, N.A., MUFG Securities Americas Inc. (“MUFG Securities”), or other MUFG Group Company (collectively, “MUFG”) is or should be construed as investment advice, a recommendation or proposal to enter into a particular transaction or pursue a particular strategy, or any statement as to the likelihood that a particular transaction or strategy will be effective in light of your business objectives or operations. Before entering into any particular transaction, you are advised to obtain such independent financial, legal, accounting and other advice as may be appropriate under the circumstances. In any event, any decision to enter into a transaction will be yours alone, not based on information prepared or provided by MUFG. MUFG hereby disclaims any responsibility to you concerning the characterization or identification of terms, conditions, and legal or accounting or other issues or risks that may arise in connection with any particular transaction or business strategy. MUFG is not acting and does not purport to act in any way as an advisor or in a fiduciary capacity.

Certain information contained in this presentation has been obtained or derived from third party sources and such information is believed to be correct and reliable but has not been independently verified. While MUFG believes that factual statements herein and any assumptions on which information herein are based, are in each case accurate, MUFG makes no representation or warranty regarding such accuracy and shall not be responsible for any inaccuracy in such statements or assumptions. Note that MUFG may have issued, and may in the future issue, other reports that are inconsistent with or that reach conclusions different from the information set forth herein. Such other reports, if any, reflect the different assumptions, views and/or analytical methods of the analysts who prepared them, and MUFG is under no obligation to ensure that such other reports are brought to your attention. Furthermore, the information may not be current due to, among other things, changes in the financial markets or economic environment and MUFG has no obligation to update any such information contained in this presentation. This presentation is not intended to forecast or predict future events. Past performance is not a guarantee or indication of future results. Any prices provided herein (other than those identified as being historical) are indicative only and do not represent firm quotes as to either price or size.

This presentation is proprietary to MUFG Securities and may not be quoted, circulated or otherwise referred to without our prior written consent. Notwithstanding this, MUFG Securities shall not be liable in any manner whatsoever for any consequences or loss (including but not limited to any direct, indirect or consequential loss, loss of profits and damages) arising from any reliance on or usage of this presentation and accepts no legal responsibility to any investor who directly or indirectly receives this material.

IRS Circular 230 Disclosure: MUFG Securities does not provide tax advice. Accordingly, any discussion of U.S. tax matters included herein (including any attachments) is not intended or written to be used, and cannot be used, in connection with the promotion, marketing or recommendation by anyone not affiliated with MUFG Securities of any of the matters addressed herein or for the purpose of avoiding U.S. tax-related penalties.

The MUFG logo and name is a service mark of Mitsubishi UFJ Financial Group, Inc., and may be used by it or other Group companies for branding or marketing purposes. Group companies include MUFG Bank, MUFG Americas Capital Leasing & Finance, LLC, Mitsubishi UFJ Trust and Banking Corporation, MUFG Securities Americas Inc., and MUFG Union Bank, N.A. (“MUB”). Corporate or commercial lending or deposit activities are performed by banking affiliates of MUFG, including, in the United States, MUFG Bank and MUB.

FLOEST™ is a service mark of MUFG Securities Americas Inc.

© 2021 Mitsubishi UFJ Financial Group Inc. All rights reserved.