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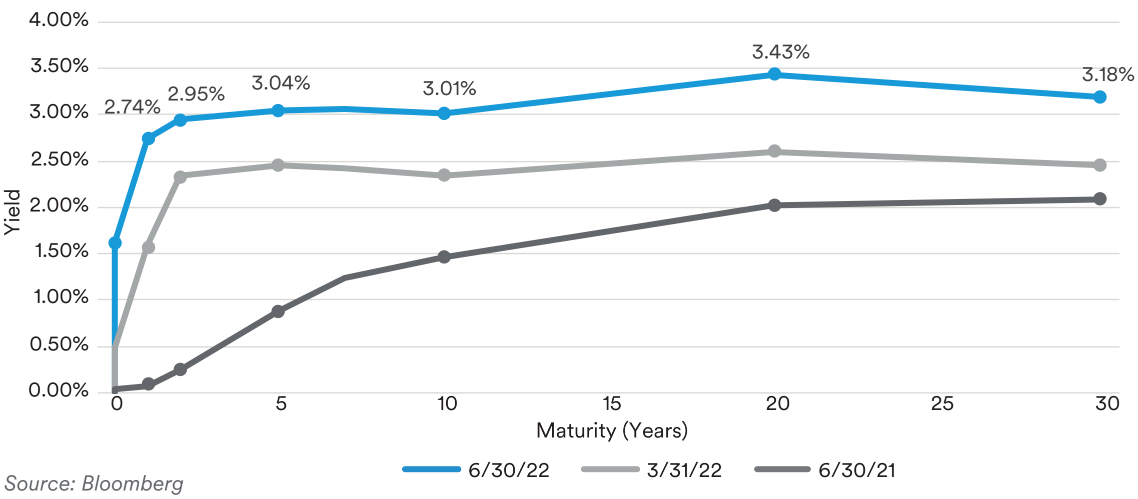
Investment Grade Corporate

Market Review and Outlook

June 30, 2022

During the second quarter of the year, volatility and uncertainty was a persistent theme. Inflation remained elevated, with the year-over-year CPI figure reaching a high of 8.6% in May. As companies witnessed deteriorating margins and consumer sentiment reached an all-time low, the Federal Reserve continued to emphasize its hawkish stance. With the goal of curtailing inflation and achieving price stability, the Fed raised their target rate 50 basis points in May and an additional 75 basis during the June FOMC meeting. The 10-year Treasury yield started the quarter at 2.34%, reached a high of 3.47% prior to the June meeting, then rallied to end the month at 3.01%. The MOVE index, a measure of interest rate volatility, reached highs not seen since 2009. Overall, the Treasury curve shifted upwards across all maturities and led by the front end, with 3-month and 2-year Treasuries rising 114 and 62 basis points, respectively. The 5s/10s and 20s/30s curves ended the quarter inverted three and 26 basis points.[1]

Figure 1 | US Treasury Curve



Source: Bloomberg

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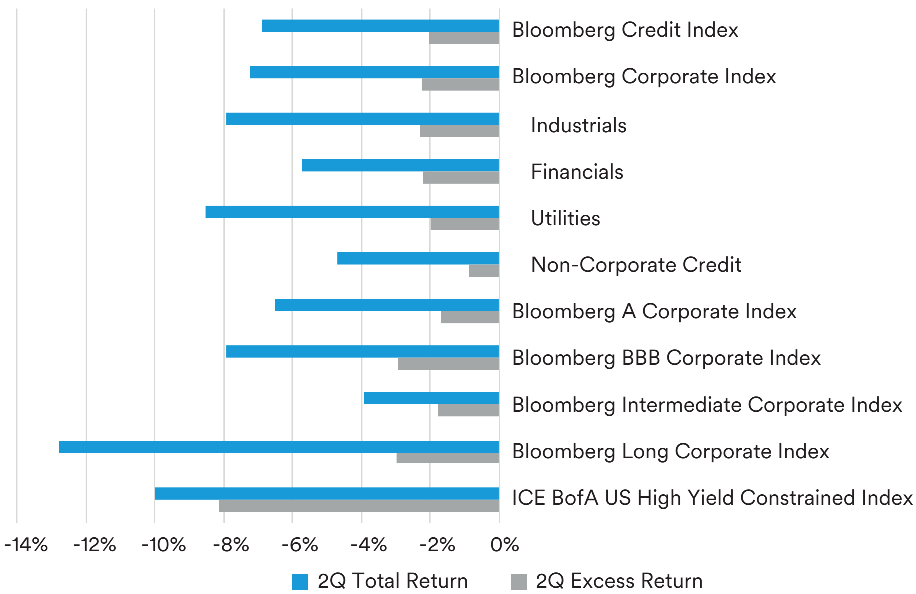
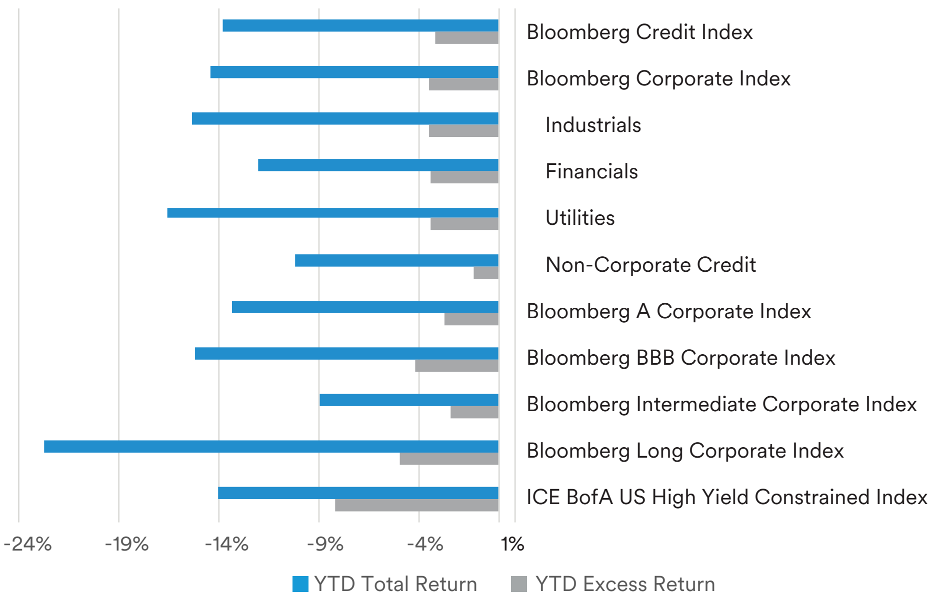
Credit markets were not immune to the macro volatility. Spreads widened substantially from 108 basis points at the beginning of the quarter to 143 at the end; although, the widening did not occur in a linear fashion. As shown in Figures 2 and 3, with spreads wider and yields higher, the Bloomberg US Credit Index posted a negative total return for the quarter, lagging similar duration Treasuries. Excess returns were negative across all sectors and maturities. Short and intermediate corporates outperformed their longer-dated counterparts. Looking at quality, BBBs underperformed higher quality AAAs, AAs, and As again this quarter. Non-corporate credit continued to outperform corporate credit, despite weakness in Sovereign debt. Within the corporate credit subsectors, Other Industrials and Construction Machinery relatively outperformed as these lower beta sectors fared better in market volatility. Essential Non-Cyclical Sectors also relatively outperformed, led by Consumer Products and Pharmaceuticals. Tobacco heavily underperformed as a series of regulations from the FDA continued to weigh on the sector. Gaming and Home Construction within Consumer Cyclicals were among the worst performing sectors as consumers slowed their consumption amidst rising prices.[2]

Figure 2 | 2nd Quarter and Year to Date Corporate Returns





Source: Bloomberg

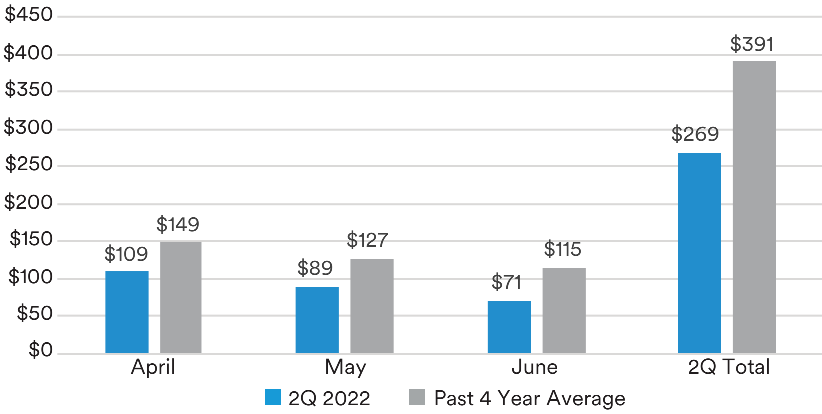
Figure 3 | High Grade Snapshot

	Sector	OAS TSY	QTD OAS Δ	QTD YTW Δ	QTD Total Return	QTD Excess Return
Top 5 Sectors	**US Credit Index**	**144**	**37**	**1.05%**	**-6.90%**	**-2.05%**
	Other Industrial	130	10	0.82%	-10.75%	-0.14%
	Construction Machinery	70	20	0.87%	-4.05%	-0.80%
	Consumer Products	105	34	0.95%	-5.87%	-1.52%
	Pharmaceuticals	117	26	0.97%	-7.58%	-1.60%
	Retailers	111	26	0.98%	-7.26%	-1.66%
Bottom 5 Sectors	Paper	212	63	1.30%	-8.13%	-3.51%
	Office REITS	197	69	1.36%	-7.39%	-3.65%
	Home Construction	221	83	1.51%	-6.34%	-3.81%
	Tobacco	250	70	1.36%	-9.86%	-4.57%
	Gaming	436	181	0.89%	-9.37%	-7.15%
Quality	A	126	32	1.04%	-6.56%	-1.74%
	Baa	193	53	1.20%	-7.80%	-2.87%

Source: Bloomberg

Looking at issuance in Figure 4, High Grade bond supply for the quarter was $269 billion. This was 23% lower than the second quarter of 2021 and 31% lower than the past four-year average.[3]

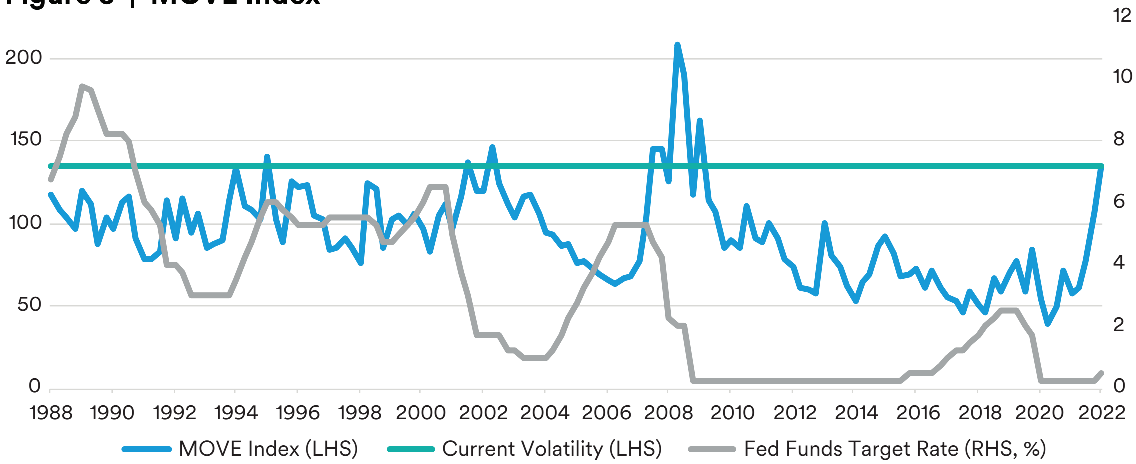
Figure 4 | High Grade Issuance



Source: JP Morgan

Investment grade corporate spreads, at 155 basis points, are 62 basis points wider than the beginning of the year. The Federal Reserve has chosen an aggressive path for the headline rate that has driven volatility, as measured by the MOVE index (Figure 5), significantly higher across all asset classes, but particularly fixed income which is has exhibited more volatility than since the Great Financial Crisis (GFC).[4]

Figure 5 | MOVE Index

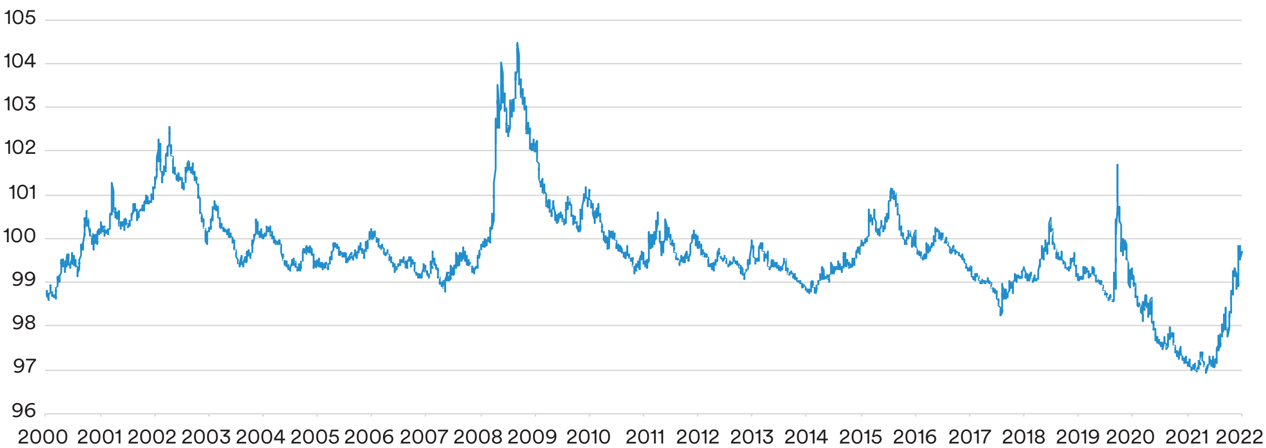


Source: Bloomberg

The Fed has also chosen to look at backwards and lagging data in their decision making, which will likely keep the voting members on a hawkish trajectory. The last minute and reactionary decision in the June meeting to go 75 basis points will only serve to increase market volatility around key data releases as market participants attempt to parse every piece of news in an attempt to divine how the FOMC will interpret it. Hardly an environment for stability and a critical policy mistake by Powell and team in our opinion. The market, however, may have other plans. Broad economic data has accelerated its descent faster than most have expected and is beginning to reprice the Fed. The July meeting, a lock for a 75 basis point increase just a few weeks ago, is now trending towards 50 basis points based on market pricing. Rates, as measured by the 10-year Treasury, have declined by over 60 basis points toward the end of the quarter after having come close to 3.5% only 2 weeks ago. Data such as retail sales, initial claims, regional manufacturing surveys, and inflation have softened and are picking up speed to the downside. Should the Fed raise 50 basis points in July and signal "normal" data dependent 25 basis point hikes after that, we would not be surprised to see a rather aggressive risk rally.[5]

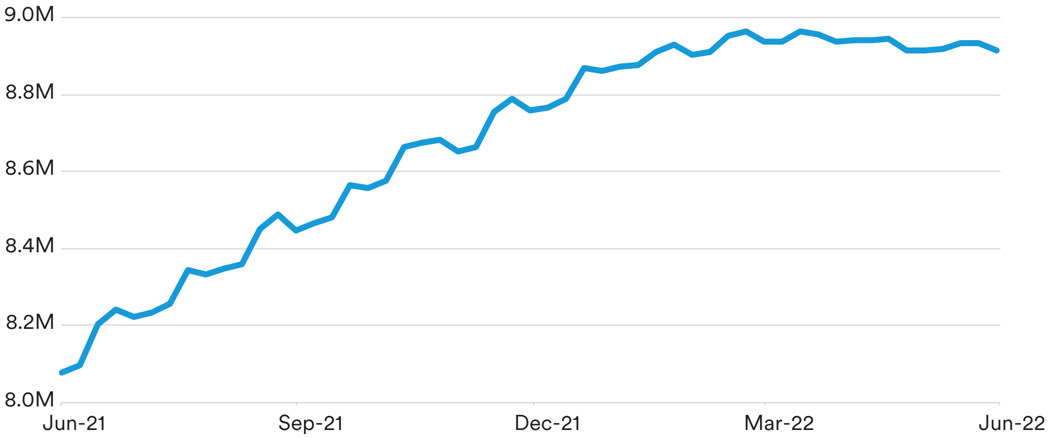
Additionally, the draining of liquidity via quantitative tightening will likely only further increase volatility. Financial conditions have already increased faster than in the past 2+ decades outside of the GFC and the COVID-19 Pandemic, and the balance sheet reduction has barely begun.

Figure 6 | US Financial Conditions Index



Source: Bloomberg

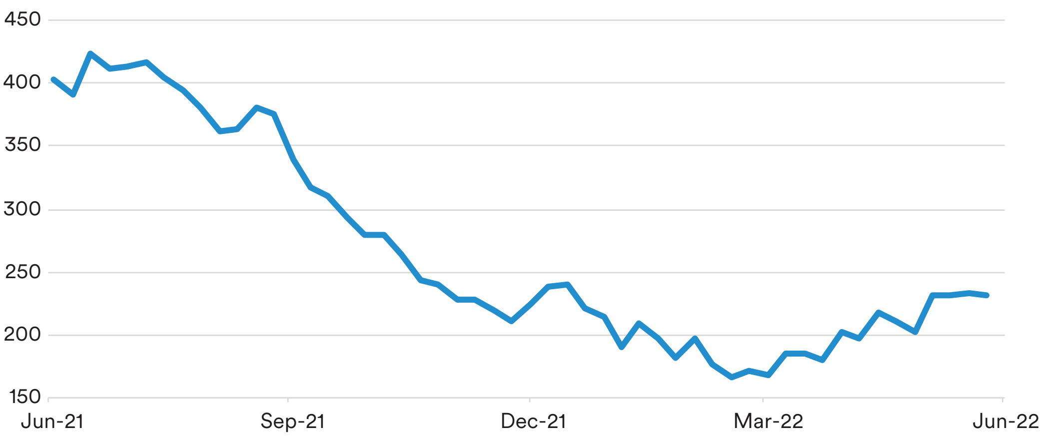
Figure 7 | US Condition of all Federal Reserve Banks Total Assets



Source: Bloomberg

It will also be important to factor in unemployment and the Fed's dual mandate going forward. Jobless claims, as shown in Figure 8, is a leading indicator and has started to gradually uptick over the quarter.

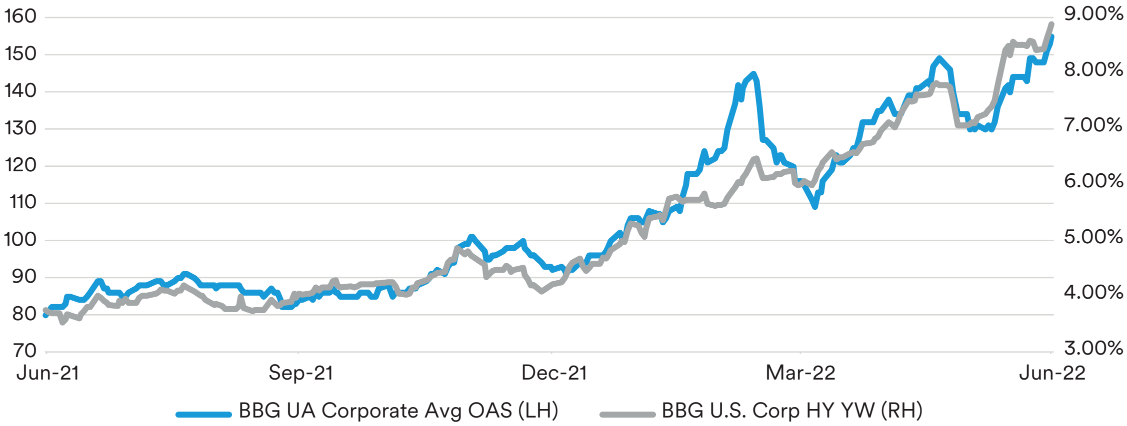
Figure 8 | Initial Jobless Claims



Source: Bloomberg

Already this year the corporate index OAS has gapped wider only to recover to higher lows twice and is currently on its third bout of widening to wider wides. We see no reprieve from this pattern in the intermediate term. Absent a recession, the chances of which are quite high, we would expect spreads to range between +125 and +175 OAS in this volatile pattern. Depending on the depth of the impending recession, spreads could approach +200 OAS or wider. U.S. High Yield has exhibited a similar patten and is closing in on a 9% yield.

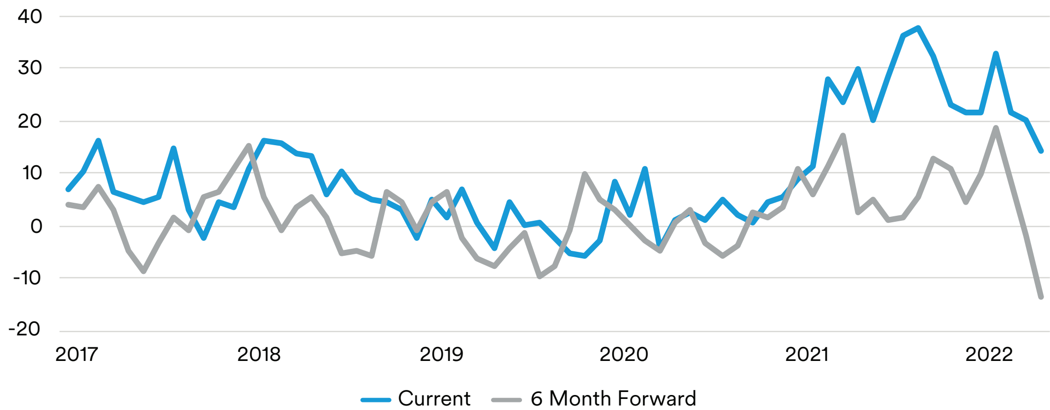
Figure 9 | US Corporate Option Adjusted Spread versus High Yield Yield to Worst



Source: Bloomberg

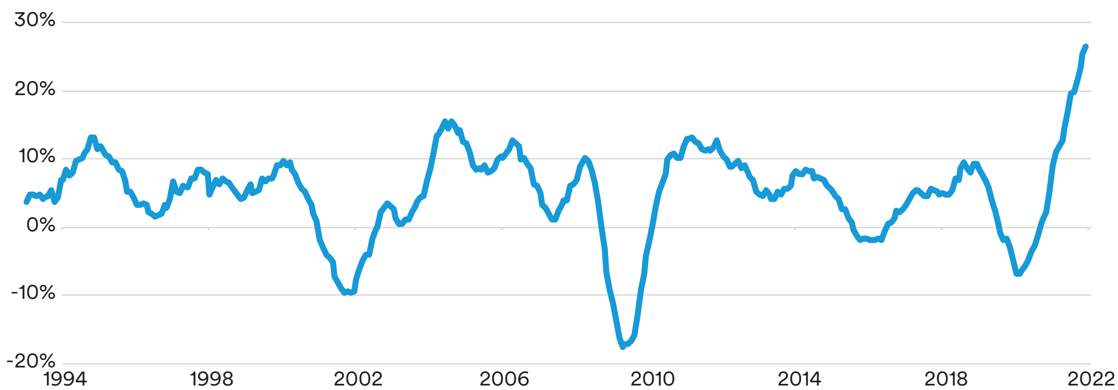
Corporate credit metrics are deteriorating. Although coverage ratios and corporate balance sheets are still relatively healthy, leverage is beginning to tick higher and we feel coverage ratios will decline with the increase in interest costs. The recent high profile profit warnings from major retailers are likely just the start of a more insidious pattern we expect to hear about with the round of second quarter earnings releases. In fact, as shown in Figures 10 and 11, supply chains are easing, and inventory is building.

Figure 10 | Manufacturing Delivery Time



Source: Bloomberg

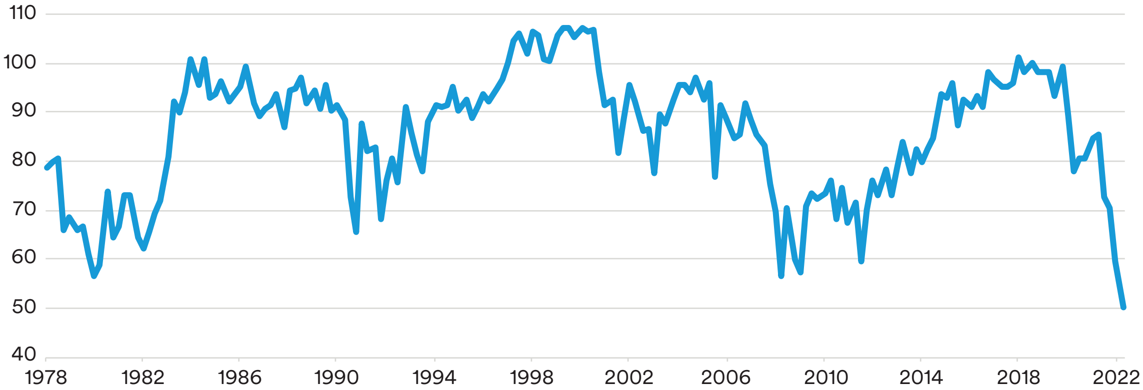
Figure 11 | Merchant Wholesale Inventories



Source: Bloomberg

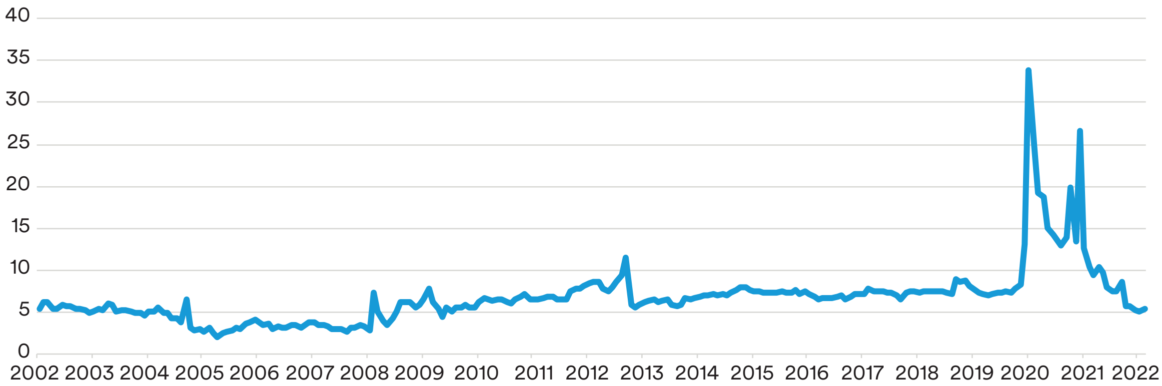
Additionally, the inflationary environment has caused consumers to increase borrowing to maintain their consumption and living standards. As demonstrated in Figures 12-14, higher prices for gas, food, and housing are taking their toll on consumers and savings cushions have been significantly reduced, especially for those in lower income brackets who are more apt to live paycheck to paycheck. Consumer sentiment is the lowest ever and US home sales are plunging as borrowing rates have spiked.

Figure 12 | University of Michigan Consumer Sentiment



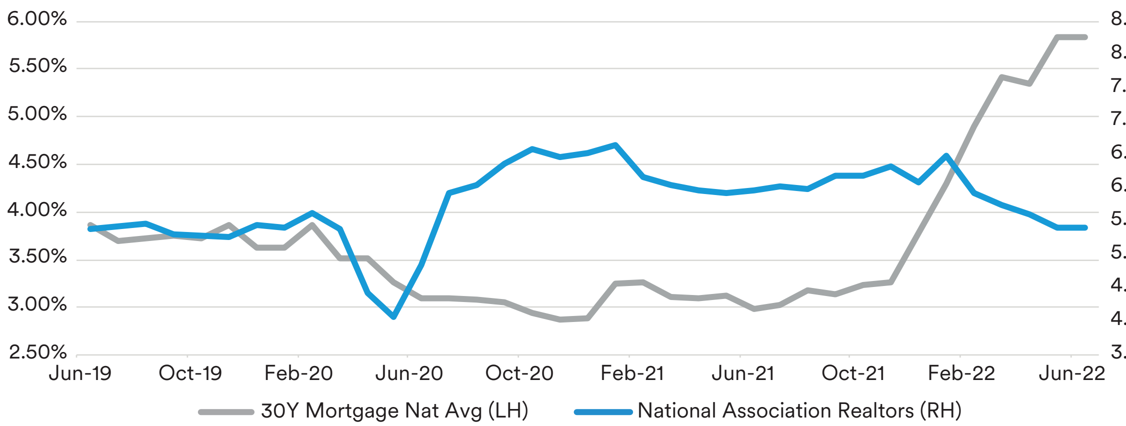
Source: Bloomberg

Figure 13 | US Personal Saving as a Percent of Disposable Income



Source: Bloomberg

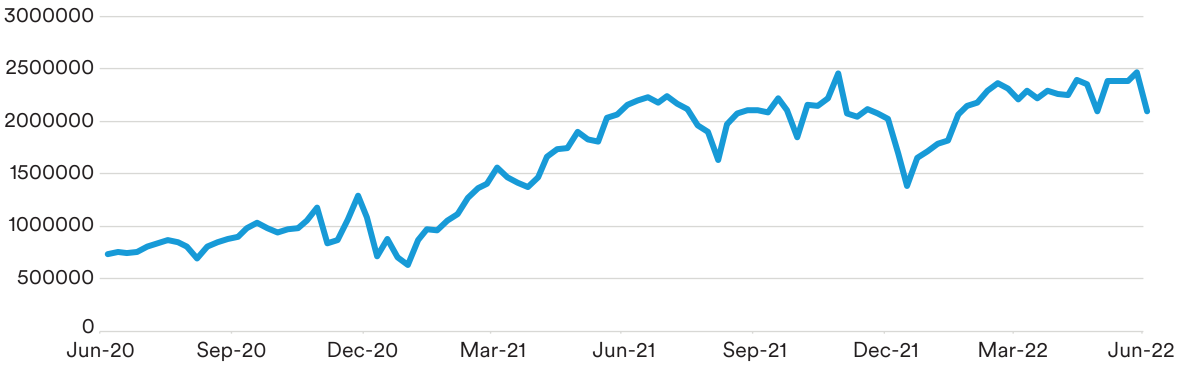
Figure 14 | State of the Housing Market



Source: Bloomberg

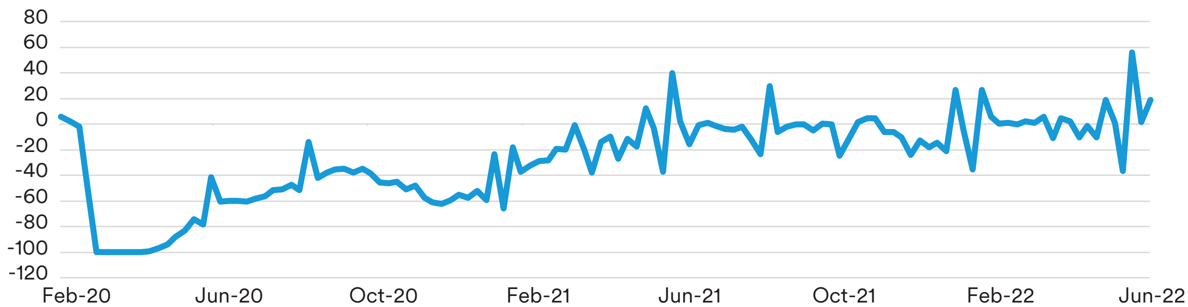
While consumption metrics such as TSA throughput and OpenTable dining still show strong US consumption, we note many of those plans were made long ago and we expect some weakness in this data to come soon.

Figure 15 | TSA Total Traveler Throughput



Source: Bloomberg

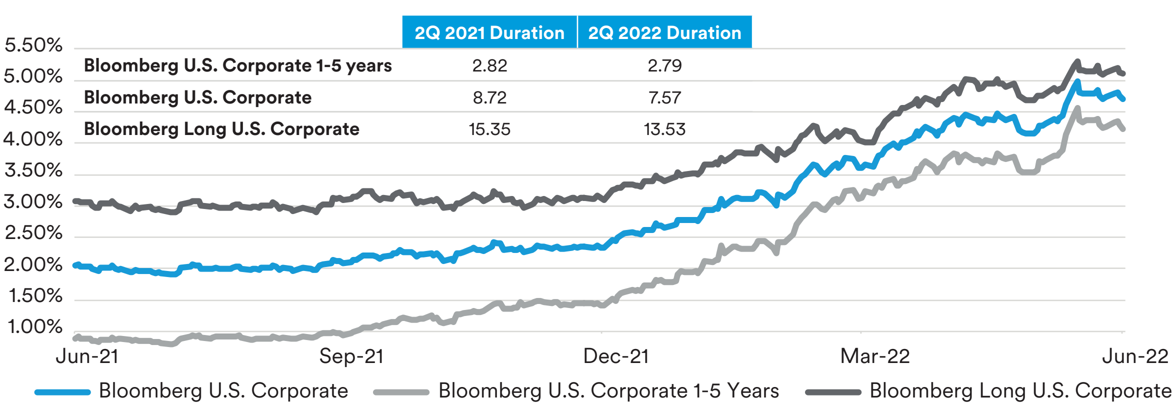
Figure 16 | USA OpenTable Diners Percentage Change



Source: Bloomberg

This will have a direct impact on corporate spread sectors such as Consumer Cyclicals, Technology, and Capital Goods. The balance of 2022 will require extreme caution by lenders in credit selection. While the above commentary is dire, we suggest the credit markets have priced in a substantial portion of the negative news and there are pockets of value and opportunity for fixed income investors. Value, as measured by yield and shown in Figure 17, is actually available in the market again after a long, QE suppressed slumber. Due to flat corporate credit curves on a flat Treasury curve, we feel attractive yields can be had without having to take significant duration risk. Corporates maturing inside of 5 years yield north of 4% with just a 2.7-year duration.[6] Even if short rates continue to rise (not our view), corporate investors will have attractive reinvestment opportunities quickly.

Figure 17 | Corporate Yield to Worst by Duration



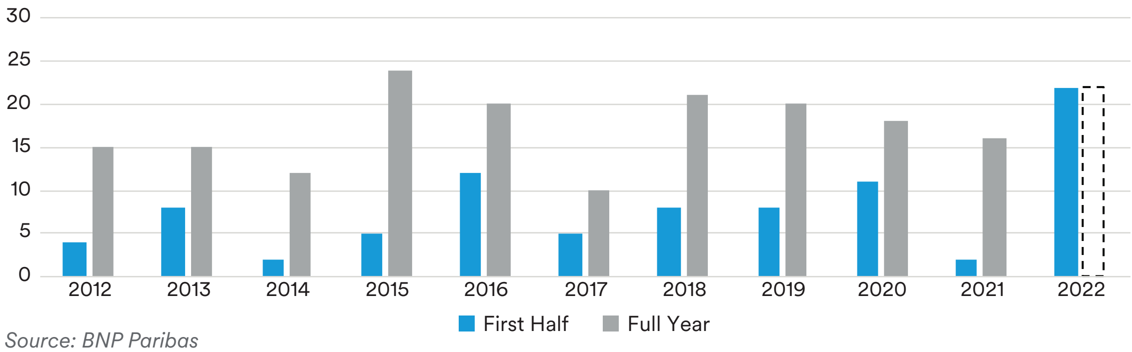
	2Q 2021 Duration	2Q 2022 Duration
Bloomberg U.S. Corporate 1-5 years	2.82	2.79
Bloomberg U.S. Corporate	8.72	7.57
Bloomberg Long U.S. Corporate	15.35	13.53

Source: Bloomberg

Flat credit curves and flat yield curves also offer investors the opportunity to shift exposures without incurring large yield changes in portfolios. There are many situations that allow investors to shorten issuer exposure without having to give up yield, possible even increasing yield depending on issuer liquidity.

We have historically been quite active in the debt capital primary markets, but this year, we have been markedly less active. Issuance trends have slowed, leading many forecasters to lower their predictions for 2022 new issuance for both Investment Grade and High Yield corporates. In fact, as shown in Figure 18, the first half of this year saw more days of no new bonds issued since 2008 - certainly a byproduct of the aforementioned volatility. With capital markets intermittently closed, price discovery is poor, and we tend to see new bonds performing poorly. As a result, we expect our sources of idea generation in new issuance to remain relatively depressed for the remainder of the year.

Figure 18 | Days Without New Issuance in the First Half of the Year



Source: BNP Paribas

Our risk remains at the low end of historical ranges. Due to the extreme flattening of the yield curve, we continue to find value in short-dated corporates that carry yields not seen in years. Alternatively, out the curve, and also due to the rapid rise in long term rates combined with low coupons of issuance the past few years, there are many securities trading at deep discount prices. Overall, we favor both high yielding, short duration bonds and low dollar price, longer duration corporates as attractive in the current environment. In terms of sector positioning, we are generally cautious around those sectors and names that are likely to face profitability pressures amid a slowdown in consumer spending.

Endnotes

[1] Bloomberg
[2] Bloomberg
[3] JP Morgan
[4] Bloomberg
[5] Bloomberg
[6] Bloomberg

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Appendix

This appendix contains details for the preceding charts and provides additional information for greater accessibility.

US Treasury Curve

Note:

- All values are approximate
- Source: Bloomberg
- The curves for “Yield for 6/30/22” and “Yield for 3/31/22” rise steeply until about 2 years and then flatten out, varying slightly out to 30 years.
- The curve for “Yield for 6/30/21” rises moderately and flattens out after 20 years.

Maturity (Years)	Yield for 6/30/22	Yield for 3/31/22	Yield for 6/30/21
0	1.65%	0.00%	0.00%
1	2.74%	1.60%	0.10%
2	2.95%	2.35%	0.25%
5	3.04%	2.45%	0.90%
10	3.01%	2.40%	1.45%
20	3.43%	2.60%	2.00%
30	3.18%	2.45%	2.10%

2nd Quarter and Year to Date Corporate Returns

Note:

- All values are approximate
- Source: Bloomberg

Category	2Q Total Return	2Q Excess Return
Bloomberg Credit Index	-7.0%	-2.0%
Bloomberg Corporate Index	-7.2%	-2.2%
Industrials	-7.9%	-2.2%
Financials	-5.8%	-2.1%
Utilities	-8.5%	-2.0%
Non-Corporate Credit	-4.8%	-1.0%
Bloomberg A Corporate Index	-6.8%	-1.6%
Bloomberg BBB Corporate Index	-7.9%	-3.0%
Bloomberg Intermediate Corporate Index	-3.9%	-1.8%
Bloomberg Long Corporate Index	-13.0%	-3.0%
ICE BofA US High Yield Constrained Index	-10.0%	-8.2%

Category	YTD Total Return	YTD Excess Return
Bloomberg Credit Index	-13.5%	-3.0%
Bloomberg Corporate Index	-14.5%	-3.5%
Industrials	-15.5%	-3.5%
Financials	-12.0%	-3.5%
Utilities	-16.5%	-3.5%
Non-Corporate Credit	-10.5%	-1.0%
Bloomberg A Corporate Index	-13.5%	-3.5%
Bloomberg BBB Corporate Index	-15.5%	-4.0%
Bloomberg Intermediate Corporate Index	-9.0%	-2.0%
Bloomberg Long Corporate Index	-22.5%	-5.0%
ICE BofA US High Yield Constrained Index	-14.0%	-8.0%

High Grade Issuance

Note:

- All values are approximate
- Source: JP Morgan

Month	2Q 2022	Past 4 Year Average
April	$109	$149
May	$89	$127
June	$71	$115
2Q Total	$269	$391

<u>MOVE Index</u>

Note:

- All values are approximate
- Source: Bloomberg
- The MOVE Index (LHS) line has the following characteristics:
  - From 1988 to 2002, it varies often in the general range from 65 to 145.
  - From 2003 to 2008, it varies much less, first descending to about 65 and rising again after year 2006 to about 135.
  - From 2008 and 2010, it peaks sharply to about 215 and drops sharply to about 87.
  - From 2010 and 2018, it descends gradually, varying often as it goes.
  - After 2018, it varies often and after 2021 climbs sharply to 135 in 2022.
- The Current Volatility (LHS) line is flat, at 135.
- Fed Funds Target Rate (RHS, %) line has the following characteristics:
  - From 1988 to 1994, it rises sharply to about 185 and then falls sharply to about 55.
  - From 1994 to 2002, it rises sharply to about 120, levels off and varies a bit until 2001, when it falls sharply to about 35 in 2002.
  - From 2004 to 2009, it rises sharply to about 100 and then falls sharply to about 5
  - From 2009 to 2019, it remains at 5 and then rises moderately to almost 50 in 2019.
  - After 2019, it falls sharply to about 5 and then rises slightly to about 10 in 2022.

Year	MOVE Index (LHS)	Current Volatility (LHS)	Fed Funds Target Rate (RHS, %)
1988	122	135	125
1990	100	135	155
1992	97	135	75
1994	130	135	64
1996	125	135	102
1998	130	135	105
2000	97	135	113
2002	123	135	35
2004	97	135	23
2006	70	135	87
2008	135	135	45
2010	87	135	5
2012	62	135	5
2014	62	135	5
2016	68	135	12
2018	45	135	37
2020	60	135	5
2022	135	135	12

US Financial Conditions Index

Note:

- All values are approximate
- Source: Bloomberg
- From year 2000 to 2004, the index rises moderately to about 102.60 and falls to about 100.10.
- From 2005 to 2008, the index is fairly flat, but varies often in the range if about 100.10 to 99.70.
- Just after 2008, the index rises sharply to 104.50 and falls sharply to about 101.20 in year 2010.
- From 2011 to 2014, the index falls gradually, varying often in between in the range of about 100.60 to 98.80.
- From 2014 to after 2017, the index rises moderately to about 101.20 and falls to 98.30.
- From just after 2017 to just after 2019, the index rises moderately to about 100.50 and falls to 98.70.
- From just after 2019 to 2021, the index rises sharply to about 101.70 and falls to about 97.15.
- After 2021, the index rises sharply to about 99.65.

Year	Index
2000	98.70
2001	100.20
2002	101.30
2003	100.25
2004	100.10
2005	99.40
2006	100.10
2007	99.30
2008	99.70
2009	102.10
2010	101.20
2011	99.45
2012	99.80
2013	100.00
2014	98.80
2015	99.85
2016	99.80
2017	99.35
2018	99.35
2019	99.05
2020	99.15
2021	97.15
2022	99.65

US Condition of all Federal Reserve Banks Total Assets

Note:

- All values are approximate
- Source: Bloomberg
- The assets rise moderately to about 8.93 million on March 2022 and then fall slightly to about 8.9 million in Jun 2022.

Month-Year	Assets
Jun-21	8.08M
Sep-21	8.45M
Dec-21	8.75M
Mar-22	8.93M
Jun-22	8.90M

Initial Jobless Claims

Note:

- All values are approximate
- Source: Bloomberg
- The claims fall moderately from about 425 to 168 in March 2022 and then rise slightly to 230 in June 2022.

Month-Year	Claims
Jun-21	407
Sep-21	350
Dec-21	223
Mar-22	168
Jun-22	230

US Corporate Option Adjusted Spread versus High Yield to Worst

Note:

- All values are approximate
- Source: Bloomberg
- The “BBG UA Corporate Avg OAS” line has the following characteristics:
    - June 2021 to September 2021: Relatively flat in the range 80 to 91.
    - October 2021 to November 2021: Slight rise from about 86 and then moderate rise to 101.
    - November 2021 to just after March 2022: Flat, then moderate rise to 120, then sharp rise to 145 and sharp fall to 109.
    - Just after March 2022 to June 2022: moderate rise to 150, then sharp fall to 130, then moderate rise to 155.
- The “BBG U.S. Corp HY YW” line has the following characteristics:
    - June 2021 to December 2021: Slight rise from 3.70% to 4.10%, varying between 3.70% and 100.1%.
    - December 2021 to March 2022: Moderate rise to 120, then sharp rise to 145% just before March 2022, and then sharp fall to 5.95%.

Month-Year	BBG UA Corporate Avg OAS	BBG U.S. Corp HY YW
Jun-21	80	3.70%
Sep-21	83	3.95%
Dec-21	92	4.10%
Mar-22	116	5.95%
Jun-22	155	8.90%

Manufacturing Delivery Time

Note:

- All values are approximate
- Source: Bloomberg
- The “Current” line decline slightly from 2017 to 2020 but it varies between 17 and -5 along the way. After 2020 the line climbs moderately to 38 and declines to 5.
- The “6 Month Forward” line declines slightly from 2017 to 2020 but varies between 17 and -10 along the way. After 2020, the line climbs slightly and after 2022 it falls steeply to -13.

Year	Current	6 Month Forward
2017	10.0	4.0
2018	17.5	7.5
2019	2.5	7.0
2020	5.0	2.0
2021	11.0	7.5
2022	28.5	15.0

Merchant Wholesale Inventories

Note:

- All values are approximate
- Source: Bloomberg
- The “Inventories” line has the following characteristics:
    - Year 1994 to 2000: Moderate rise from 0.4% to 14%, then fall to 2% and slight rise again to 9%.
    - 2000 to 2006: Sharp fall to -9% and rise to 16%, then fall to 10.5%.
    - 2006 to 2016: Sharp fall to 1%, then rise to 10%, then sharp fall to -18%, rise to 13%, and moderate fall to -2%.
    - 2016 to 2022: Moderate rise to 9%, then a sharp fall to -7%, and sharp rise to 26.5%.

Year	Inventories
1994	7.5%
1998	6.0%
2002	-6.0%
2006	10.5%
2010	1.5%
2014	7.5%
2018	5.5%
2022	26.5%

University of Michigan Consumer Sentiment

Note:

- All values are approximate
- Source: Bloomberg
- The “Consumer Sentiment” line has the following characteristics:
  - Year 1978 to 1990: Sharp fall from 81 to 57, then sharp rise to 102, then slight decline to 91. Varies often, over a total range of 20.
  - 1990 to 2006: Sharp fall to 65, then moderate rise to 108, then moderate fall to 88. Varies often, over a total range of 20.
  - 2006 to 2022: Sharp fall to 56, then moderate rise to 102, then sharp fall to 96.

Year	Consumer Sentiment
1978	79
1982	63
1986	95
1990	91
1994	89
1998	105
2002	96
2006	88
2010	76
2014	81
2018	98
2022	55

US Personal Saving as a Percent of Disposable Income

Note:

- All values are approximate
- Source: Bloomberg
- The "Percent of Disposable Income" line has the following characteristics:
  - 2002 to 2020: Relatively flat, varying often over a maximum range of 12%.
  - 2020 to 2022: Sharp rise to 34%, then fall to 13%, then sharp rise to 27%, then sharp fall to 5%.

Year	Percent of Disposable Income
2002	6.0%
2003	5.0%
2004	5.0%
2005	3.0%
2006	4.0%
2007	3.5%
2008	3.0%
2009	6.5%
2010	6.5%
2011	6.0%
2012	8.5%
2013	6.5%
2014	7.0%
2015	7.5%
2016	7.5%
2017	7.5%
2018	7.5%
2019	7.5%
2020	17.5%
2021	12.5%
2022	5.0%

State of the Housing Market

Note:

- All values are approximate
- Source: Bloomberg
- The "30Y Mortgage Nat Avg" line has the following characteristics:
  - June 2019 to December 2020: Slight to moderate fall to 2.80%.
  - December 2020 to December 2021: Relatively flat, varying between 3.30% and 3.00%.
  - December 2021 to June 2022: Sharp rise to 5.45% and then moderate rise to 5.80%.
- The "National Association Realtors" line has the following characteristics:
  - June 2019 to March 2020: Relatively flat, varying between 5.70% and 5.20%.
  - March 2020 to February 2021: Sharp fall to 4.00%, then sharp rise to 5.85%, then moderate rise to 6.55%, then slight fall to 6.00%.
  - February 2021 to June 2022: Slight rise to 6.45%, then moderate fall to 5.40%.

Month-Year	30Y Mortgage Nat Avg	National Association Realtors
Jun-19	5.35%	3.35%
Oct-19	5.25%	3.75%
Feb-20	5.45%	3.75%
Jun-20	4.50%	3.20%
Oct-20	6.45%	2.95%
Feb-21	6.25%	3.27%
Jun-21	5.95%	3.00%
Oct-21	6.20%	3.25%
Feb-22	6.10%	4.70%
Jun-22	5.30%	5.85%

<u>TSA Total Traveler Throughput</u>

Note:

- All values are approximate
- Source: Bloomberg
- The “Throughput” line has the following characteristics:
    - June 2020 to June 2021: Slight rise to 1000000, then moderate rise to 2200000. The line varies over a maximum range of 530000.
    - June 2021 to June 2022: The line rises slightly to 2500000, varying over a maximum range of 1100000.

Month-Year	Throughput
Jun-20	750000
Sep-20	850000
Dec-20	105000
Mar-21	1550000
Jun-21	2200000
Sep-21	2150000
Dec-21	1900000
Mar-22	2250000
Jun-22	2250000

USA OpenTable Diners Percentage Change

Note:

- All values are approximate
- Source: Bloomberg
- The “Percentage Change” line Falls sharply to -100% and then rises gradually to 20%. The line varies often over a maximum range of 100%.

Month-Year	Percentage Change
Feb-20	0%
Jun-20	-60%
Oct-20	-45%
Feb-21	-27%
Jun-21	-5%
Oct-21	-12%
Feb-22	0%
Jun-22	20%

Corporate Yield to Worst by Duration

Note:

- All values are approximate
- Source: Bloomberg
- All three lines are generally the same shape, but are separated by about 1.00% at the start, narrowing to about 0.50% at the end.
- The highest line of the graph is “Bloomberg Long U.S. Corporate”. It is fairly flat to start at about 3.00%, then after December 2021 it rises moderately to 5.10%.
- The next highest line of the graph is “Bloomberg U.S. Corporate”. It is fairly flat to start at about 2.00%, then after September 2021 it rises gradually and then moderately to 4.70%.
- The lowest line of the graph is “Bloomberg U.S. Corporate 1-5 Years”. It is fairly flat to start at about 0.85%, then after September 2021 it rises gradually and then moderately to 4.20%.

Month-Year	Bloomberg U.S. Corporate	Bloomberg U.S. Corporate 1-5 Years	Bloomberg Long U.S. Corporate
Jun-21	1.95%	0.85%	3.00%
Sep-21	2.10%	1.00%	3.15%
Dec-21	2.55%	1.60%	3.30%
Mar-22	3.75%	3.35%	4.25%
Jun-22	4.70%	4.20%	5.10%

Days Without New Issuance in the First Half of the Year

Note:

- All values are approximate
- Source: BNP Paribas
- The "Full Year" value for year 2022 is marked with a dashed outline of the bar.

Year	First Half	Full Year
2012	3.5	15.0
2013	8.0	15.0
2014	2.0	12.5
2015	23.5	23.5
2016	12.5	20.0
2017	5.0	10
2018	8.0	21.5
2019	8.0	20.0
2020	11.5	18.0
2021	2.0	16.5
2022	22.0	22.5