



Capital
Markets

The RBC Macroscope

Bond Yields Take A Bite

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For required conflicts disclosures, see page 213.

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This report is priced as of market close April 22, 2022 ET unless otherwise noted.
All values in U.S. dollars unless otherwise noted.

US Equity Market Outlook: Bond Yields Take A Bite

In a Nutshell

Macroscope is our monthly chart book in which we update our thoughts on the US equity market outlook from both a top-down and bottom-up perspective. We review six DRIVERS of performance for a number of dimensions – the S&P 500, stocks vs. bonds, US vs. non-US, Growth vs. Value, S&P 500 sectors, Russell 1000 industries and factors, and Small Cap. The big things you need to know: (1) We are trimming our year-end 2022 S&P 500 price target from 5,050 to 4,860. The recent move up in bond yields was the biggest contributor to the downward revision to our forecast. (2) We think US equities are likely to keep benefiting from safe haven status for a bit longer. (3) We continue to be more intrigued with Growth than Value going forward, though we'd be highly selective in our Growth exposure. (4) While Small Caps are looking interesting again on valuation and positioning, we remain concerned that fundamentals will stay challenging for Small Caps given the downshift in economic expectations towards slower growth.

Trimming Our Year-End 2022 S&P 500 Price Target, Still Looking for Modest Gains on the Year & Upside From Now to Year-End

We've refreshed the models we use to arrive at our S&P 500 price target for the latest shifts in the macro variables that serve as inputs. Our analysis has prompted us to trim our year-end 2022 S&P 500 price target from 5,050 to 4,860, a cut of 3.7%.

Our updated price target of 4,860 is the average of 13 different scenarios that we examined (full details are on page 7). Our models point to a wide range of outcomes, as the most bearish is <4,400 and the most bullish is >5,200. Even though economic forecasts on the Street have been lowered, our GDP-based models – which bake in current consensus GDP forecasts as tracked by Bloomberg – remain among the more constructive ones, pointing to an S&P 500 that ends the year in the 4,800-5,300 range. Our sentiment models are also constructive, pointing to a year-end level of 4,742 (the number suggested by deeply bearish readings on the AAll survey – see pages 32-33) or 5,259 (the number implied when we bake in the average rebound off growth scare lows such as 2010, 2011, 2015-2016, and late 2018, which recent trading has mimicked, including the latest bout of weakness – see pages 8-9). One of our valuation models, which bakes in the average P/E contraction seen during the past five Fed hiking cycles (see page 39) does the best job of articulating the bear case (assuming recession and a broadening of the Russia/Ukraine war to NATO are avoided, key downside risks to our call), and suggests the S&P 500 should end the year a little below 4,400. Our cross asset analysis is in between, with our models comparing stocks to bonds (see pages 73, 76, and 77), arguing the S&P 500 deserves to end the year at 4,500-4,600.

As always, our approach to our targets is quantitative and data driven. We don't massage the data to fit the narrative we want to tell, but use it to help us understand what the narrative should be. The story the data is telling us right now is that economic forecasts haven't fallen enough to derail equities for the year (current consensus anticipates 2022 and 2023 real GDP of 3.2% and 2.1%, with odds of a US recession pegged at 25% – see pages 47-48), and that at the March 8th low – which stocks seem poised to retest – sentiment already priced in many of the challenges that equity market participants have been grappling with (at -17.5% last week on the 4-week average, net bulls on the AAll survey remain well below the -10% contrarian buy threshold that has been followed by 12-month forward returns of 15.5% in the S&P 500 in the past). Our valuation work also suggests that at the March 8th low, the S&P 500 may have largely baked in Fed tightening (assuming no recession follows), as the P/E contraction seen on March 8th was in line with the multiple contraction seen in past Fed tightening cycles. Like many other things associated with pandemic trading, it simply seemed to happen with a vengeance on an accelerated time frame.

The data is also telling us that the recent rise in 10-year yields has diminished, but not totally destroyed, the case for US equities for the remainder of the year. Other than reducing the influence of our GDP models in our targeting process, the biggest contributor to the reduction in our year-end S&P 500 target was the move in bond yields. What strikes us about these models is that they are arguing for slower gains in US equities going forward as opposed to declines. For example, the percent of stocks with a dividend yield in excess of the 10-year Treasury yield has fallen to 18% as of mid-April – a level consistent with a 5.1% gain in the S&P 500 on a 9-month forward basis. Additionally, when real yields are rising, 9-month forward S&P 500 gains have averaged 6.8%.

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US Equities Seem Likely To Keep Benefiting From Safe Haven Status for the Time Being

We continue to get questions about why US equities have been so resilient despite massive headwinds from Fed tightening fears, recession fears, and the Russia/Ukraine war. A number of the ideas embedded in our S&P 500 price target analysis speaks to this issue – the idea that Fed tightening was priced in at the March 8th low, that equities have been pricing in slower economic growth but not a recession (supported by ongoing resilience in high frequency economic indicators and earnings season commentary but an assumption that came into serious doubt this week with talk of a 75 bps hike), that sentiment has already gotten washed out, that buy-side margin expectations have been lowered while companies continue to manage through myriad challenges, and that higher bond yields are a problem for US equities but not a reason on their own to look for a down year – are all part of the answer to that question.

Another equally important part of the answer to this question is the idea that US equities are benefiting from safe haven status relative to other geographies. As we highlight on page 82, US equities have outperformed non-US equity since last summer, with leadership seeing another leg up in late February as Russia invaded Ukraine. The US dollar has rallied, and US equities have done what they normally do when this happens – outperformed their non-US peers (page 86). As we ran through the global section of Macroscope this month, one thing that jumped out to us is that most of the economic-related indicators that we use to monitor the US/non-US equity trade favor the US right now. Economic surprises look a bit better in the US right now than other major countries (page 87). Consensus GDP forecasts for 2022 are improving in the US relative to EU (page 89). Recession expectations have risen much faster for Europe than the US (page 90). And gauges of economic sentiment and economic policy uncertainty have been more resilient in the US than other major countries (pages 91 and 98). For now, the Russia/Ukraine war as well as COVID – which is hitting China hard – are being viewed by equity market participants as having fewer reverberations in the US. For now, this is overriding the expensive relative valuation profile of the US (page 85).

We Continue To Be More Intrigued With Growth Than Value Going Forward, but Would Stay Selective

In mid-March, sparked by the Fed meeting, the Growth trade started to outperform Value in a trade that lasted until early April. Since then Value has caught another tailwind and the relative ratio between the R1000 Growth and R1000 Value indices is right back where it was when it inflected in mid-March (page 101). Despite the shift in momentum back to Value in April, we continue to be more intrigued with Growth than Value going forward.

As we ran through the style section of Macroscope this month, we were struck by how many of our charts are looking better for Growth vs. Value or are making the case for Growth over Value again. From a bigger picture/longer-term perspective, four things are key to remember: (1) When US equities are outperforming non-US equities, Growth tends to outperform Value within the US (page 83); (2) Value typically outperforms ahead of 1st Fed rate hikes, but Growth tends to take leadership back during the hiking cycle (page 123); (3) Value typically outperforms when the economy is running above average, but Growth tends to take back leadership when the economy is running below average (page 121) as consensus expectations have started to anticipate for 2023 (consensus is at 2.1% per Bloomberg) and 2024 (consensus is at 2%), but not yet for 2022 (consensus is at 3.2%); and (4) Growth is higher quality than Value quantitatively (page 112), a factor that tends to outperform over time and when uncertainty is high and rising.

There are a few other tactical indicators that we are watching on this trade that also keep us looking for Growth leadership to return sooner rather than later: (1) Nasdaq futures positioning among asset managers has been recovering after hitting 2020-2021 lows – suggesting to us that Growth got oversold (page 115). (2) ETF flows are starting to fade for Value while improving for Growth (page 127); (3) While Growth doesn't look cheap relative to Value on P/E yet, the relative P/E has returned to pre-pandemic levels (page 116); (4) Growth is starting to look slightly attractive vs. Value on normalized P/Es and cash flow multiples (page 118); (5) The compression in the Growth/Value relative P/E tends to move in sync with the relative long-term EPS growth expectation of the two style segments – a gap that had been narrowing but now appears to be stabilizing (page 110); (6) The rate of upward EPS estimate revisions slightly favors Value over Growth at the moment but less so than recent months (page 109).

US Equity Market Outlook: Bond Yields Take A Bite

It is important to stress, however, that we'd be highly selective in our Growth exposure. We continue to like Large Cap Information Technology, which has modestly attractive valuations vs. the S&P 500 (page 152), strong EPS/sales revisions trends vs. other sectors (page 149), a high quality profile relative to other sectors (page 138), an optimistic outlook from RBC's analyst teams in our latest analyst survey (page 140), a strong ESG profile (page 139), less risk from Russia/Ukraine (pages 159-160), and stronger ETF flows than other parts of the Growth trade (page 163). By contrast, we've stayed market weight Consumer Discretionary and Communication Services, which have weaker EPS and sales revisions trends, are more exposed to the consumer, have seen weaker ETF flows, have a less exciting ESG profile, and more cautious outlooks from our analyst teams than the Technology sector.

Note that while we understand the impulse to shift towards defensive sectors given their tendency to outperform following first Fed rates hikes and the economic fears that are swirling, we are struggling to figure out exactly what we'd want to buy in the defensive part of the stock market. Generally, we find that defensive sectors are already overvalued with poor earnings revisions trends and low quality profiles. As investors navigate the defensive parts of the market in the very near term, the results of our latest analyst survey taken in late March are worth keeping in mind. Among the defensive sectors, our survey found the most constructive views from our Health Care analysts and the least constructive views from our Consumer Staples team, which sees risk in the back half of the year and 2Q reporting season. Our REITs and Utilities teams came in more neutral on their performance outlooks, with our REITs' team becoming more constructive over the past few months. For additional details on our sector views, see our sector scorecard on page 141.

Valuations and Positioning Have Improved for Small Cap, but We Suspect Fundamental Conditions Will Stay Challenging a Bit Longer for Them

Small Caps have been trading sideways relative to Large Caps since late January (page 175). While we acknowledge that the set-up for Small Caps has improved – something that keeps us constructive on the broader market through year-end – we still see some fundamental challenges for Small Caps that keep us skeptical of the idea of returning to an overweight on Small Cap vs. Large Cap.

To be sure, Small Caps are looking better on our positioning/sentiment and valuation work. Sell-side ratings are on the rise for the Russell 2000 relative to Mega Caps (page 184), and Small Cap futures positioning among asset managers appears to have bottomed after hitting 2016 lows on a dollar value basis and 2020 lows on a number of contracts basis (page 185). Additionally, the Russell 2000's weighted median forward P/E multiple has dipped slightly below its long-term average again (page 186) – similar to what we saw in early 2020 – and continues to look deeply discounted relative to the S&P 500 (page 187). When we dig down deeper into the Russell 2000, we find all of the market cap quintiles within the index look reasonably valued or deeply undervalued (page 190), a change from the past few years when the biggest stocks (which tend to be the most investable) still looked expensive even though the smallest stocks looked cheap.

While these improvements could justify taking a more neutral posture on Small Cap relative to Large Cap as opposed to an underweight stance, at least for longer-term investors, we've been reluctant in recent client conversations to recommend a shift back to overweight on Small Cap relative to Large Cap. As we ran through the Small Cap section of Macroscope this month, we were reminded by one chart after another that Small Caps still have a massive challenge in place given the concerns swirling around earnings and the economy. On earnings, we continue to see evidence that Small Caps are having a tougher time managing through margin pressures. The rate of upward EPS estimate revisions has been far weaker for the Russell 2000 than the S&P 500 (page 182), and the rate of change on Small Cap margins has been trailing that of Large Cap margins, something that is normally accompanied by Small Cap underperformance relative to Large Caps (page 180). On the economy, we think we need to get deeper into the cyclical cooling off that's currently underway before taking a more constructive stand on Small Caps. On this point, it's important to keep in mind that Small Caps reliably tend to see a major peak in performance vs. Large Cap in the middle of Fed hiking cycles (see page 202), arguably this peak got pulled forward into 2021, and typically underperform Large Caps when GDP is trending below average (page 193). Small caps also tend to lag when ISM manufacturing is falling (page 195), when Small Business optimism is waning (page 194), and when high yield credit spreads are widening (page 199) – all reminders that when it comes to Small Cap returns, perceptions of how the economic backdrop is changing can matter the most.

Broader US Equity Market Outlook

US Equities Generally Including The S&P 500



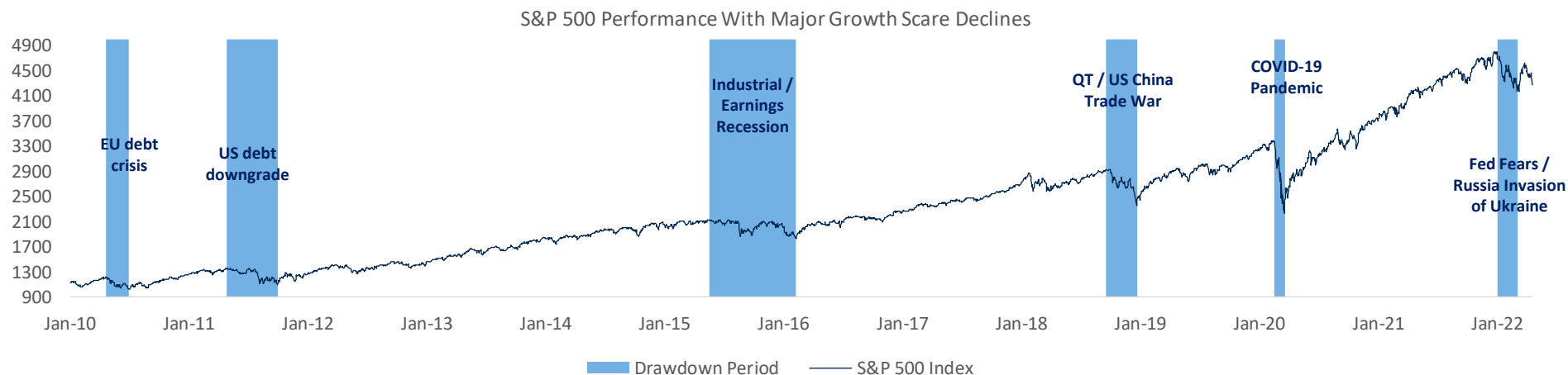
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Our Current Thinking on the Year-End Level for the S&P 500 in 2022

- Our updated price target of 4,860 is the average of 13 different scenarios that we examined. Our models point to a wide range of outcomes, as the most bearish is <4,400 and the most bullish is >5,200.
- Even though economic forecasts on the street have been trimmed, our GDP-based models – which bake in current consensus GDP forecasts as tracked by Bloomberg – remain among the more constructive ones, pointing to an S&P 500 that ends the year in the 4,800-5,300 range.
- Our sentiment models are also constructive, pointing to a year-end level of 4,742 (the number suggested by deeply bearish readings on the AAll survey) or +5,200 (the number implied when we bake in the average rebound off growth scare lows such as 2010, 2011, 2015-2016, and late 2018, which recent trading has mimicked even with the latest bout of weakness).
- One of our valuation models, which bakes in the average P/E contraction seen during the past five Fed hiking cycles does the best job of articulating the bear case (assuming recession and a broadening of the Russia/Ukraine war to NATO are avoided, key downside risks to our call), and suggests the S&P 500 should end the year a little below 4,400.
- Our cross asset analysis is in between, with our models comparing stocks to bonds, arguing the S&P 500 deserves to end the year at 4,500-4,600. These models are where we saw some of the biggest downward revisions since our last update.

Fundamentals/Economy		Implied Level	% from 12/31/21
GDP Regression (2022)	Implied year-end 2022 level based on consensus GDP forecasts (3.1% as of mid April 2022)	5,137	7.8%
Economic Momentum (2022)	Decelerating & Below Avg GDP Growth (Current year avg return; 2022 consensus is 3.1% & Porcelli is at 2.5% as of mid April 2022)	5,281	10.8%
Economic Momentum (2023)	Decelerating & Below Avg GDP Growth (Prior year avg return, 2023 consensus is 2.1% as of mid April 2022)	4,800	0.7%
Valuation		Implied Level	% from 12/31/21
Flat Next Year P/E	P/E at 20.8x (12-31-21 price / bottom up consensus 2022 EPS forecast of \$230) on \$252 (consensus bottom up EPS forecast for 2023)	5,228	9.7%
Contracted Next Year P/E Due To Fed Hikes	P/E at 17.3x (16.5% contraction - avg Fed hikes impact - to 12-31-21 price / bottom up consensus 2022 EPS forecast of \$230) on \$252 (bottom up consensus EPS forecast for 2023)	4,366	-8.4%
Sentiment		Implied Level	% from 12/31/21
Contrarian Bearishness	Avg 9 month fwd return when AAll net bulls <10% on the 4 week avg (11%) vs. 4/22/2022 close	4,742	-0.5%
Growth Scare Rebound	Avg 9 month fwd rebound from post Fin Crisis growth scare trough (26.1%) vs. YTD low (3/8/2022)	5,259	10.3%
Policy		Implied Level	% from 12/31/21
United Democratic Leadership	Avg full year return when Democrats control White House, Senate & House	5,243	10.0%
Election Cycle	Avg full year return in 2nd year of Presidential term / Midterm Election Year	5,043	5.8%
QT/Geopolitics	2018 full-year decline in the S&P 500, the best example of full-year impact of QT/geopolitical risk hitting stocks	4,471	-6.2%
Cross Asset		Implied Level	% from 12/31/21
Dividend Yield Test	Avg 9M Fwd Return (5.1%) when <20% of S&P 500 stocks have div yield above 10 Yr Yld (18% as of mid April 2022), vs 4/22/22 close	4,490	-5.8%
Earnings Yield Gap Test	Avg 9M Fwd Return (6.8%) since 1989 when earnings yield gap (based on FY2 P/E & 10 Yr) is 1-2 standard deviations below the post GFC avg (-1.8 as of mid April 2022) vs. 4/22/22 close	4,561	-4.3%
Real Yield Test	Avg 9M Fwd Return (6.8%) since 2010 when real yields are rising	4,562	-4.3%

Post-GFC Growth Scores Have Been Accompanied by Drawdowns in the 14–20% Range



S&P 500 Growth Score Pullbacks Post 2010: Peak To Trough Declines & Performance Post Trough

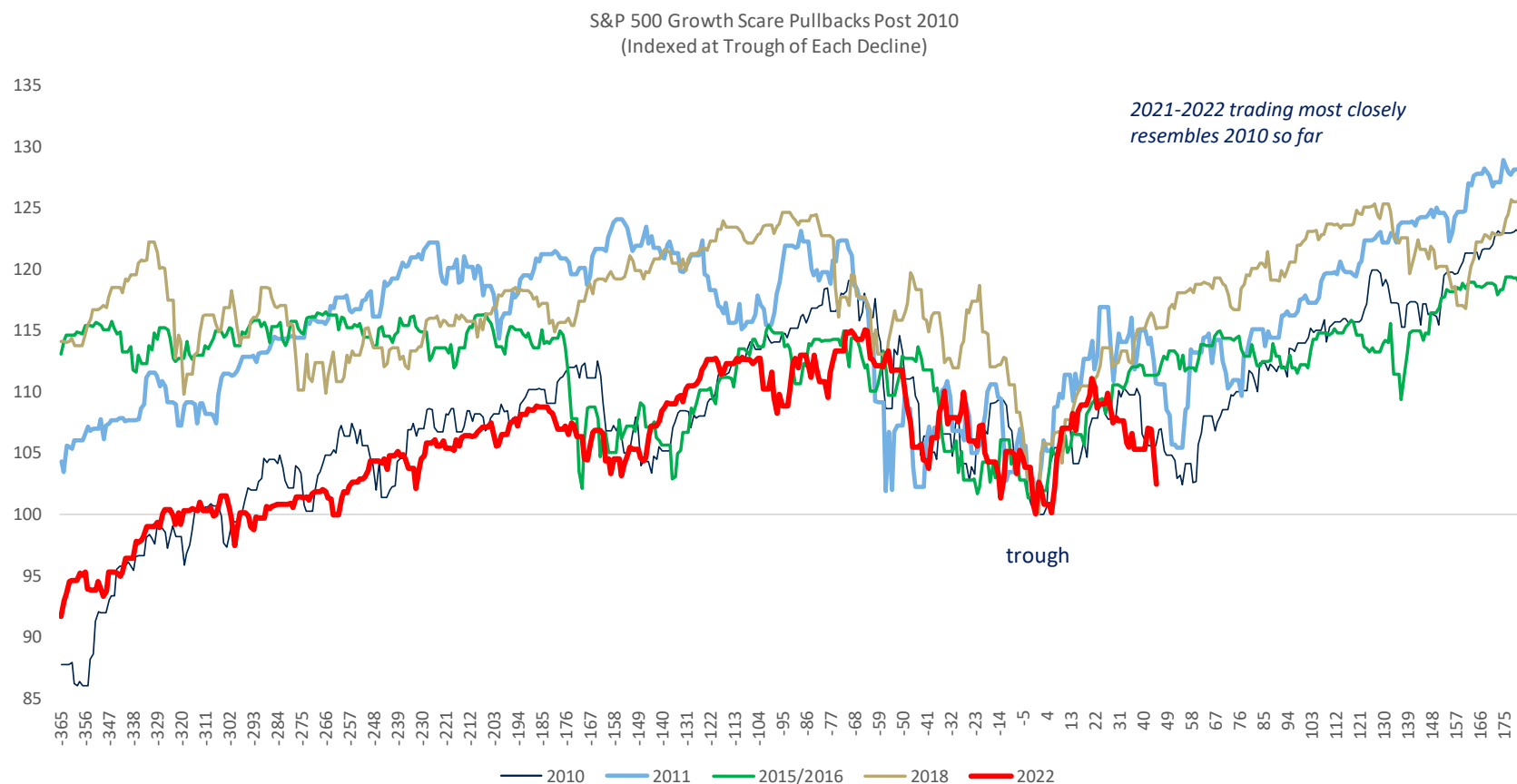
S&P 500 Decline Details						
Peak Date	Trough Date	Duration (# Calendar Days)	Peak Price Level	Trough Price Level	% Decline	9 Month Return
04/23/2010	07/02/2010	70	1217	1023	-16.0%	30.3%
04/29/2011	10/03/2011	157	1364	1099	-19.4%	25.0%
05/21/2015	02/11/2016	266	2131	1829	-14.2%	18.3%
09/20/2018	12/24/2018	95	2931	2351	-19.8%	27.3%
01/03/2022	03/08/2022	64	4797	4171	-13.0%	
Median ex current		126			-17.7%	26.1%
Average ex current		147			-17.3%	25.2%

The early 2022 drawdown totaled 13% as of the March 8th low – a little shallower than other post GFC growth scores.

A median growth score drawdown would take the S&P 500 to ~3,950 while a late-2018-type drawdown would take the S&P 500 to ~3,850. We see that as the potential downside level to watch if the March 8th lows don't hold and recession is avoided.

Nine months post-growth score troughs, stocks tend to be 25–26% higher. A 26% move off the March 8th low would take the index above 5,200.

Growth Score Declines Take 2-9 Months, Recoveries Take 4-5 Months



S&P 500 Performance With Major Growth Score Declines								
	Peak Date	Trough Date	Duration in # of Calendar Days	Drawdown Duration Estimated # of Months	Full Recovery Date	Full Recovery Duration	Full Recovery Duration From Trough	Full Recovery Duration From Trough Estimated # of Months
2010 - European Debt Crisis	04/23/2010	07/02/2010	70	2	11/04/2010	125		4
2011 - US Debt Downgrade	04/29/2011	10/03/2011	157	5	02/24/2012	144		5
2015 / 2016 - Industrial Recession	05/21/2015	02/11/2016	266	9	07/11/2016	151		5
2018 - QT / US-China Trade War	09/20/2018	12/24/2018	95	3	04/23/2019	120		4
2022 - Fed Tightening / Russia Invasion of Ukraine	01/03/2022	03/08/2022	64	2	TBD	TBD		TBD
Average ex 2022			147	5		135		5

Source: RBC US Equity Strategy, Bloomberg; as of April 22, 2022

Our DRIVERS Still Tilt Positive for the Broader US Equity Market

Deals & Cash Deployment

Modest Positive

Overall corporate confidence, capex expectations, and tech spending expectations appear to have peaked, but remain at high levels.

Cash levels remain elevated (despite ticking lower) and debt levels have fallen along with interest expense, suggesting balance sheets are being well managed. Debt paydown discussion surged in 2021.

Commentary on buybacks, dividends, and capex has been on the rise, but a softening in ISM new orders may foretell a coming moderation in capex.

The case for stocks from a dividend perspective vs. bonds has deteriorated as just 18% of S&P 500 companies have a dividend yield higher than the 10-year yield, which calls for more muted returns in the S&P 500 going forward.

The dividend yield appeal of the S&P 500 has dwindled, with just 18% of stocks having a dividend yield above the 10-year Treasury yield as of mid-April, something that tends to be followed by 7.8% in the US equity market.

Revisions & Earnings

Neutral

S&P 500 EPS forecasts have moved up in the aggregate, supported by a few key sectors. Under the surface, the rate of upward EPS estimate revisions for the S&P 500 has turned slightly negative despite ongoing positive revisions for revenues.

Margin trends have been outperforming commentary on margins, with demand still strong, pricing power robust, and an emphasis on cost savings and productivity offsetting inflation, labor, and supply chain challenges for now. While the sell-side has looked for flattening margins across the broader S&P 500, the buy-side has been anticipating margin contraction already.

Investor Sentiment & Positioning

Strong Positive

Retail investor sentiment has been deeply bearish on the AAll survey, but has been down around pandemic lows and at levels that in the past have been followed by strong gains in the US equity market over the next 12 months.

Institutional investors have also been deeply pessimistic, with Nasdaq and Russell 2000 futures positioning among asset managers returning to levels consistent with past lows before starting to recover.

From an asset allocation perspective, US equities look over owned among US households & professional investors, with US equity stakes in line with or above past highs. But this seems unlikely to change much as long as inflation remains elevated. Over time, equity ownership in US households (as a percent of financial assets, net of cash and bonds) has tracked CPI.

Valuation vs. History & Bonds

Neutral

Bottom-up valuations have improved but don't look cheap yet. Our bottom-up market cap weighted forward P/E of the index is well below peak, but still remains a little less than 1 standard deviation above its LT average.

The top-down forward S&P 500 P/E appears to be baking in the Fed hiking cycle already. The multiple contracted by 20% on the March 8th low in the index and had contracted ~16% as of March month end – in line with past Fed hiking cycles which saw multiple compression of 7-21% over the past few decades.

Stocks still look attractive when we look at earnings yields vs. treasuries, though far less so than usual. Mid-April levels are consistent with 12-month forward S&P 500 returns of 6-9%.

Economy & Policy

Mixed

The high frequency indicators we track show signs of consumer spending shifting from goods to services, with some slippage on same-store sales but improvement/stability in dining, flying, public transportation and back to work. GDP forecasts have been trimmed but for now, the economic narrative driving stocks appears to be one in which economic growth decelerates back to trend much more quickly than anticipated. This is supportive of further gains in the S&P 500 this year should it hold up. Expectations for a recession have been rising, but are still only 25% according to Bloomberg's survey of professional forecasters, similar to 2011 and 2015-2016 when major growth scares occurred.

On fiscal policy, mid-term years are often challenging for stocks with below-trend returns. But there is some optimism embedded in the market about the mid-terms, which are widely expected to shift Congressional control back to Republicans.

Foreign policy is a key risk to monitor. A broadening out of the Russia/Ukraine war to include NATO or use of nuclear weapons doesn't appear to be baked in based on our survey work, though prolonged sanctions/stalemate are.

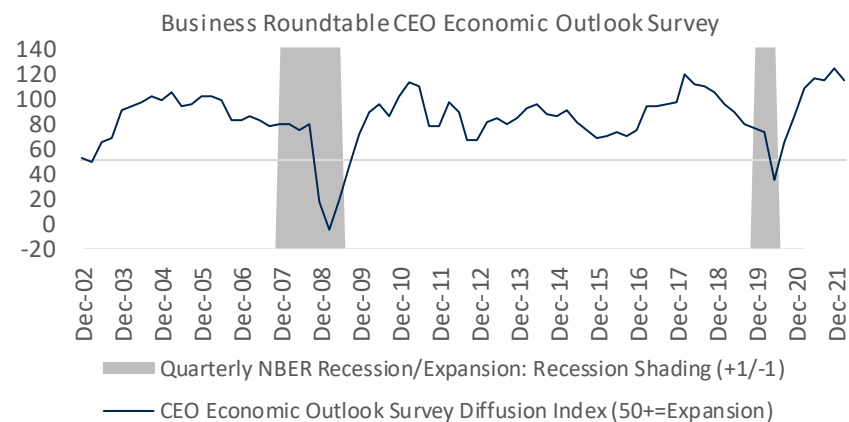
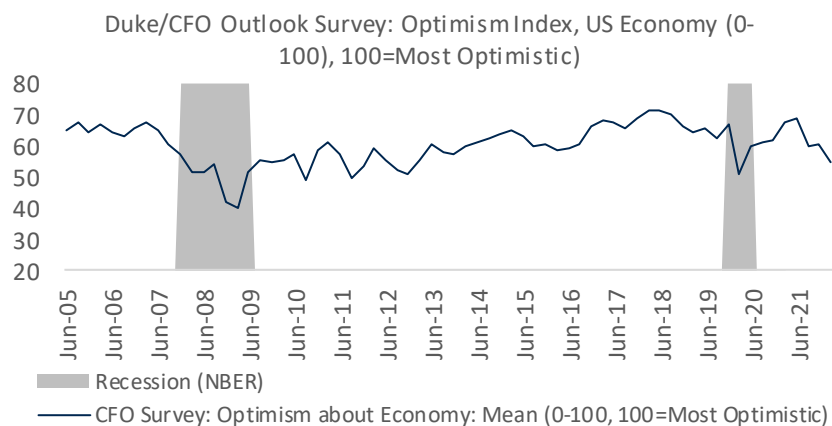
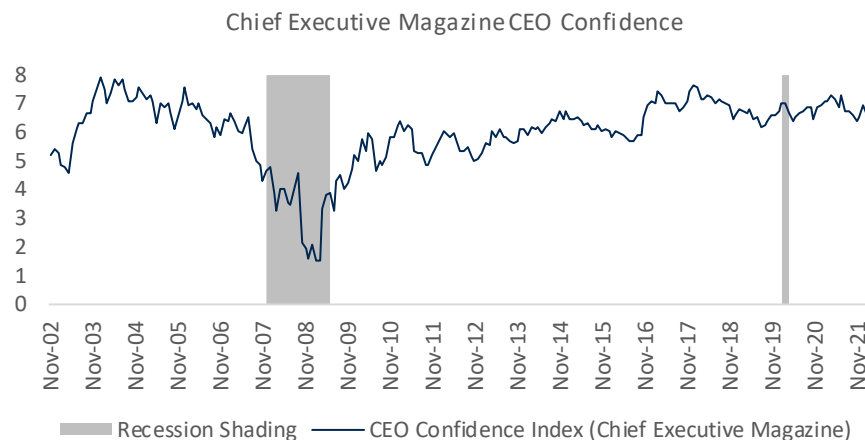
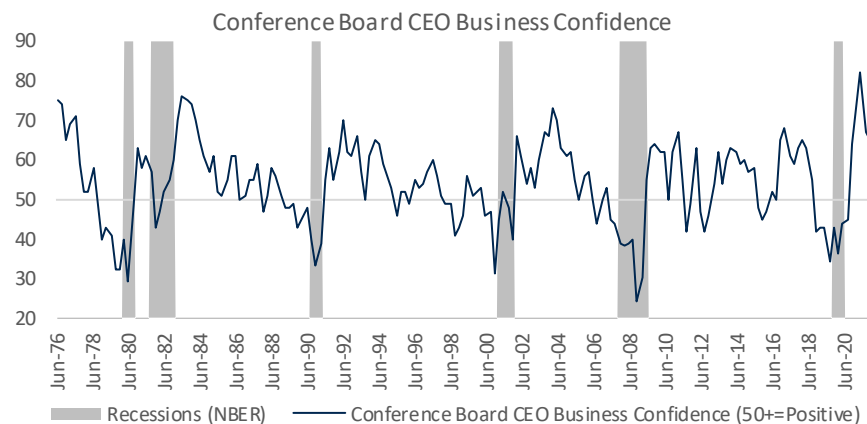
Retail Money Flows

Neutral

US equity flows were briefly positive earlier this year, but non-US flows and bond flows have seen momentum shift back in their favour of late.

ESG flows which have been another source of buying power for US equities, have stayed positive despite moderating from last year's peak.

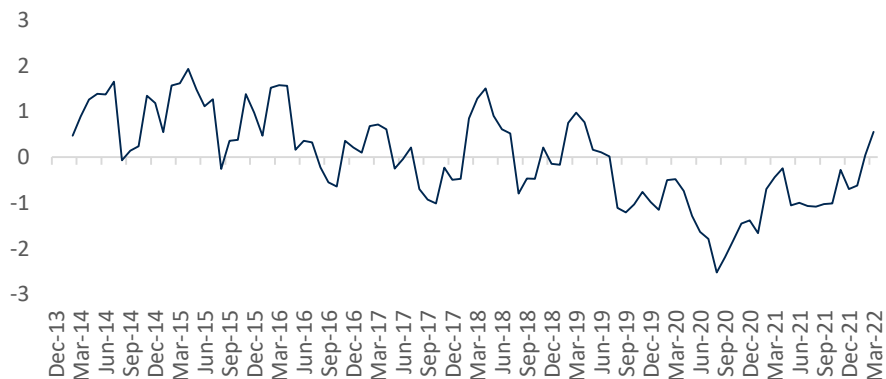
C Suite Confidence Appears To Have Peaked on Most Surveys



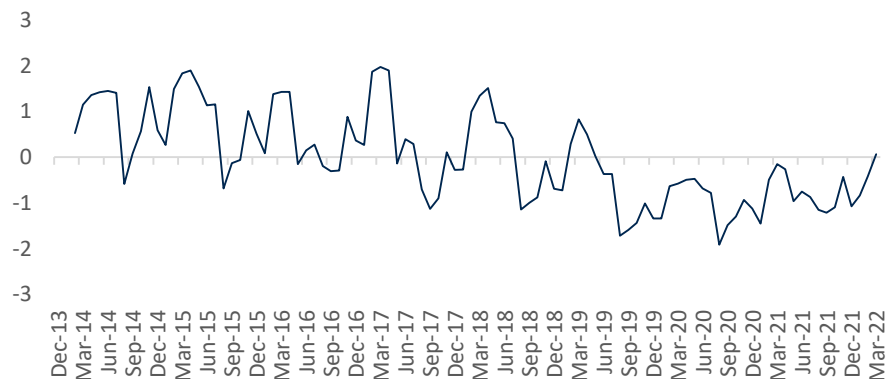
Source: RBC US Equity Strategy, Haver Analytics, Bloomberg; all charts quarterly as of 1Q22 except for Chief Executive Magazine which is monthly as of April 2022

Buyback, Dividend & Capex Discussions Picking Up, M&A Discussion Has Been Stable

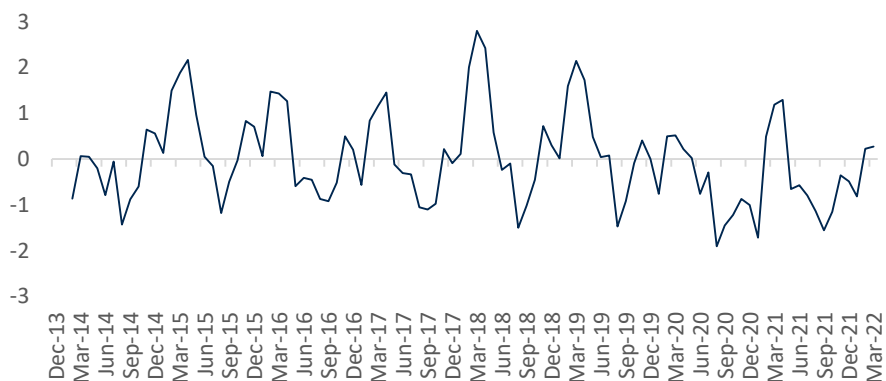
Buyback Mentions T3M (Z-Score)



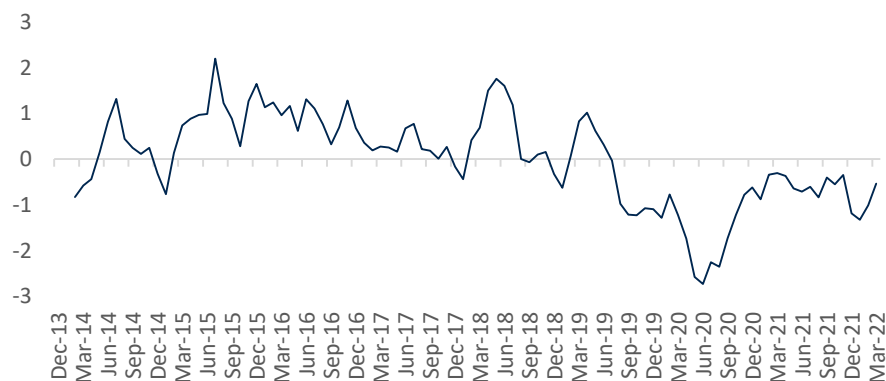
Dividend Mentions T3M (Z-Score)



Capex Mentions T3M (Z-Score)

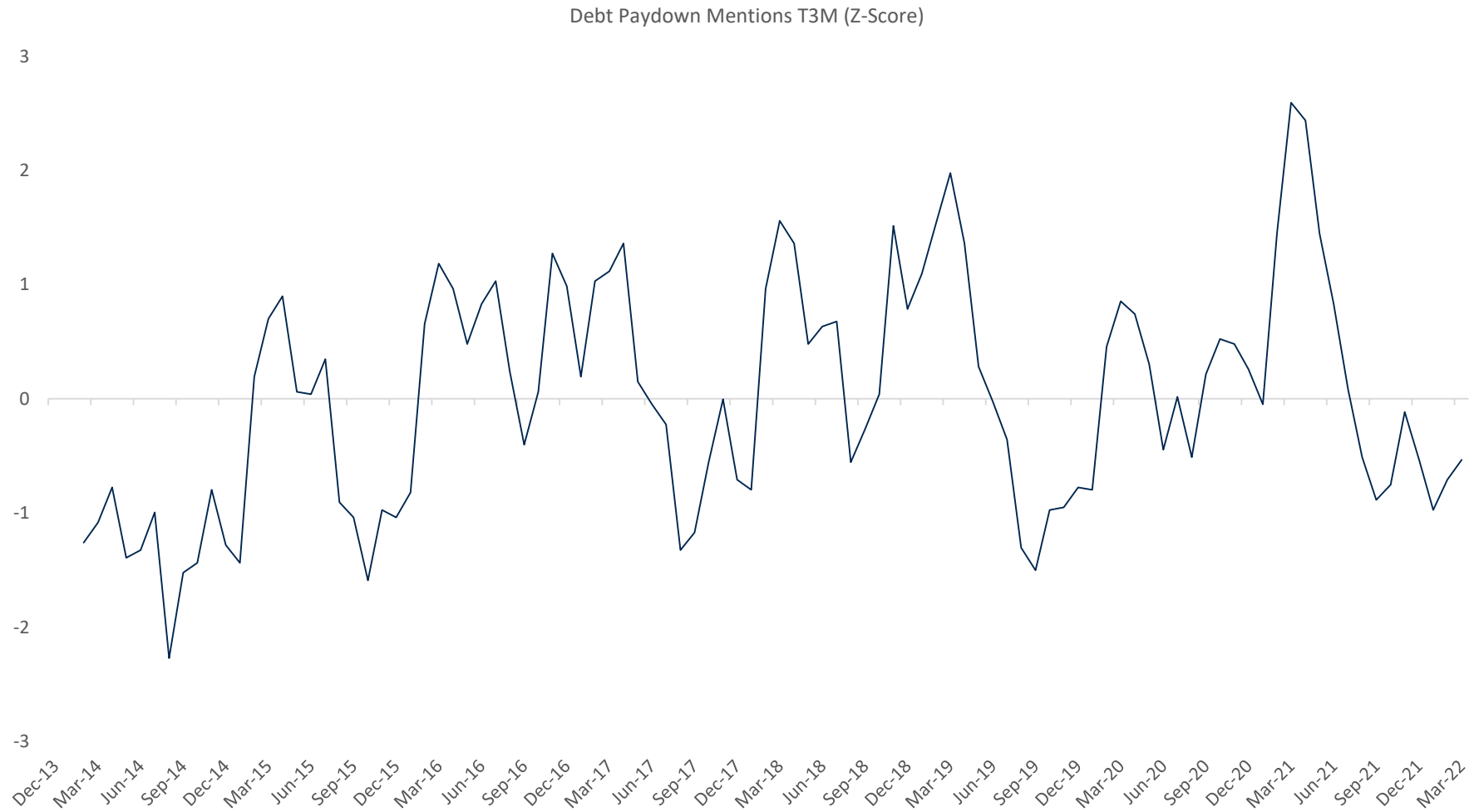


M&A Mentions T3M (Z-Score)



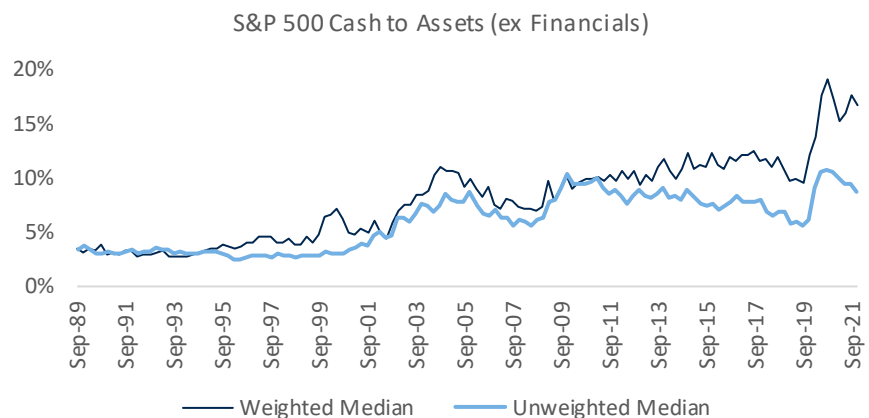
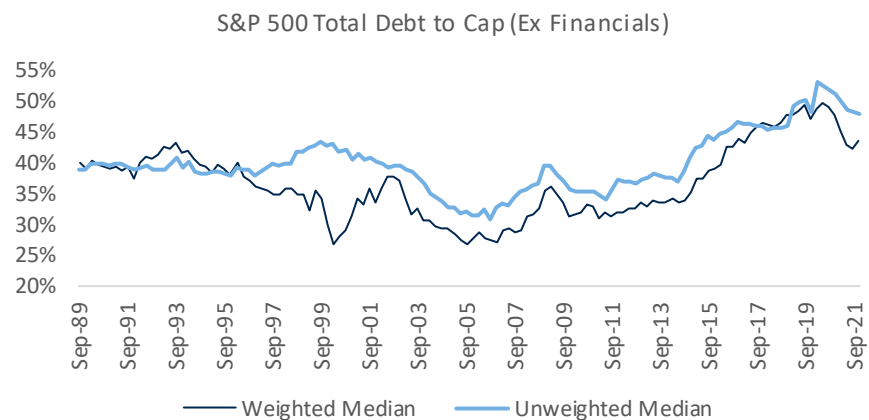
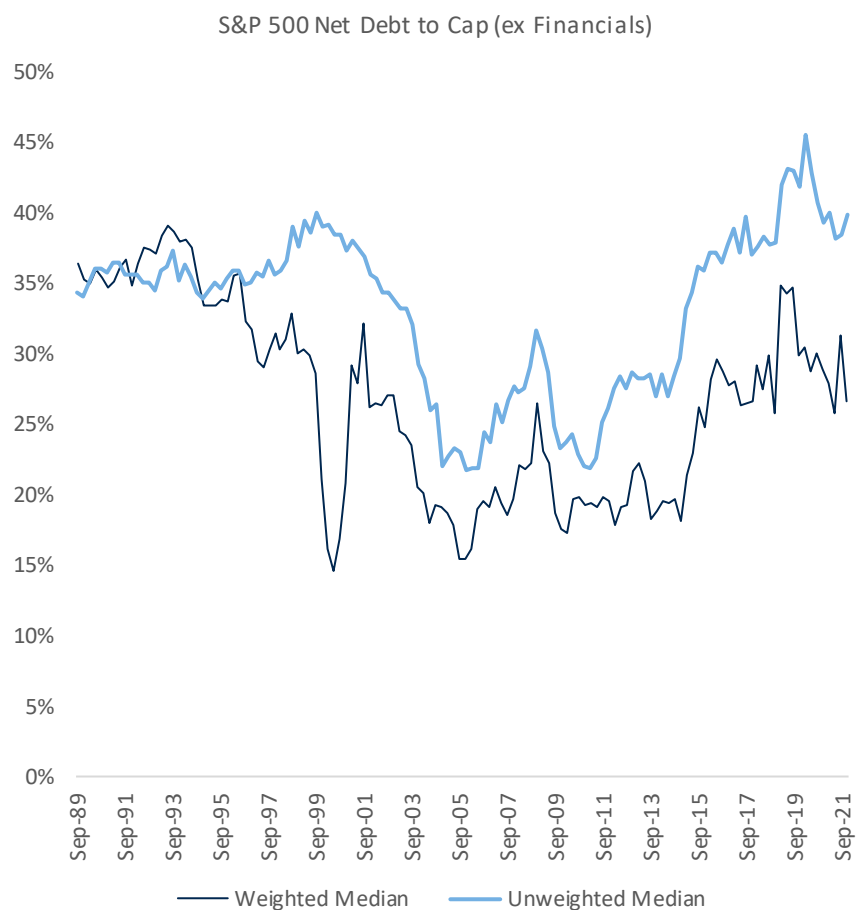
Source: RBC US Equity Strategy, Bloomberg; transcript analysis is based on mentions through earnings calls and other event transcripts for S&P 500 companies, latest data point is as of March 2022

Debt Paydown Discussion Has Eased After Spiking in 2021



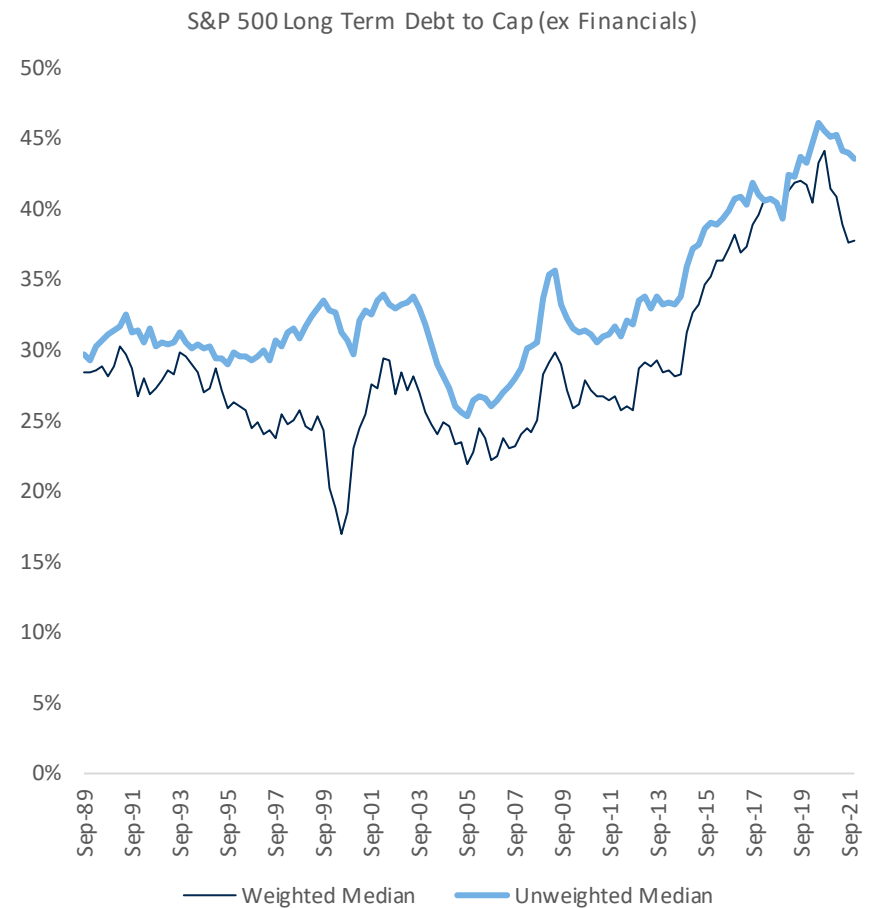
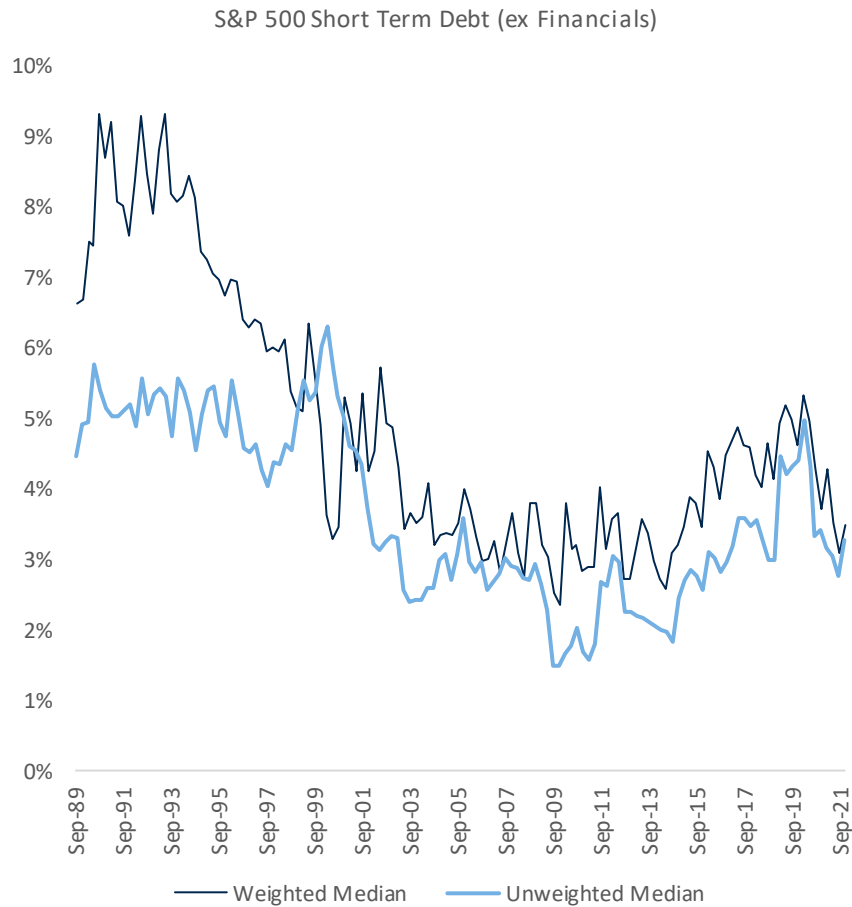
Source: RBC US Equity Strategy, Bloomberg; transcript analysis is based on mentions through earnings calls and other event transcripts for S&P 500 companies, latest data point is as of March 2022

Debt Levels Have Been High, but Are Coming Down



Source: RBC US Equity Strategy, S&P Capital IQ/ClariFI, Compustat; note that changes to lease accounting procedures took effect in 1Q19; latest data point is 4Q21

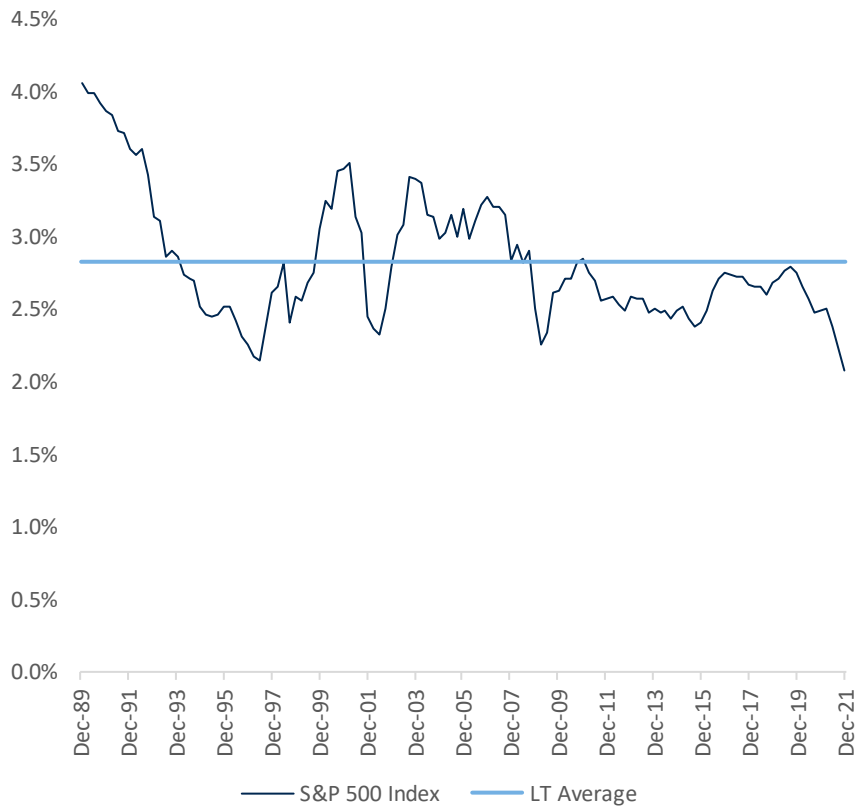
Short-Term and Long-Term Debt Has Been Coming Down



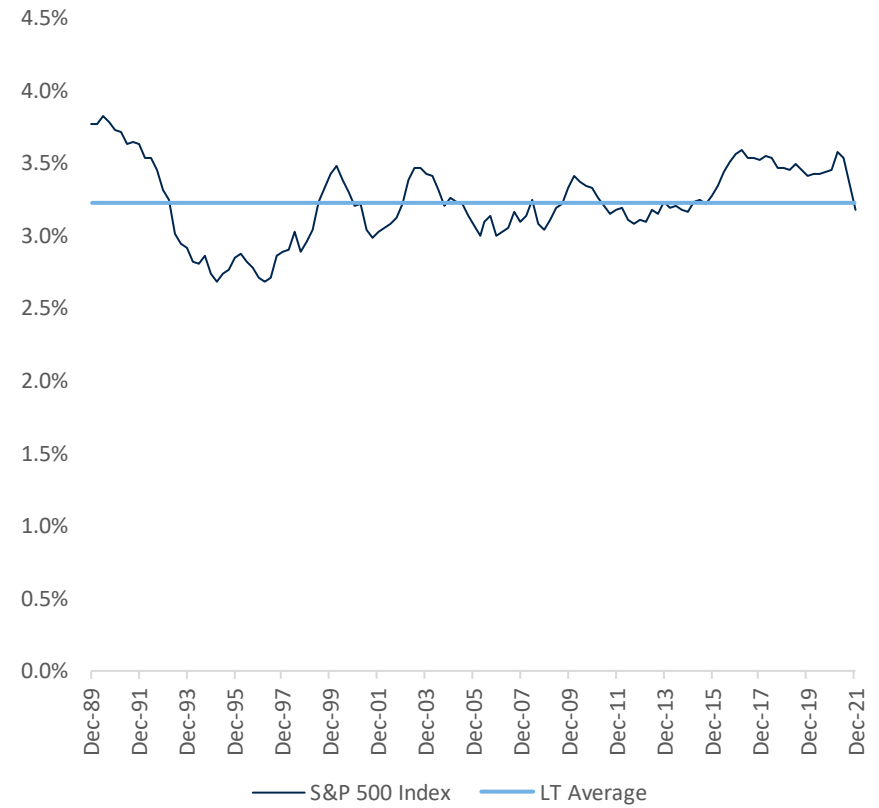
Source: RBC US Equity Strategy, S&P Capital IQ/ClariFI, Compustat; note that changes to lease accounting procedures took effect in 1Q19; latest data point is 4Q21

Interest Expense Fell Sharply Ahead of Fed Liftoff

S&P 500 Weighted Average Interest Expense as a % Sales



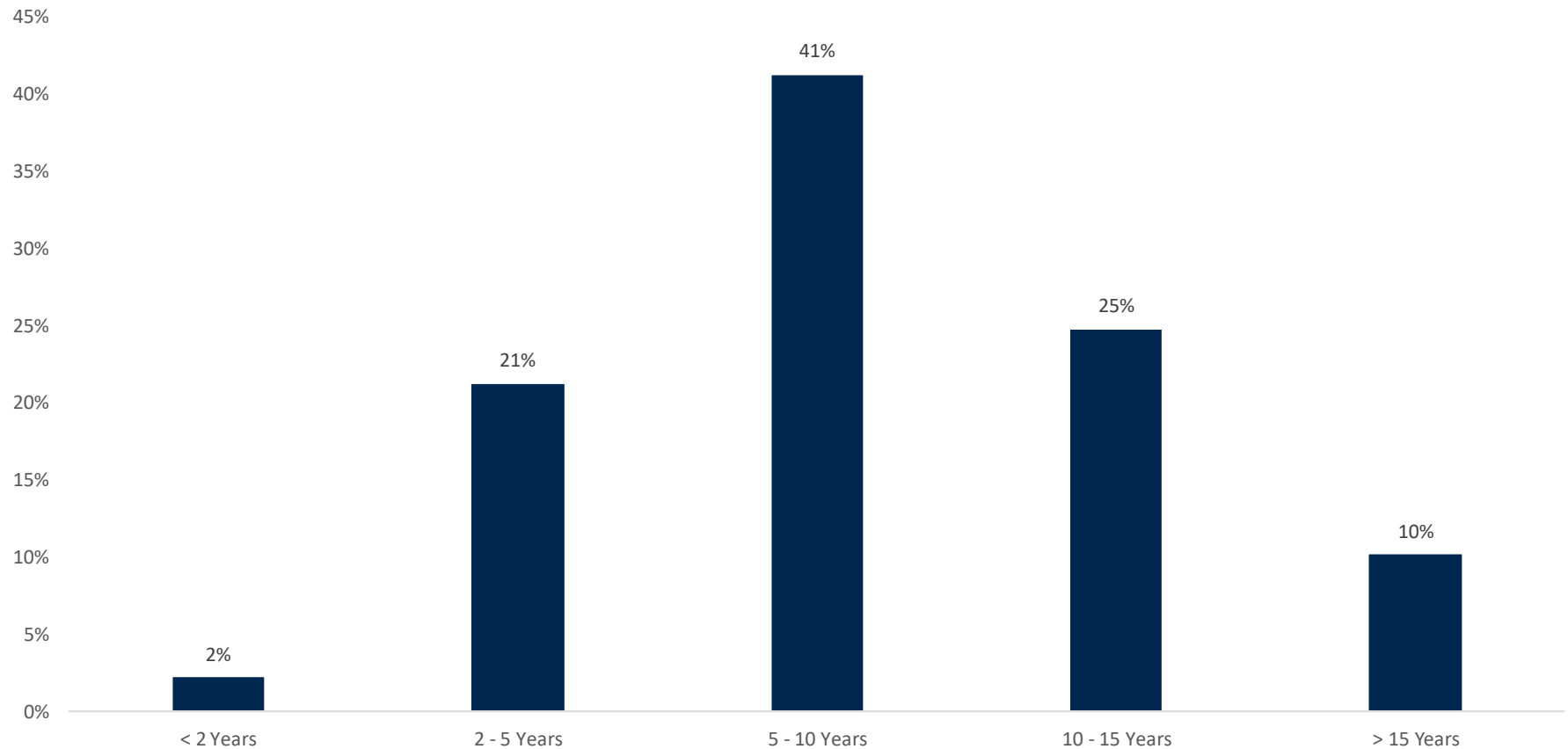
S&P 500 Average Interest Expense as a % Sales



Source: RBC US Equity Strategy, S&P Capital IQ/ClariFI, Compustat; latest data point is 4Q21

Most Companies Have Long Leads on Repayment

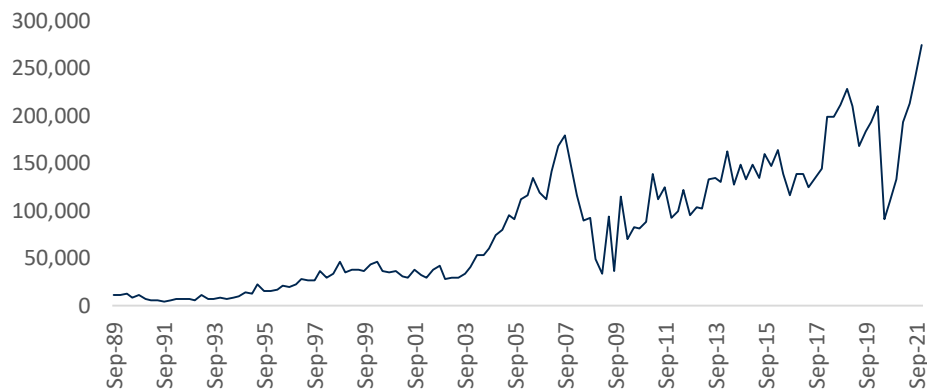
S&P 500 Companies: Breakdown of Wgt Average Maturity Dates (% Companies)



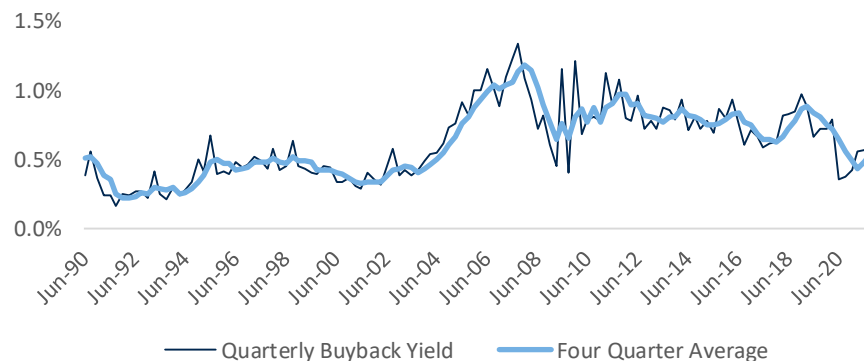
Source: RBC US Equity Strategy, Bloomberg; as of April 18, 2022

Buybacks Have Bounced Back

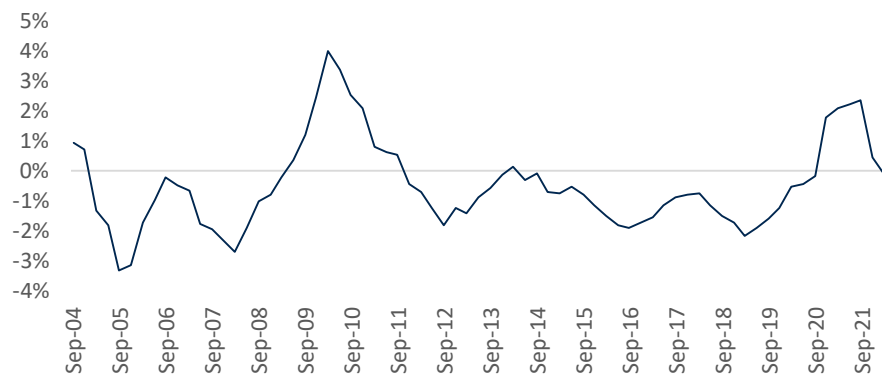
S&P 500 Buybacks (\$ Value)



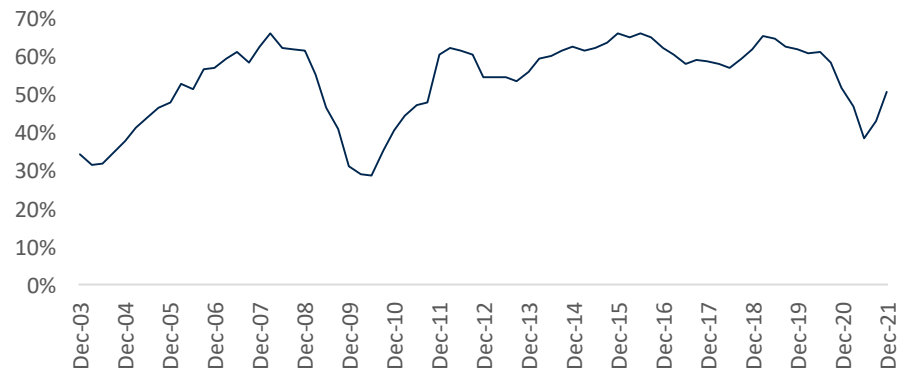
S&P 500 Buyback Yield



S&P 500 Index: Yr/Yr Divisor Growth

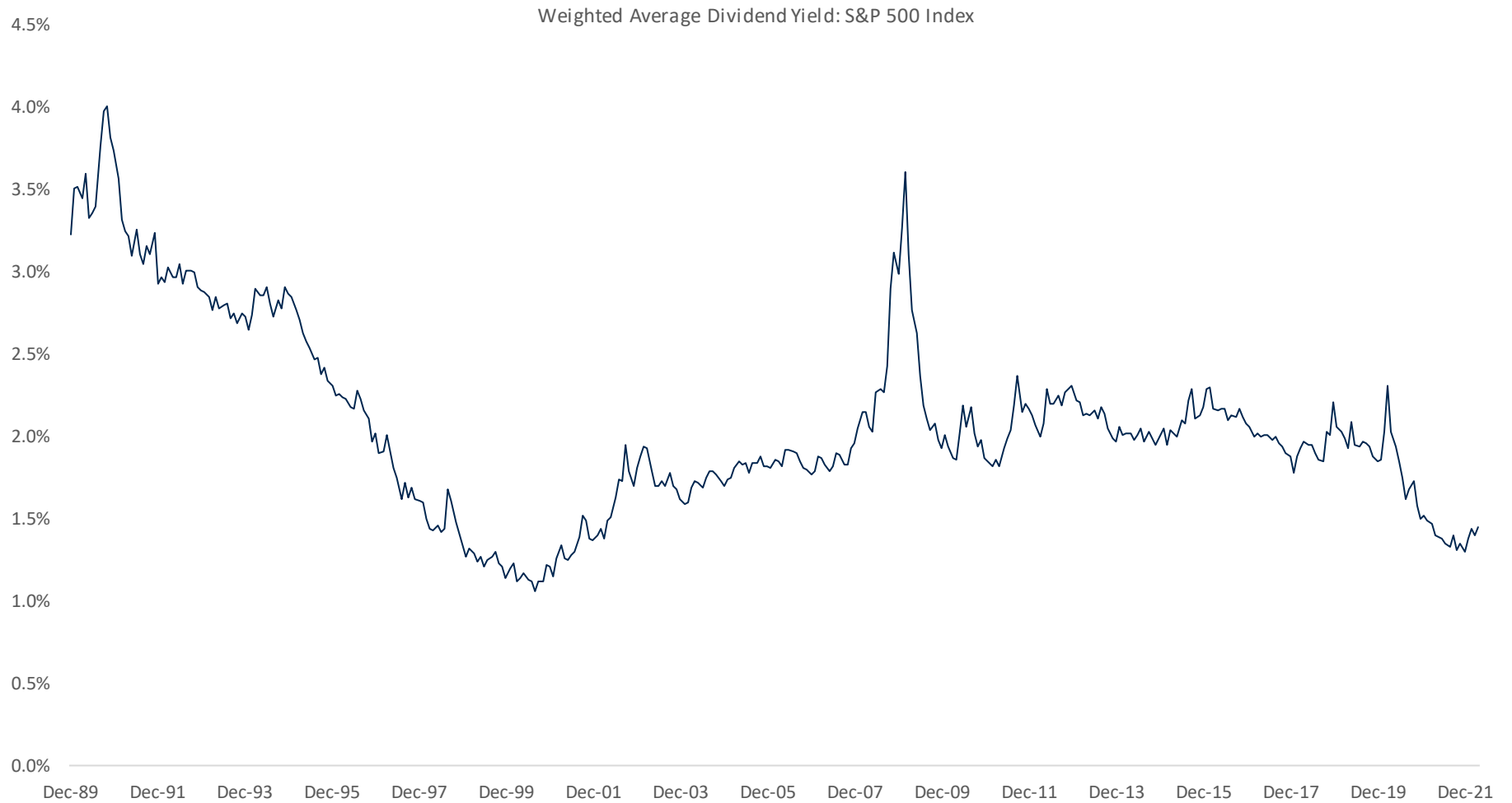


S&P 500 Index: Reduction In Share Count vs. Prior Year



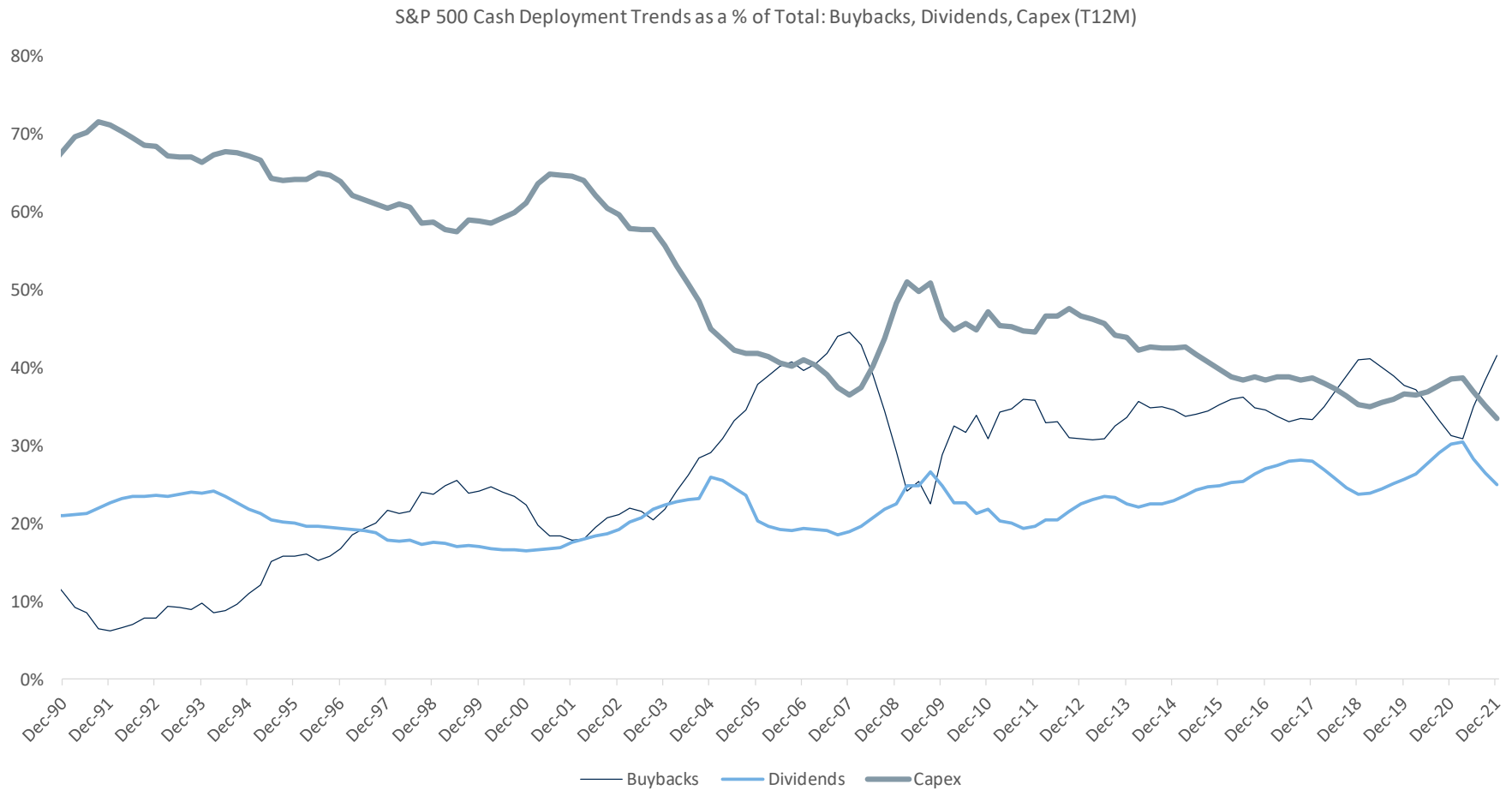
Source: RBC US Equity Strategy, Bloomberg, S&P Capital IQ/Clarifi, Compustat; divisor growth chart as of March 2022; other charts are as of 4Q21

The S&P 500's Dividend Yield Has Stabilized



Source: RBC US Equity Strategy, S&P Capital IQ/ClariFI; as of April 2022

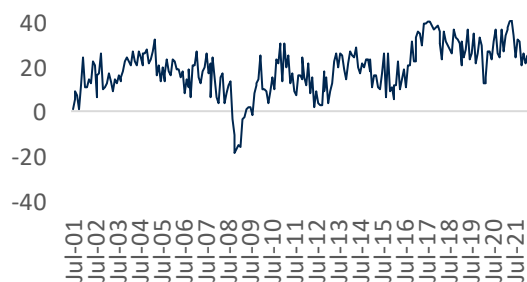
Buybacks Favored Over Dividends & Capex in Recent Years



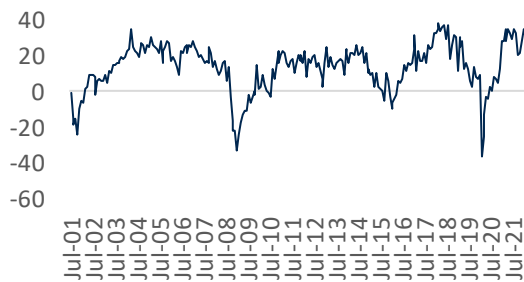
Source: RBC US Equity Strategy, S&P Capital IQ/ClariFI; as of 4Q21

Capex Expectations Have Slipped/Stalled, but Generally Remain at Healthy Levels

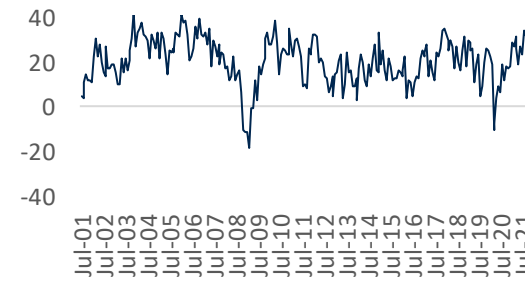
Philly Fed Mfg Bus Outlook: Future Capital Expenditures Diffusion Indx(SA, %Bal)



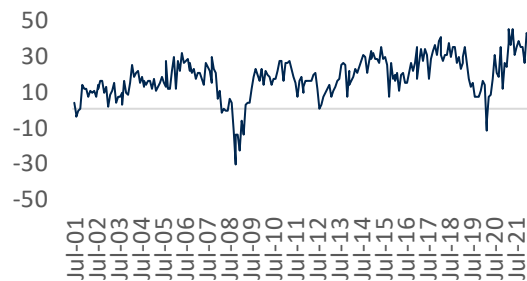
Kansas City Fed Mfg Survey: Capital Expenditures: Expected in 6 Months(SA, %Bal)



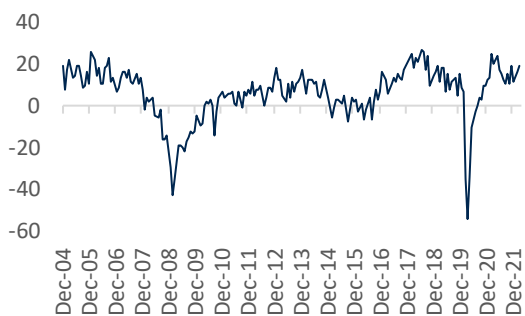
Empire State Mfg Svy: Cap Expenditures, 6 Mos Ahead: Diffusion Index (SA, %Bal)



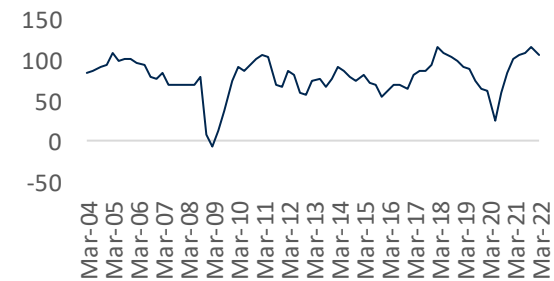
Richmond Fed Mfg Survey: Expected Manufacturing Capital Expenditures (SA, %Bal)



Dallas Fed Manufacturing Outlook Capital Expenditures

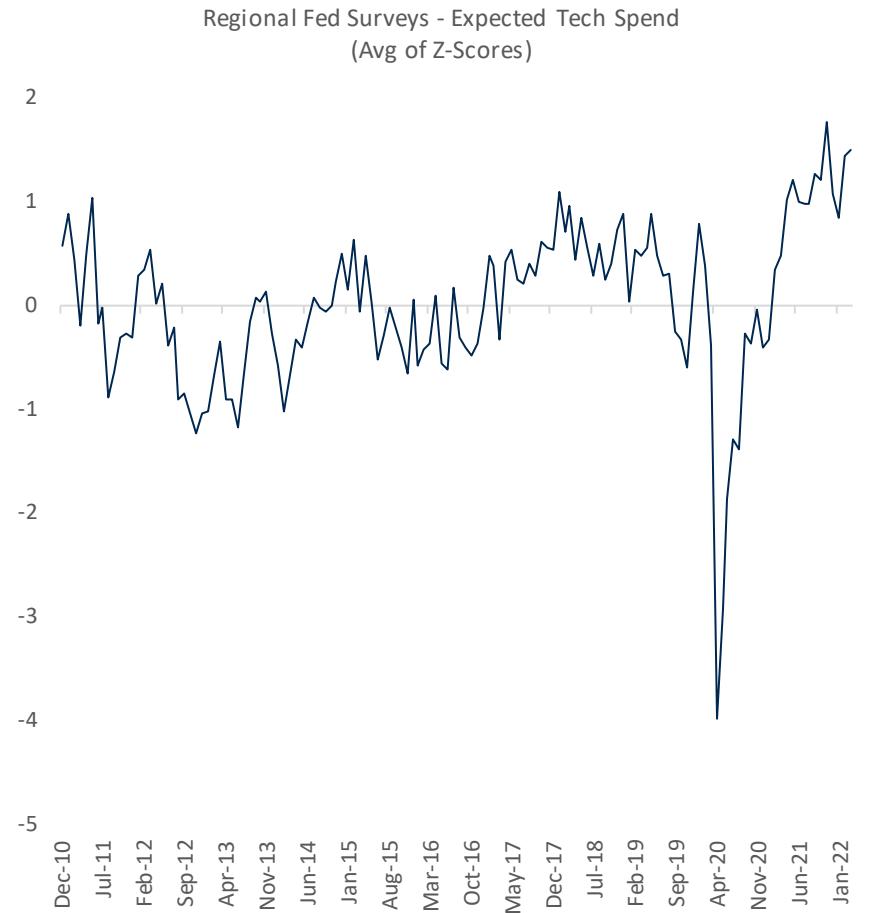
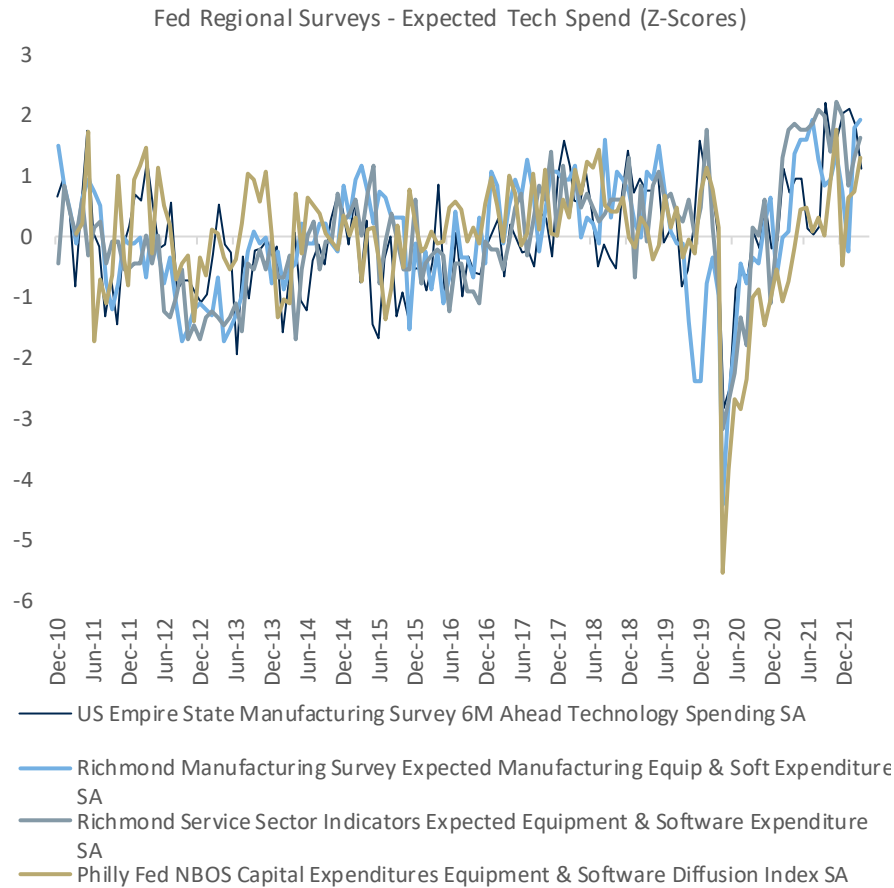


Business Roundtable CEO Economic Outlook: Capital Spending Sub-Index (50+=Expansion)



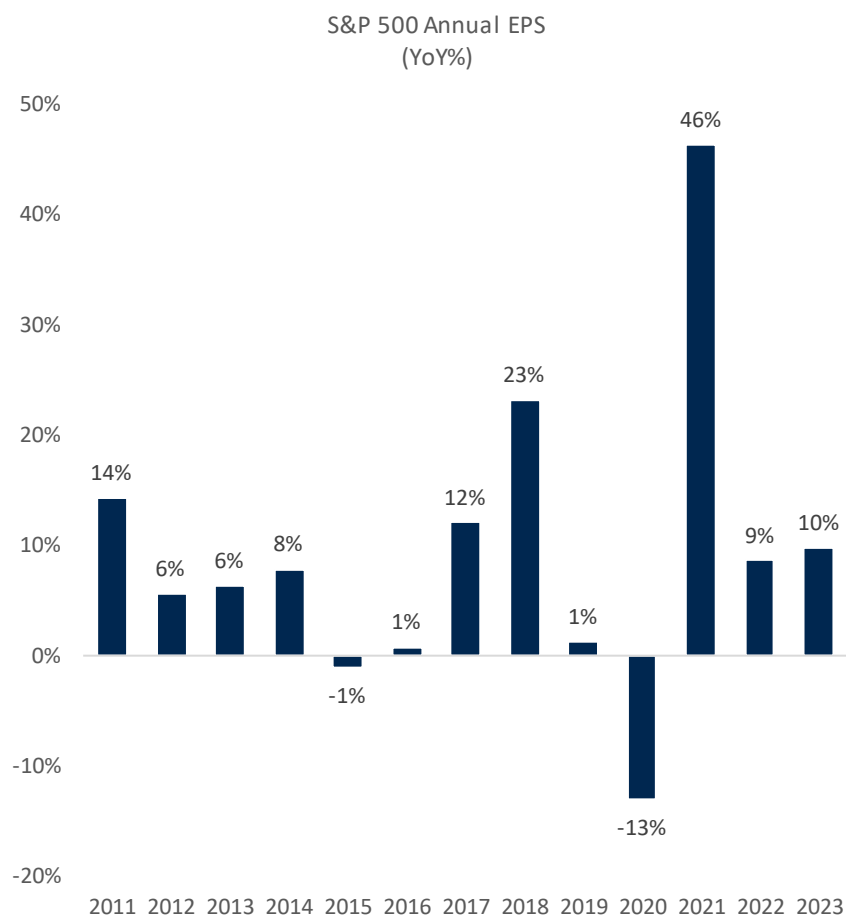
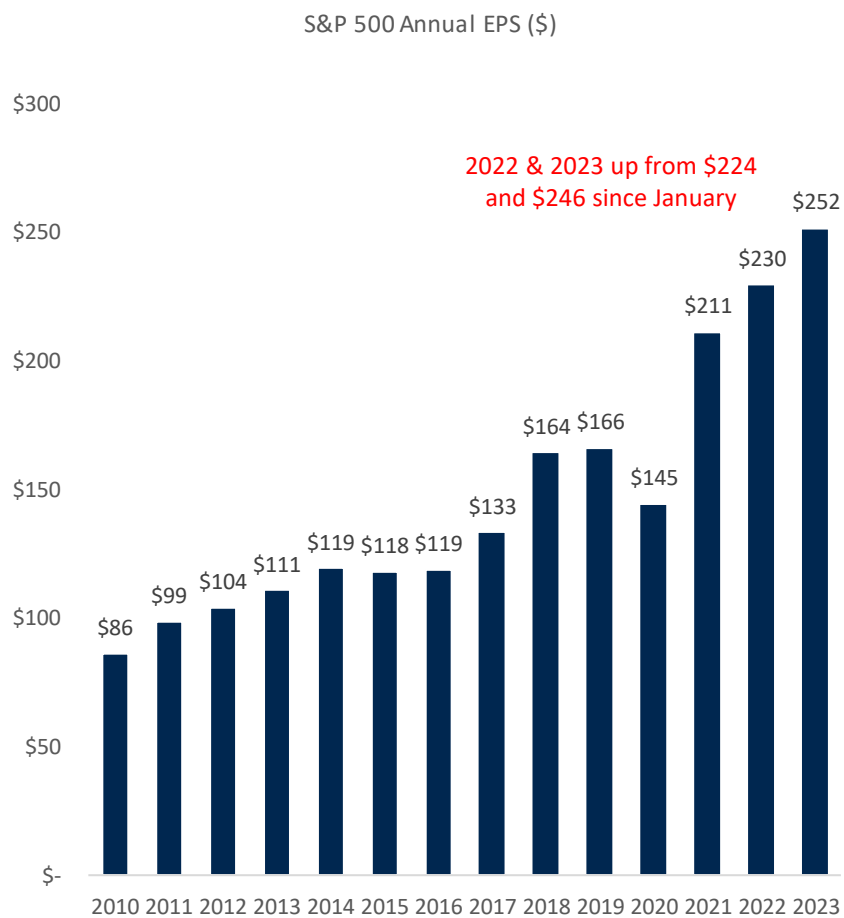
Source: RBC US Equity Strategy, Haver, Bloomberg; all charts monthly through March 2022 except Business Roundtable through 1Q22 and Philly and Empire Fed through April 2022

Tech Spending Expectations May Have Peaked but Remain Robust



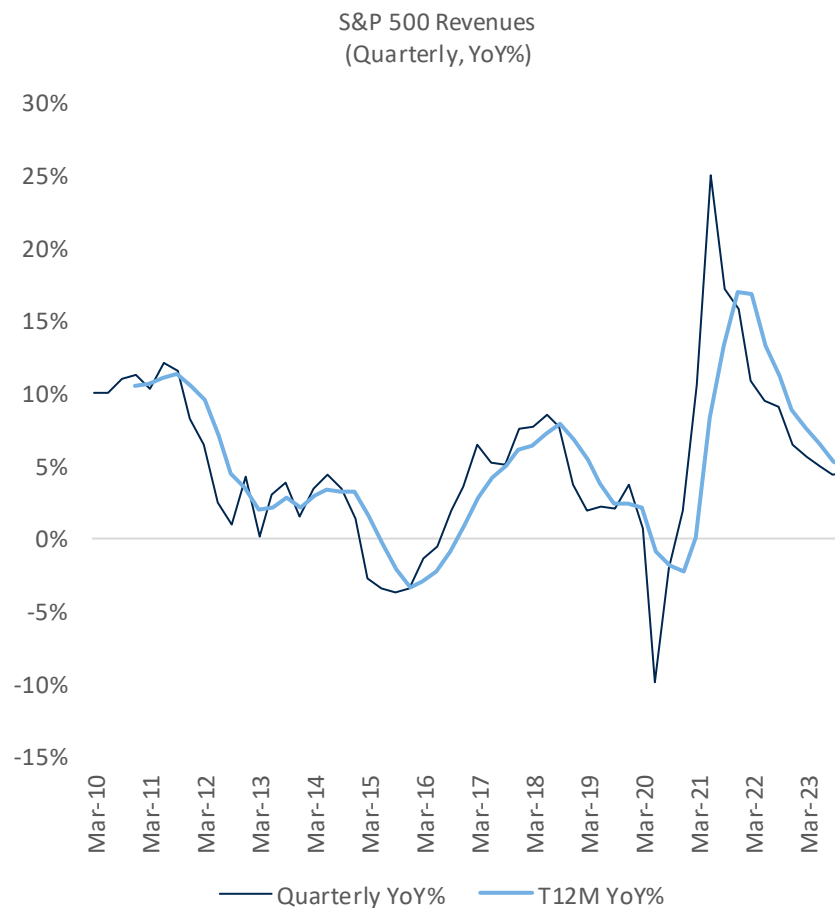
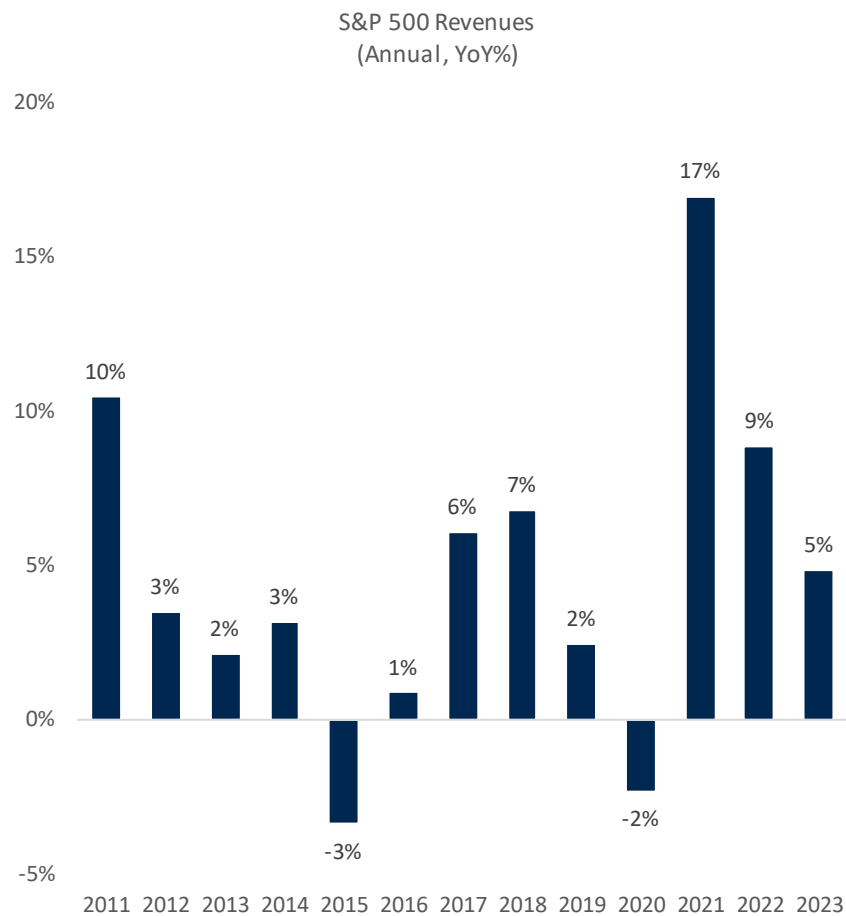
Source: RBC US Equity Strategy, Bloomberg, as of March 2022

Consensus EPS Forecasts for the S&P 500 Have Moved Up



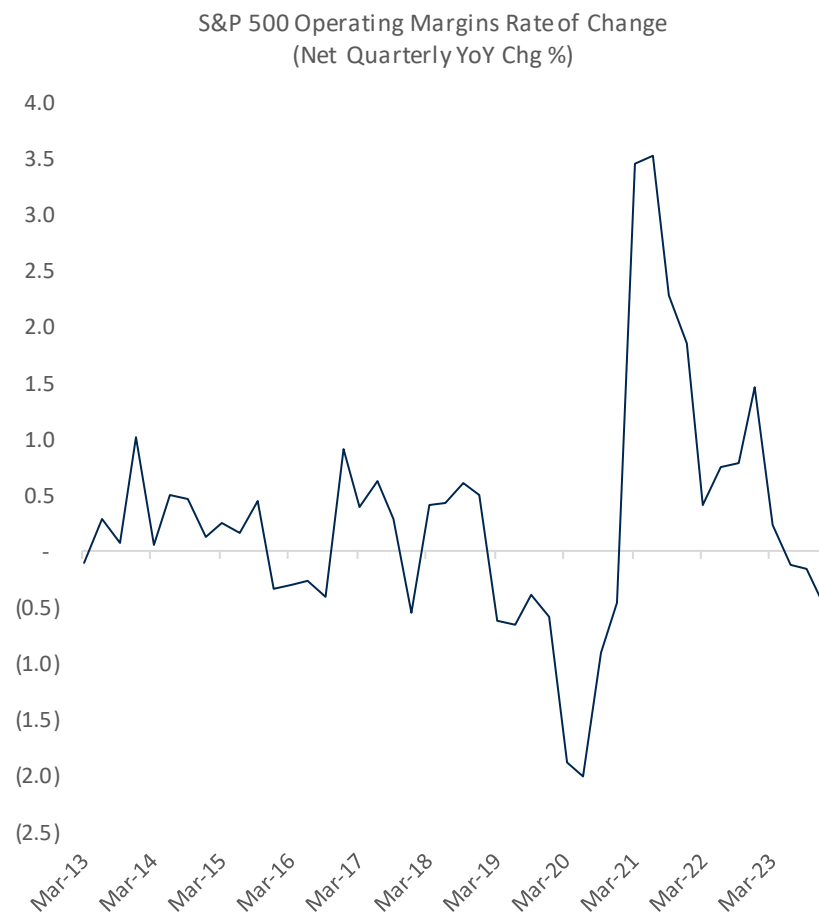
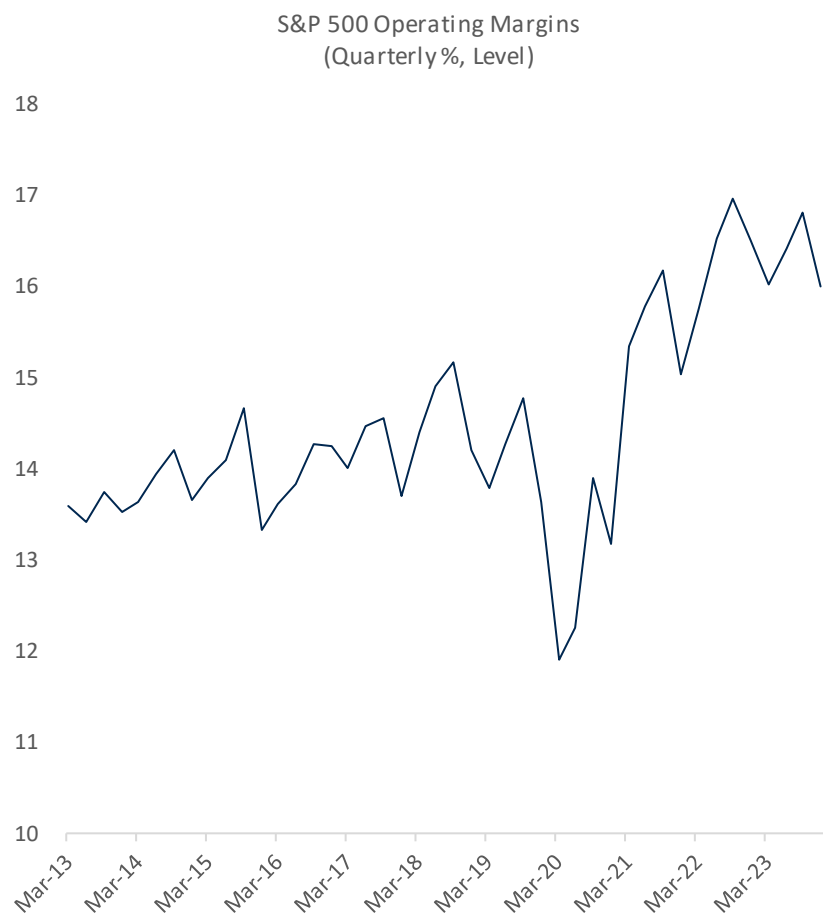
Source: RBC US Equity Strategy, Bloomberg; as of April 8th, 2022; 2022-2023 are bottom-up sell-side consensus forecasts as tracked by Bloomberg

Consensus Expects Revenue Growth to Decelerate in 2022-2023, After Peaking in 2021



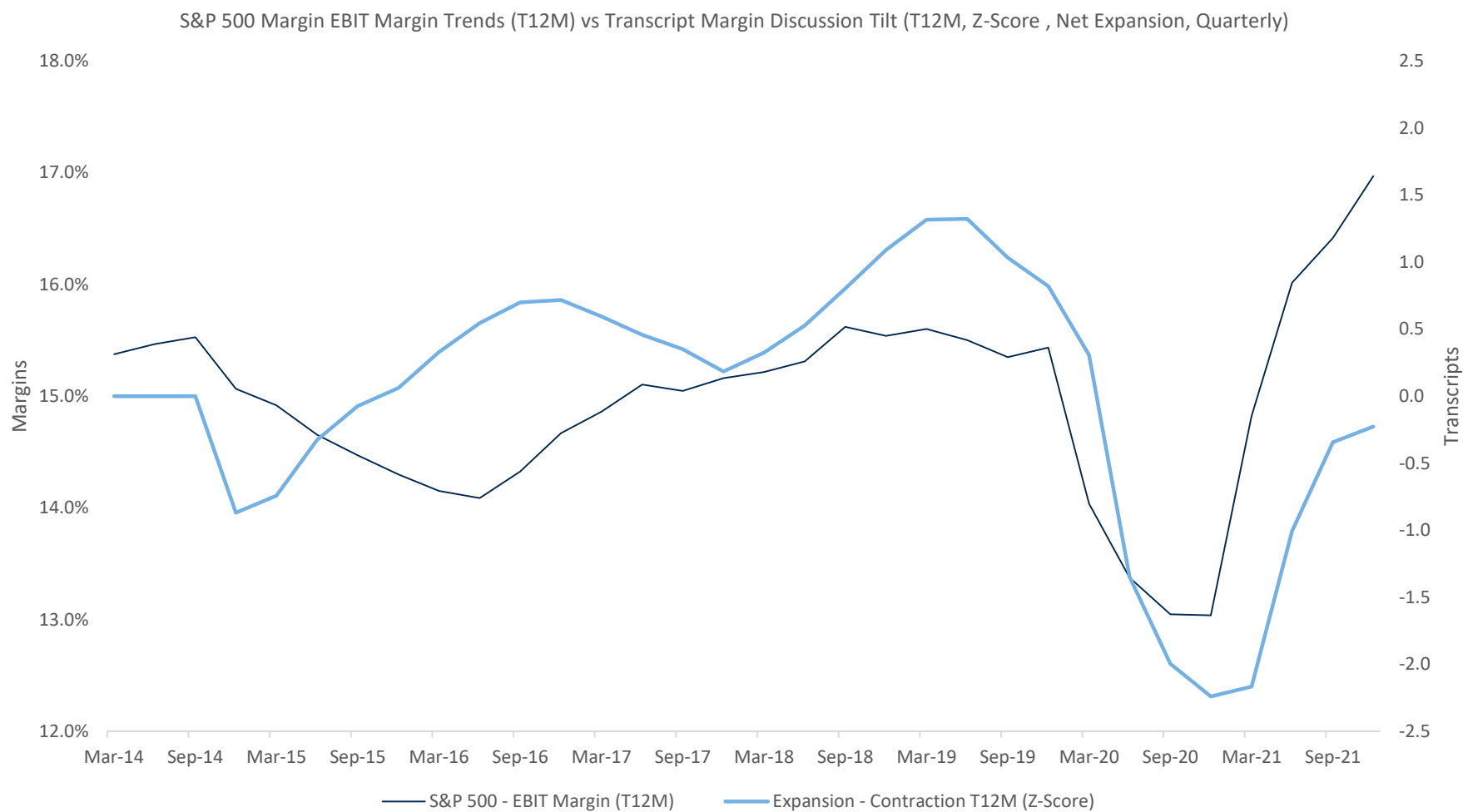
Source: RBC US Equity Strategy, Bloomberg; as of April 20, 2022; 2022-2023 are bottom-up sell-side consensus forecasts as tracked by Bloomberg

Consensus Expects Margins to Flatten Out in 2022-2023, After Peaking in 2021



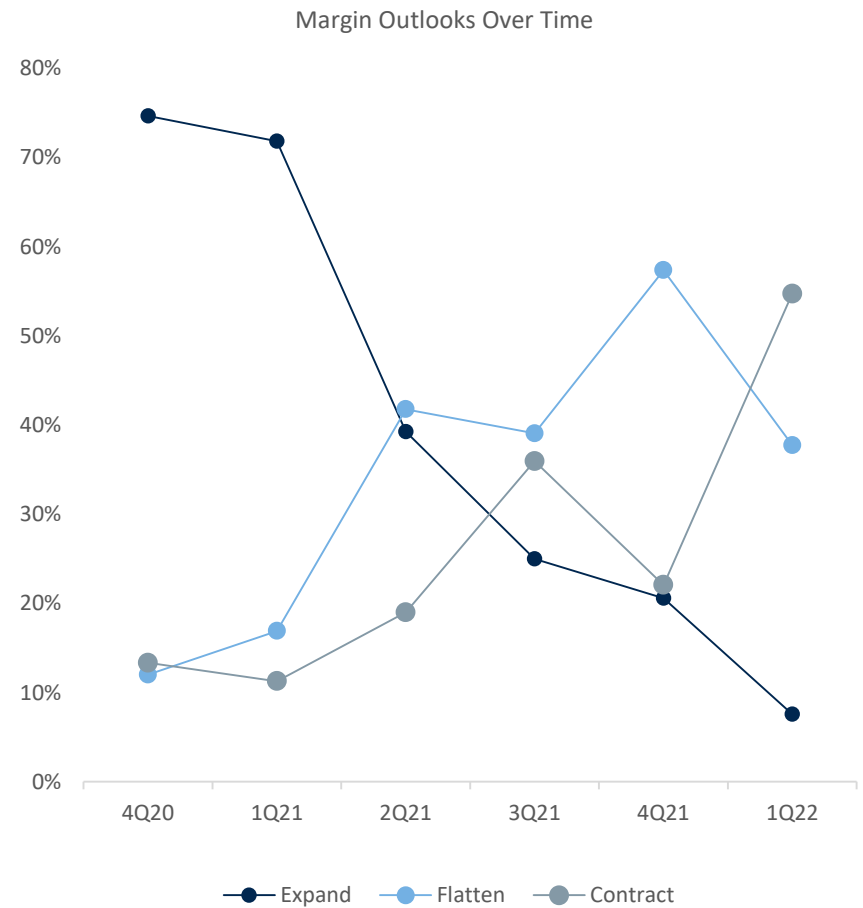
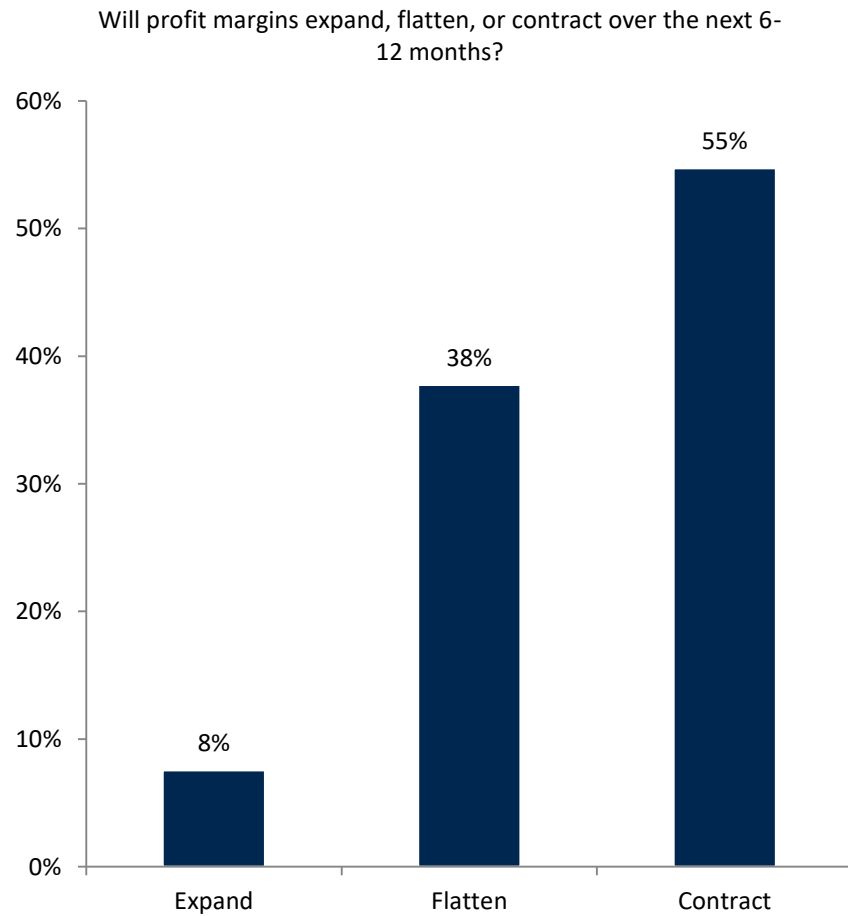
Source: RBC US Equity Strategy, Bloomberg; as of April 20, 2022; 2022-2023 are bottom-up sell-side consensus forecasts as tracked by Bloomberg; excludes REITs and Financials

Actual Margin Trends Have Been Tracking Better Than Company Commentary in Transcripts



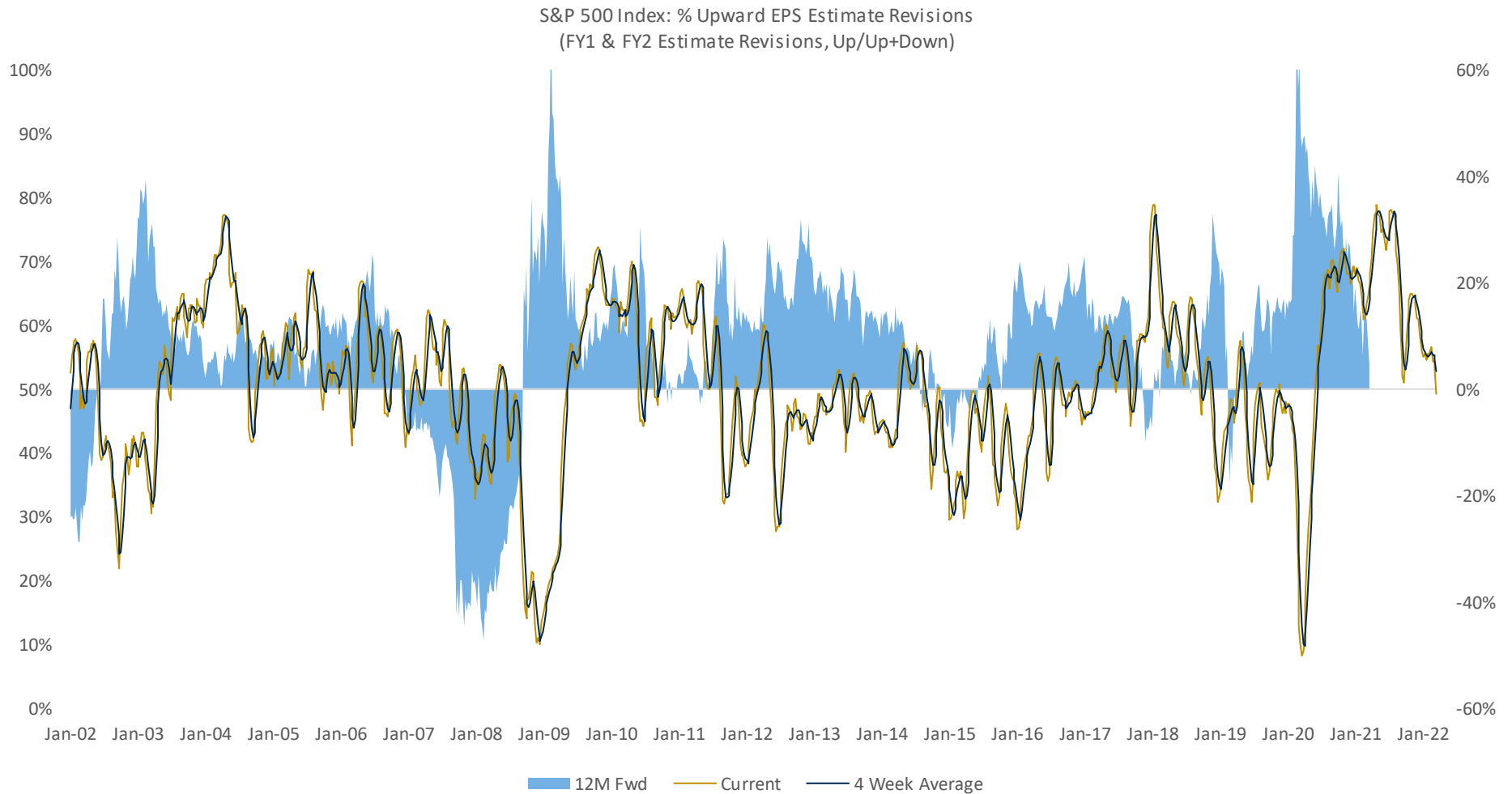
Source: RBC US Equity Strategy, Bloomberg. Transcript analysis based on mentions through earnings calls & other event transcripts for S&P 500 companies, latest data point is as 4Q21 for both transcripts and margin trends

Most US Equity Investors Expected Margin Contraction by a Wide Margin in Our Late-March Survey



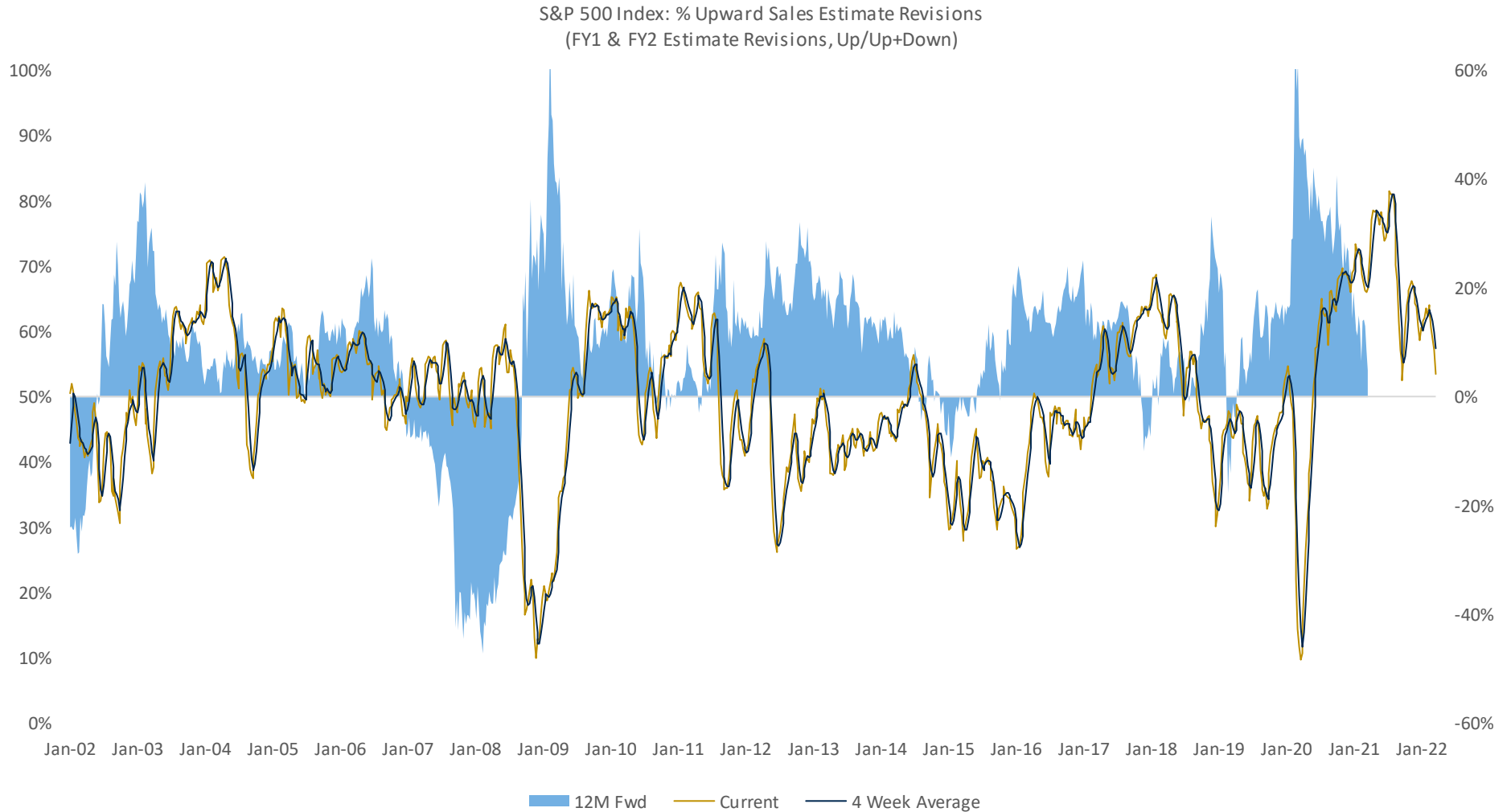
Source: RBC US Equity Strategy; survey taken March 28th-31st, 2022 of 106 institutional investors

EPS Revisions Have Faded for the S&P 500, Are Back in Slight Negative Territory



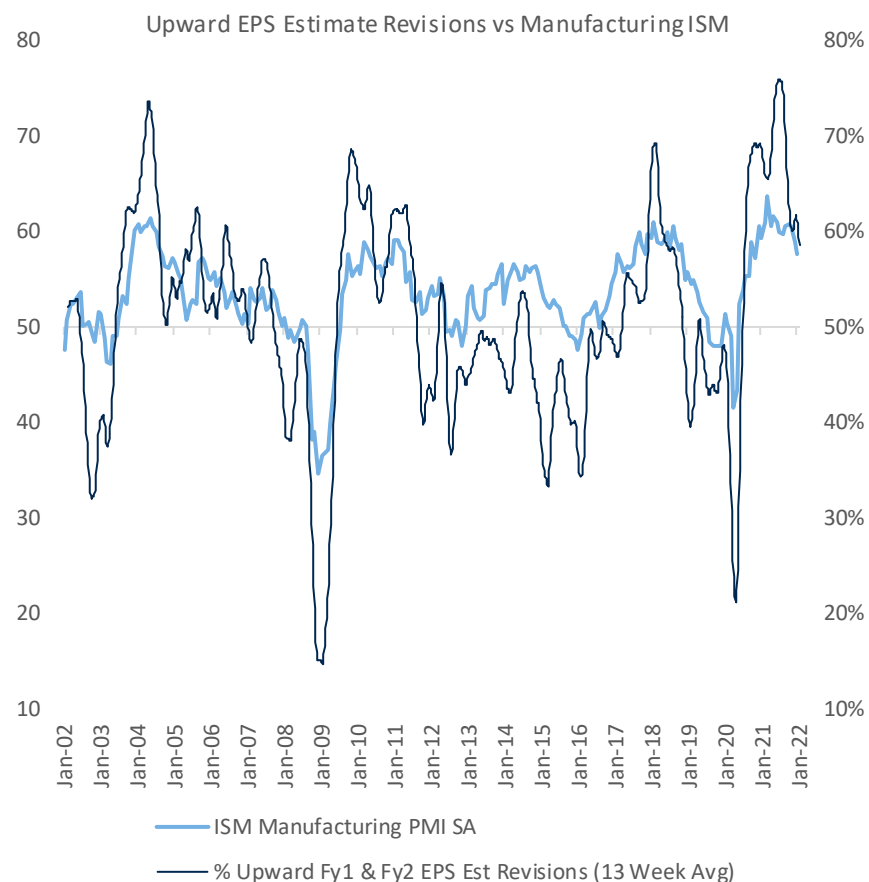
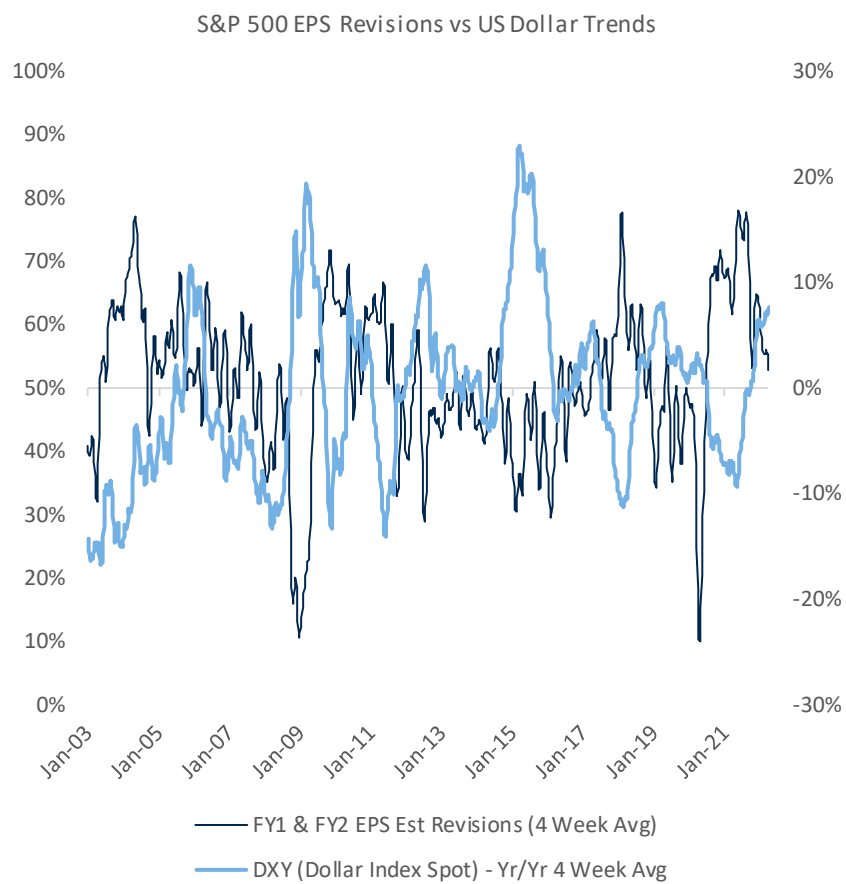
Source: RBC US Equity Strategy, S&P Capital IQ/ClariFI, CIQ estimates. For REITS, FFO/share revisions are used instead of EPS revisions; as of April 15, 2022

Sales Revisions Still Slightly Positive for the S&P 500



Source: RBC US Equity Strategy, S&P Capital IQ/ClariFI, CIQ estimates; as of April 15, 2022

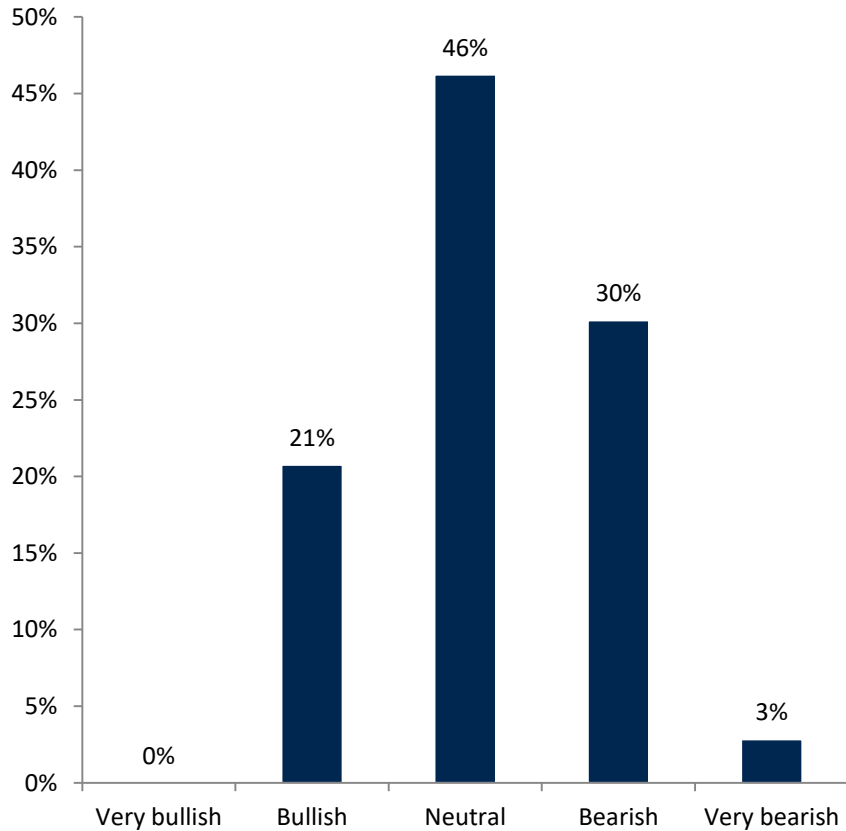
Stronger Dollar & Weakening ISM Mfg Typically Coincide With Weaker EPS Revisions Trends



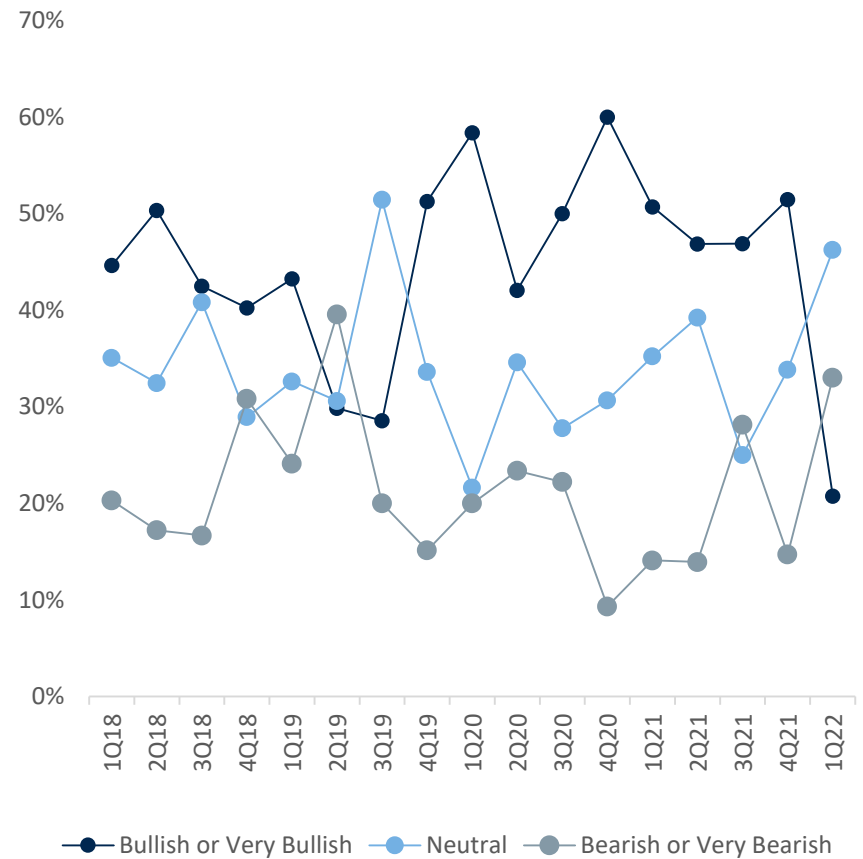
Source: RBC US Equity Strategy, CIQ estimates, S&P Capital IQ/ClariFI, Bloomberg. Revisions as of April 15, 2022; DXY as of April 8, 2022; ISM as of March 2022

The Bears Outnumber the Bulls, for the 1st Time Since Mid-2019

What is your outlook for the US stock market over the next 6-12 months?

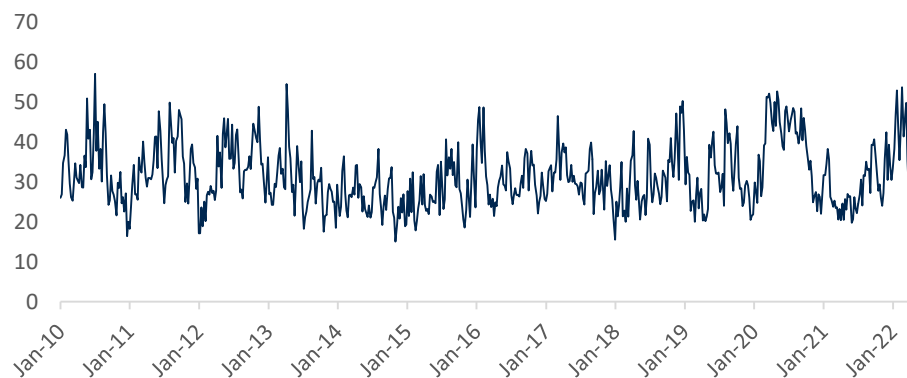


Stock Market Outlook Over Time

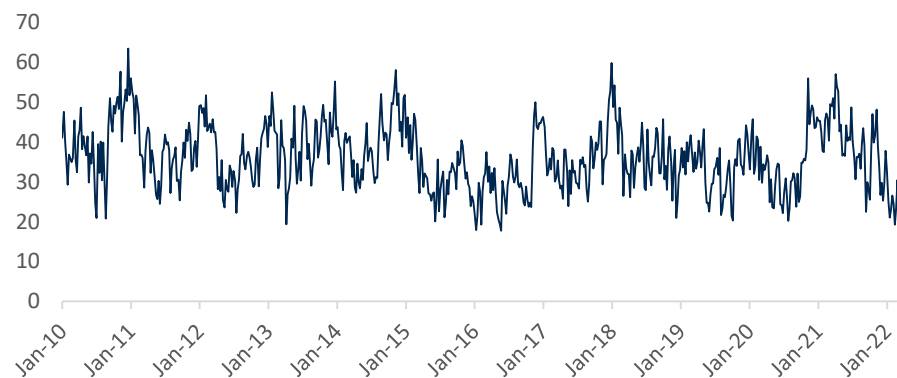


Bulls Retreating Again in April, While Bears Re-Emerge

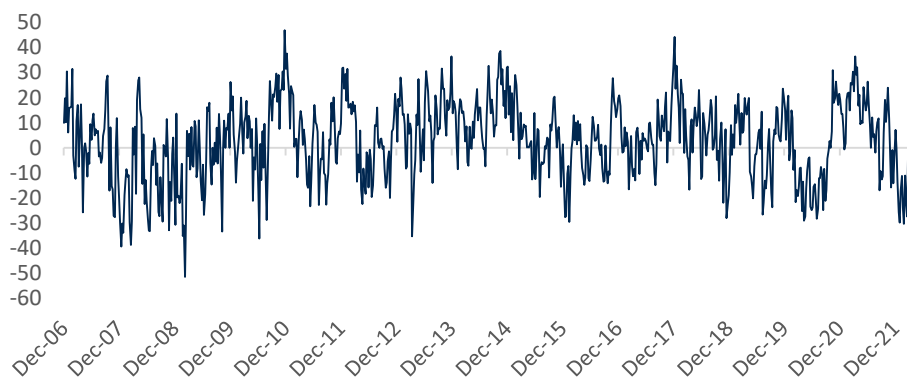
AAll US Investor Sentiment Bearish Readings



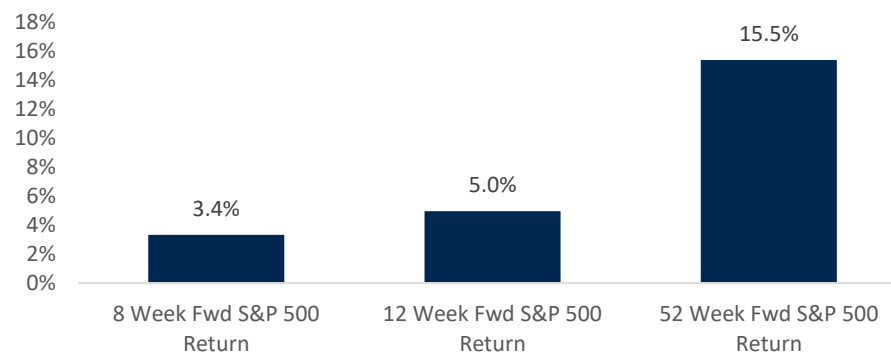
AAll US Investor Sentiment Bullish Readings



AAll US Investor Sentiment - Bulls Less Bears (Weekly)



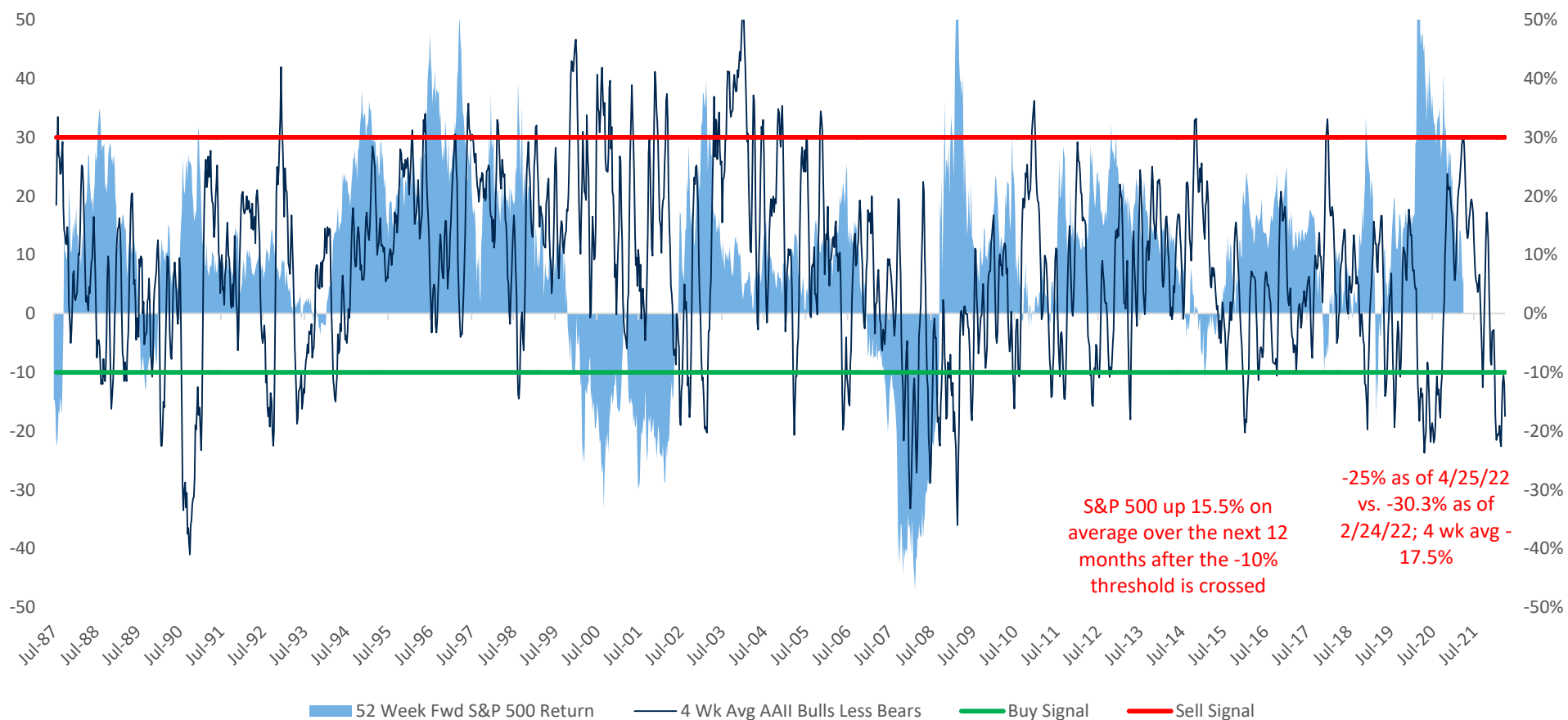
Avg S&P 500 Fwd Return since 1987 when 4 Week Avg AAll Bulls Less Bears Spread is below -10



Source: RBC US Equity Strategy, AAll, Bloomberg; as of April 21, 2022

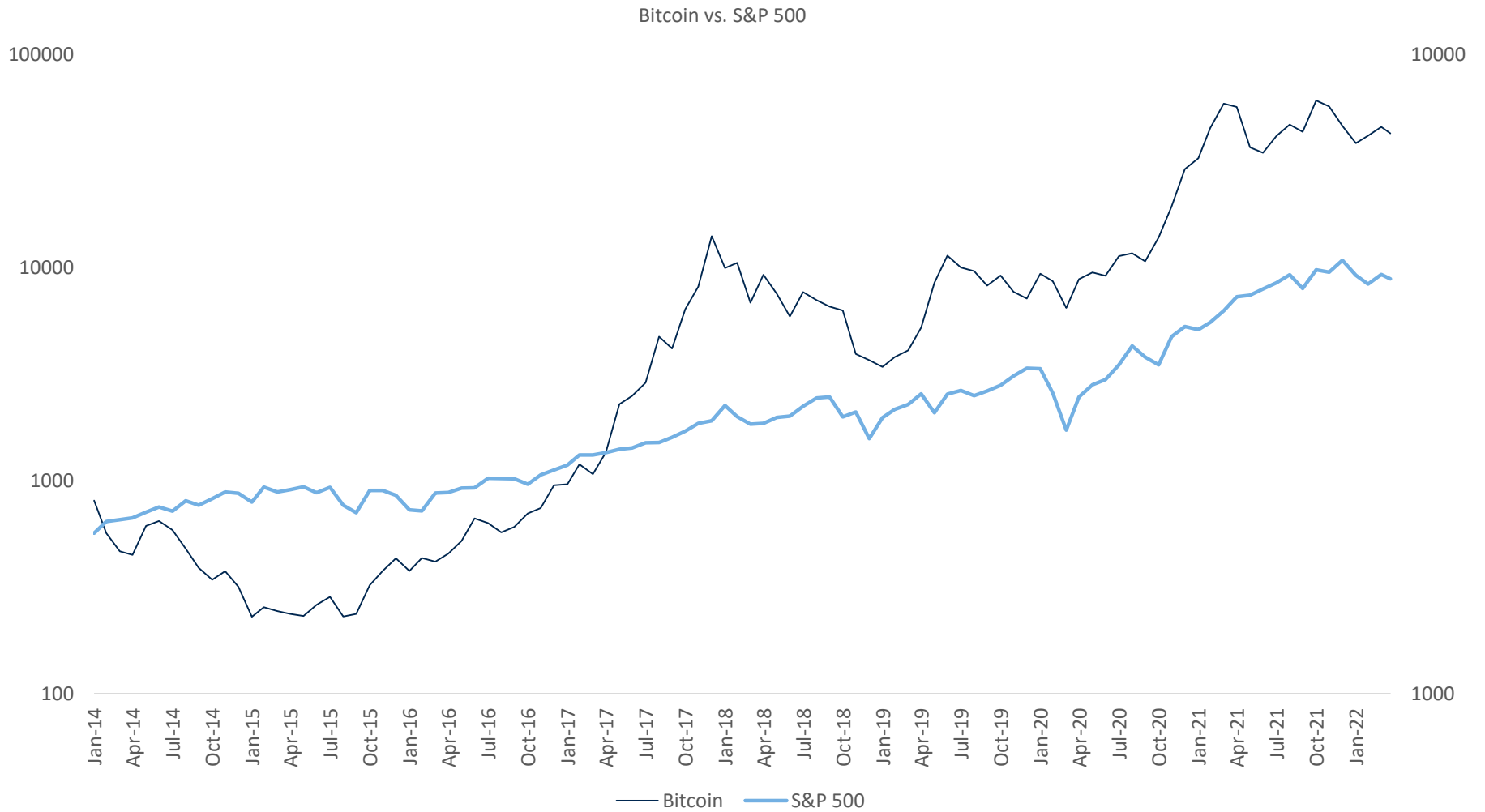
Individual Investor Sentiment Still Deeply Bearish, a Contrarian Buy Signal

AAll Bulls Less Bears (4 Week Avg) vs. 12 Month Forward S&P 500 Return



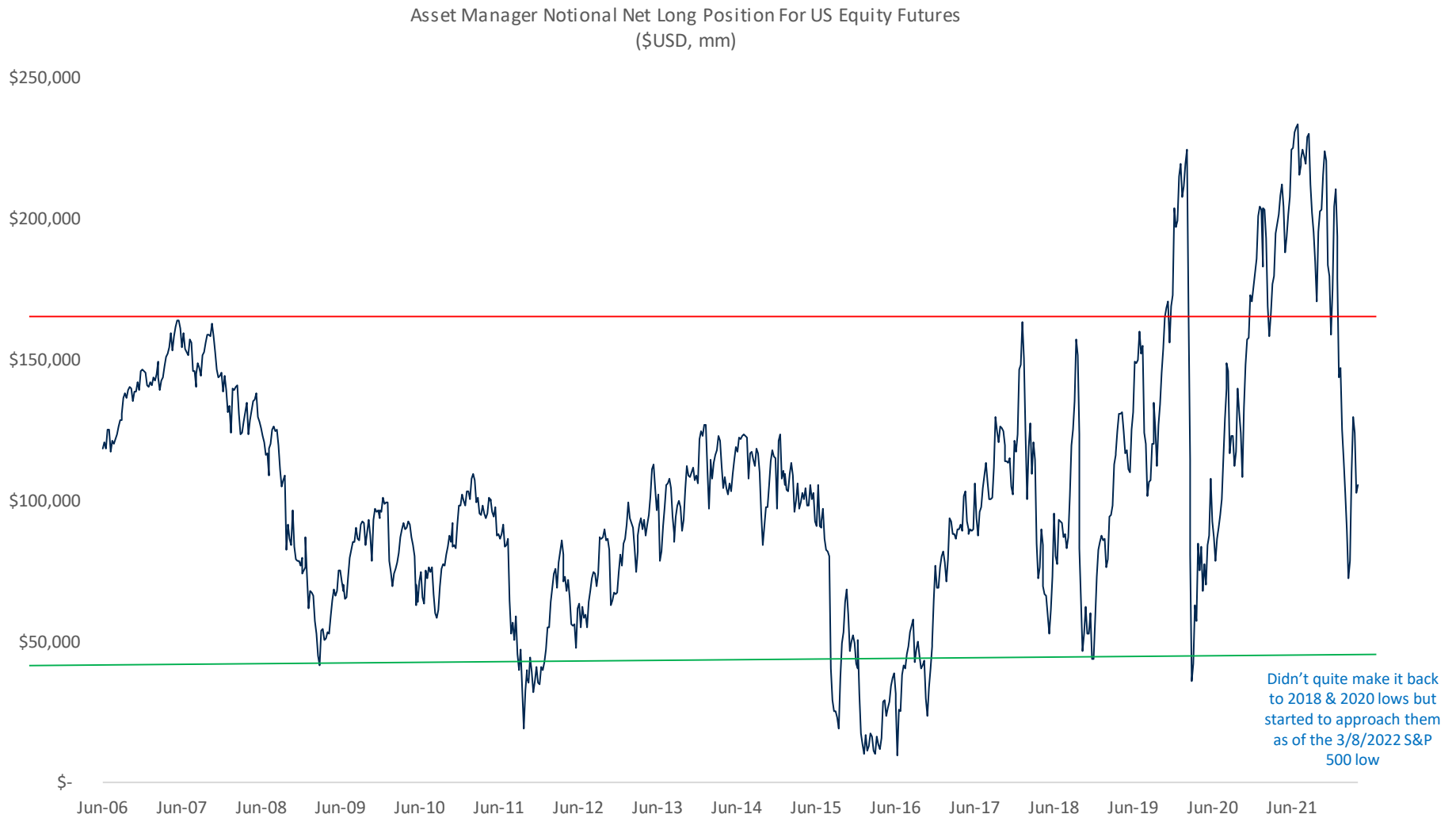
Source: RBC US Equity Strategy, AAll, Bloomberg; as of April 21, 2022

Bitcoin and the S&P 500 Have Become Correlated Risk Assets



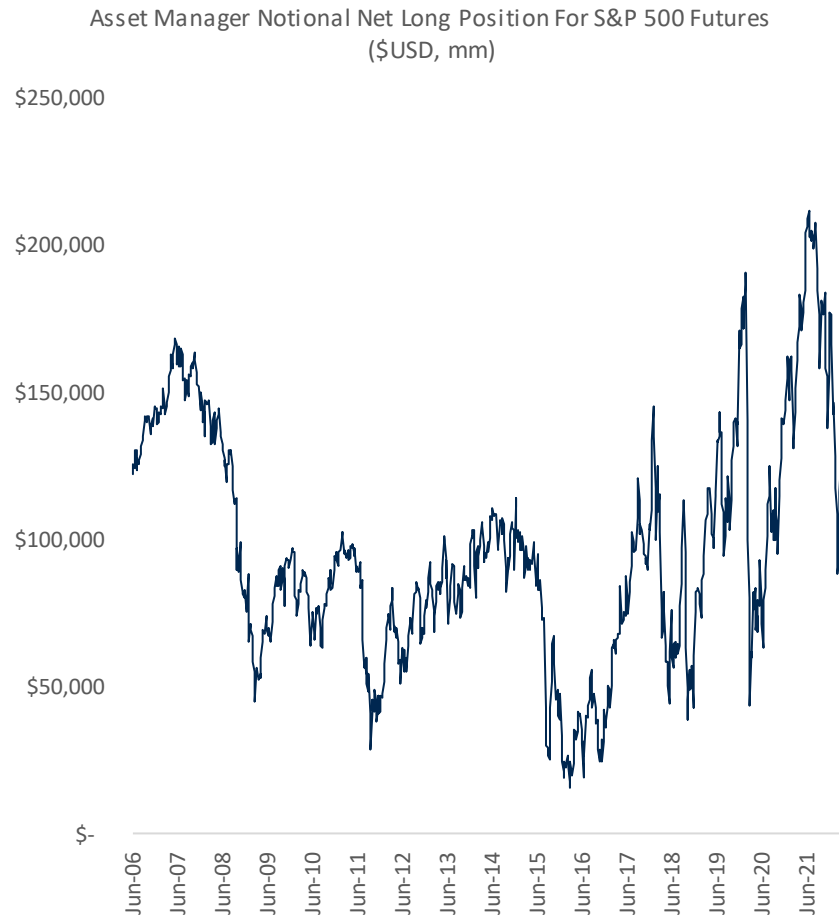
Source: RBC US Equity Strategy, Bloomberg; as of April 21, 2022

Asset Managers' US Equity Futures Positioning Bounced in March After Falling Sharply



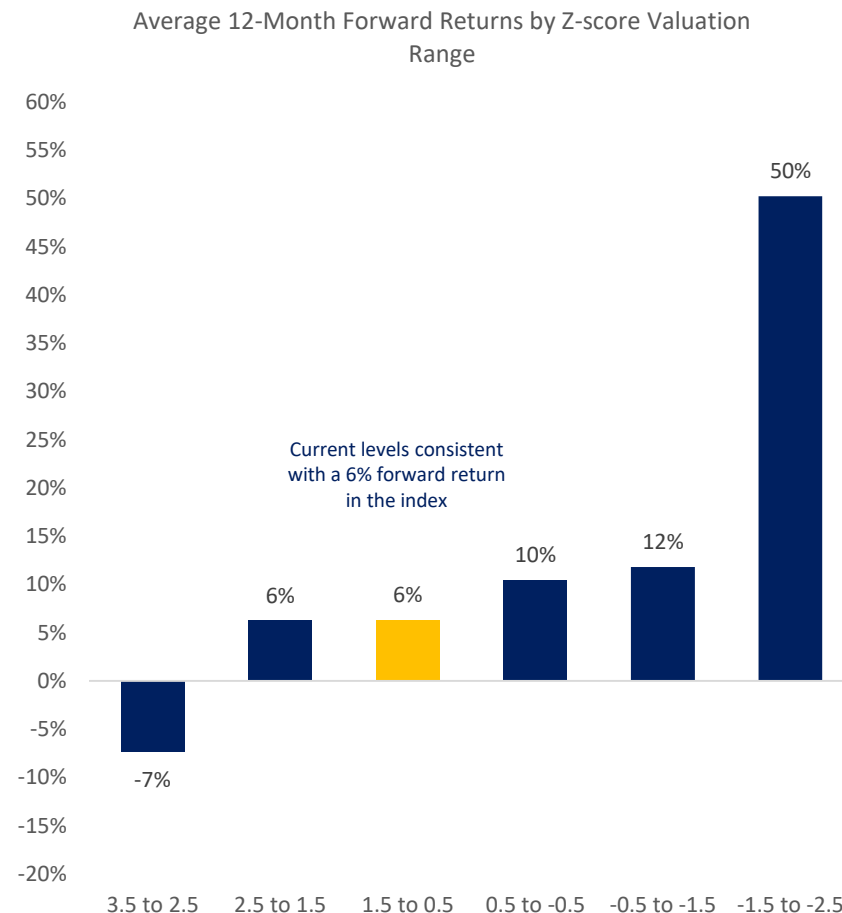
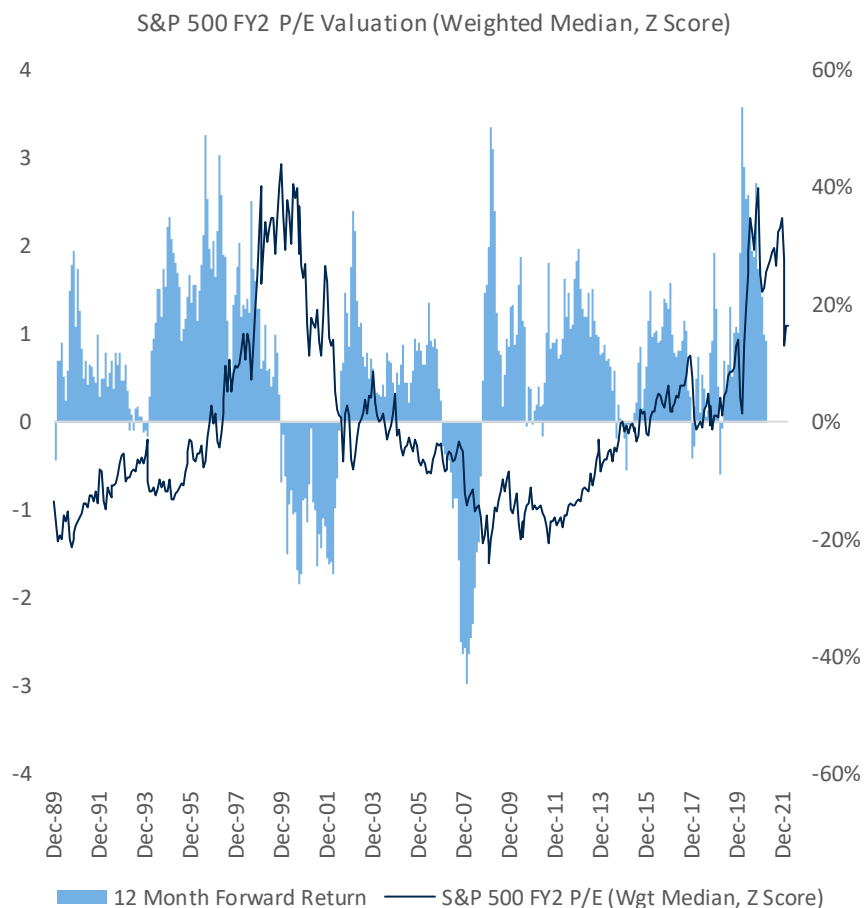
Asset Manager/Institutional: These are institutional investors, including pension funds, endowments, insurance companies, mutual funds, and portfolio/investment managers whose clients are predominantly institutional.
Source: RBC US Equity Strategy, RBC Futures Desk, CFTC; as of April 19, 2022

Positioning in S&P 500 Futures Has Stabilized After Declining Sharply



Asset Manager/Institutional: These are institutional investors, including pension funds, endowments, insurance companies, mutual funds, and portfolio/investment managers whose clients are predominantly institutional.
Source: RBC US Equity Strategy, RBC Futures Desk, CFTC; as of April 19, 2022

S&P 500 Still Elevated, but Well Below Peak, on Bottom-Up Forward P/E's



Source: RBC US Equity Strategy, S&P Capital IQ/ClariFI, CIQ estimates, IBES estimates; as of April 15, 2022

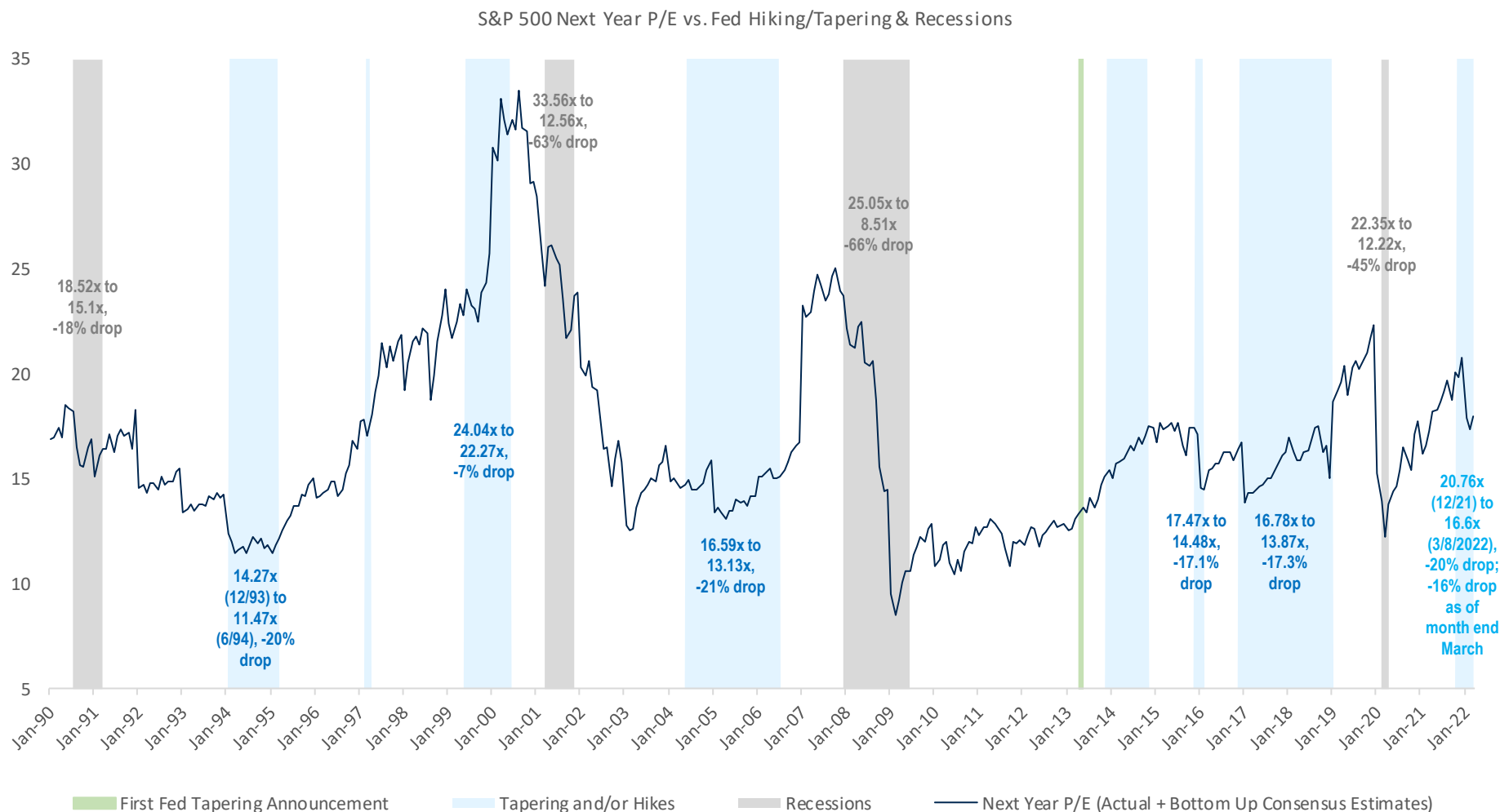
Bottom-Up S&P 500 Valuations Still Elevated on Most Metrics

S&P 500 Large Cap																			
Unweighted Medians	LTM P/E	Norm P/E	Norm P/E	LTM P/S	LTM EV/S	LTM	LTM	LTM	LTM	LTM	LTM	NTM P/E	FY1 P/E	FY2 P/E	NTM			Price/Book	
	ex neg EPS	ex neg - 5 Yr Avg	ex neg - 10 Yr Avg			EV/EBITDA ex neg	P/EBITDA ex neg	EV/EBIT ex neg	P/EBIT ex neg	P/OCF ex neg	P/FCF ex neg	ex neg EPS	ex neg EPS	ex neg EPS	NTM P/S	P/CF ex neg CF	FY2 PEG ex neg		
Current	24.5	33.4	39.8	3.2	3.8	14.6	12.2	20.5	16.8	16.4	22.3	19.6	19.6	17.5	3.0	14.3	1.4	3.7	
Z Score	1.6	2.3	2.4	2.5	2.4	2.4	2.3	2.5	2.4	2.2	0.6	1.4	1.1	1.2	2.1	1.4	0.3	2.1	
Avg	19.5	23.6	27.7	1.6	2.1	9.8	7.9	13.7	11.0	11.4	19.8	16.4	17.1	14.9	2.0	10.5	1.4	2.6	
Median	19.2	24.4	28.5	1.6	2.0	9.8	7.7	13.5	10.7	11.5	19.8	16.4	17.3	15.1	1.9	11.1	1.3	2.7	

S&P 500 Large Cap																			
Weighted Medians	LTM P/E	Norm P/E	Norm P/E	LTM P/S	LTM EV/S	LTM	LTM	LTM	LTM	LTM	LTM	NTM P/E	FY1 P/E	FY2 P/E	NTM			Price/Book	
	ex neg EPS	ex neg - 5 Yr Avg	ex neg - 10 Yr Avg			EV/EBITDA ex neg	P/EBITDA ex neg	EV/EBIT ex neg	P/EBIT ex neg	P/OCF ex neg	P/FCF ex neg	ex neg EPS	ex neg EPS	ex neg EPS	NTM P/S	P/CF ex neg CF	FY2 PEG ex neg		
Current	27.4	42.6	49.2	4.7	5.0	17.6	16.6	23.6	21.4	20.6	26.2	23.3	23.4	20.7	4.4	18.2	1.5	6.4	
Z Score	1.2	2.3	1.9	2.5	2.1	1.9	2.1	2.0	2.0	1.7	0.4	1.2	1.0	1.1	1.3	0.7	0.3	2.0	
Avg	21.0	25.9	31.4	2.3	2.9	11.3	9.6	15.1	13.1	13.3	23.0	17.9	18.6	16.4	2.9	13.0	1.4	3.7	
Median	19.6	24.4	28.9	2.1	2.8	10.6	9.1	13.7	11.9	12.2	21.2	16.6	17.3	15.5	2.5	12.1	1.4	3.3	

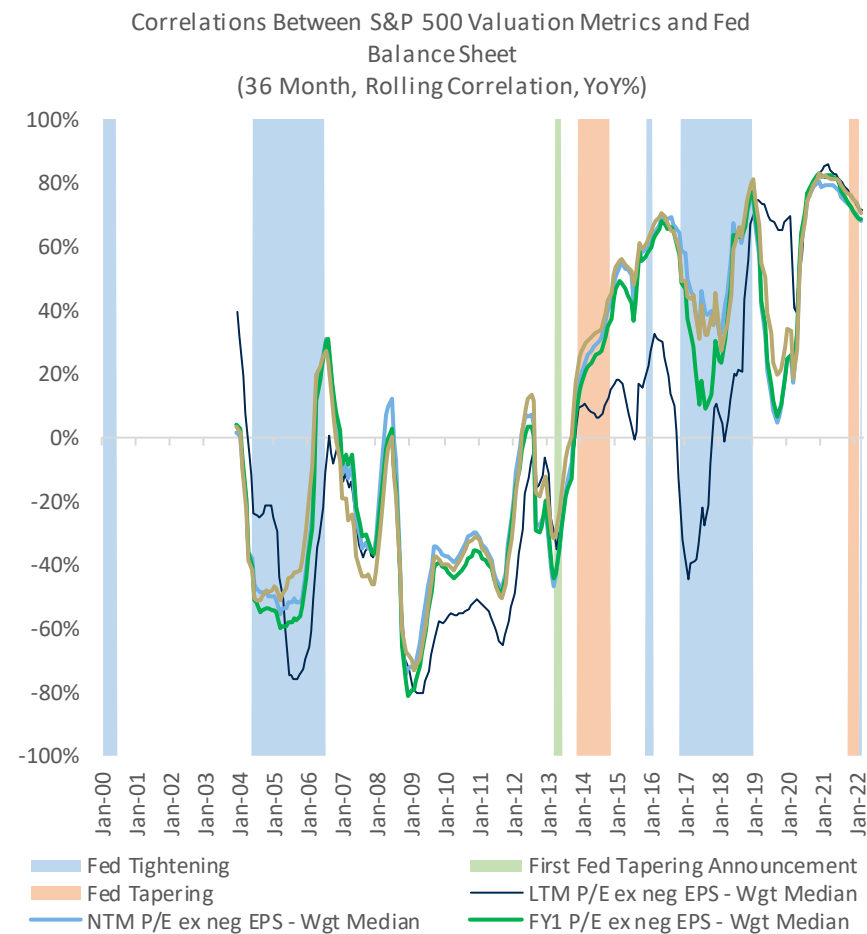
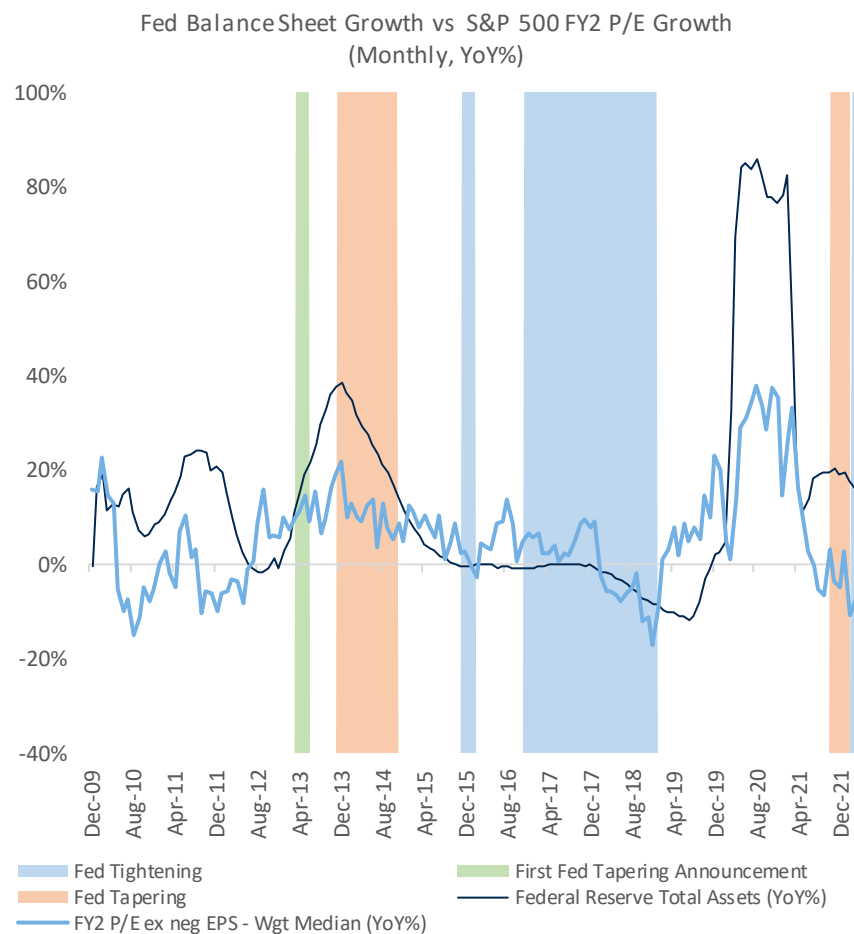
Source: RBC US Equity Strategy, S&P Capital IQ/ClariFI, CIQ estimates, IBES estimates; as of April 15, 2022

S&P 500 Fwd P/E Contraction in Early 2022 Similar to Past Hiking Periods & '90-'91 Recession



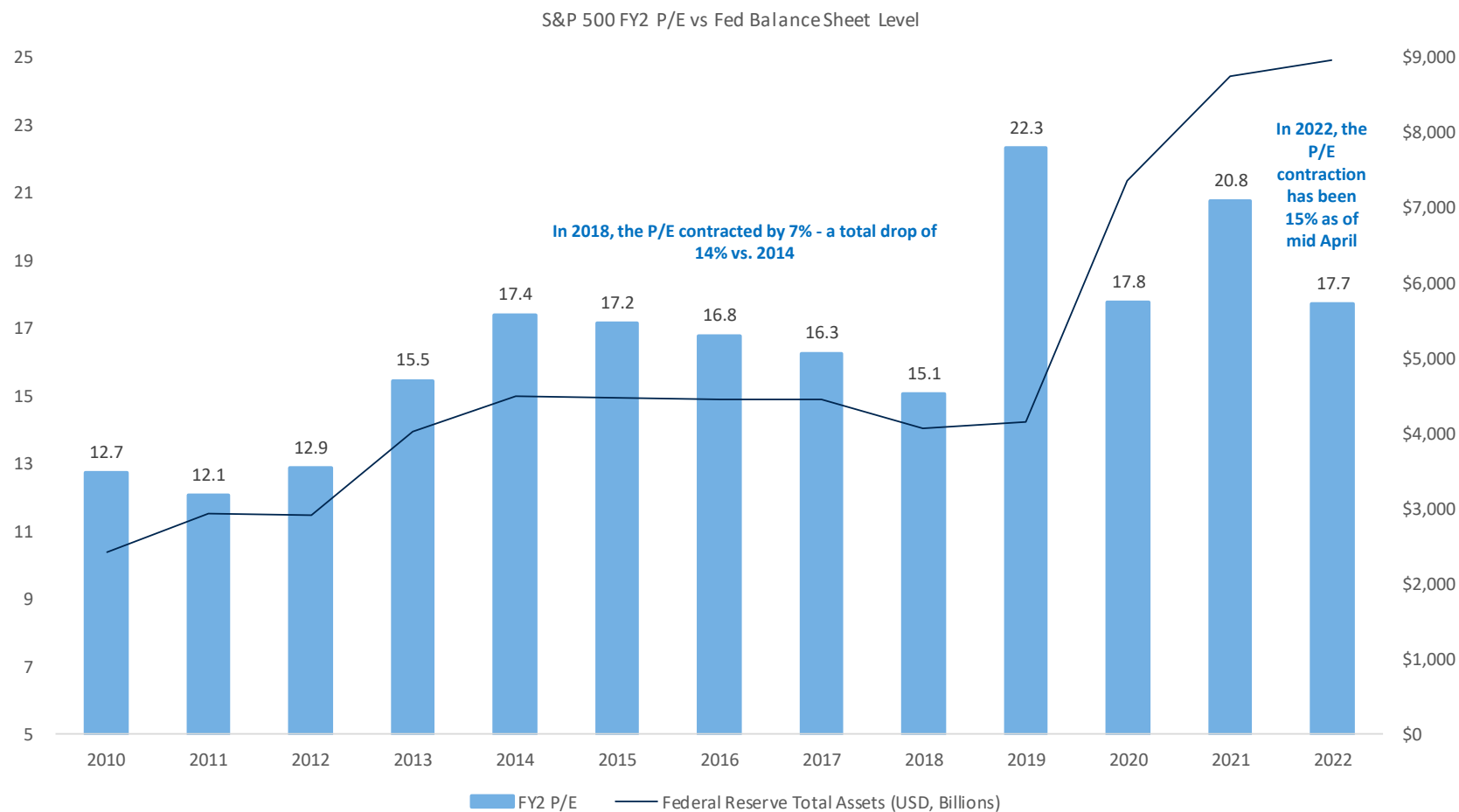
Source: RBC US Equity Strategy, Haver, Bloomberg; based on monthly pricing through March 2022

Bottom-Up P/E Contraction in 2022 on Par With 2011's Contraction, Occurred Despite B/S Growth



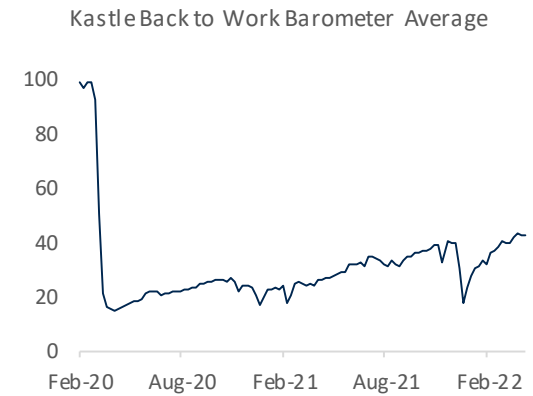
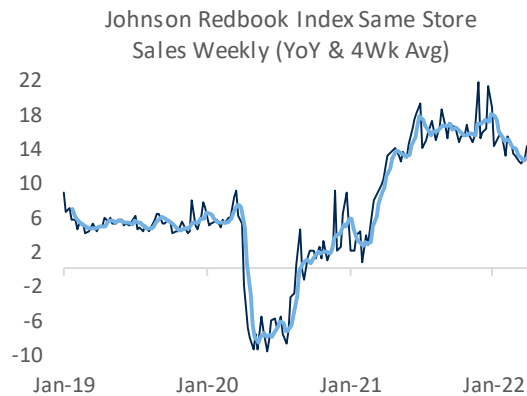
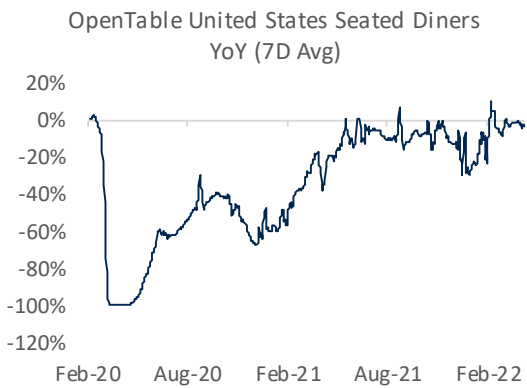
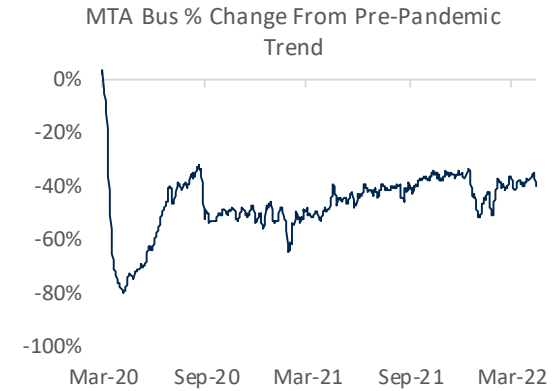
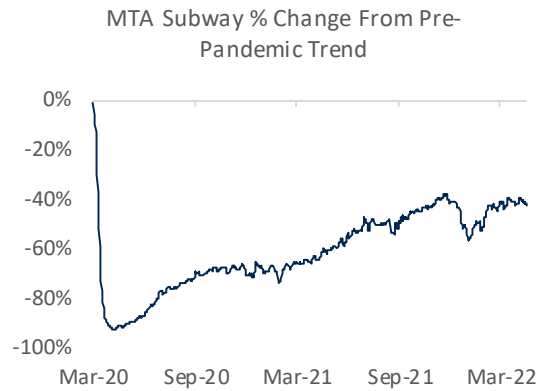
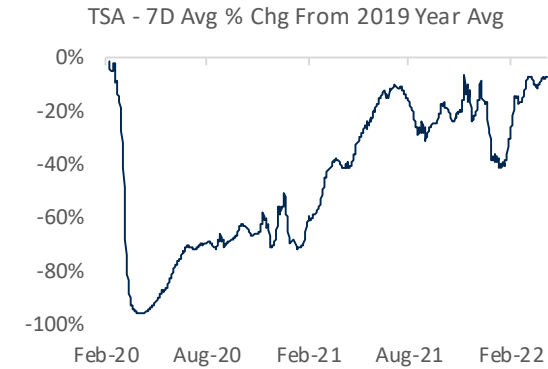
Source: RBC US Equity Strategy, Bloomberg, S&P Capital IQ/ClariFi, P/E's based on actuals and consensus forecasts; as of March 2022

Tapering/QT Tripped Up the P/E Multiple in the Past, But 2022's Move Reflects That Pain Already



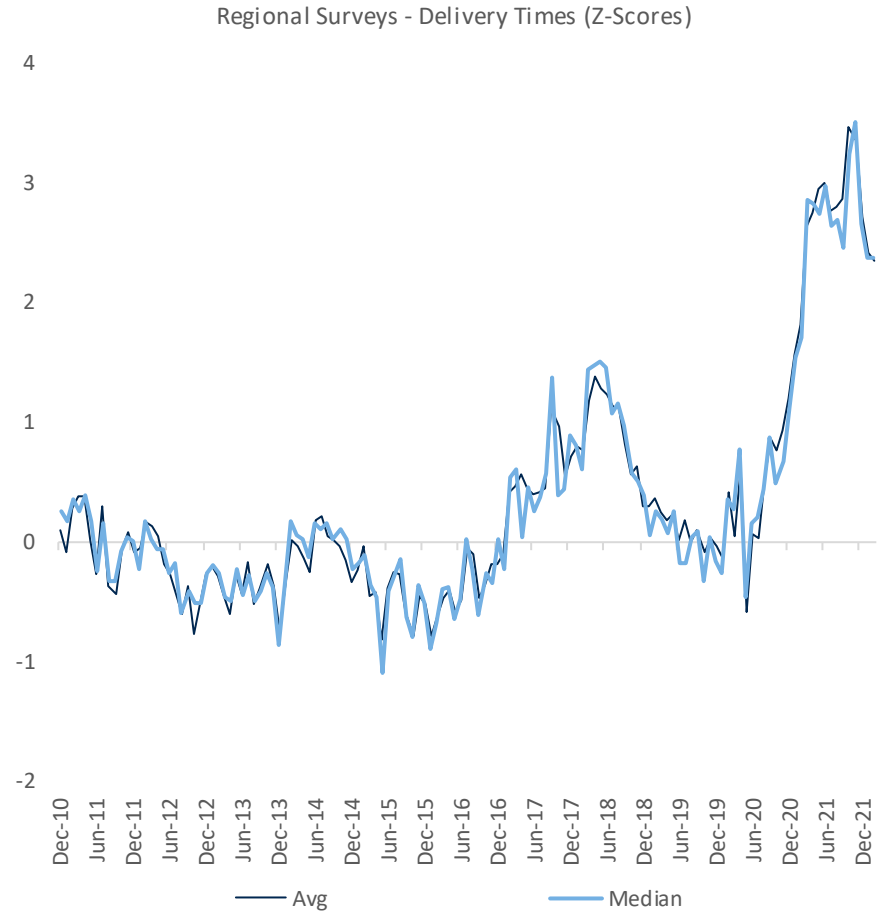
Source: RBC US Equity Strategy, Bloomberg; as of April 18, 2022; 2022 P/E based on current pricing and bottom-up estimate of 2023 EPS; 2021 P/E based on actual close and bottom-up estimate of 2022 EPS

Flying & Back to Work Rising, Dining & MTA Stable, Same-Store Sales Slipping



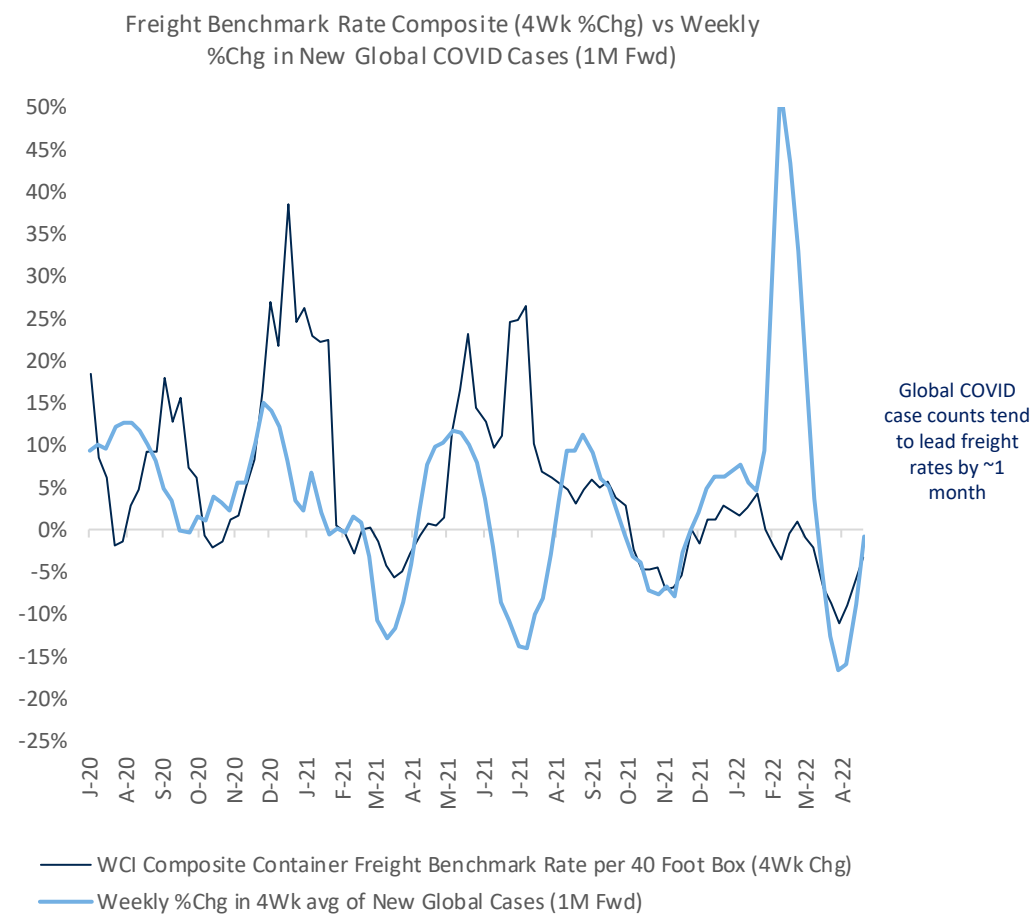
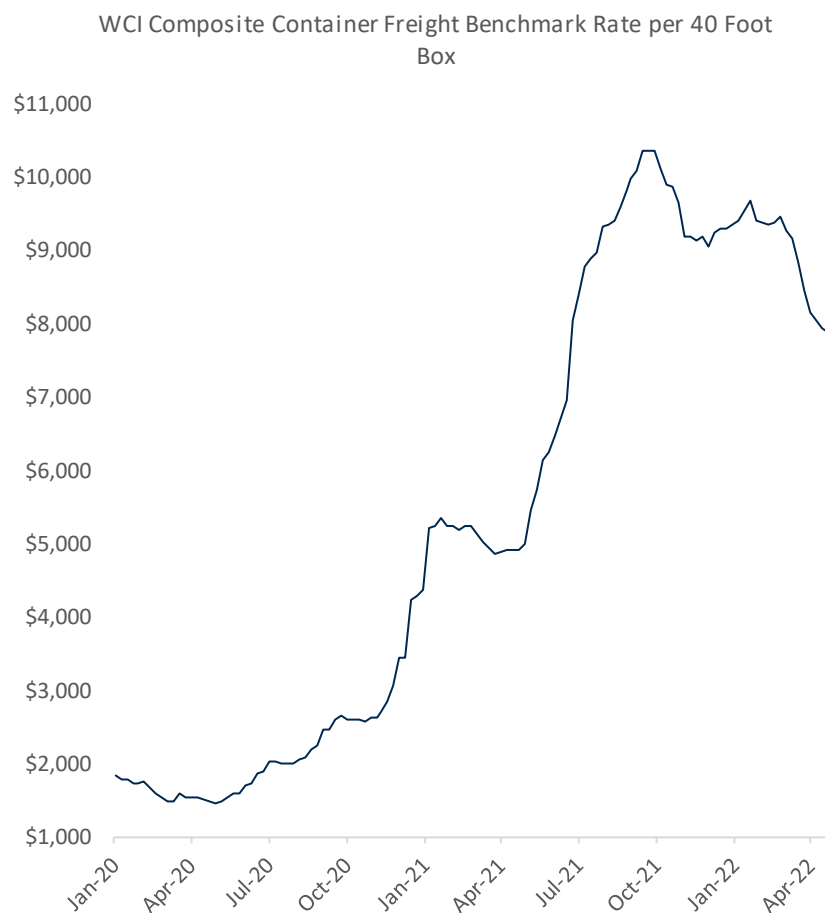
Source: RBC US Equity Strategy, Bloomberg; as of April 2022

Trends in Unfulfilled Orders and Backlogs Improving, Along With Delivery Times



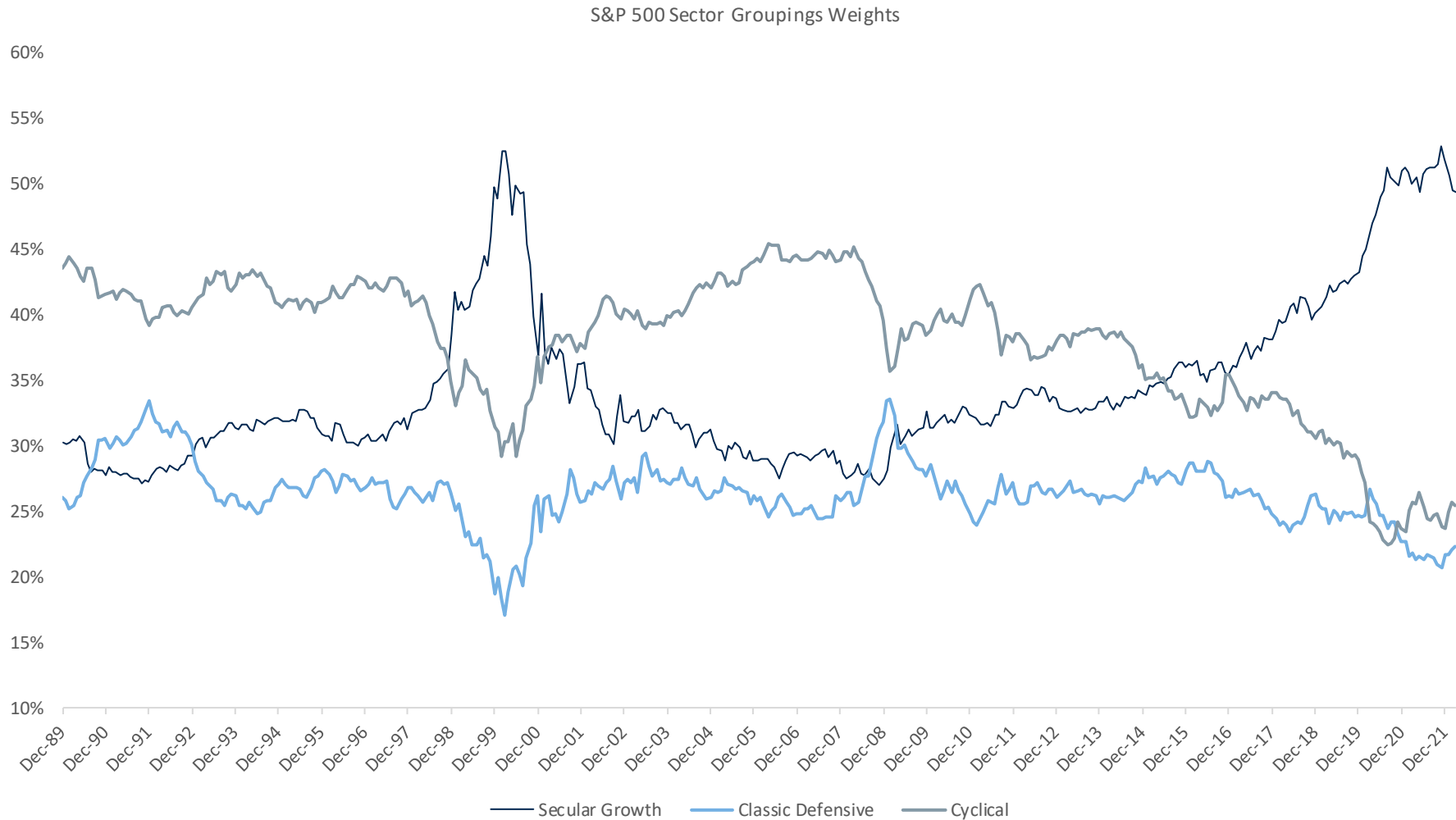
Source: RBC US Equity Strategy, Bloomberg; as of March 2022

Freight Rates Have Come Down, but May Worsen Due to Latest Global COVID Developments



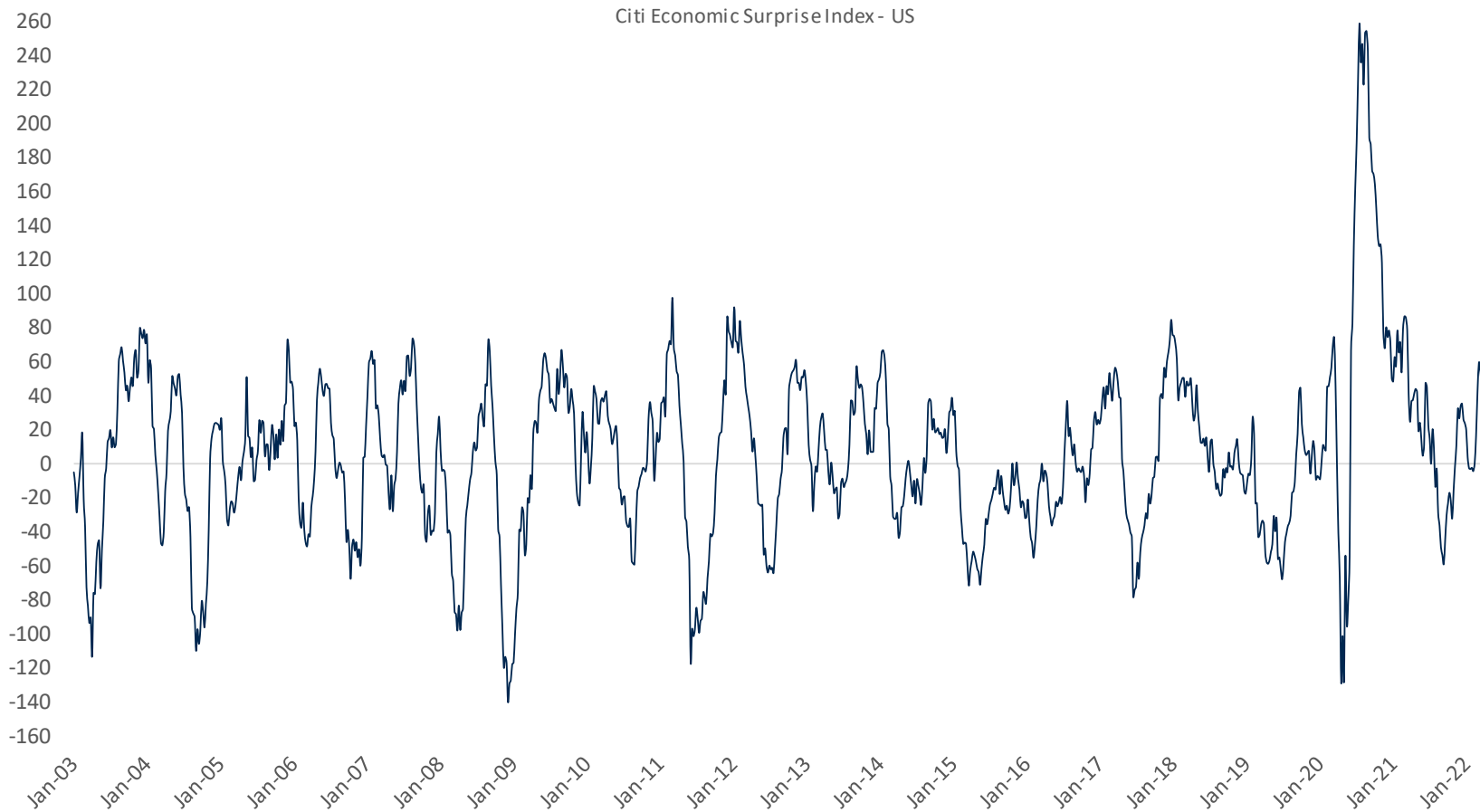
Source: RBC US Equity Strategy, Bloomberg, Drewry; as of April 21, 2022

The S&P 500 Has a Clear Secular Growth Bias



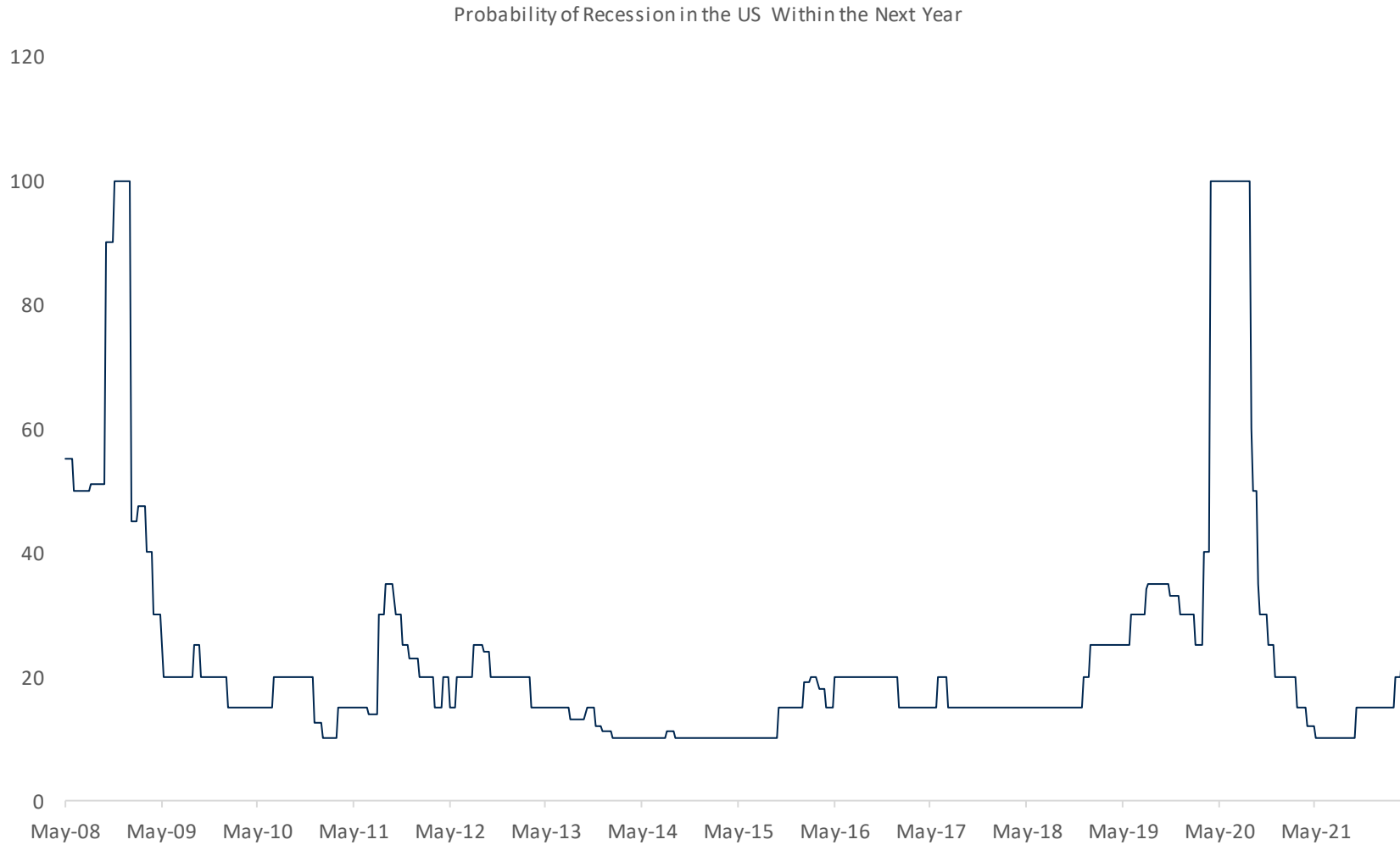
Source: RBC US Equity Strategy, S&P Capital IQ/ClariFi. Cyclical Sectors: Materials, Energy, Industrials, and Financials. Secular Growth: Tech, Internet, Communication Services, Consumer Discretionary ex Internet. Defensives: Consumer Staples, Health Care, Utilities; as of March 2022

Positive US Economic Surprises Are Picking Up



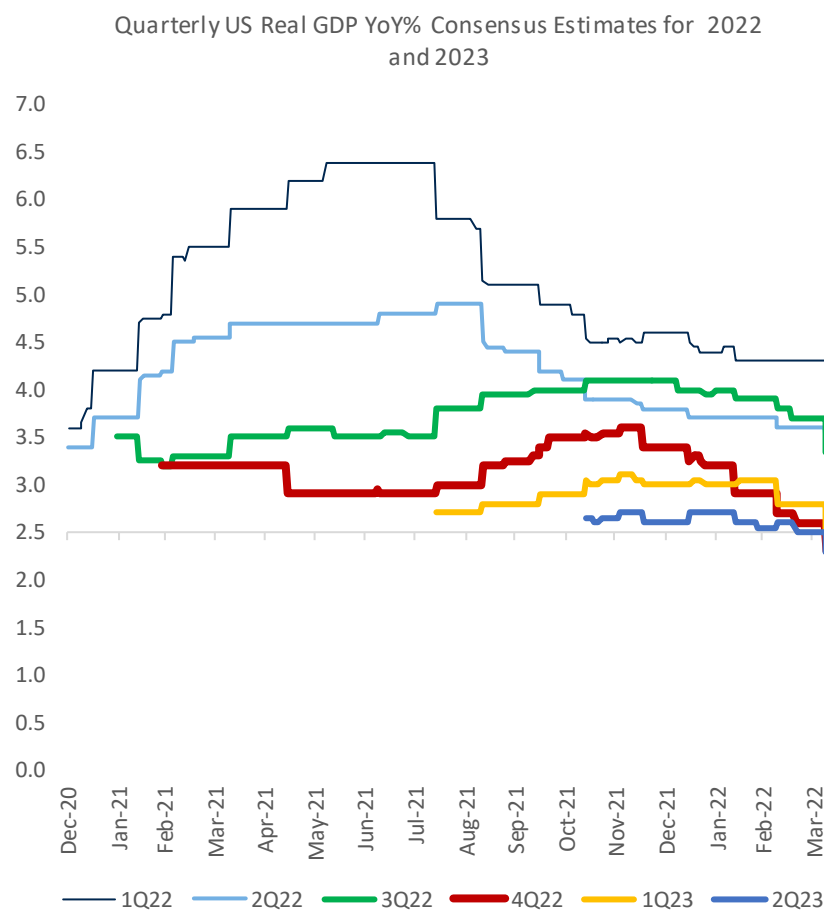
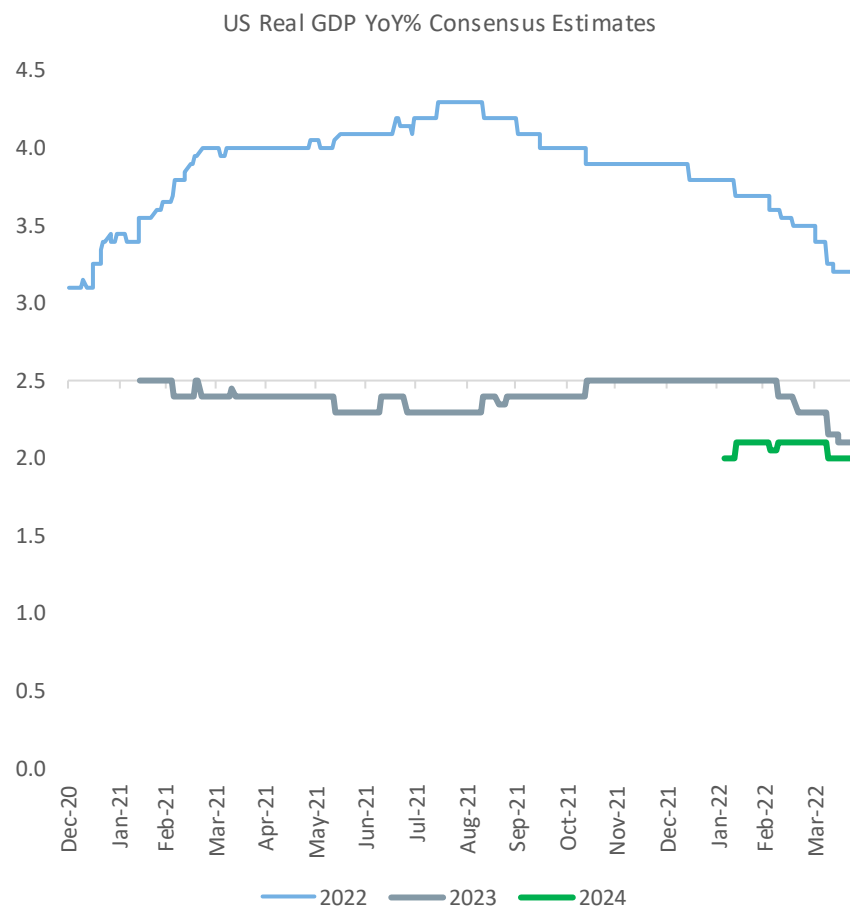
Source: RBC US Equity Strategy, Bloomberg; as of April 22, 2022

US Recession Expectations Rising But Still Low, Similar to 2011 and 2016



Source: RBC US Equity Strategy, Bloomberg; as of April 22, 2022

2022 GDP Forecast Slipping, Expected To Fall Below Average in 4Q22 & 2023-2024



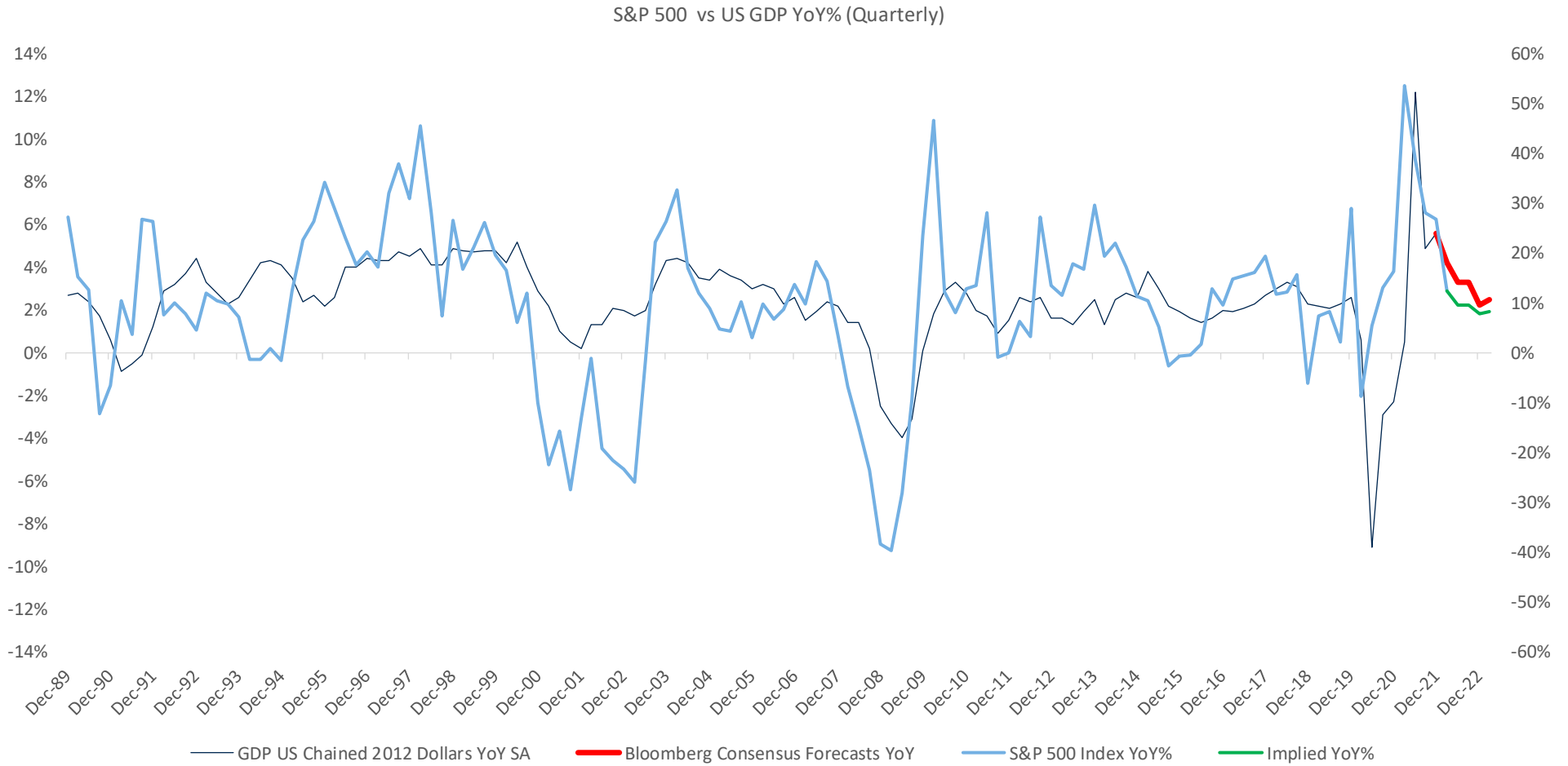
Source: RBC US Equity Strategy, Bloomberg; as of April 22, 2022

If the Economy Sees Slow Growth in 2023, Stocks Should Be Up but Below Trend in 2022

S&P 500 Returns During Different GDP Environments						
Real GDP Range	# Instances	Average Return (Prior Year)	Median Return (Prior Year)	Average Return (Current Year)	Median Return (Current Year)	
< 0%	12	-7.5%	-8.2%	13.6%	19.9%	When a recession happens, stocks are usually down the year before
0 - 2%	8	4.0%	6.0%	0.0%	0.0%	Sub 2% real GDP years are usually problematic for stocks, the year of and before they happen, but modest gains are seen the year before if recession is averted
2 - 4%	28	10.3%	8.7%	9.6%	11.1%	Stocks are usually ok – with trend-like returns – before and during 2-4% GDP years
> 4%	27	15.9%	16.5%	9.6%	12.4%	Stocks are usually well above trend the year before higher-than-average GDP occurs
All Years (1947-2021)	75	8.8%	10.8%	9.2%	11.4%	

Source: RBC US Equity Strategy, Haver, S&P; based on annual data through 2021

Stock Price Gains Tend To Moderate as GDP Growth Slows



Source: RBC US Equity Strategy, Bloomberg; as of April 18, 2022

The Stock Market Tends To Lose, on Average, One-Third of Its Value Heading into Recessions

Drawdowns have ranged from 14% to 57%, with an average drop of 32%

S&P 500 Peak To Trough Declines Around Recessions

Recession Dates	S&P 500 Peak Date	S&P 500 Trough Date	S&P 500 Peak Level	S&P 500 Trough Level	S&P 500 Peak To Trough Decline (% Chg)	S&P Pullback		Estimated Trough Month	Estimated # of Months Stocks Bottomed Before Recession Ended
						Calendar Days	Estimated end of Recession Month		
May 1937 - June 1938	03/10/1937	03/31/1938	19	9	-54%	386	06/30/1938	03/31/1938	-3.0
Nov 1948 - Oct 1949	06/15/1948	06/13/1949	17	14	-21%	363	10/31/1949	05/31/1949	-5.1
July 1953 - May 1954	01/05/1953	09/14/1953	27	23	-15%	252	05/31/1954	08/31/1953	-9.1
Aug 1957 - April 1958	07/15/1957	10/22/1957	49	39	-21%	99	04/30/1958	11/30/1957	-5.0
April 1960 - Feb 1961	08/03/1959	10/25/1960	61	52	-14%	449	02/28/1961	10/31/1960	-4.0
Dec 1969 - Nov 1970	11/29/1968	05/26/1970	108	69	-36%	543	11/30/1970	05/31/1970	-6.1
Nov 1973 - Mar 1975	01/11/1973	10/03/1974	120	62	-48%	630	03/31/1975	09/30/1974	-6.1
Jan 1980 - July 1980	02/13/1980	03/27/1980	118	98	-17%	43	07/31/1980	03/31/1980	-4.1
July 1981 - Nov 1982	11/28/1980	08/12/1982	141	102	-27%	622	11/30/1982	07/31/1982	-4.1
July 1990 - Mar 1991	07/16/1990	10/11/1990	369	295	-20%	87	03/31/1991	09/30/1990	-6.1
Mar 2001 - Nov 2001	03/24/2000	10/09/2002	1527	777	-49%	929	11/30/2001	09/30/2002	10.1
Dec 2007 - June 2009	10/09/2007	03/09/2009	1565	677	-57%	517	06/30/2009	02/28/2009	-4.1
Feb 2020 - April 2020	02/19/2020	03/23/2020	3386	2237	-34%	33	04/30/2020	03/31/2020	-1.0
Average					-32%	381		Average ex 2001	-4.8
Median					-27%	386		Median ex 2001	-4.6

We excluded the 1945 recession as there was no clear stock market pullback around it. Stats for Estimate # of Months Stocks Bottomed Before Recession Ended excludes 2001 recession. 2001 recession pullback stats are based on March 2000 peak / Oct 2002 low. The market hit a low in Nov 01, which was the retested and surpassed in 2002.

Latest Consensus 2023 GDP Forecast of 2.1% Highlights Risk of Flat Year in 2022 for the S&P 500

S&P 500 Annual Returns During Different Economic Environments			
S&P 500 Average Annual Returns			
Economic Environment	Prior Year	Current Year	Next Year
Below Avg Real GDP Growth	1.4%	9.7%	9.9%
Above Avg Real GDP Growth	15.8%	8.8%	8.6%
Decelerating GDP	4.0%	10.2%	8.2%
Decelerating & Above Avg GDP	11.2%	8.9%	5.1%
Decelerating & Below Avg GDP	0.7%	10.8%	9.5%
Accelerating GDP	13.7%	8.3%	9.7%
Accelerating & Above Avg GDP	17.2%	8.4%	9.6%
Accelerating & Below Avg GDP	3.7%	8.1%	10.1%

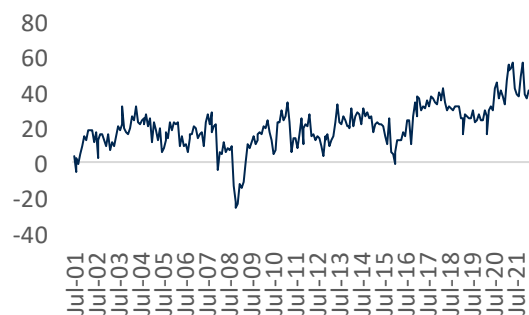
Source: RBC US Equity Strategy, Bloomberg, study includes returns from 1947-2021

Expectations for Future Employment Trends May Have Peaked, but Also Remain at Strong Levels

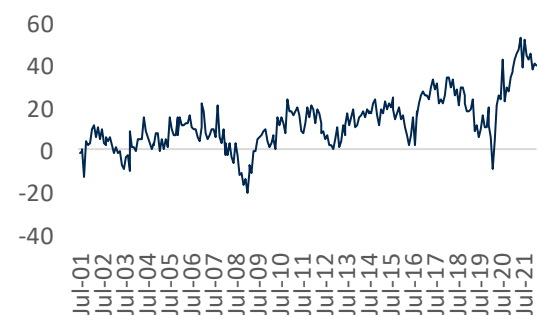
ISM Manufacturing Report on Business
Employment SA



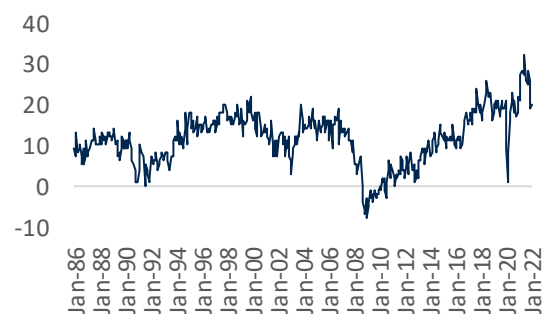
Philly Fed Mfg Business Outlook: Future
Employment Diffusion Index(SA, %Bal)



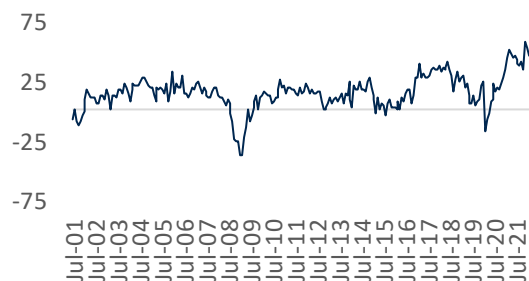
Richmond Fed Mfg Survey: Expected
Manufacturing Employment (SA, %Bal)



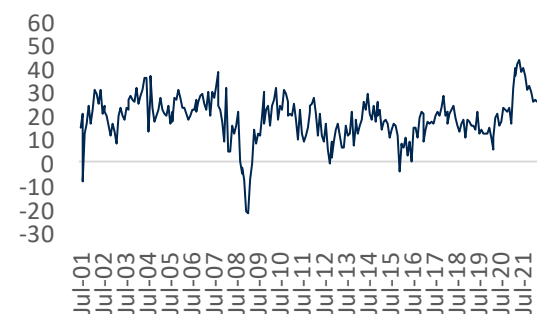
NFIB: Percent Planning to Increase
Employment, Net (SA, %)



Kansas City Fed Mfg Survey: Number of
Employees: Expected in 6 Months (SA,
%Bal)

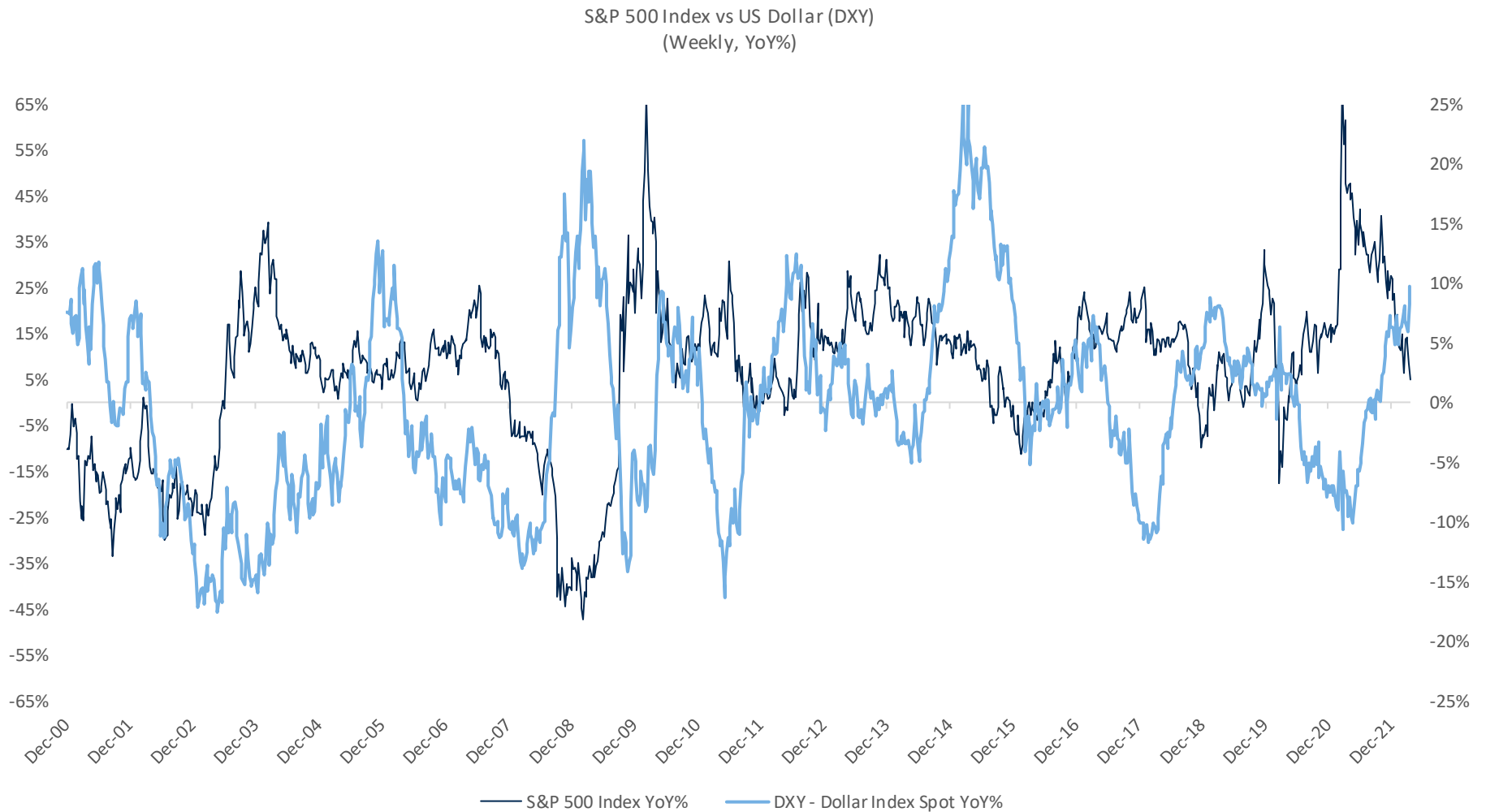


Empire State Mfg Svy: No of Employees,
6 Mos Ahead: Diffusion Index (SA, %Bal)



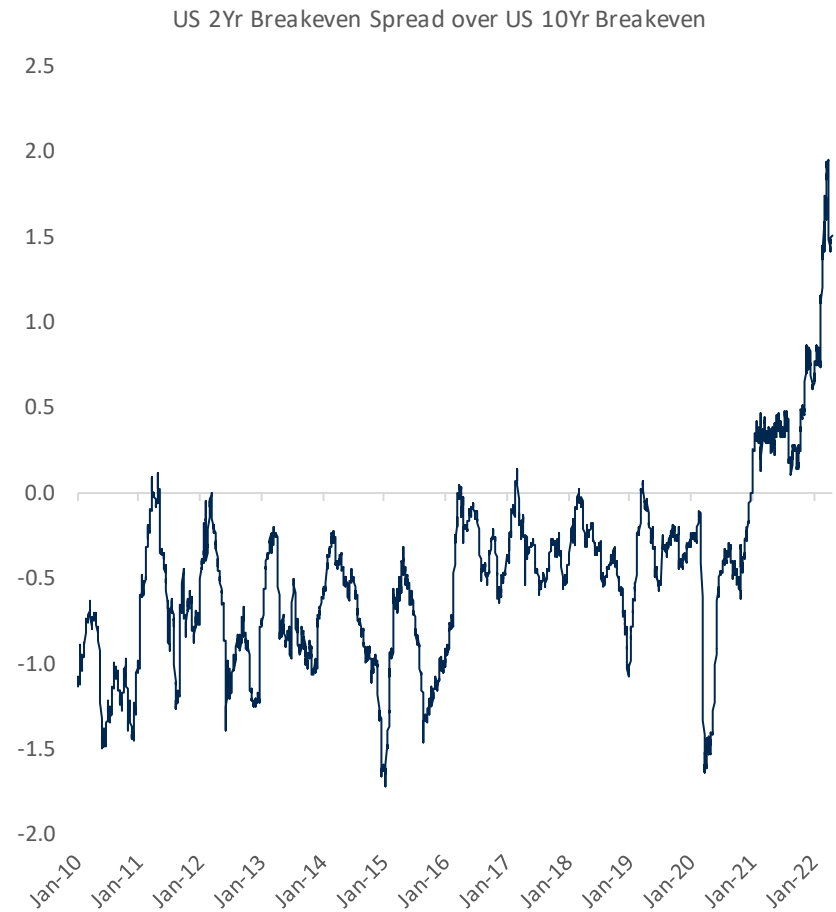
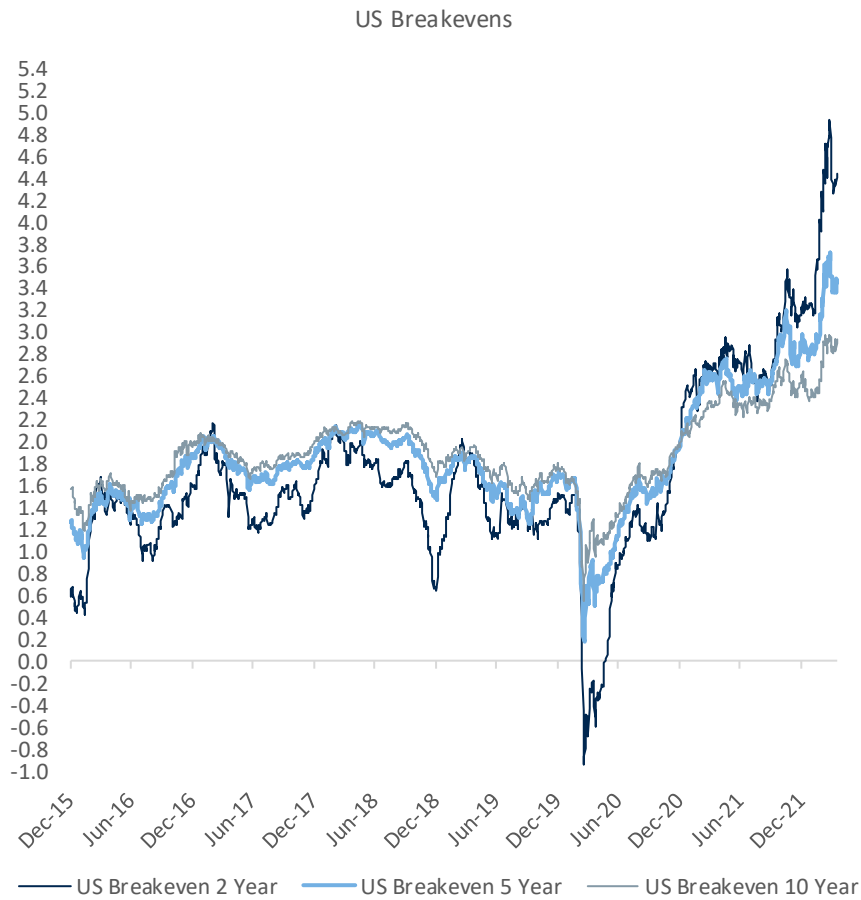
Source: RBC US Equity Strategy, Bloomberg, Haver; charts as of March 2022 except Empire and Philly Fed through April 2022

A Stronger Dollar Is Usually a Headwind for US Equity Market Direction

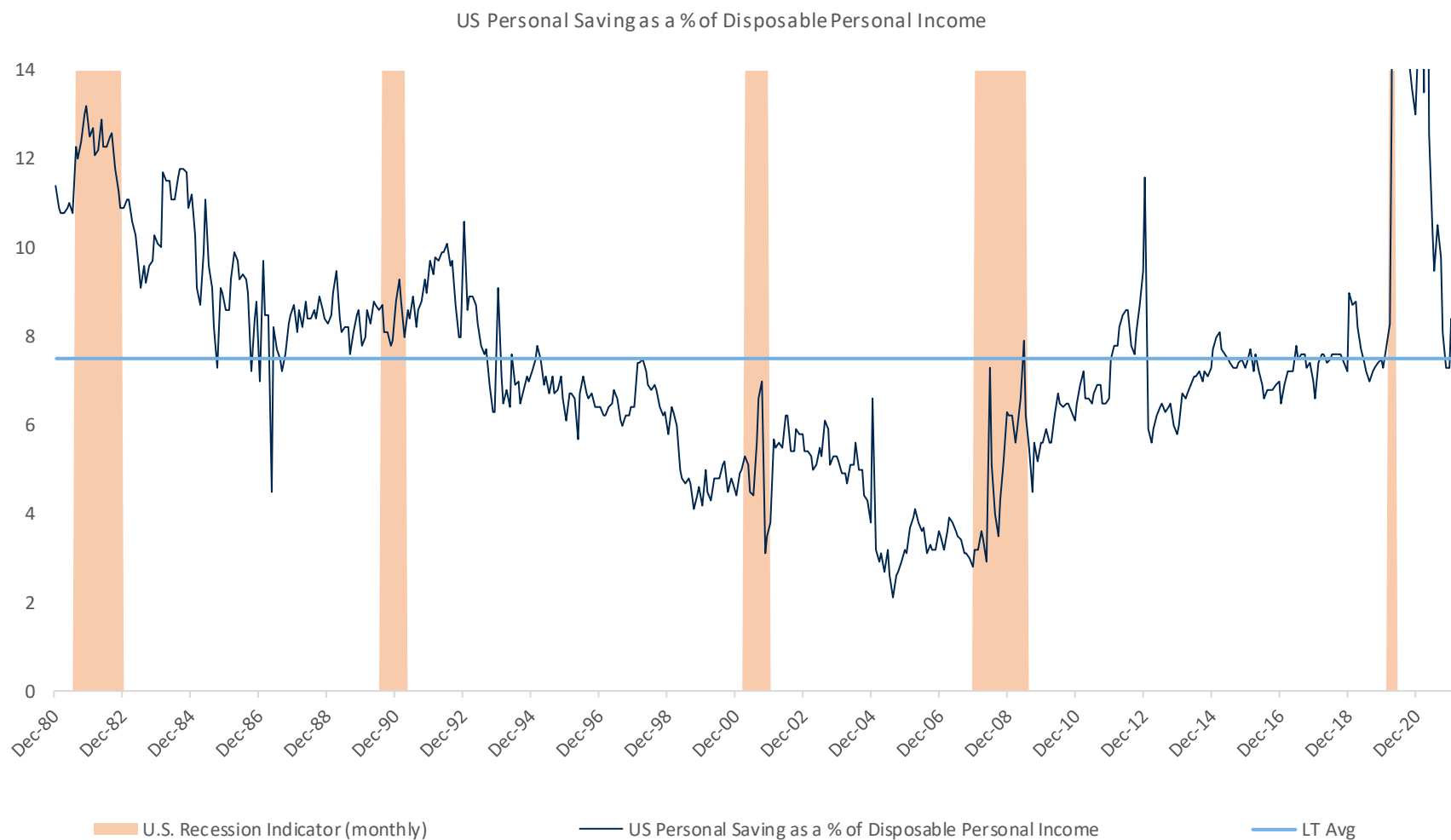


Source: RBC US Equity Strategy, Bloomberg; as of April 15, 2022

Inflation Expectations Remain Higher in the Short Term Than in the Medium & Longer Term

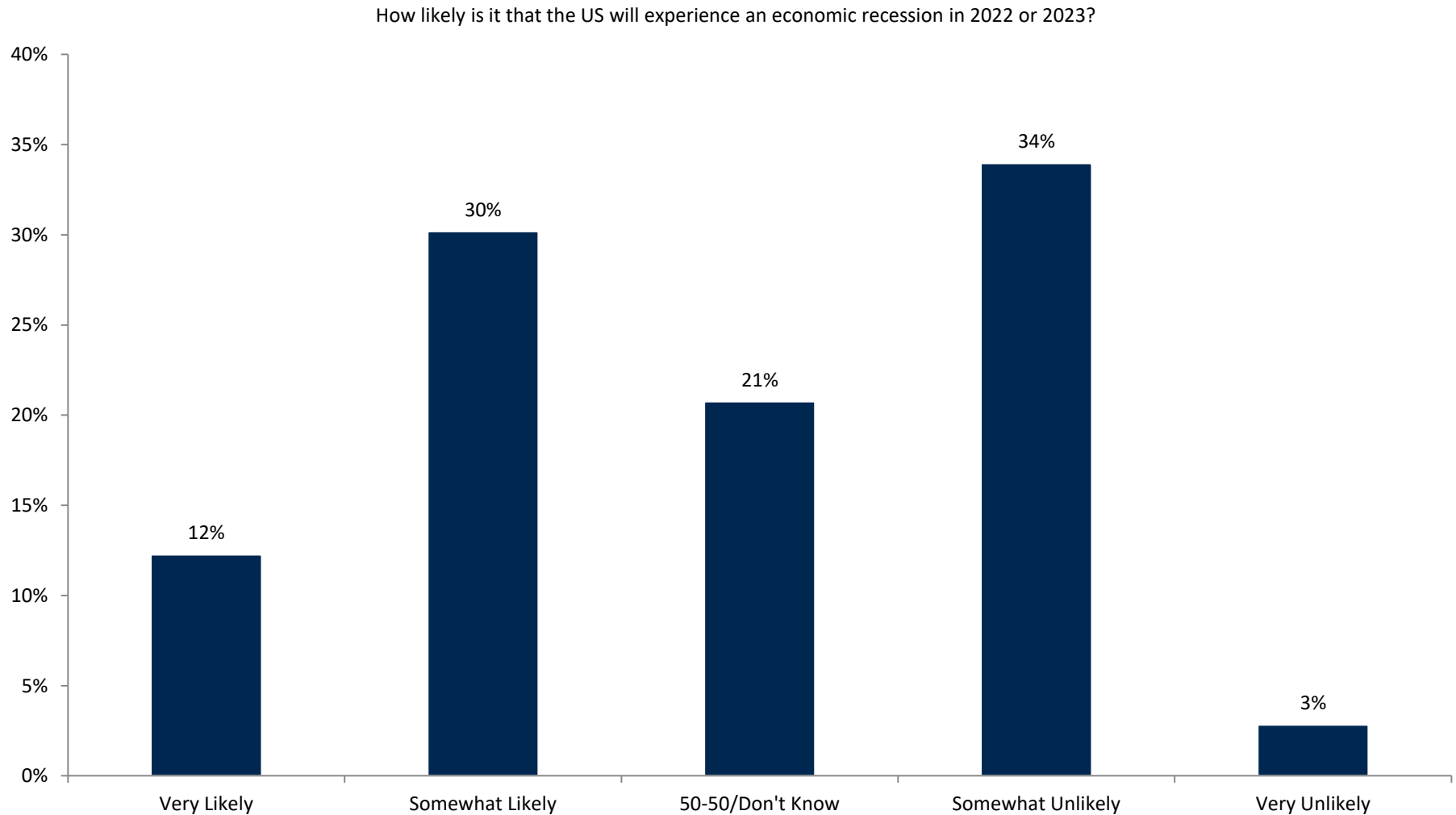


Consumer Cash Cushions Have Come Down, Still Above the Lows Seen in Most Recessions

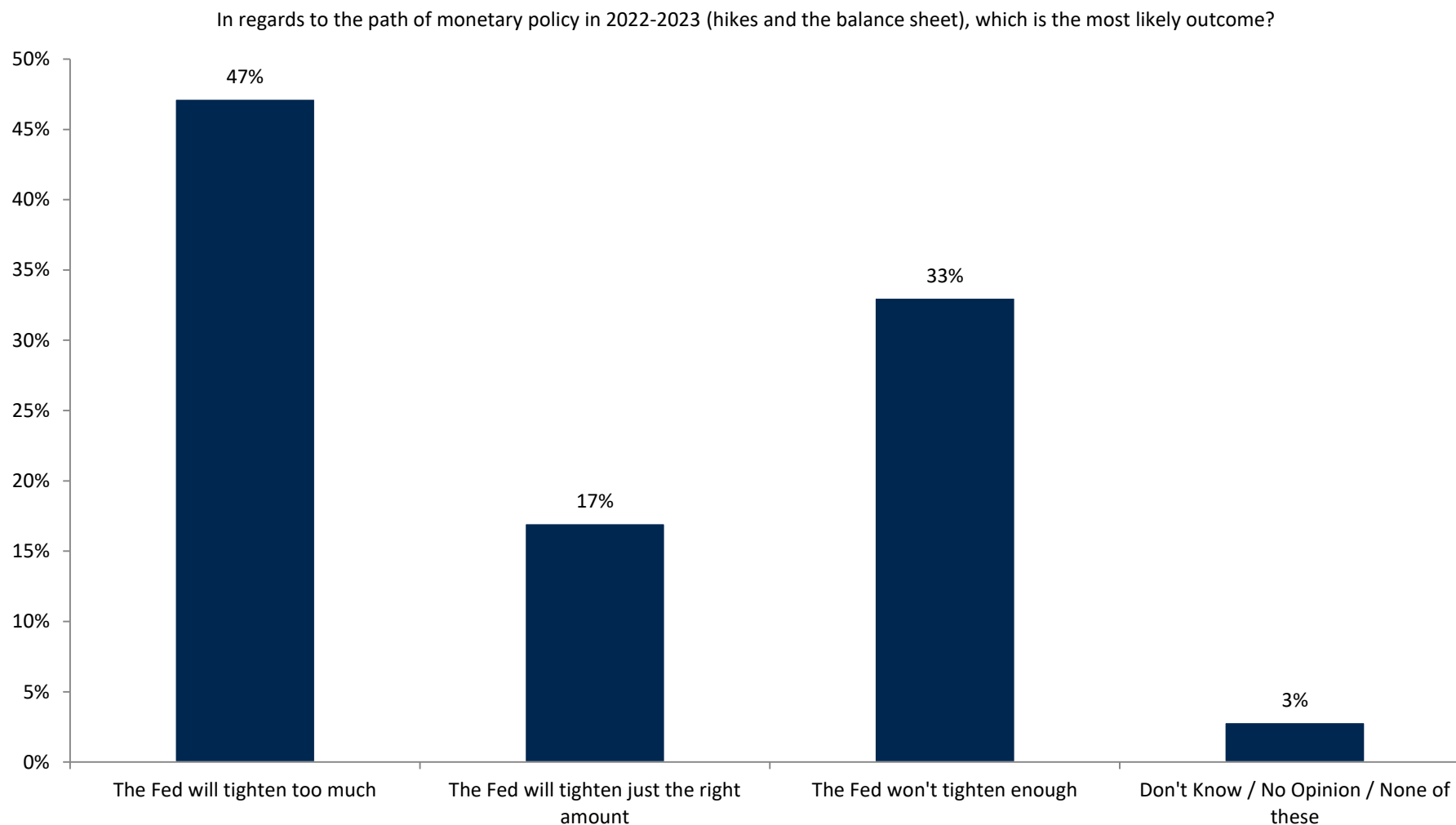


Source: RBC US Equity Strategy, Bloomberg; as of February 2022

Split Views on a US Recession, With a Tilt Towards Those Who Say One Is Coming

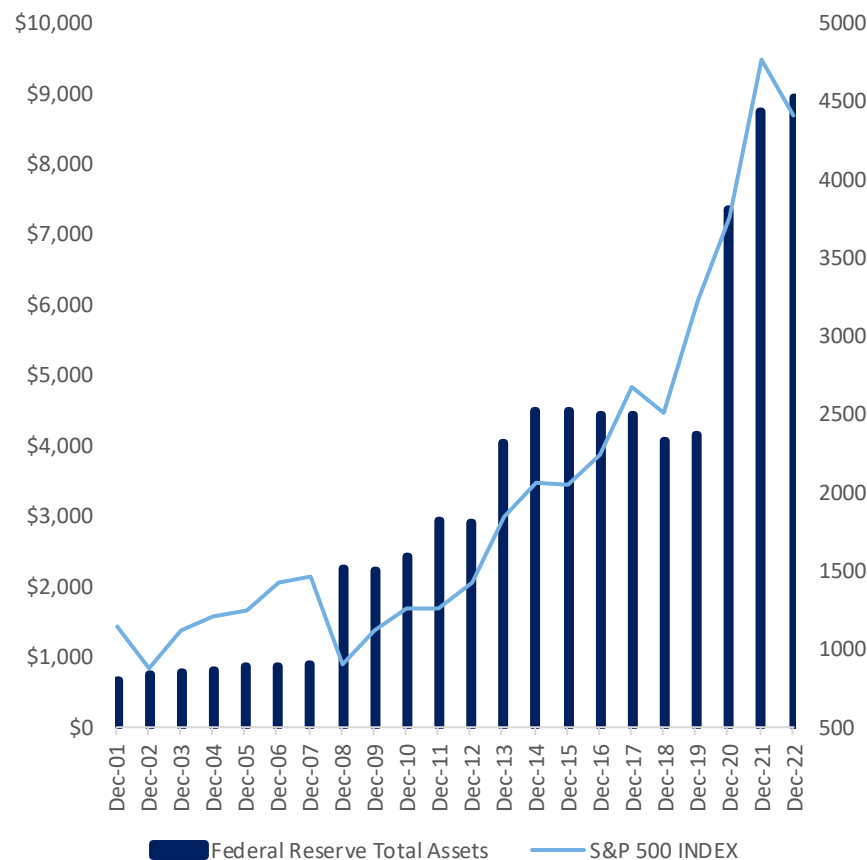


Little Confidence in the Fed, Nearly Half Say They Will Tighten Too Much

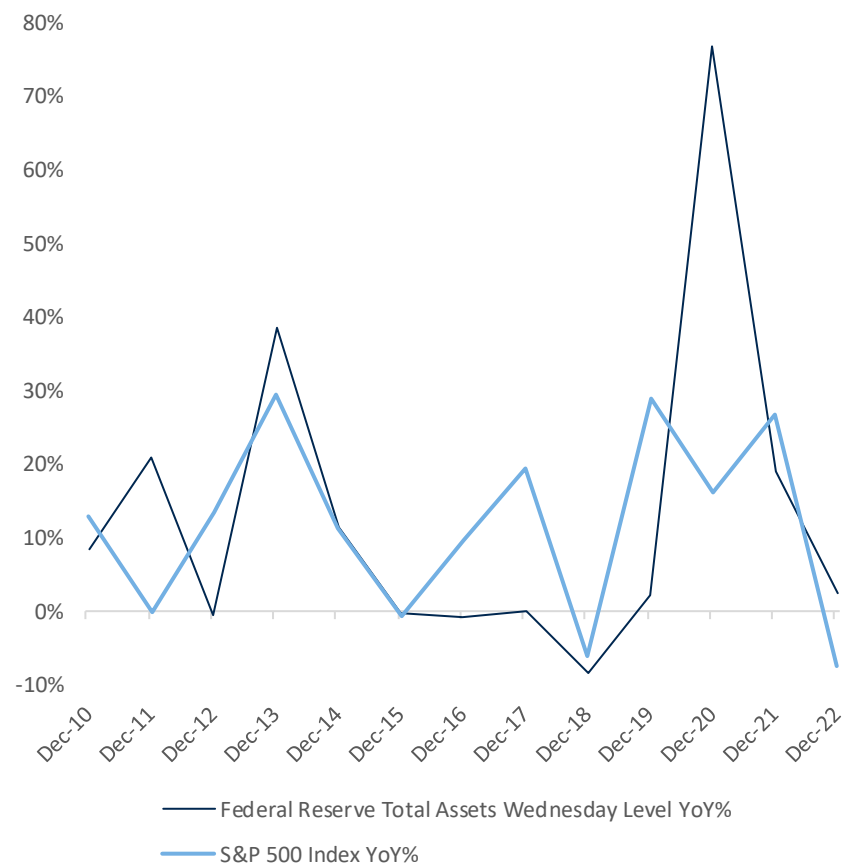


The S&P 500's 2022 YTD Decline Is Similar to 2018's, the Last Time QT Was Priced in Significantly

Federal Reserve Total Assets (USD, Billions) vs S&P 500

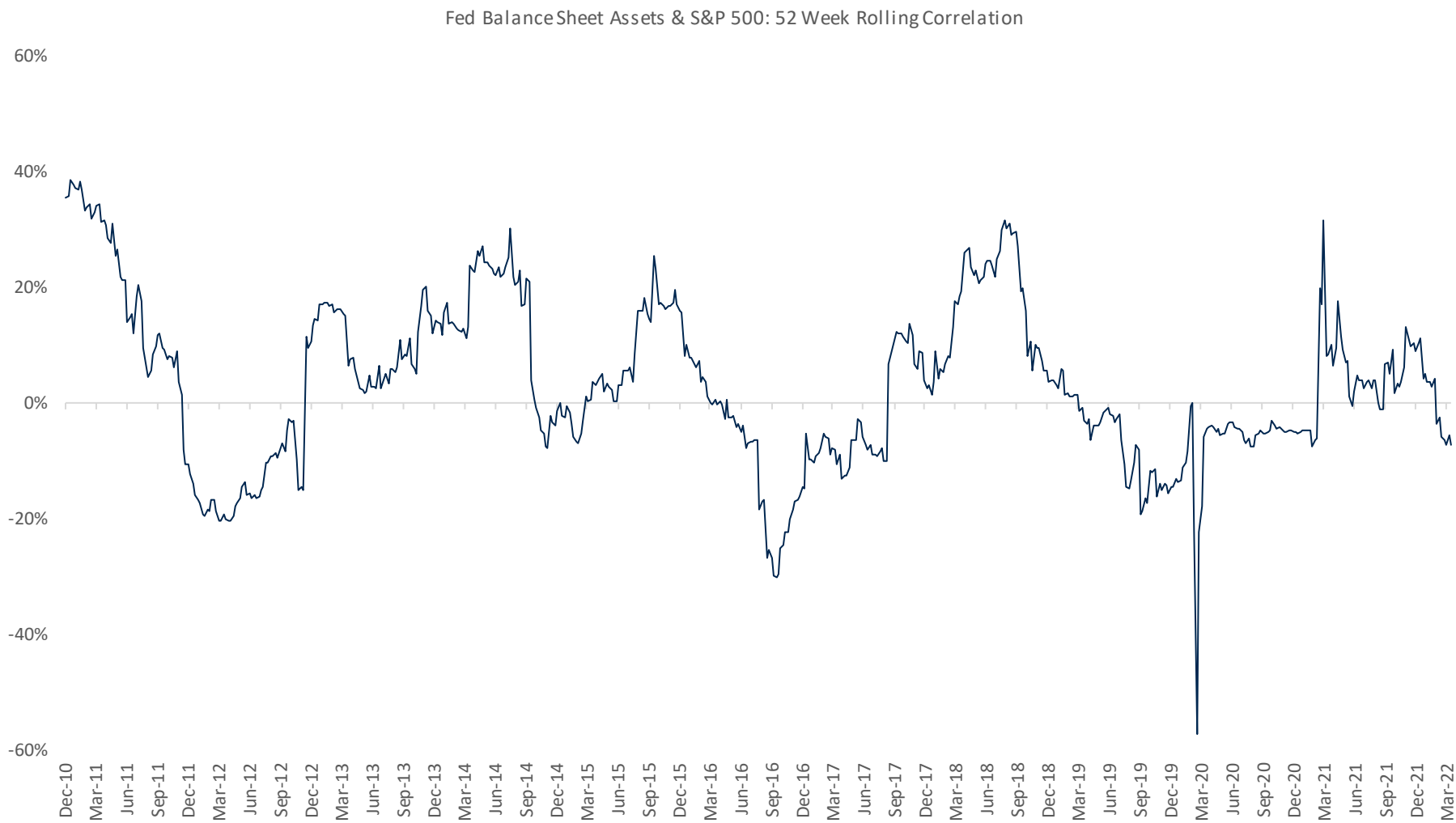


Federal Reserve Total Assets vs S&P 500 Annual Change



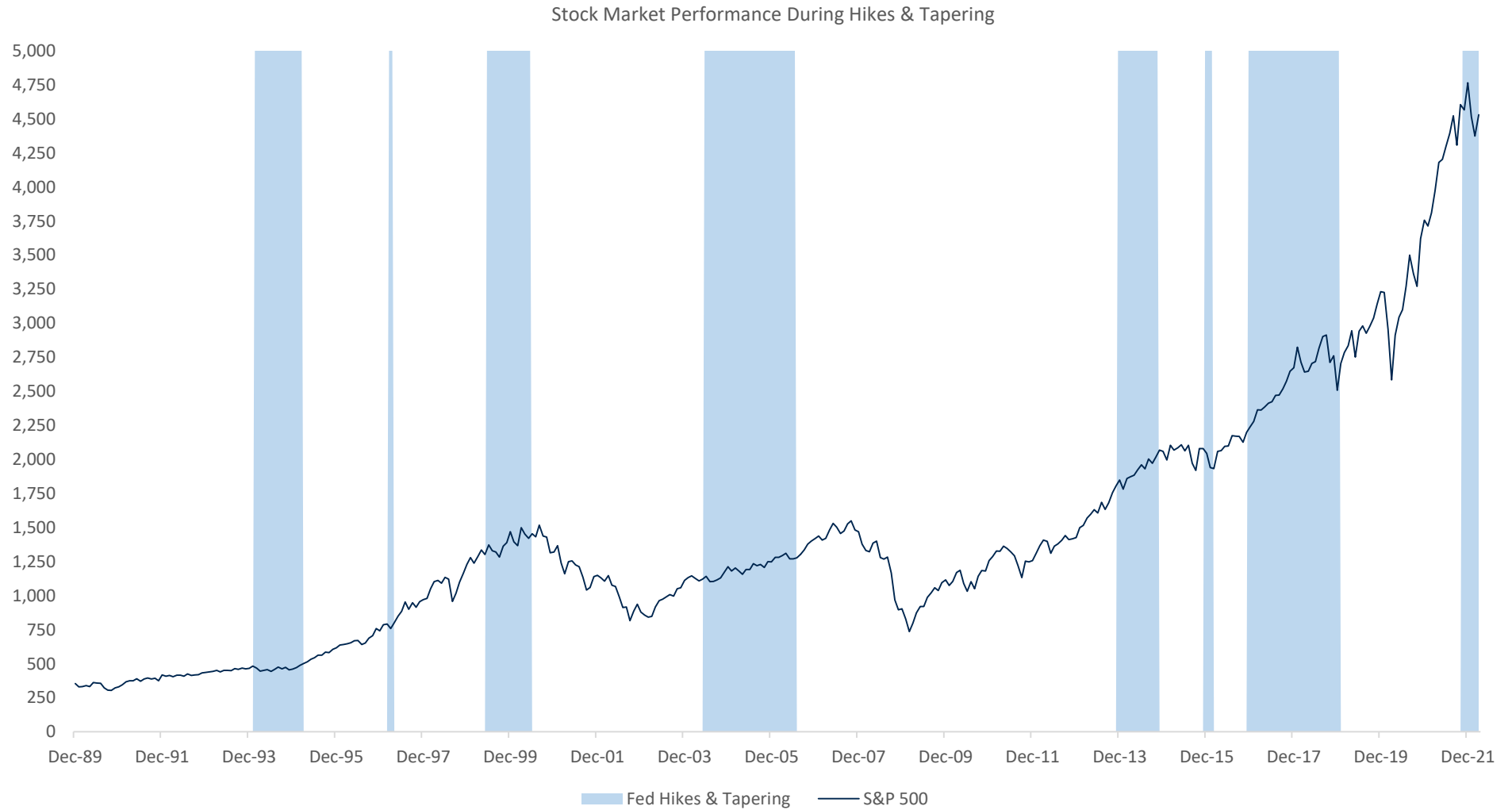
Source: RBC US Equity Strategy, Bloomberg, S&P 500 as of April 14, 2022

Correlation Between the Fed's Balance Sheet & US Equity Market Pricing Has Flipped Negative



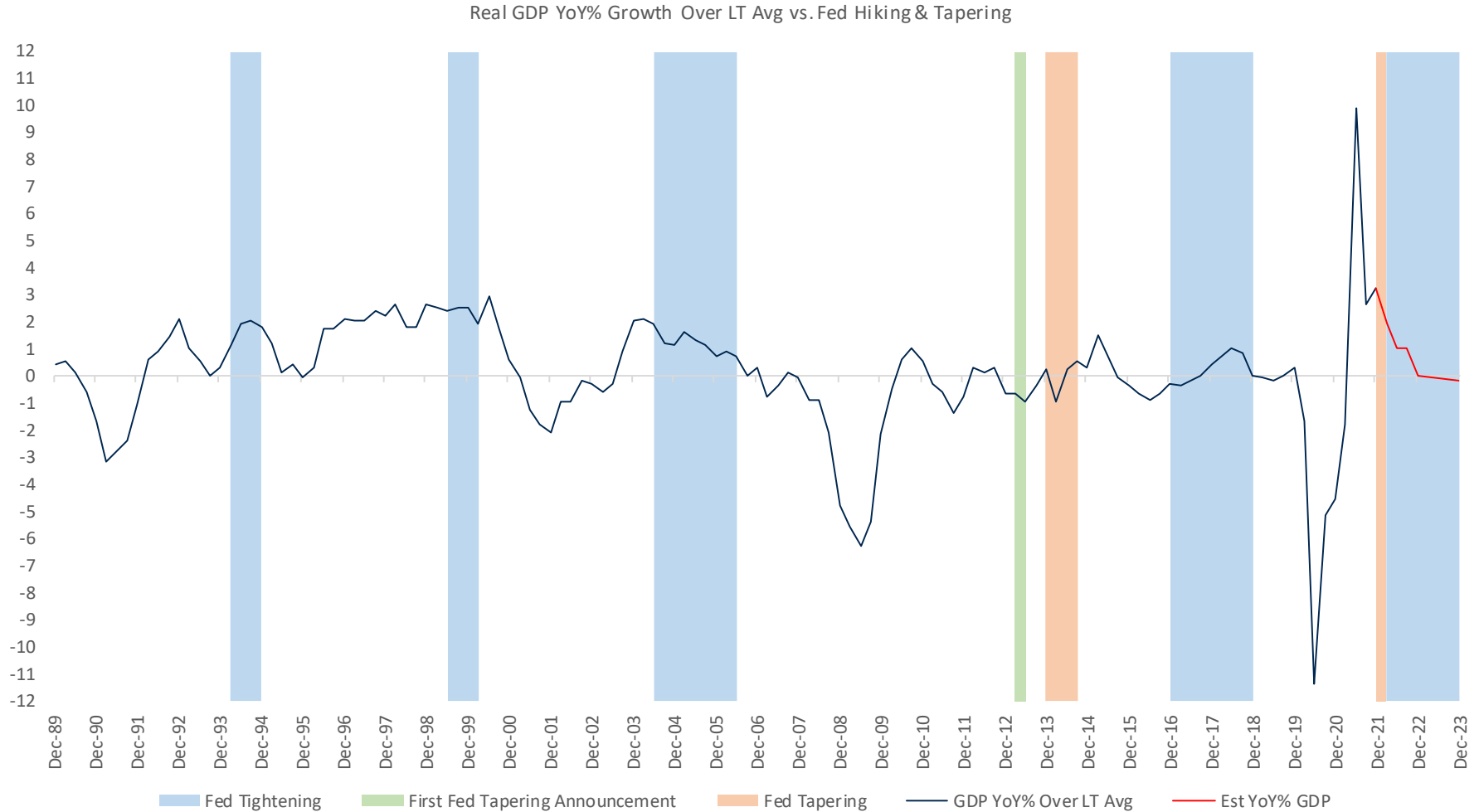
Source: RBC US Equity Strategy, Bloomberg, S&P 500 as of April 14, 2022

The S&P 500 Usually Keeps Climbing While the Fed Is Tightening, Despite Turbulence at Liftoff



Source: RBC US Equity Strategy, Haver, Bloomberg; as of March 2022

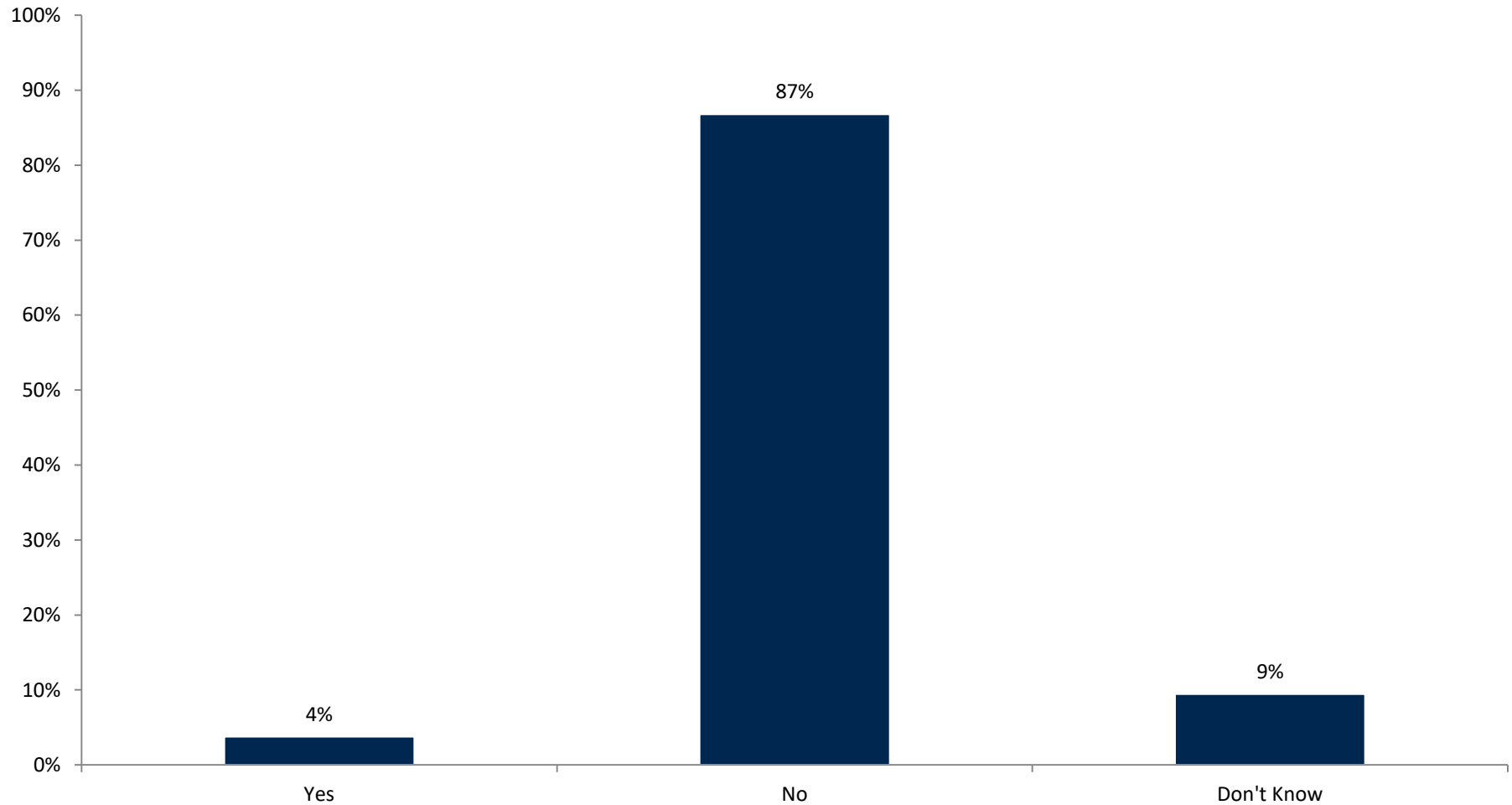
GDP Growth Usually Returns to Trend After Fed Rate Hikes Begin



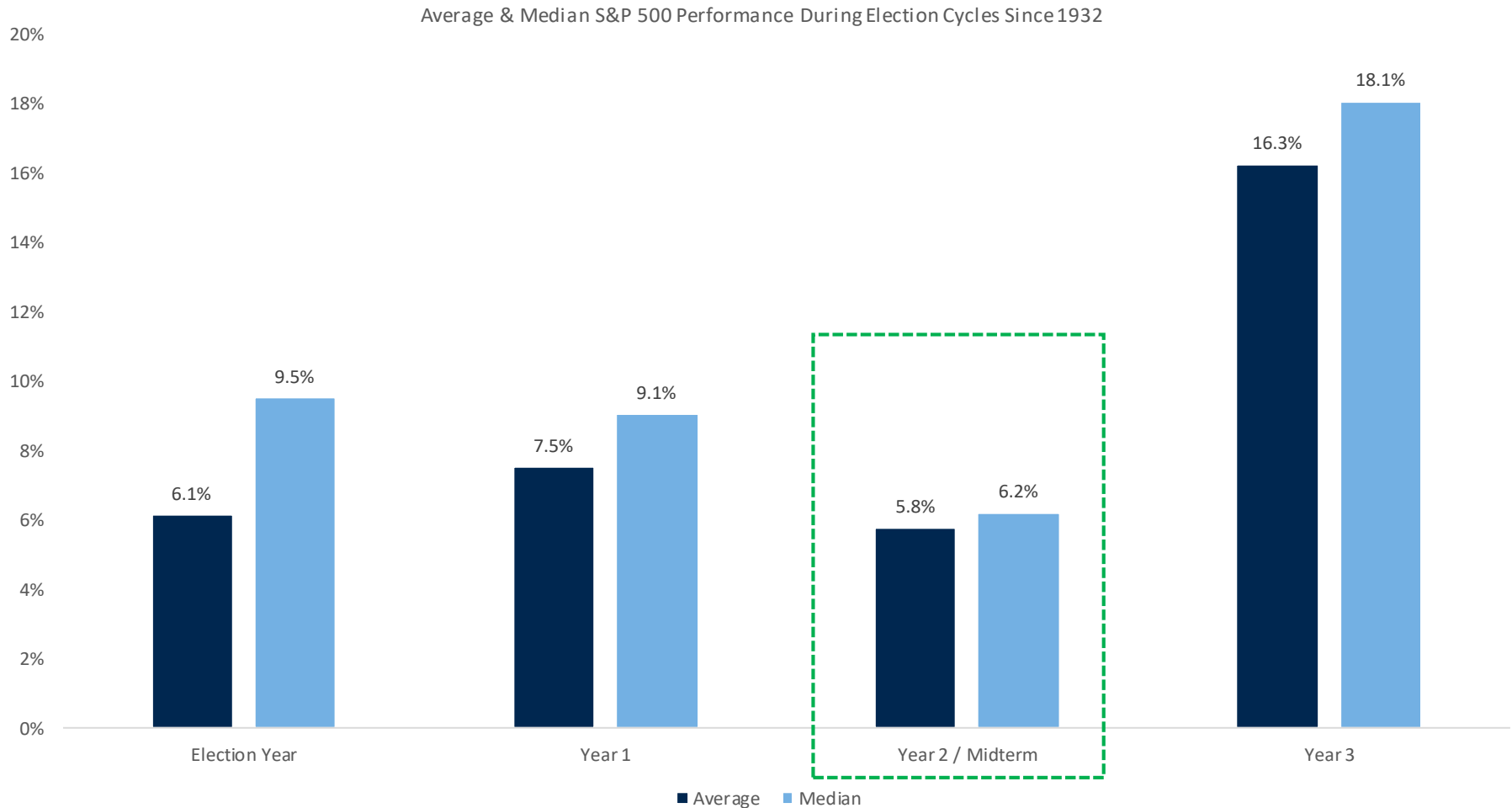
Source: RBC US Equity Strategy, Haver, Bloomberg; as of March 2022 (pricing) and April 2022 (GDP forecasts)

Democrats Widely Expected To Do Poorly in the Midterms

Will the Democrats hold on to control of both chambers of Congress in the midterms this fall?

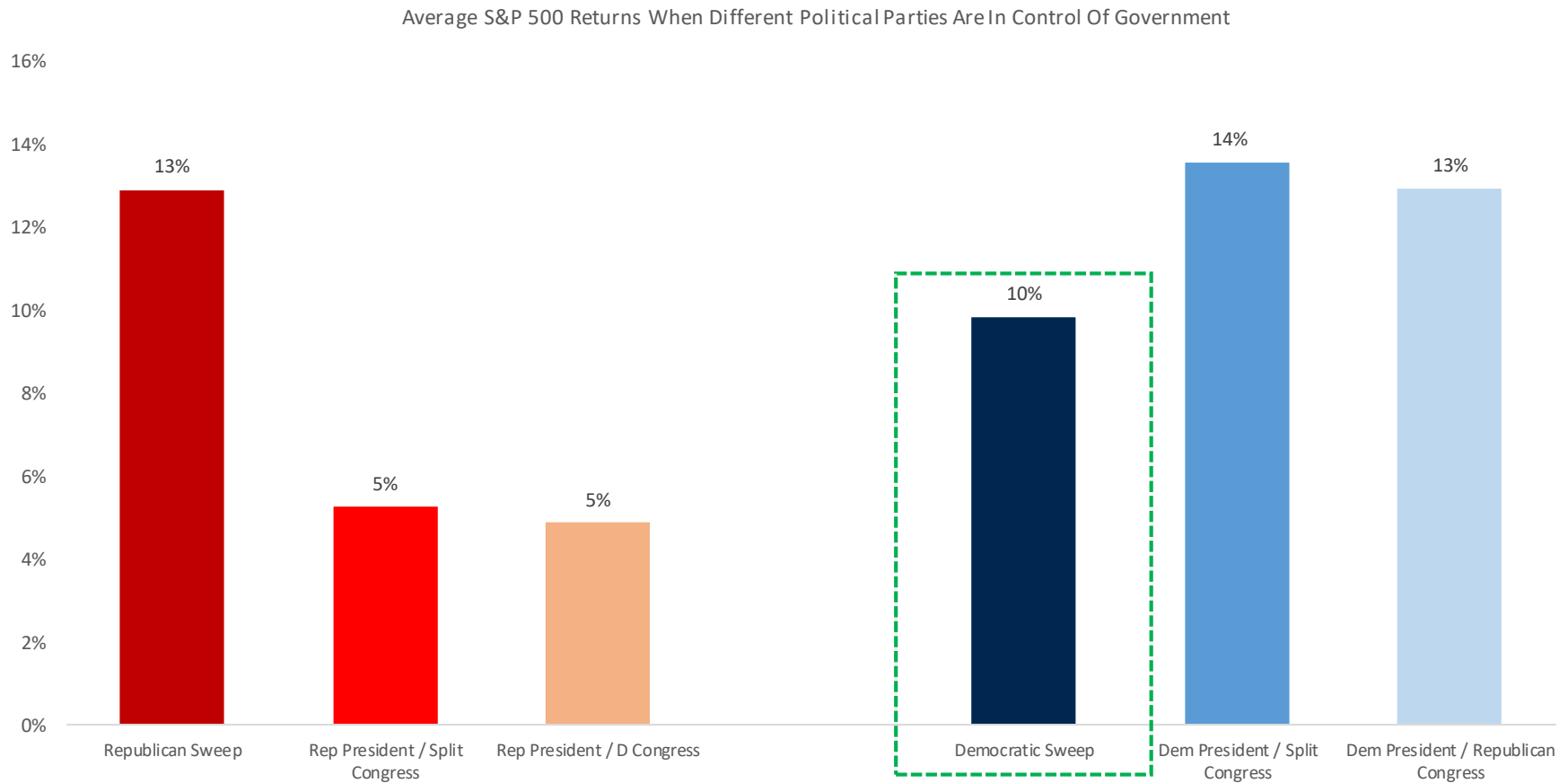


2nd Year of a Presidential Cycle (Mid-Term Year) Tends To Be Up, but a Little Below Trend



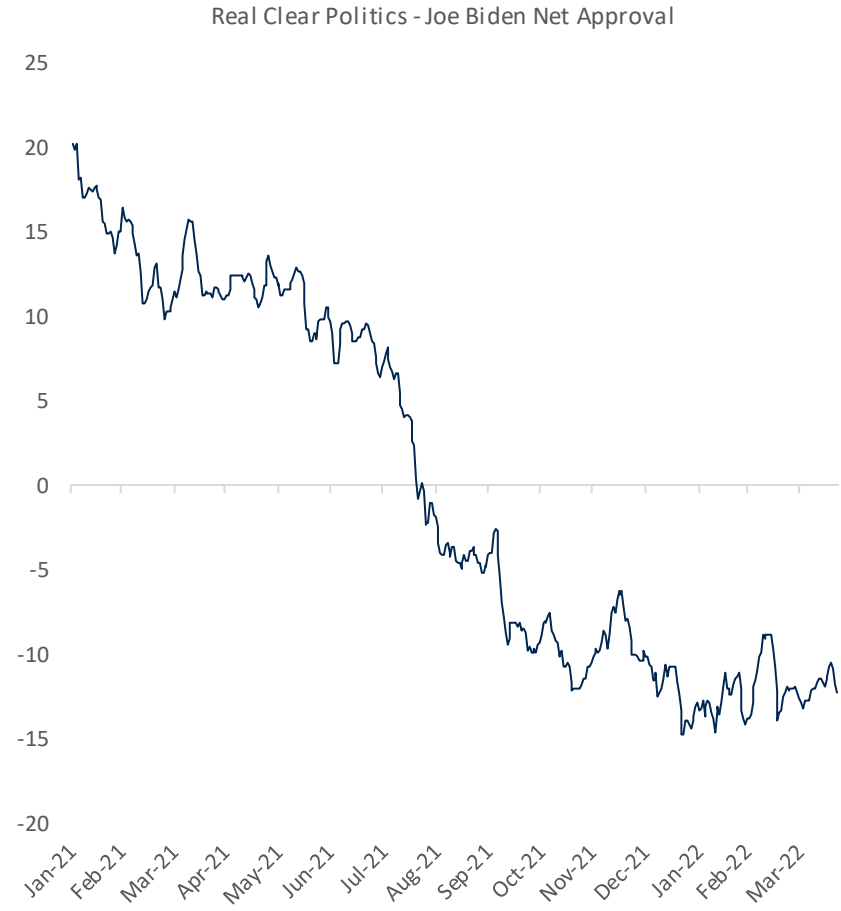
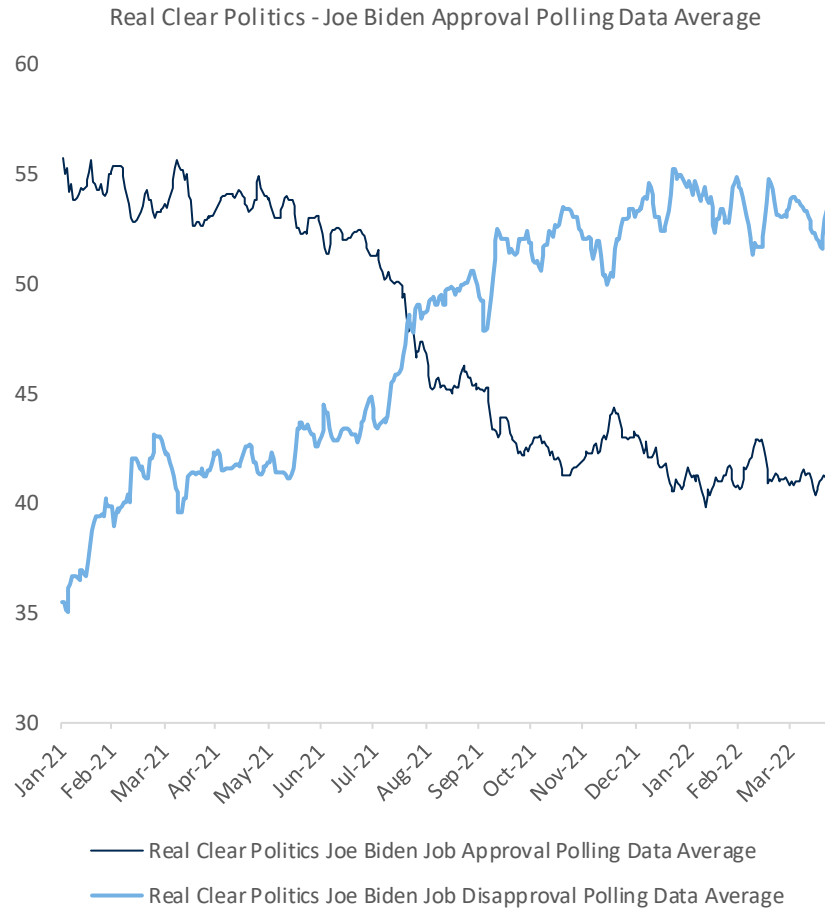
Source: RBC US Equity Strategy, Bloomberg. Data goes back to 1932, based on price returns.

Longer Term, Stocks Tend To Rise Regardless of Which Party Is in Control of Government



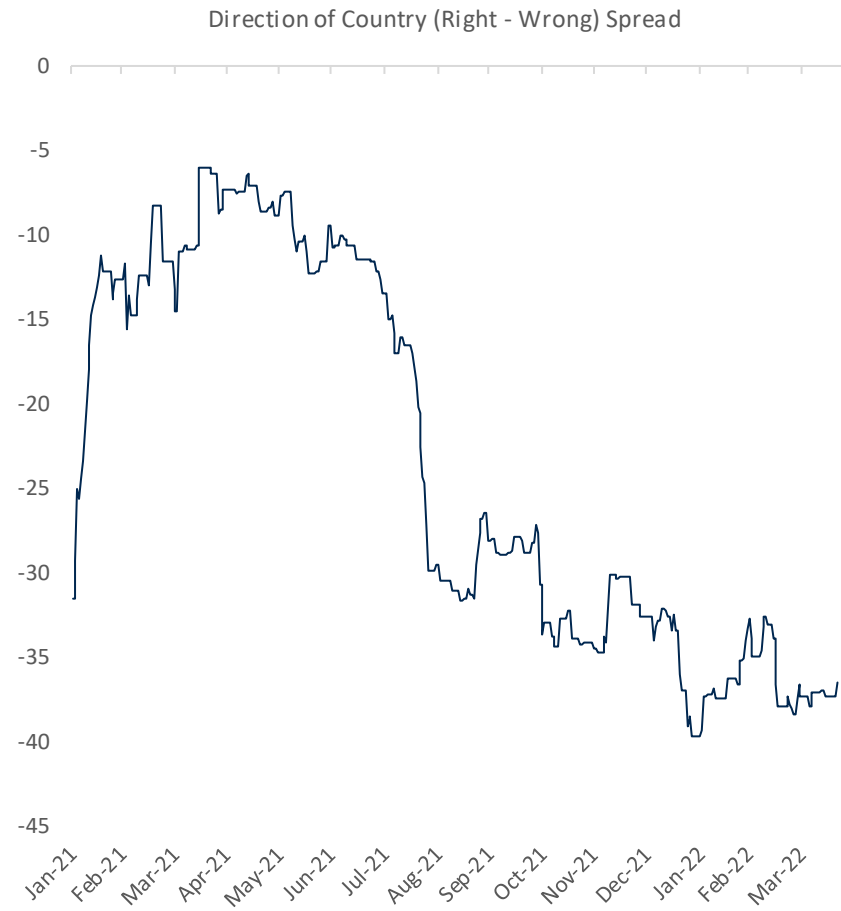
Source: RBC US Equity Strategy, Haver. Includes years since 1932; the 2000 election resulted in a 50/50 tie in the Senate (with a Republican VP acting as the deciding vote after inauguration). However, midway through 2001 one Republican Senator left to become an independent and caucus with the Democrats, based on price returns.

Biden's Polling Numbers Have Stabilized at Low Levels



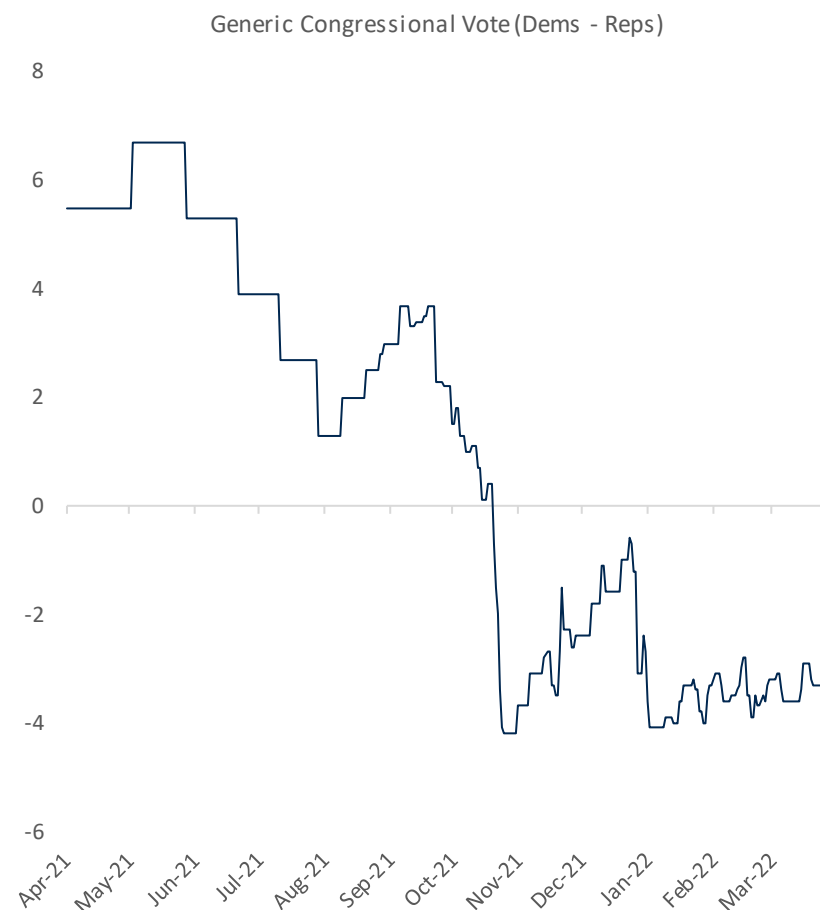
Source: RBC US Equity Strategy, Bloomberg; as of April 21, 2022

Views on the Direction of the Country Have Also Stabilized



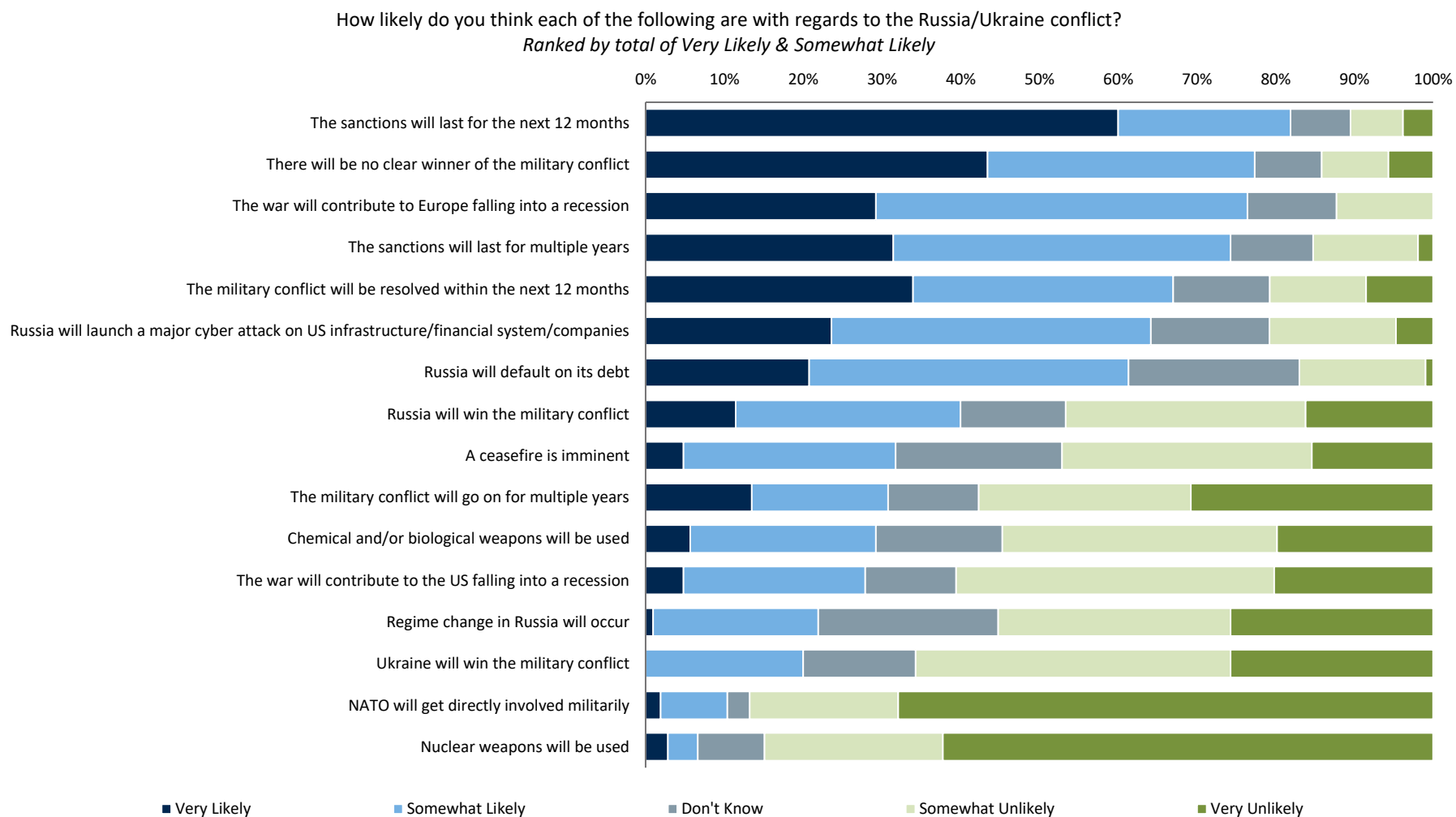
Source: RBC US Equity Strategy, Bloomberg; as of April 20, 2022

Views on Congressional Republicans Have Deteriorated, While Stabilizing for Democrats



Source: RBC US Equity Strategy, Bloomberg; as of April 21, 2022

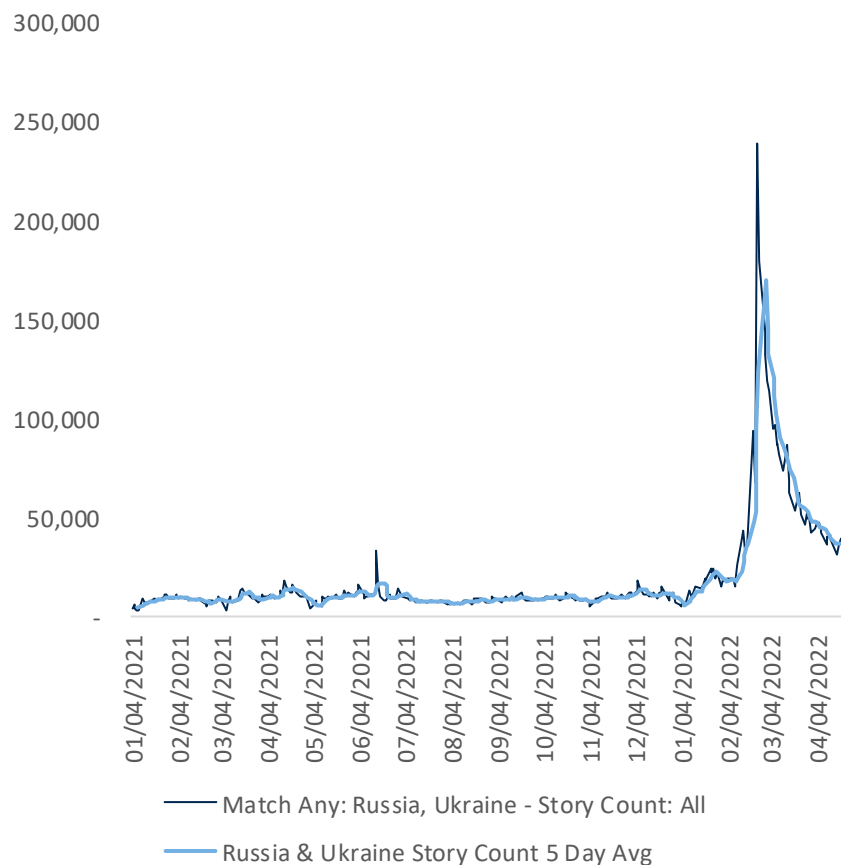
On Russia/Ukraine, Investors Expect Lengthy Sanctions, EU Recession, Cyber Attacks, Debt Default



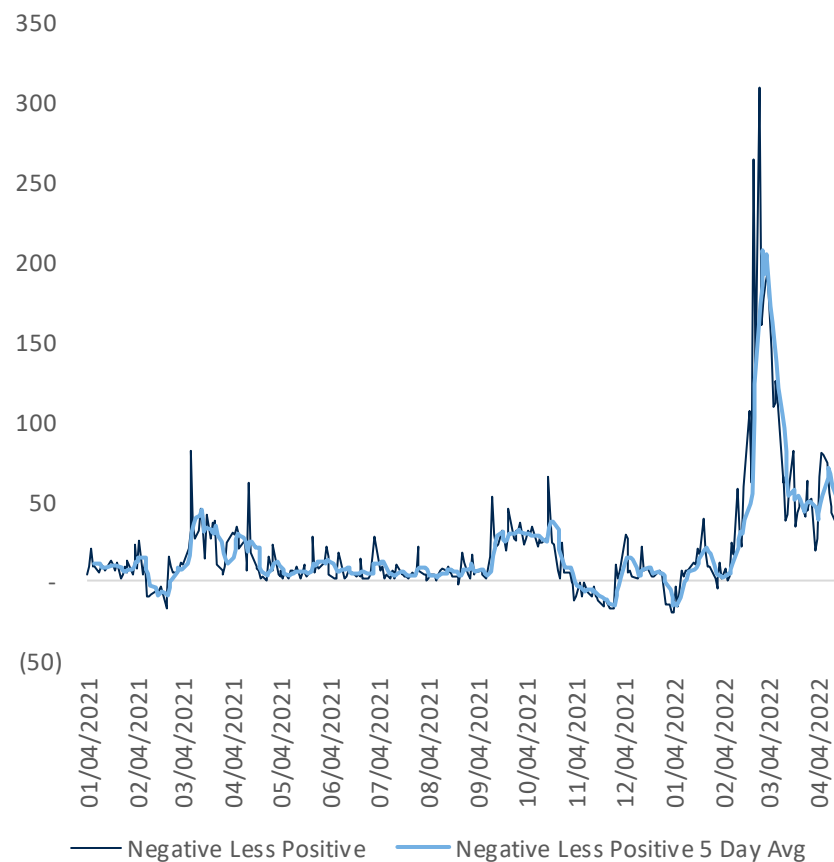
Source: RBC US Equity Strategy; results from our March 2022 investor survey taken 3/28/22-3/31/22

Russia/Ukraine Concerns in the Media Have Faded

Russia & Ukraine News Story Count

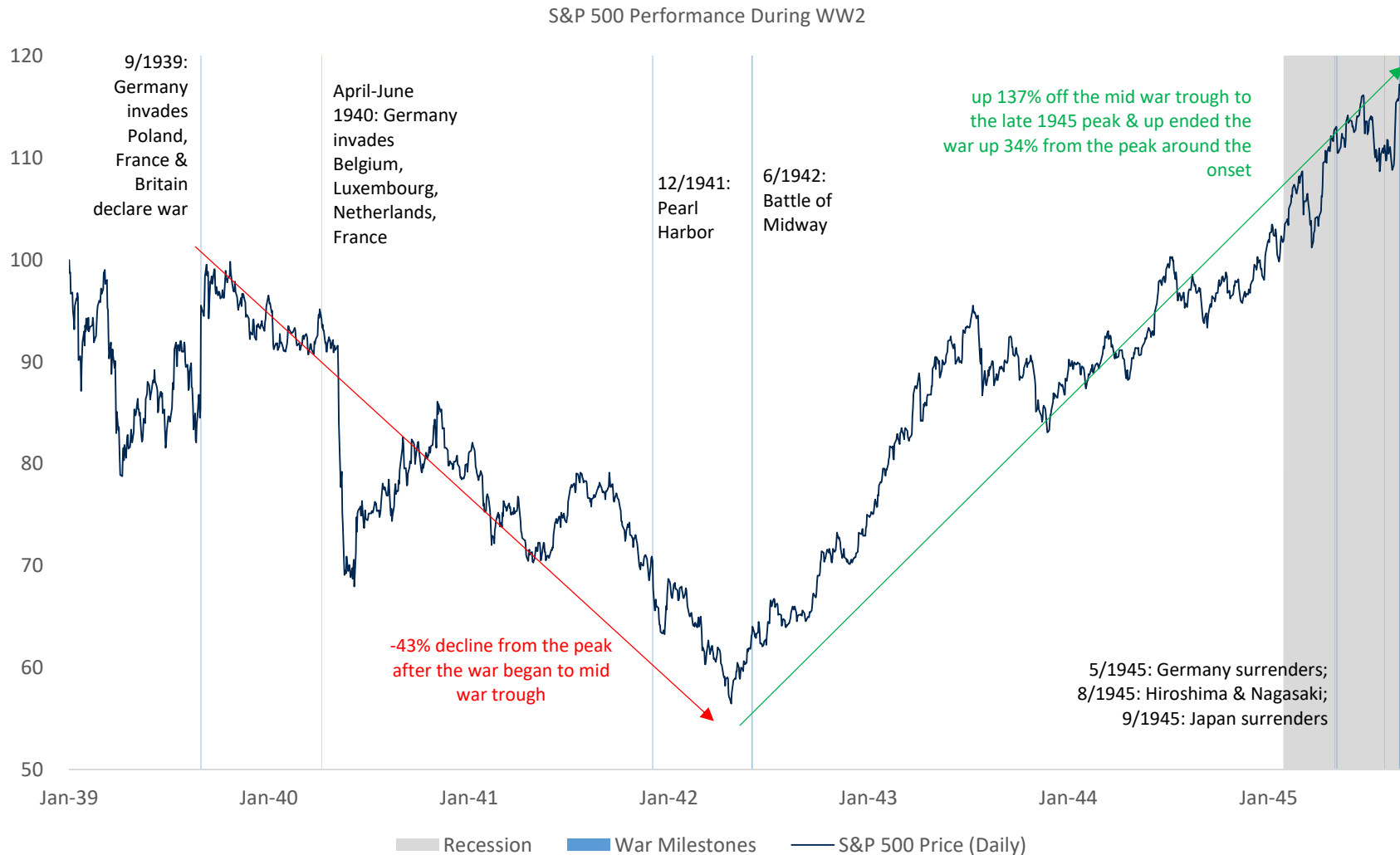


Russia & Ukraine News Sentiment



Source: RBC US Equity Strategy, Bloomberg; as of April 21, 2022

WW2 Drawdown in Stocks Little Worse Than Typical Recession



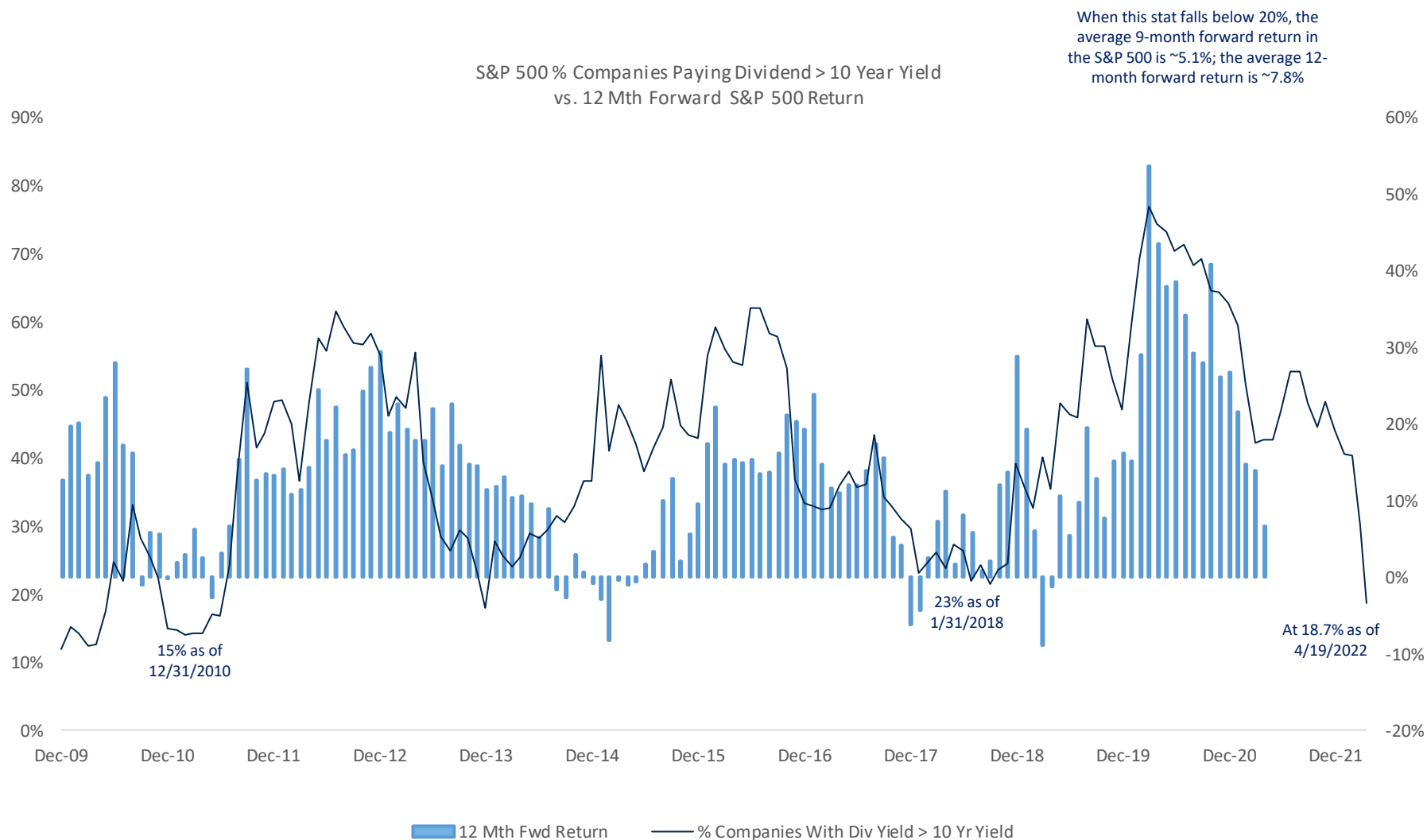
Cross Asset Context

Stocks vs. Bonds & Other Asset Classes



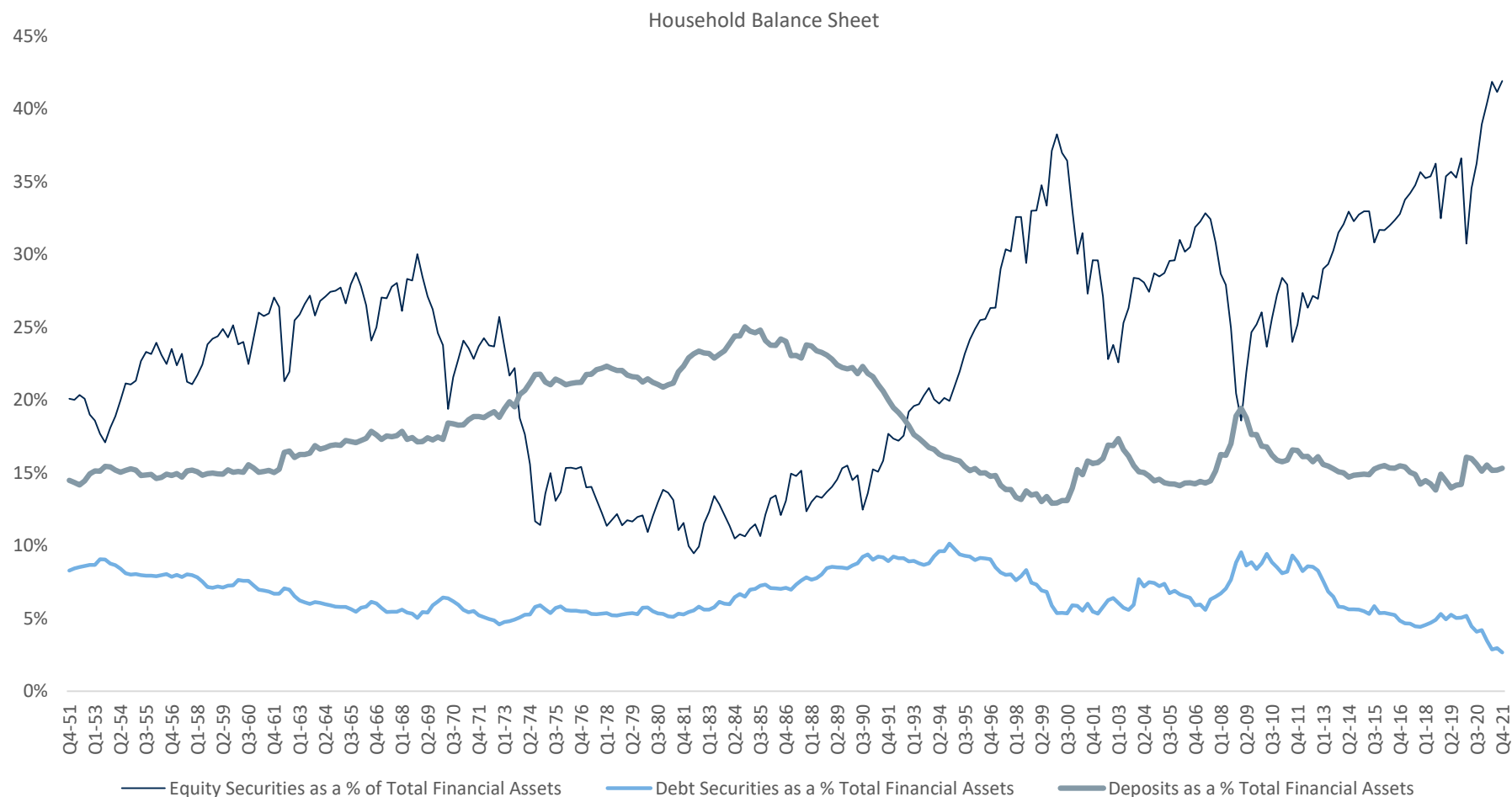
Capital
Markets

Dividend Appeal of the S&P 500 Has Diminished



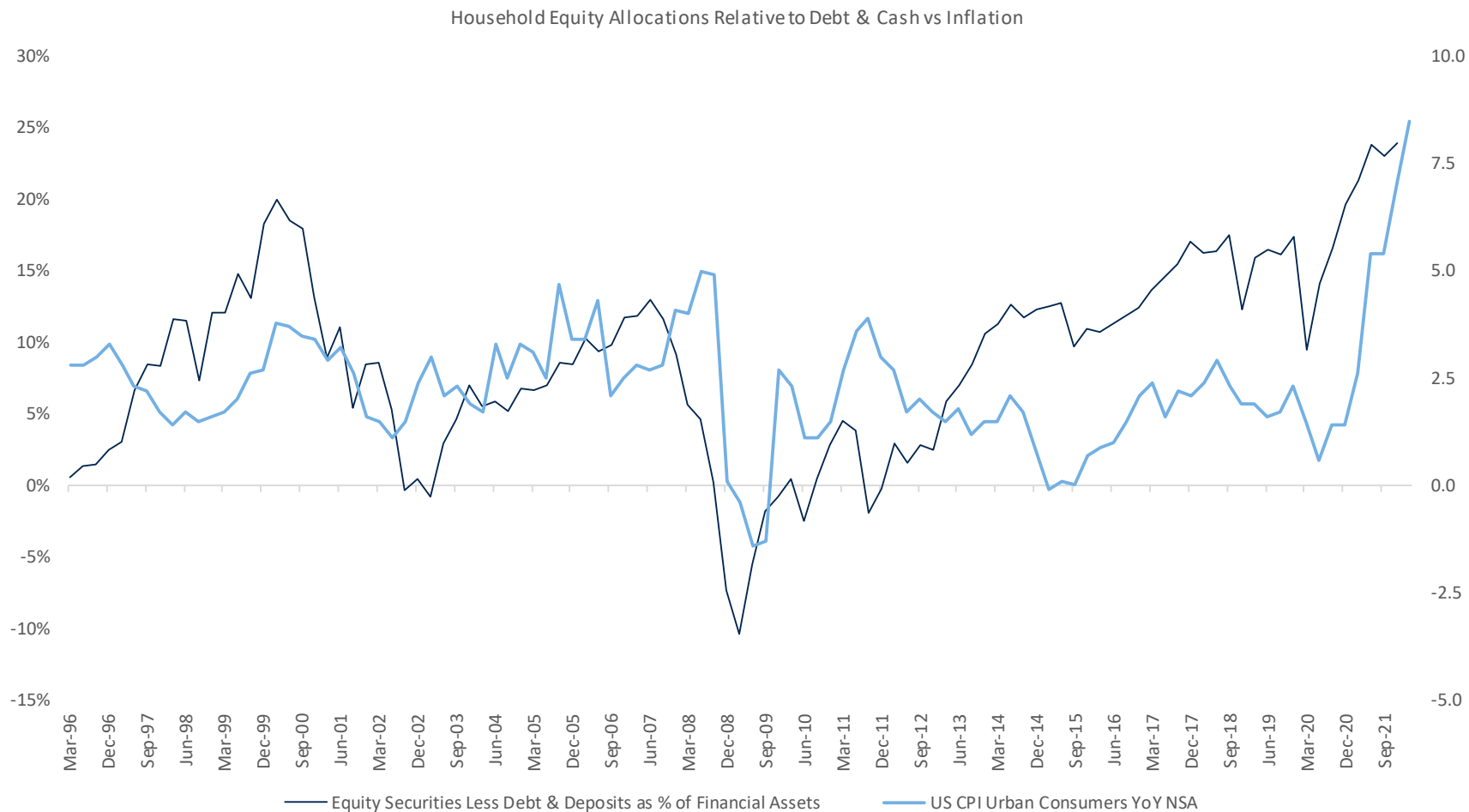
Source: RBC US Equity Strategy, S&P Capital IQ/ClariFI, Bloomberg; as of April 19, 2022

Equity Stakes of US Households at All-Time Highs While Debt & Cash Exposure Have Eased



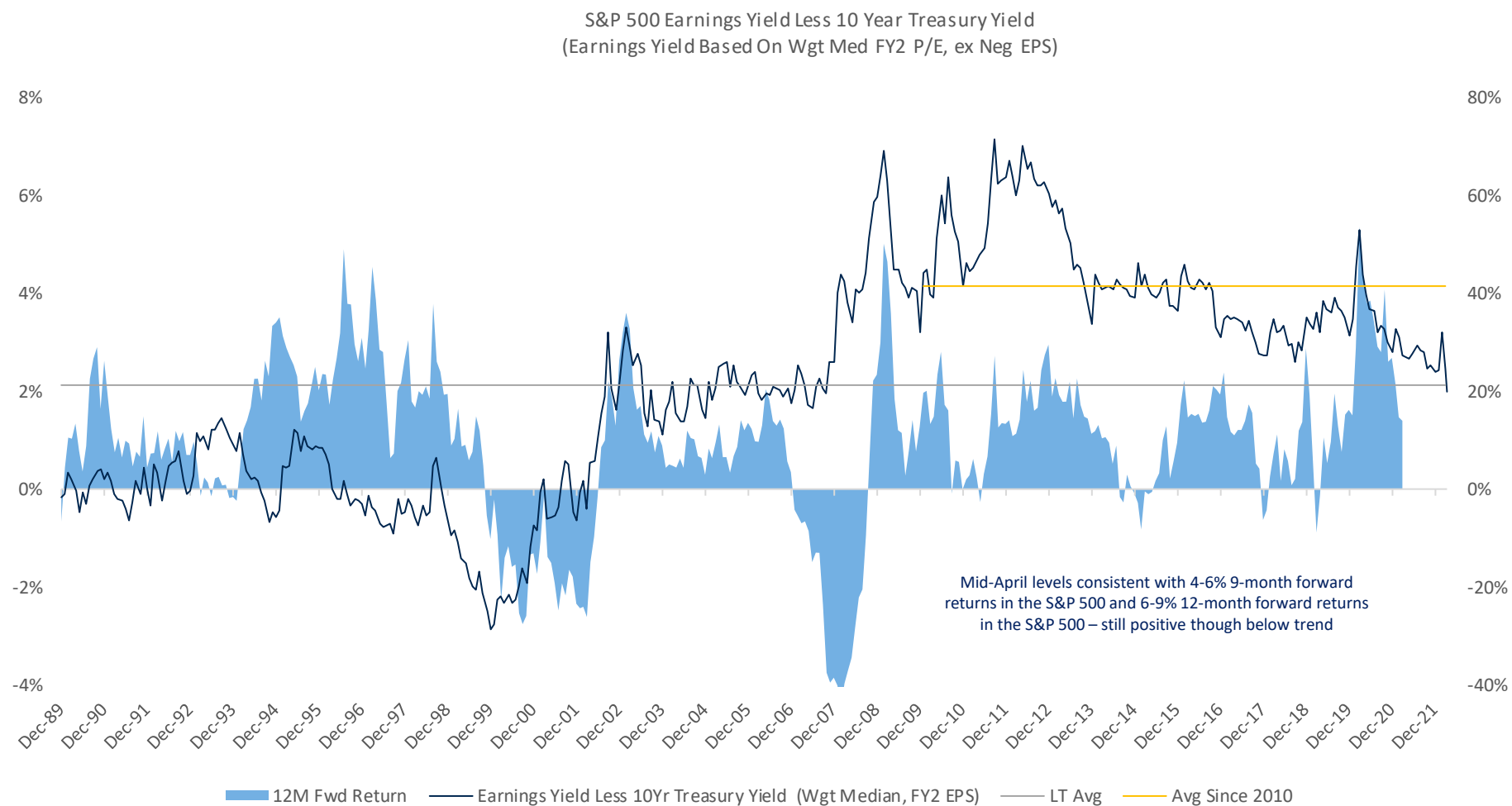
Source: RBC US Equity Strategy, Federal Reserve Flow of Funds, Haver; through 4Q21

Inflationary Conditions Have Kept Households Invested in Equities



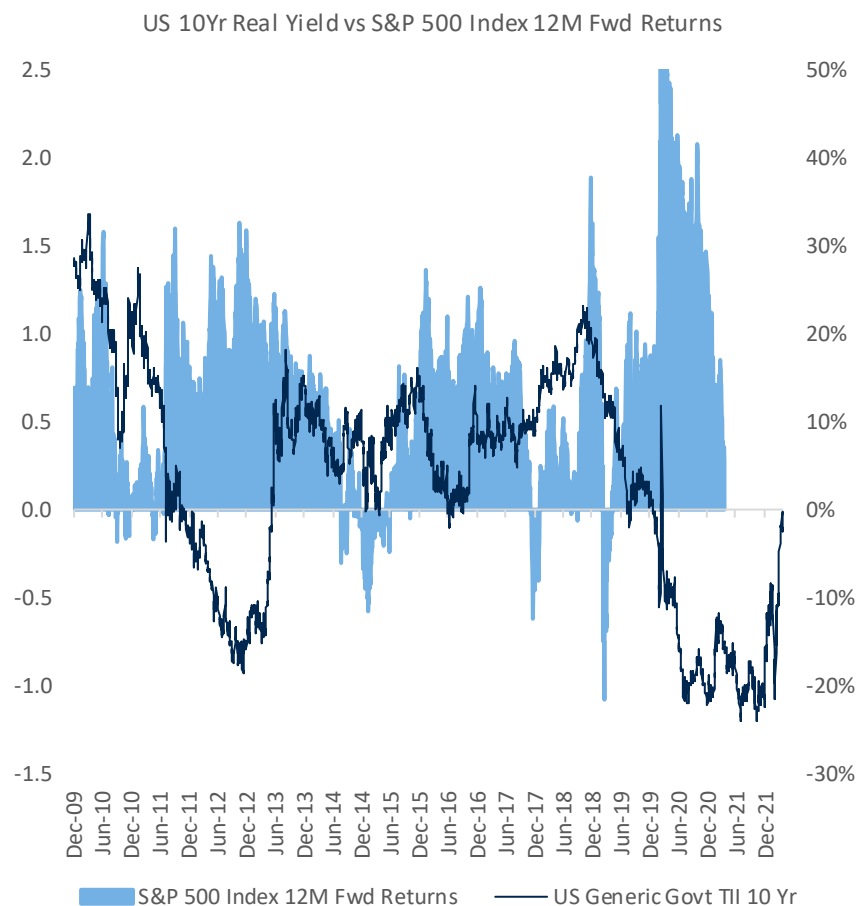
Source: RBC US Equity Strategy, Federal Reserve Flow of Funds, Haver, Bloomberg, CPI as of 1Q22, Asset Allocation Stats as of 4Q21

US Equities Have Gotten Less Attractive Relative to Bonds



Source: RBC US Equity Strategy, S&P Capital IQ/ClariFI, Bloomberg; as of April 18, 2022

S&P 500 Returns Tend To Moderate When Real Yields Are Rising



S&P 500 Forward Returns Since 2010 When 10Yr Real Yield Increasing or Decreasing			
	3M Fwd	9M Fwd	12M Fwd
Declining Real Yields	3.5%	10.1%	15.0%
Rising Real Yields	2.4%	6.8%	11.0%

Return Difference (Declining - Rising)	1.1%	3.3%	3.9%
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S&P 500 Forward Returns Since 2010 When 10Yr Real Yield Is Negative			
	3M Fwd	9M Fwd	12M Fwd
Rising Negative Real Yields	4.8%	12.2%	15.9%
Declining Negative Real Yields	5.0%	15.4%	24.7%

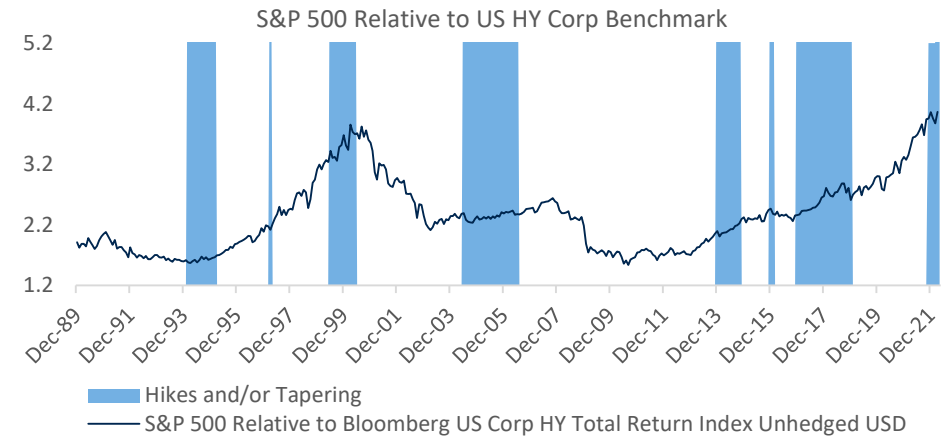
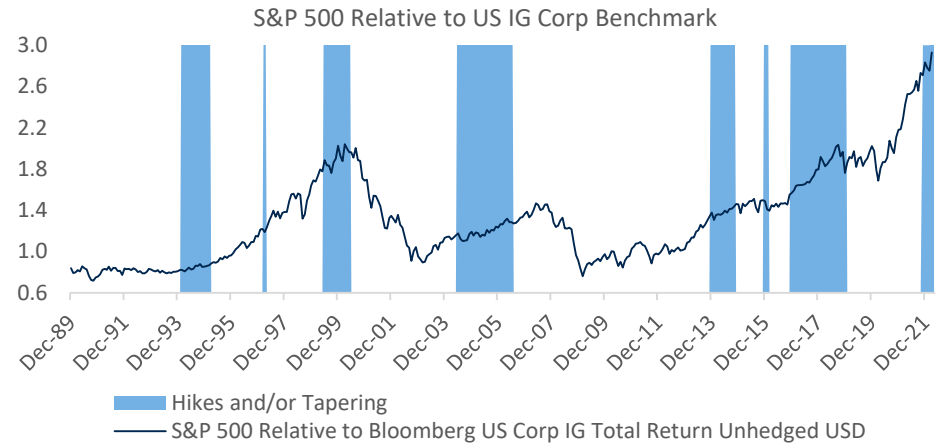
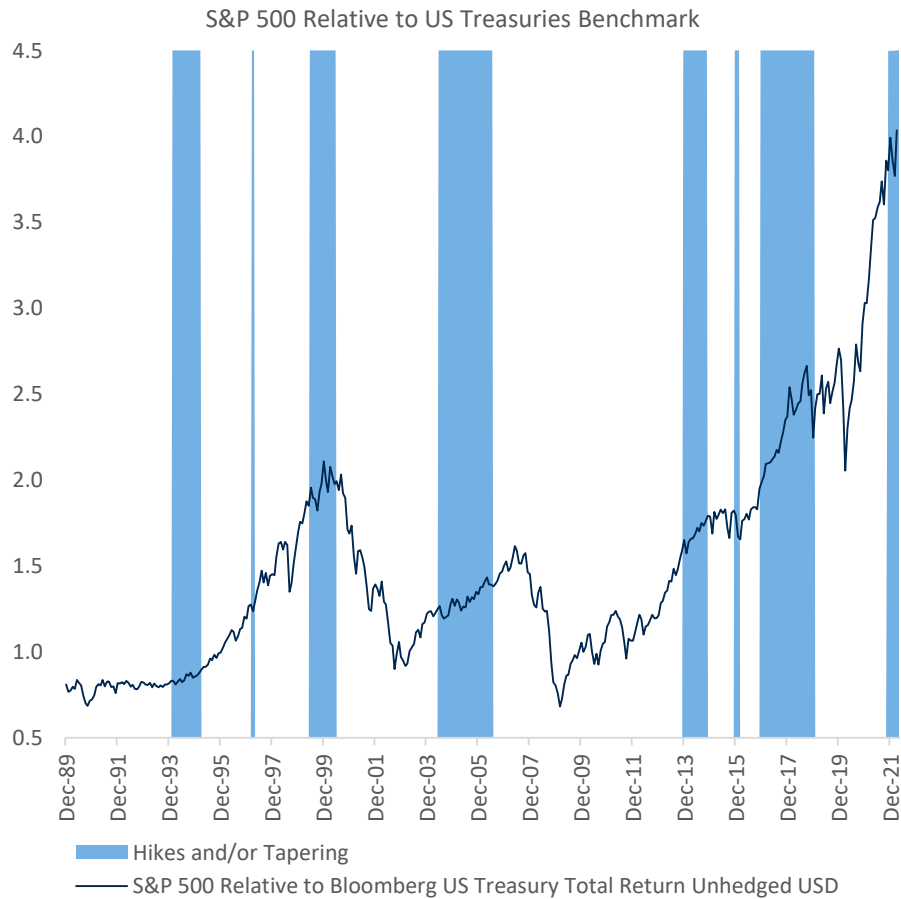
Return Difference (Declining - Rising)	0.3%	3.2%	8.7%
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S&P 500 Forward Returns Since 2010 When 10Yr Real Yield Is Positive			
	3M Fwd	9M Fwd	12M Fwd
Rising Positive Real Yields	0.7%	3.9%	7.6%
Declining Positive Real Yields	1.0%	2.2%	2.7%

Return Difference (Declining - Rising)	0.2%	-1.7%	-4.8%
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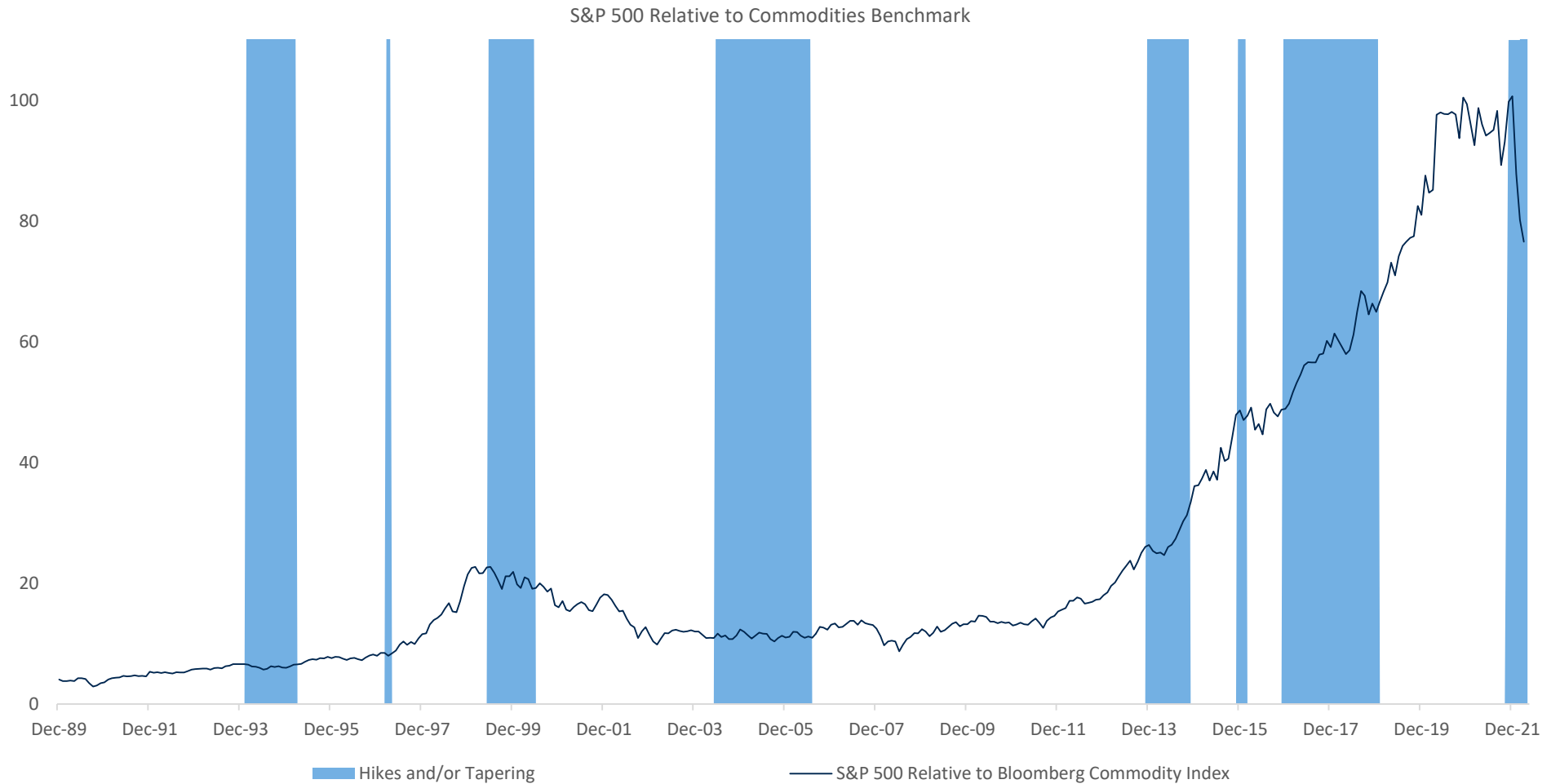
Source: RBC US Equity Strategy, Bloomberg. Study on declining and rising negative real yields assumes an interval of six months of changes in the benchmark; as of April 21, 2022

US Stocks Tend To Outperform Bonds When the Fed Is Hiking



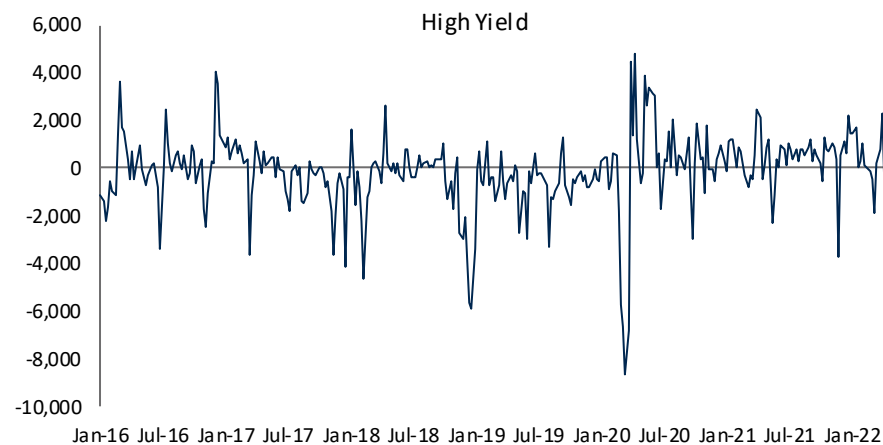
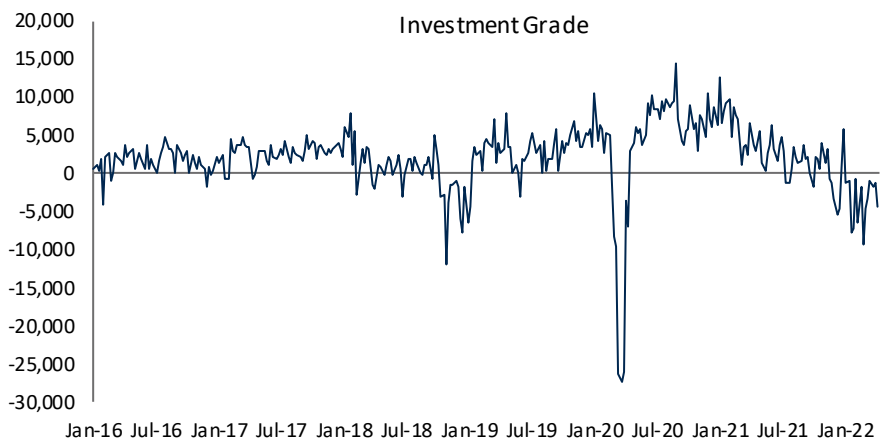
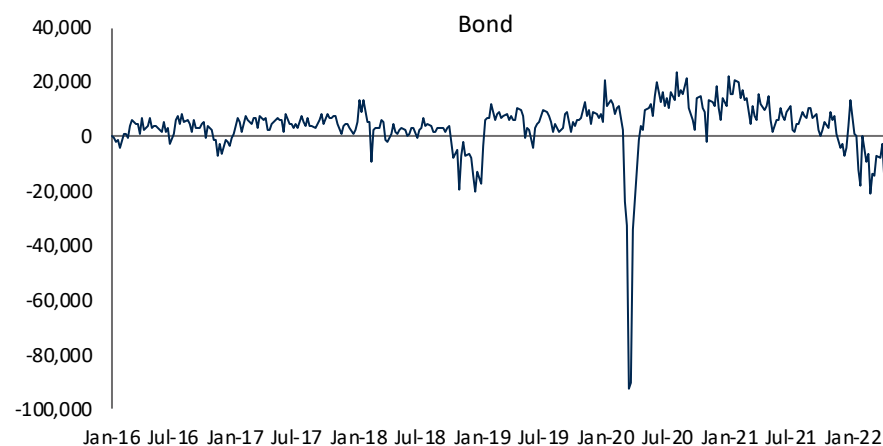
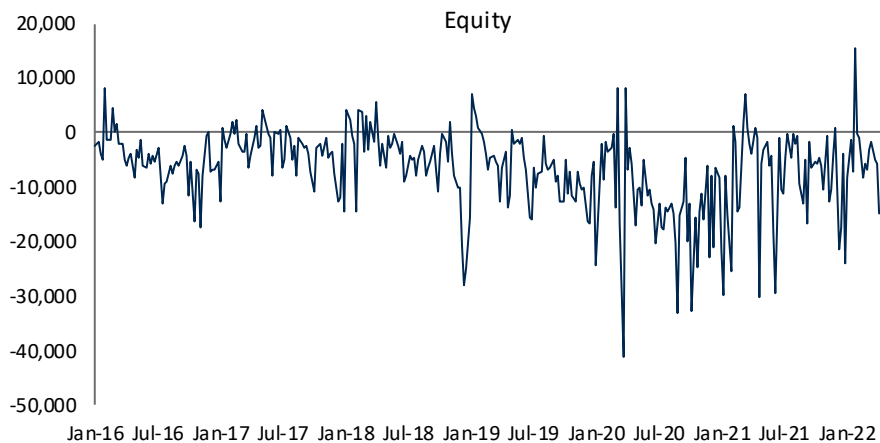
Source: RBC US Equity Strategy, Bloomberg, MSCI; as of April 19, 2022

Stocks Often Lag Commodities As Hikes Get Underway



Source: RBC US Equity Strategy, Bloomberg; as of April 19, 2022

Equity Flows Perked Up To Start the Year but Have Faded; Bond Flows Starting to Heal



Source: RBC US Equity Strategy, Haver Analytics; as of April 13, 2022

Global Context

US vs. Non-US Equities

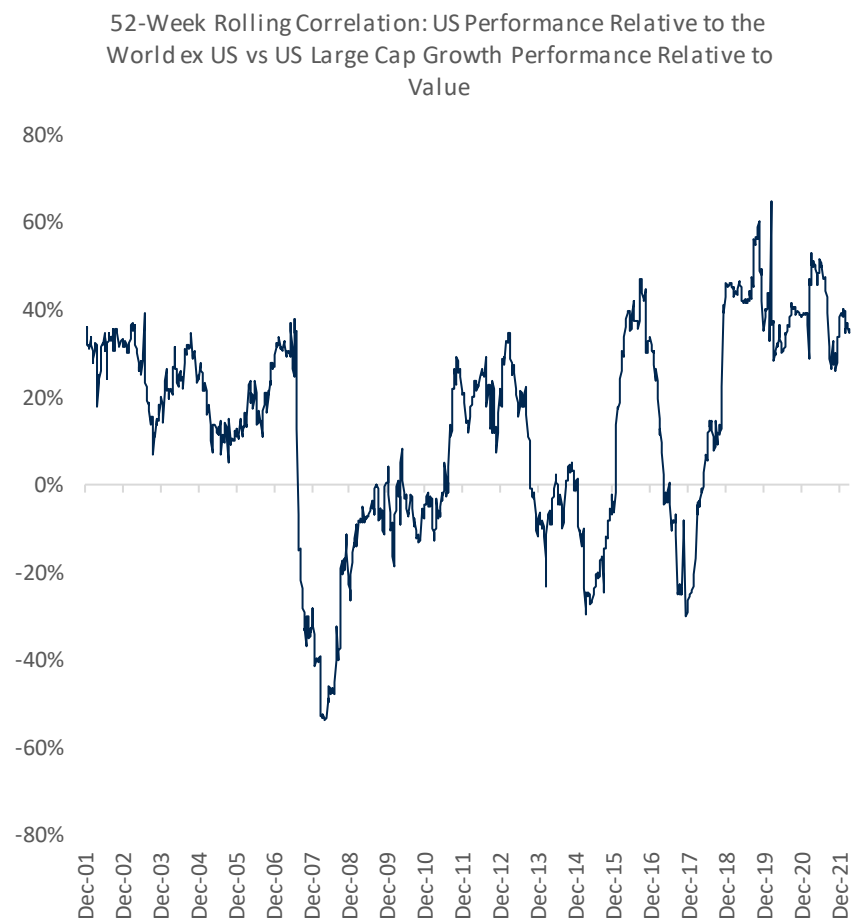
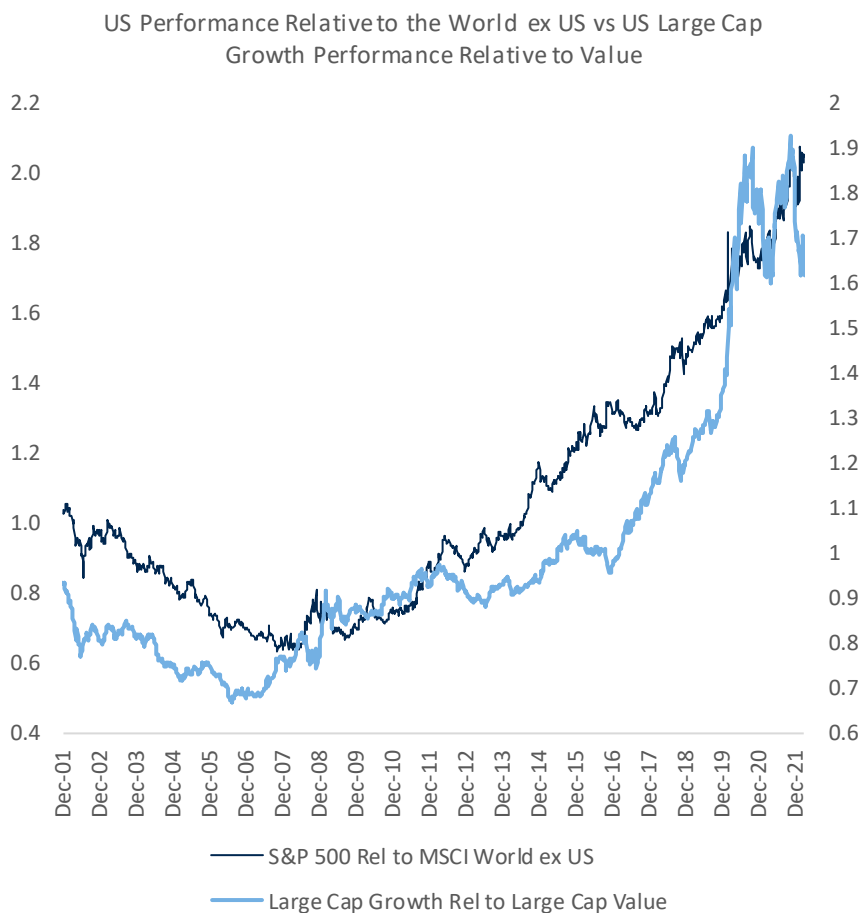


Capital
Markets

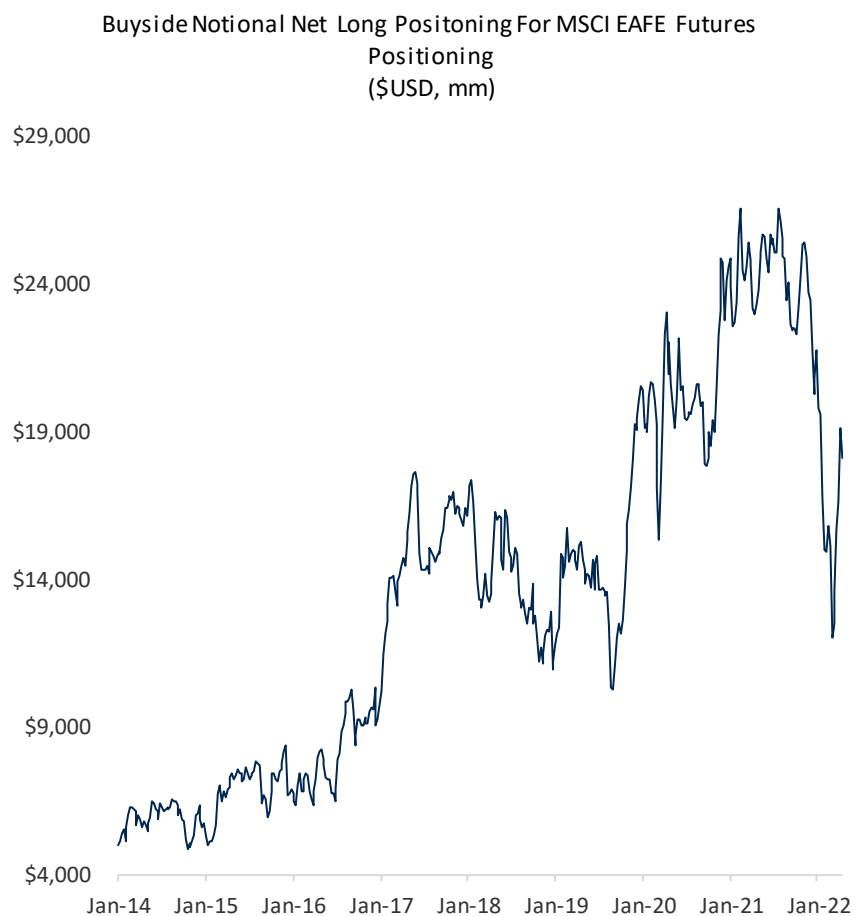
US Has Outperformed Non-US Since Late February



The Growth/Value and US/Non-US Trades Have Been Positively Correlated Recently

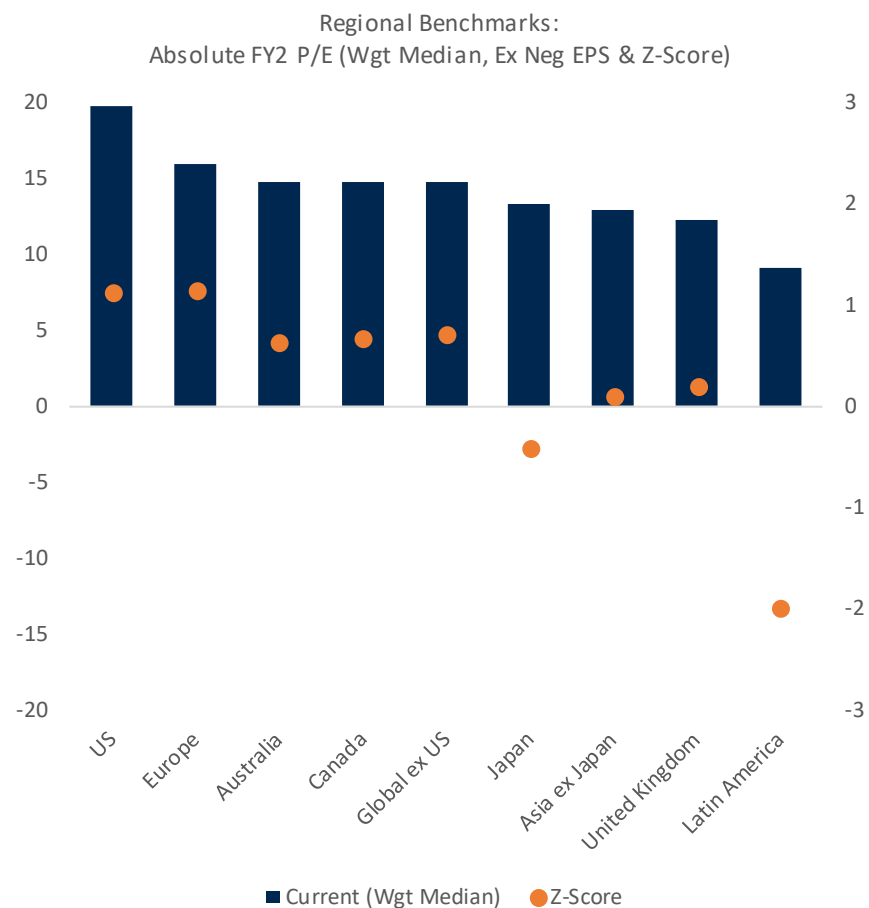
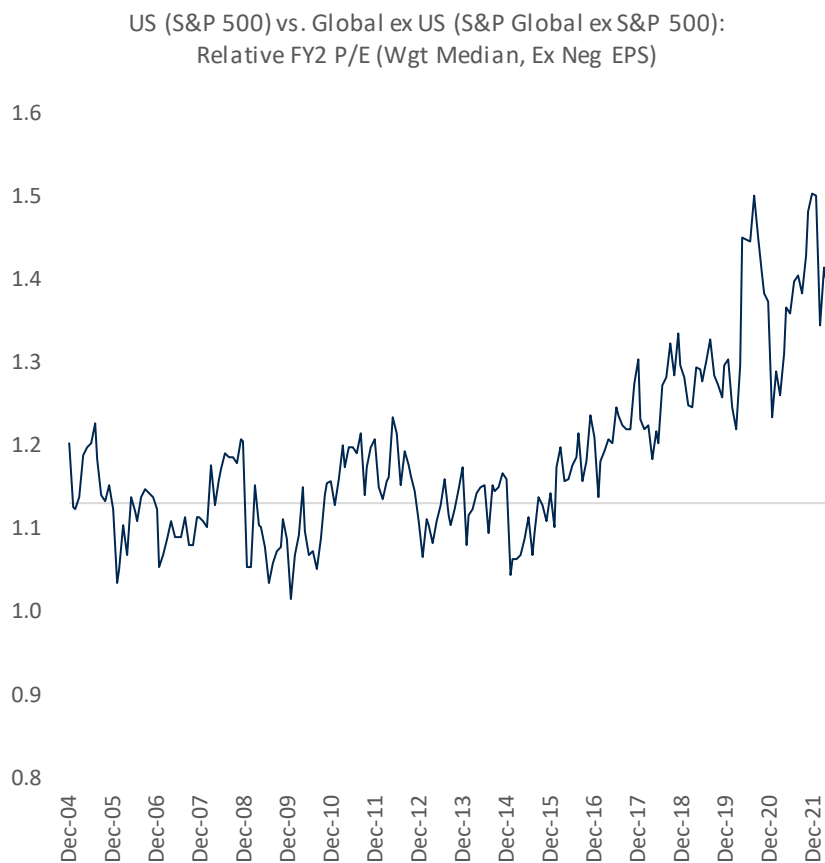


Futures Positioning Rebounding for Europe, Flat for EM



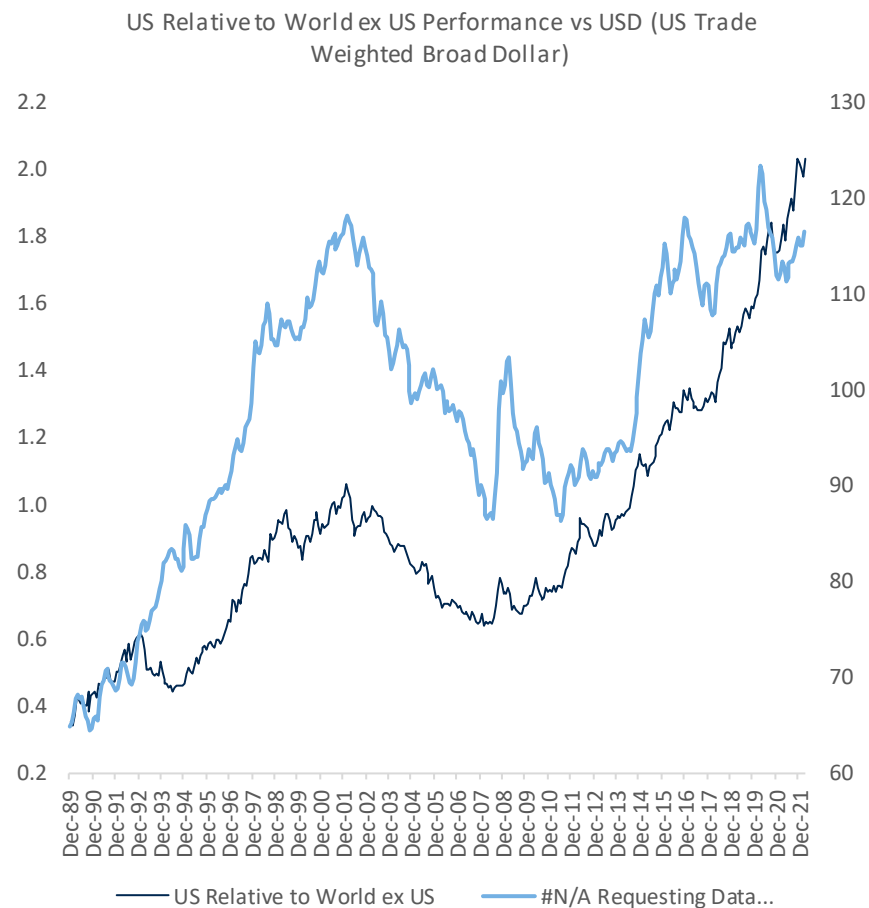
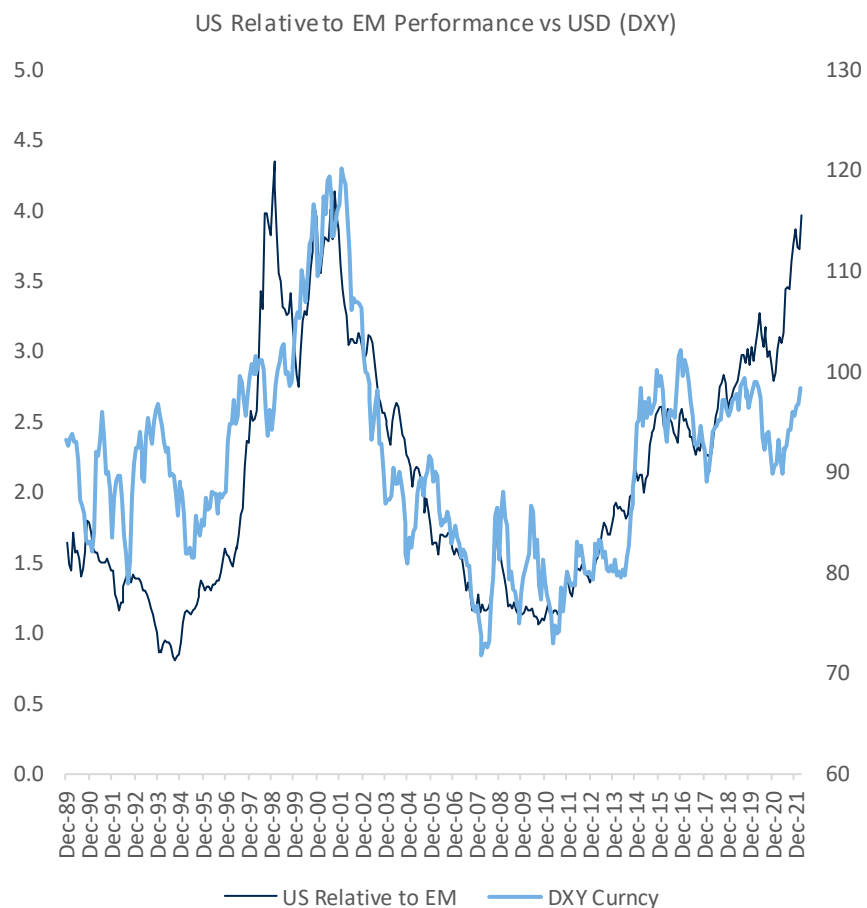
Source: RBC US Equity Strategy, RBC Futures Desk, CFTC. Asset Manager/Institutional: These are institutional investors, including pension funds, endowments, insurance companies, mutual funds, and those portfolio/investment managers whose clients are predominantly institutional; Nikkei 225 Futures Positioning combines JPY and USD based contracts, converting JPY based contracts into USD using as of date JPY/USD FX Spot Prices. As of 4/19/2022

Valuations Have Improved for US-Equities vs. Non-US Equities, but Aren't Cheap



Source: RBC US Equity Strategy, S&P Capital IQ/ClariFI. Z-Scores calculated since 2004; as of April 18, 2022

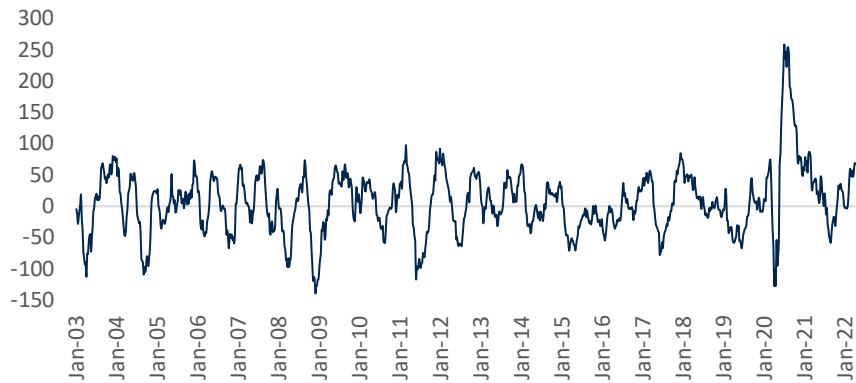
US Performance Relative to ROW Has Been Closely Aligned With US Dollar Trends Over Time



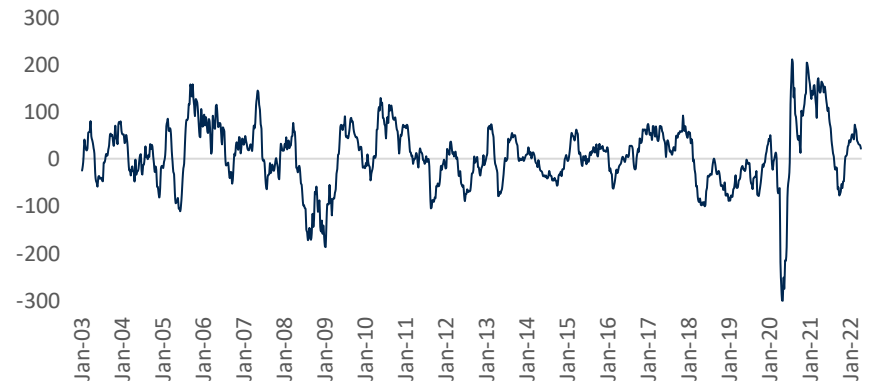
Source: RBC US Equity Strategy, Bloomberg; as of March 2022

Positive Economic Surprises Still Being Seen in the US and Europe

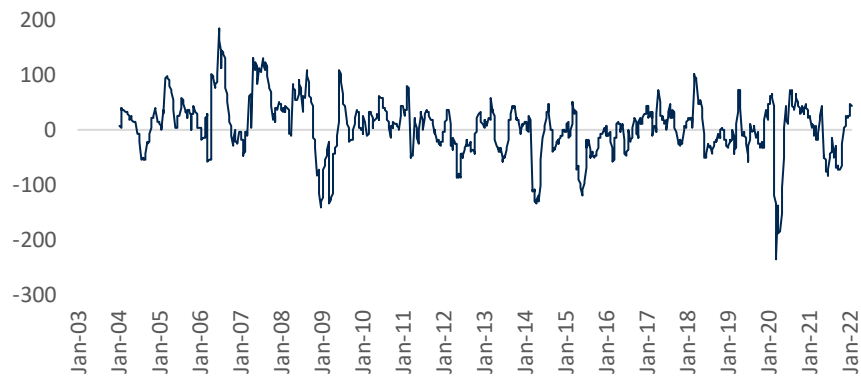
Citi Economic Surprise Index - US



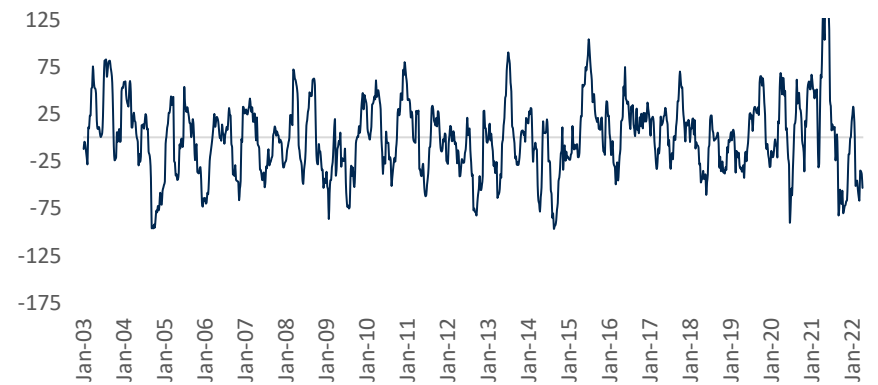
Citi Economic Surprise Index - Europe



Citi Economic Surprise Index - China

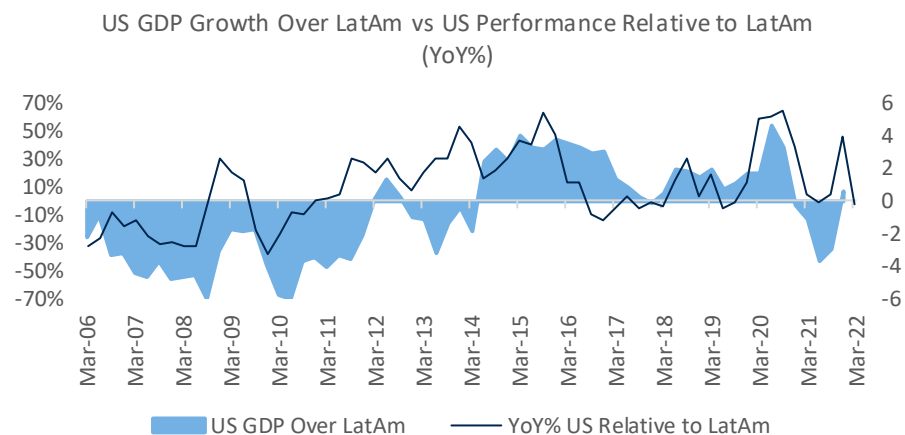
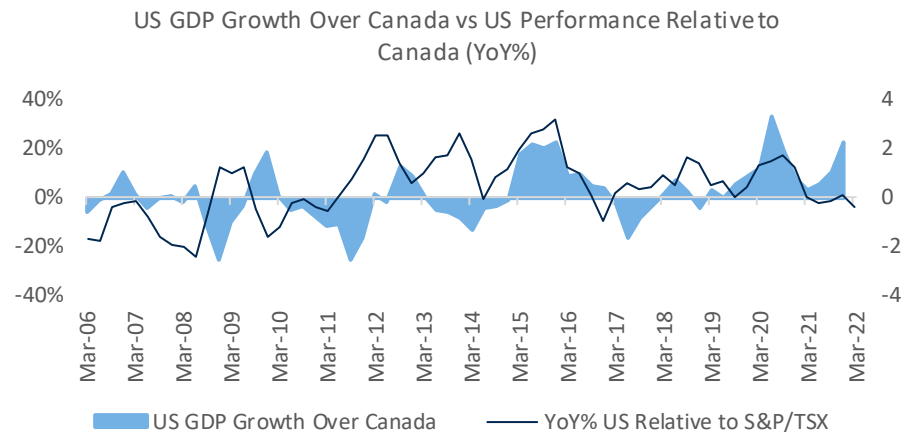
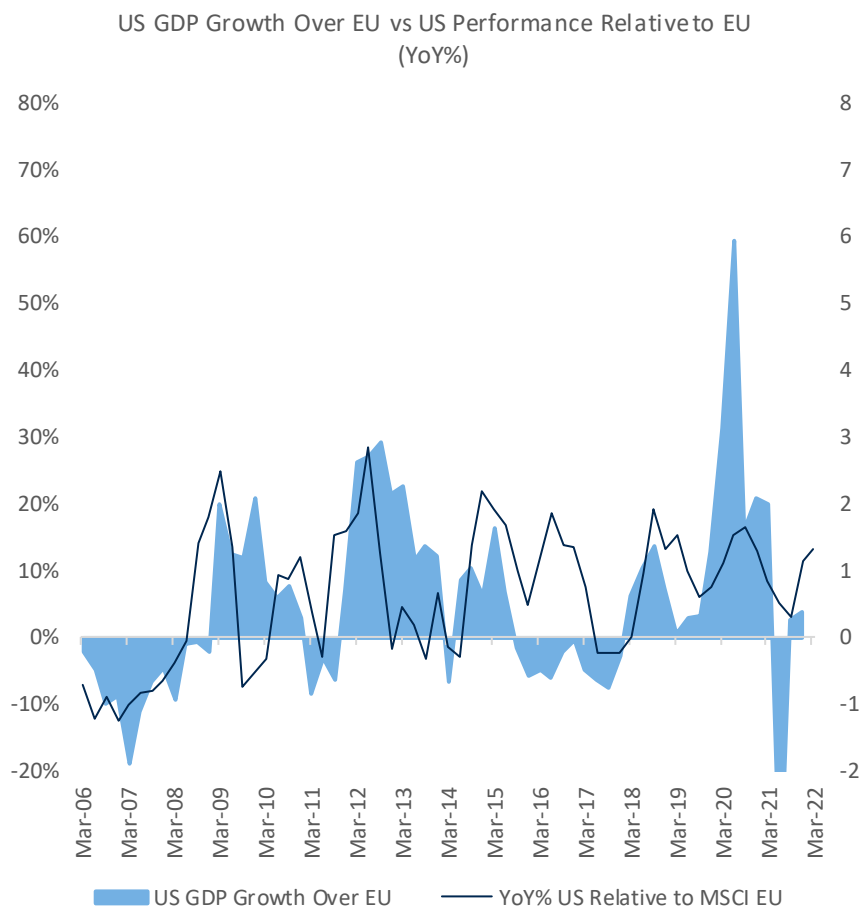


Citi Economic Surprise Index - Japan



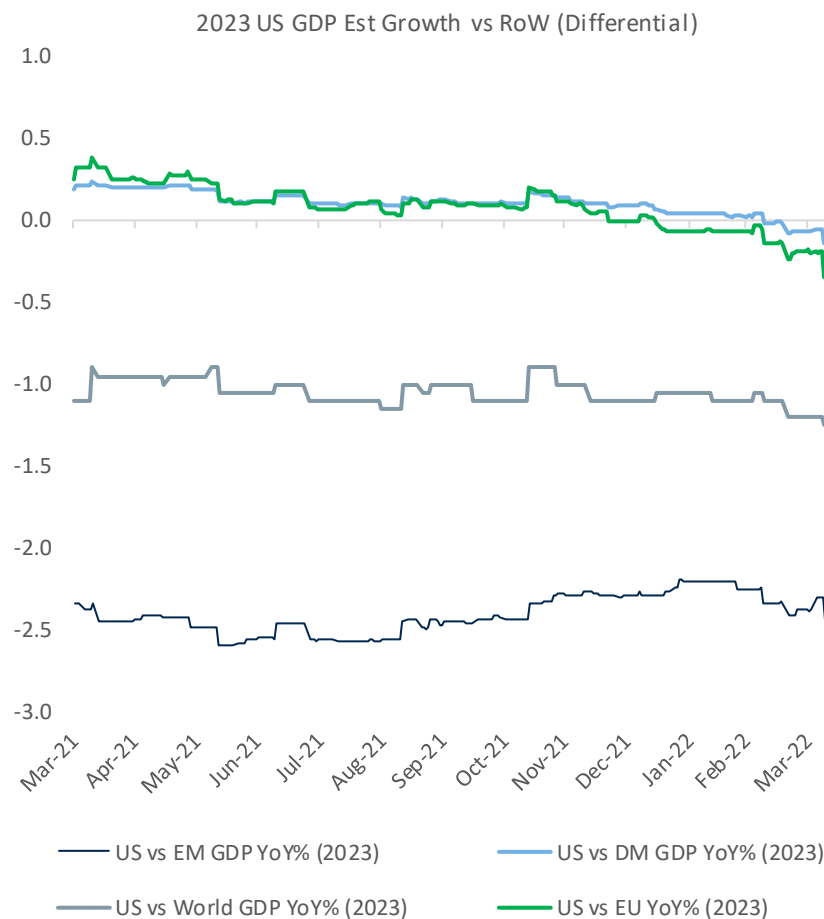
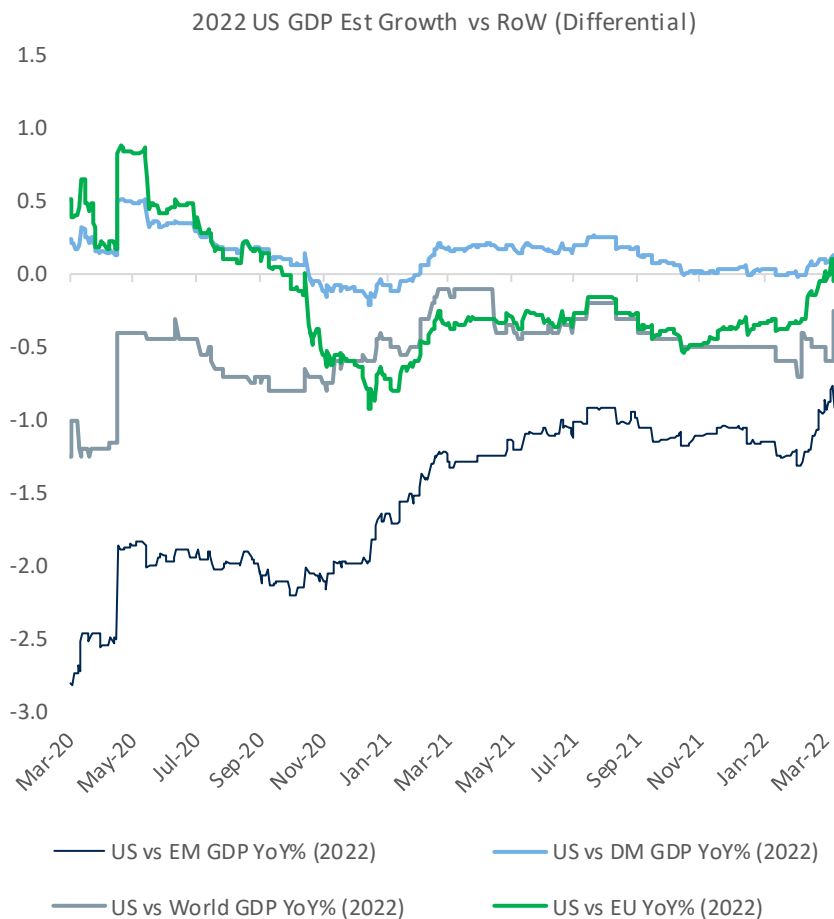
Source: RBC US Equity Strategy, Bloomberg; as of April 22, 2022

Superior Economic Growth in the US Has Driven Better Equity Returns Over Time



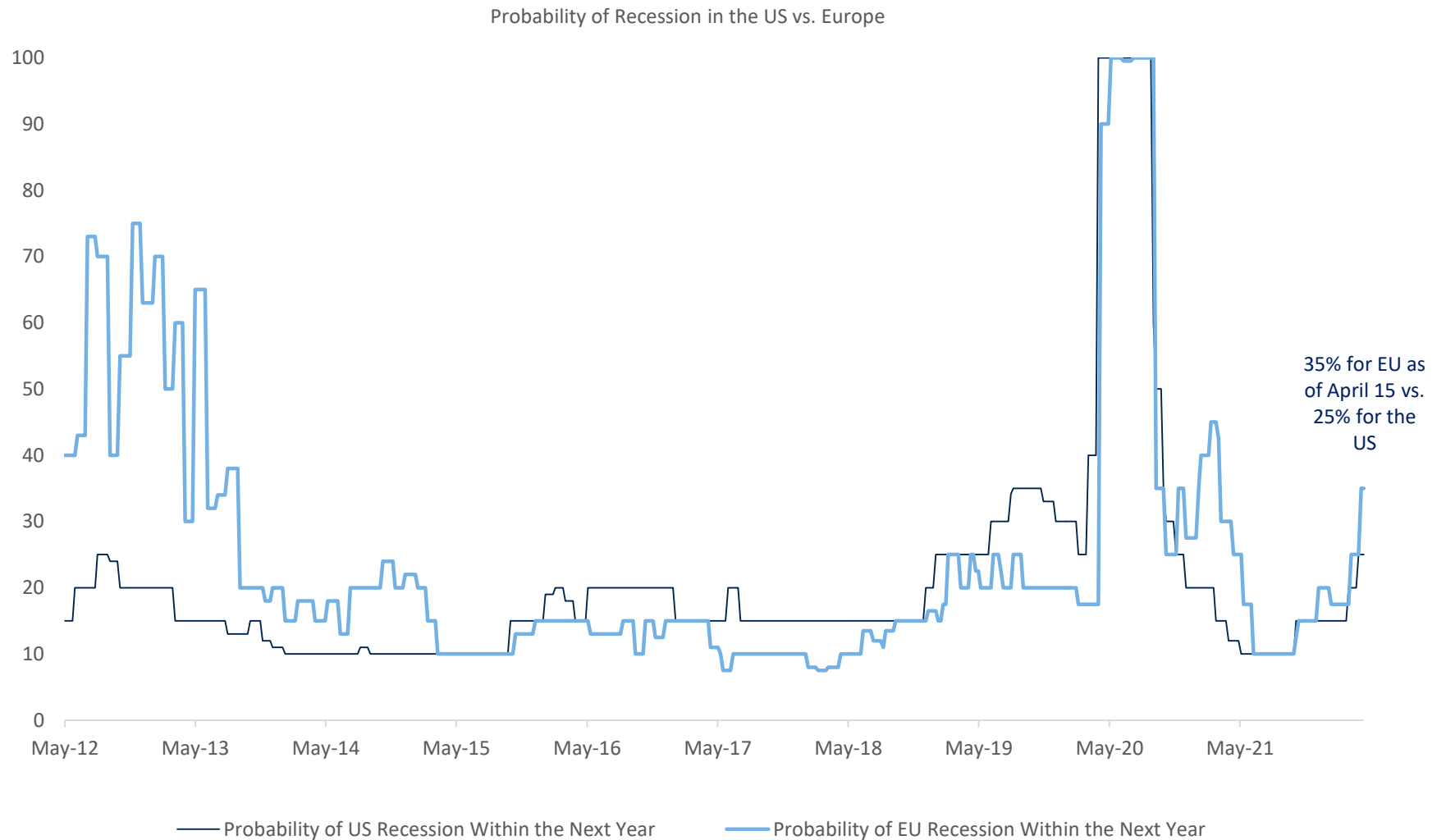
Source: RBC US Equity Strategy, Bloomberg. As of 1Q22 (performance) and 4Q21 (GDP)

US GDP Expectations Picking Up Relative to Other Regions for 2022, Losing Steam on 2023



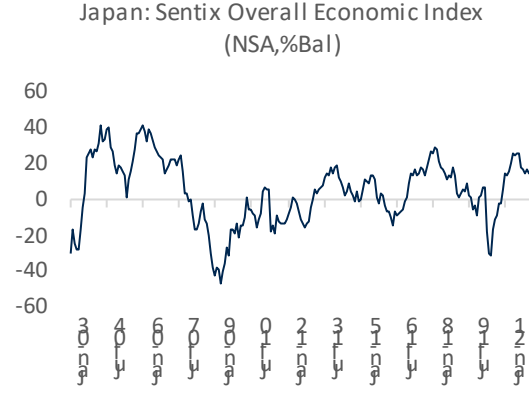
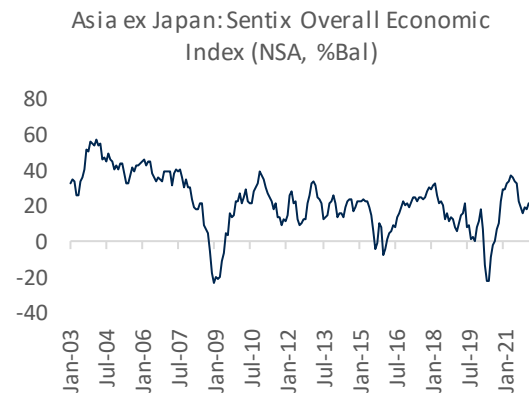
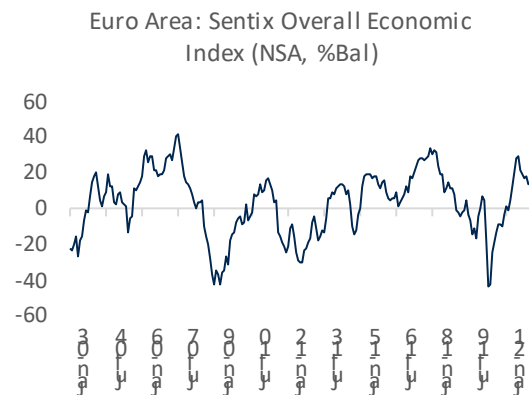
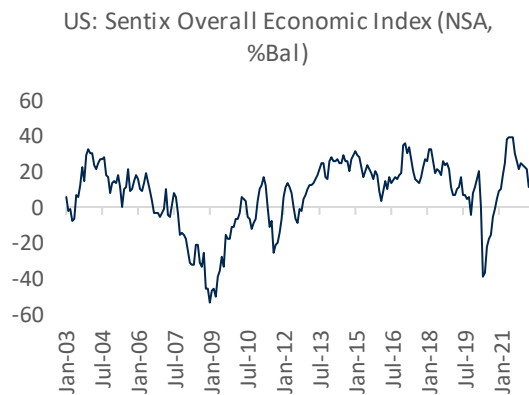
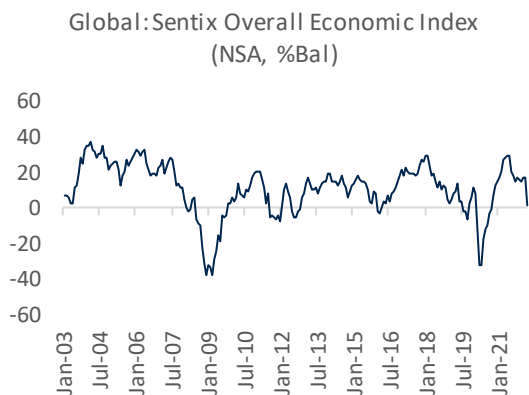
Source: RBC US Equity Strategy, Bloomberg; as of April 22, 2022

Recession Expectations Rising Faster in Europe Than the US



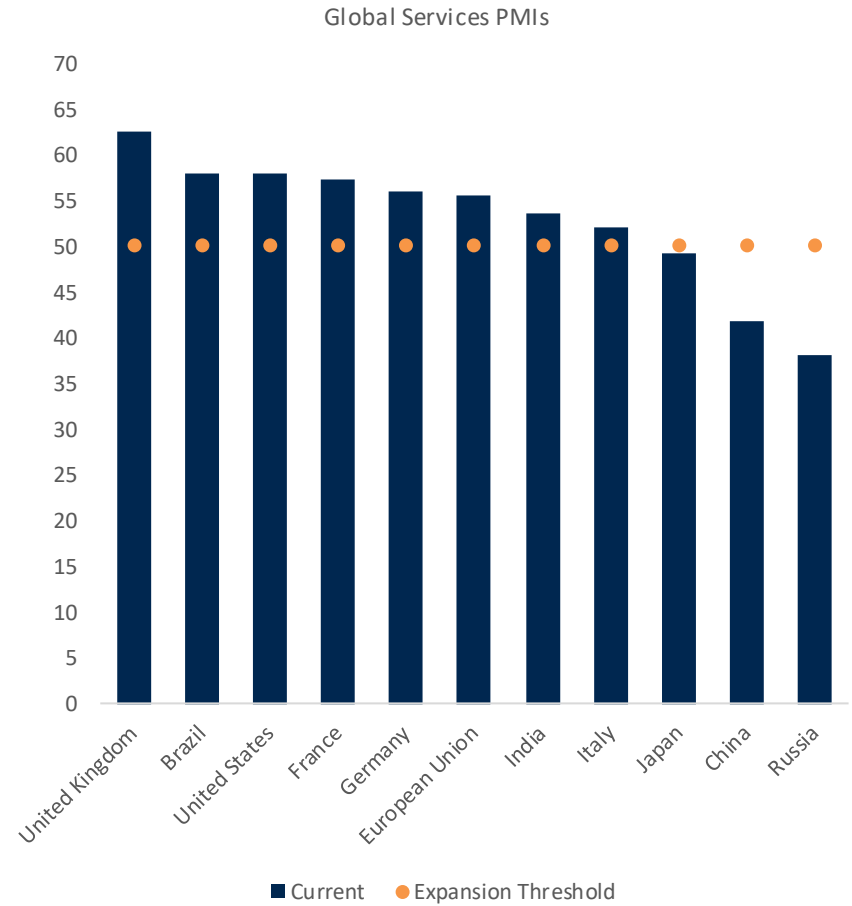
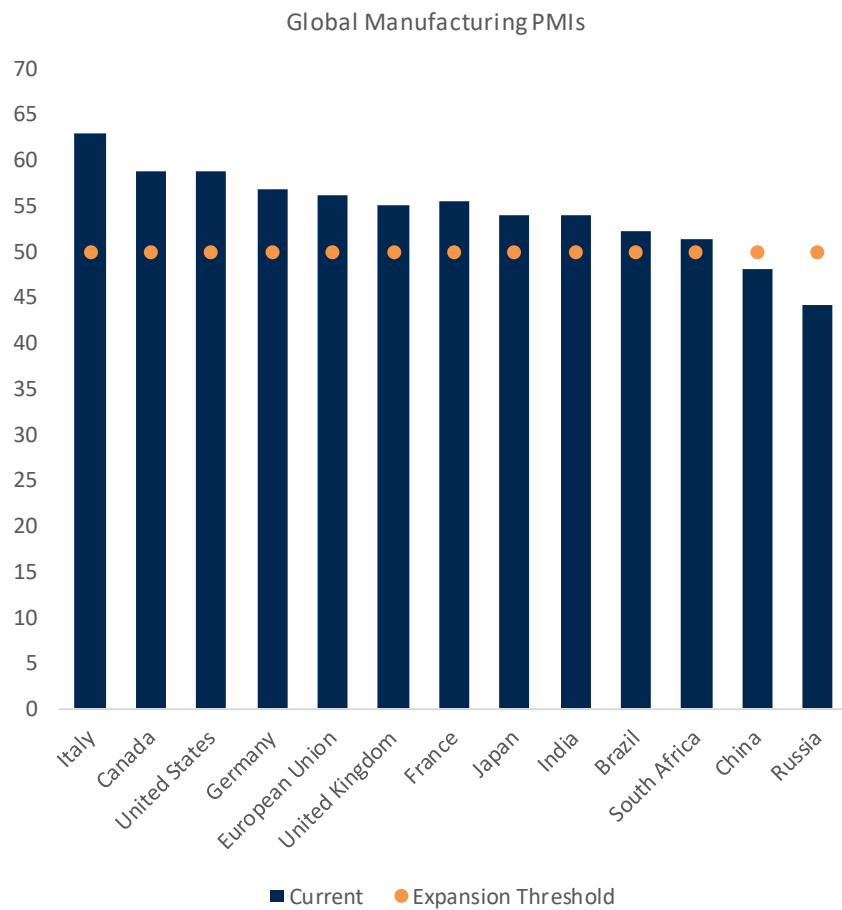
Source: RBC US Equity Strategy, Bloomberg; as of April 22, 2022

Perceptions of Economic Data Have Started To Ease Around the Globe, US Showing Resilience



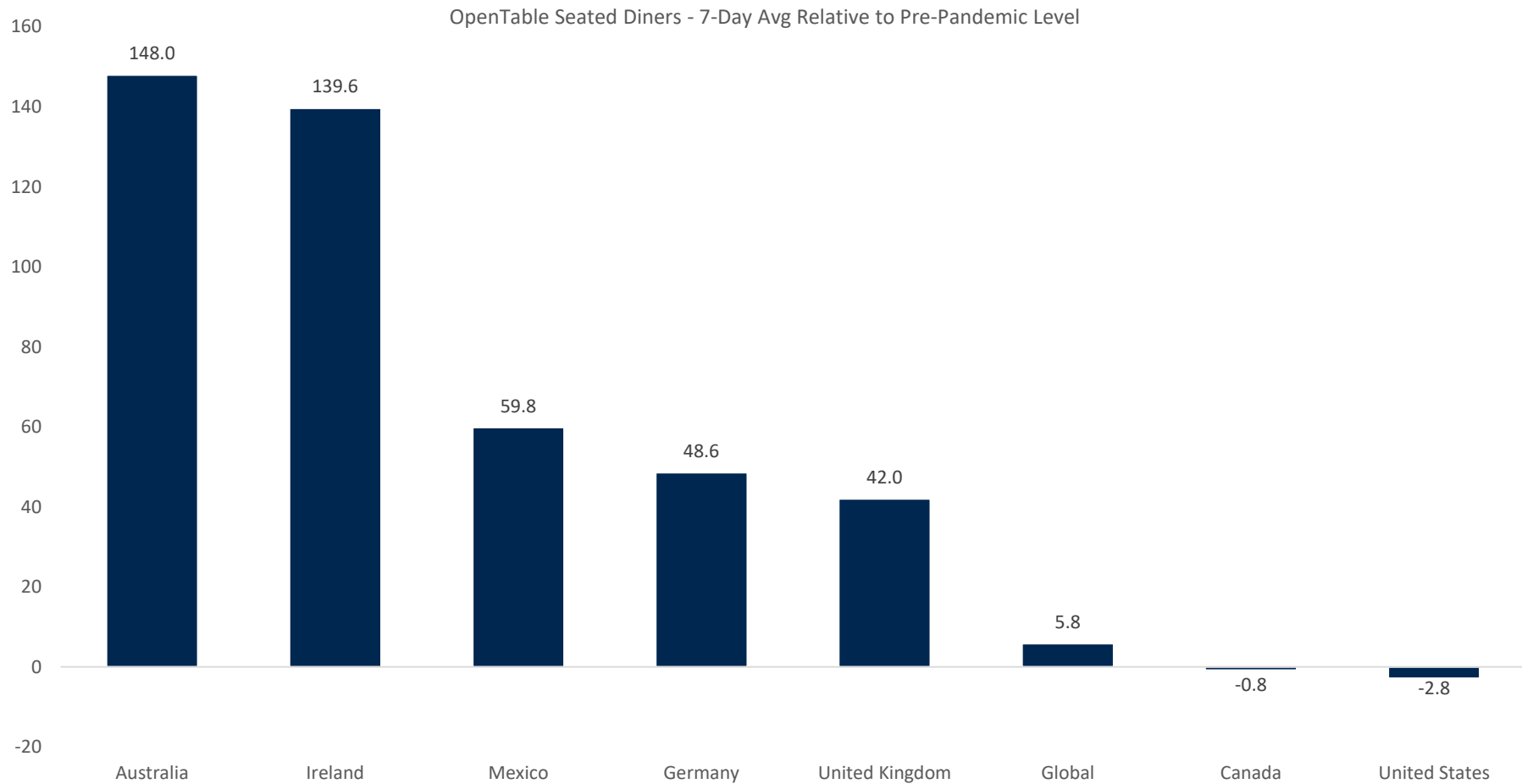
Source: RBC US Equity Strategy, Haver, Sentix. Sentix Overall Economic Indices are based on monthly surveys of around 4,500 respondents (over 1,000 institutional and almost 4,000 individual investors) on their expectations for economic developments. The Sentix survey results are representative of a broadly diversified group of investors; as of March 2022

The US Has Been a Leader Recently on Both Manufacturing & Services PMIs



Source: RBC US Equity Strategy, Bloomberg, IHS Markit. Regions in focus shown for G10 + BRICS countries, where available. As of March 2022.

US Is Lagging Other Major Countries in the Dining Recovery



Source: RBC US Equity Strategy, Bloomberg; as of April 18, 2022

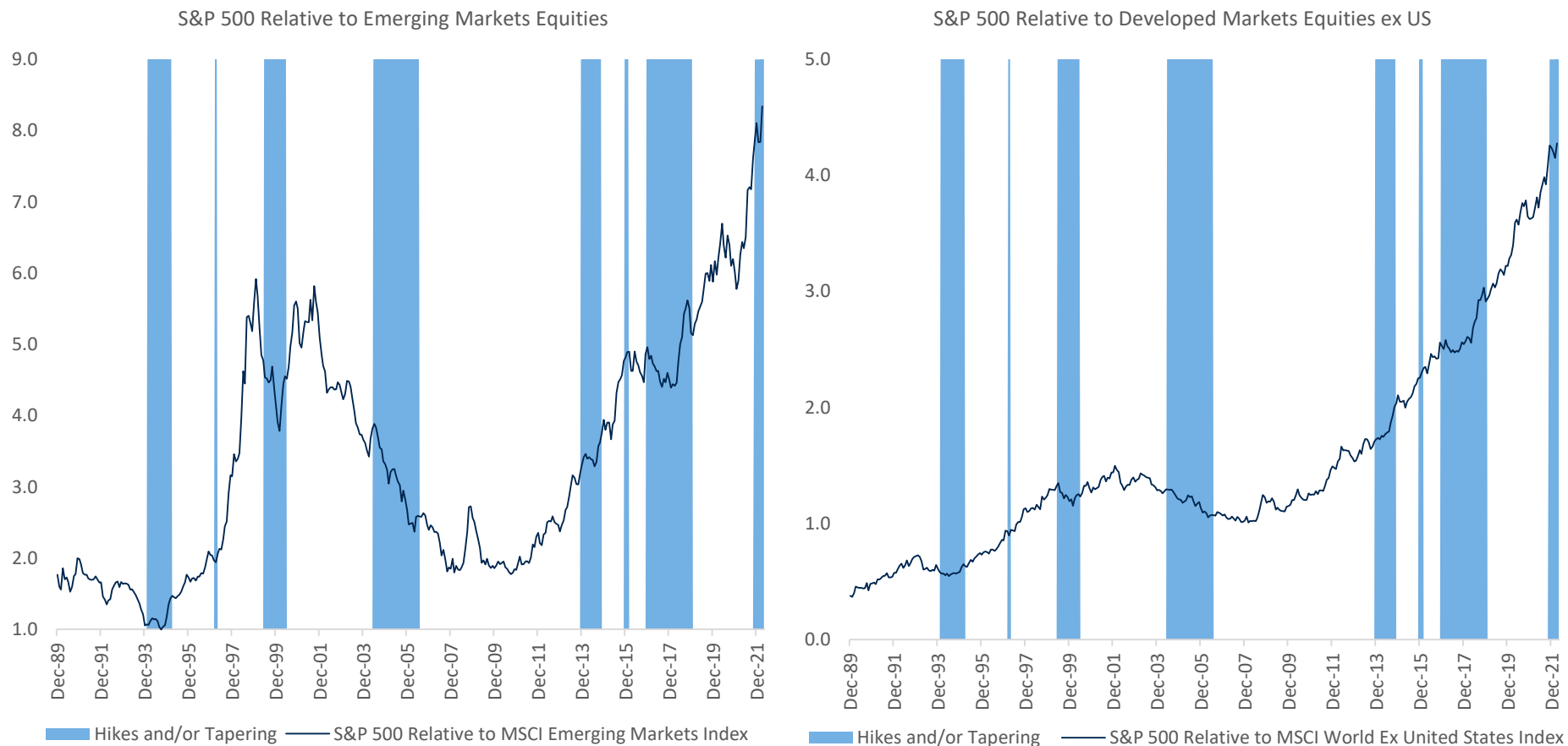
Data shows year-over-year (the same day of the week over the same week YA) seated diners at restaurants on the OpenTable network across all channels: online reservations, phone reservations, and walk-ins.

Central Banks Around the World Are Starting To Raise Rates

G-20 Central Bank Interest Rates										
	05/31/2021	06/30/2021	07/30/2021	08/31/2021	09/30/2021	10/29/2021	12/31/2021	01/31/2022	02/28/2022	03/31/2022
Argentina	38.00	38.00	38.00	38.00	38.00	38.00	38.00	40.00	42.50	44.50
Change		Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Raised	Raised	Raised
Australia	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Change		Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged
Brazil	3.50	4.25	4.25	5.25	6.25	7.75	9.25	9.25	10.75	11.75
Change		Raised	Unchanged	Raised	Raised	Raised	Raised	Unchanged	Raised	Raised
Canada	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.50
Change		Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Raised
China	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35
Change		Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged
Eurozone	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change		Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged
United Kingdom	0.10	0.10	0.10	0.10	0.10	0.10	0.25	0.25	0.50	0.75
Change		Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Raised	Unchanged	Raised	Raised
Indonesia	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
Change		Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged
India	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Change		Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged
Japan	-0.03	-0.05	-0.04	-0.04	-0.05	-0.03	-0.02	-0.02	-0.01	-0.02
Change		Cut	Raised	Raised	Cut	Raised	Raised	Cut	Raised	Cut
South Korea	0.50	0.50	0.50	0.75	0.75	0.75	1.00	1.25	1.25	1.25
Change		Unchanged	Unchanged	Raised	Unchanged	Unchanged	Raised	Raised	Unchanged	Unchanged
Mexico	4.06	4.23	4.42	4.65	4.66	4.88	5.43	5.51	6.00	6.51
Change		Raised	Raised	Raised	Raised	Raised	Raised	Raised	Raised	Raised
Russia	5.00	5.50	6.50	6.50	6.75	7.50	8.50	8.50	20.00	20.00
Change		Raised	Raised	Unchanged	Raised	Raised	Raised	Unchanged	Raised	Unchanged
Turkey	19.00	19.00	19.00	19.00	18.00	16.00	14.00	14.00	14.00	14.00
Change		Unchanged	Unchanged	Unchanged	Cut	Cut	Cut	Unchanged	Unchanged	Unchanged
United States	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.50
Change		Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Raised
South Africa	3.50	3.50	3.50	3.50	3.50	3.50	3.75	4.00	4.00	4.25
Change		Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Raised	Raised	Unchanged	Raised

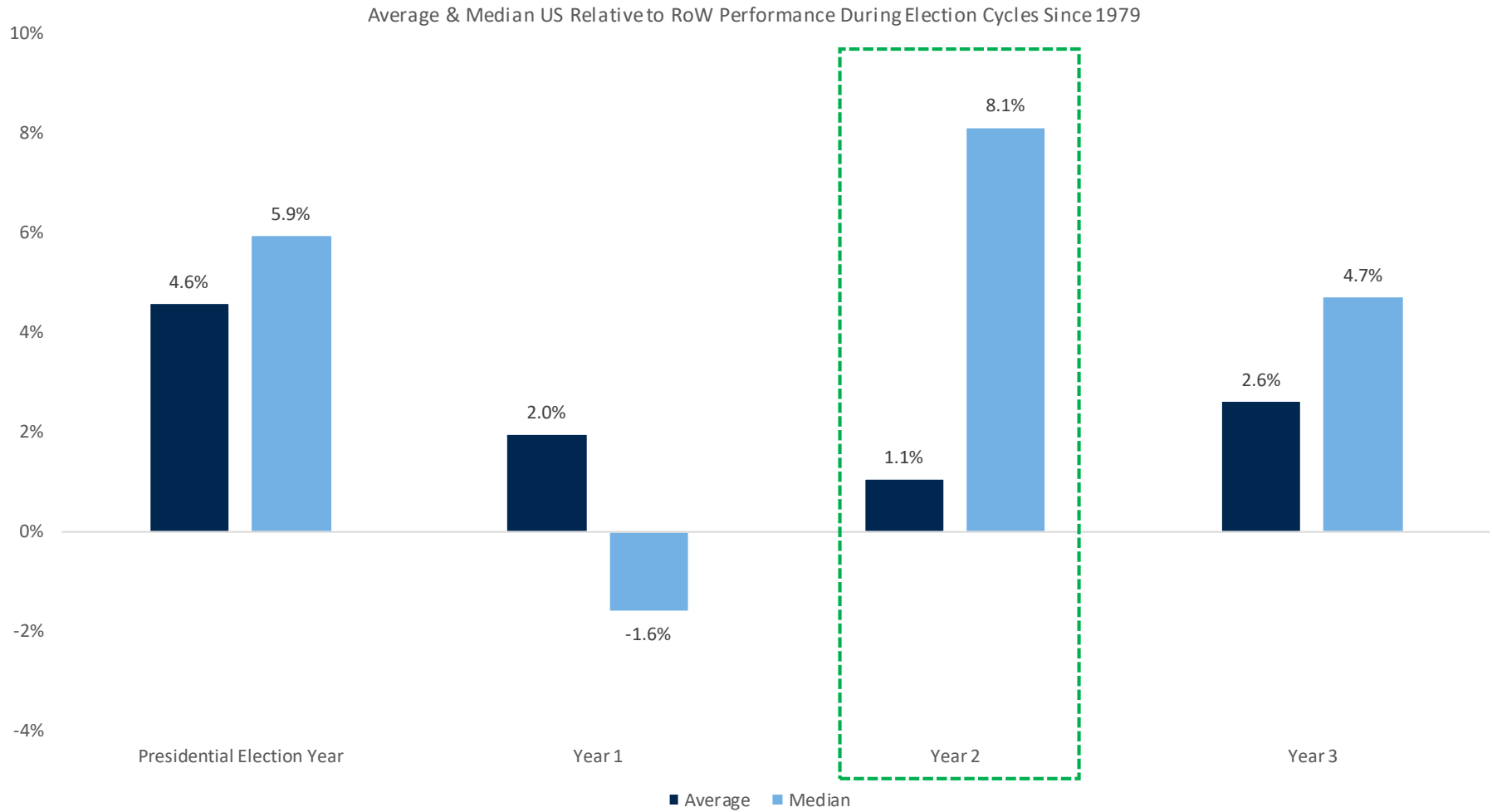
Source: RBC US Equity Strategy, Bloomberg. Interest Rates shown based on respective domestic currencies.

US Stocks Often Lag Non-US Stocks Early on in Hiking Cycles, Then Reclaim Leadership



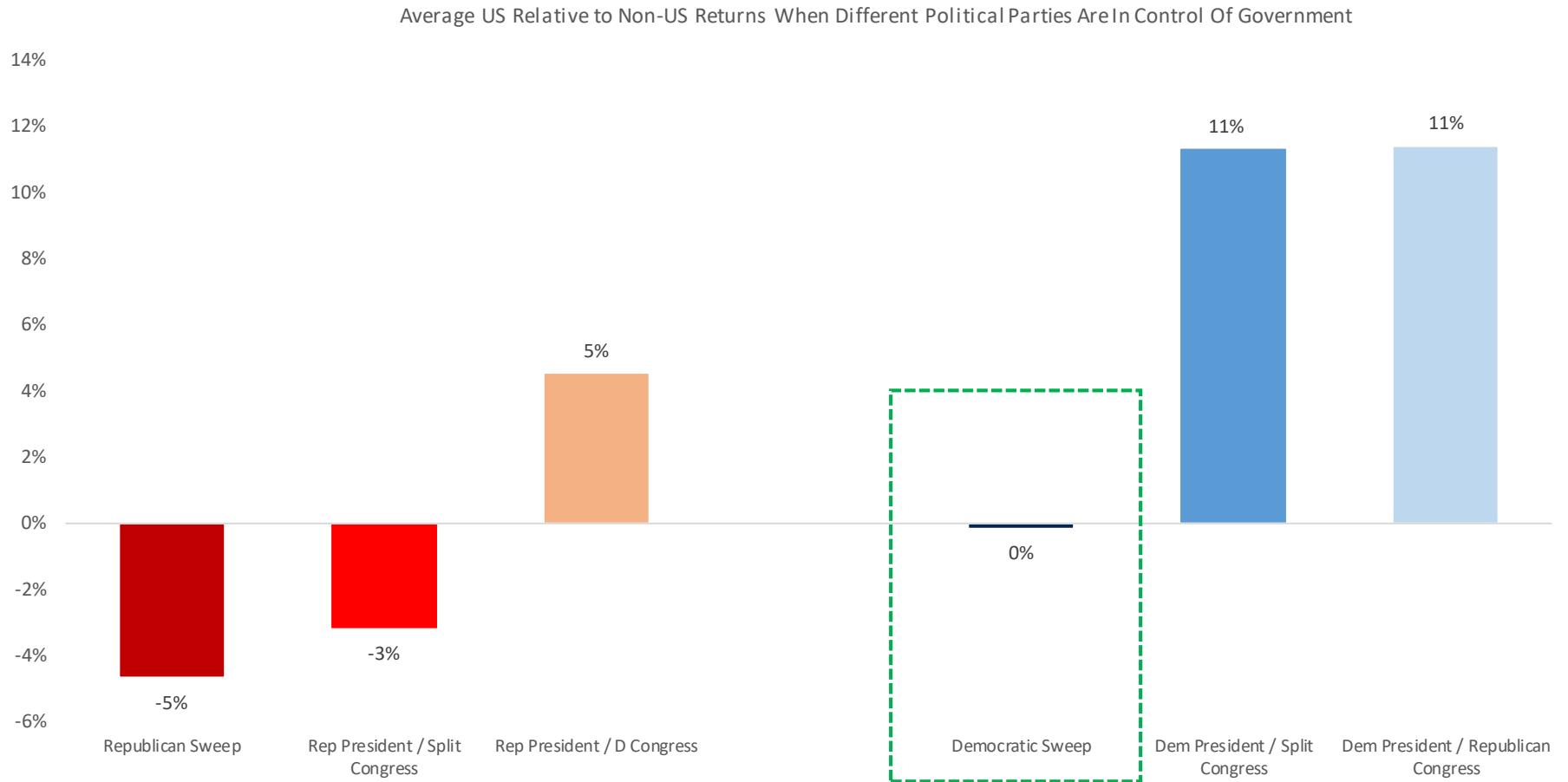
Source: RBC US Equity Strategy, Bloomberg, MSCI; as of March 2022

US Equities Tend To Outperform in Year 2 of the Election Cycle



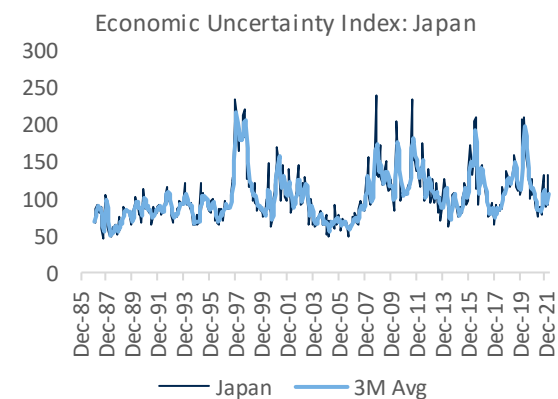
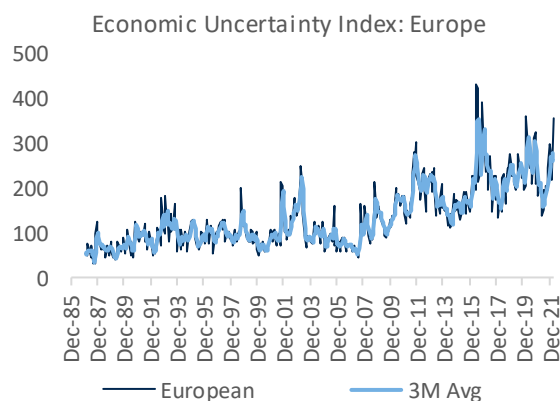
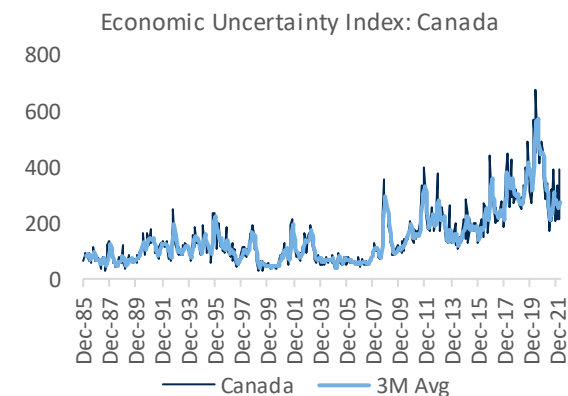
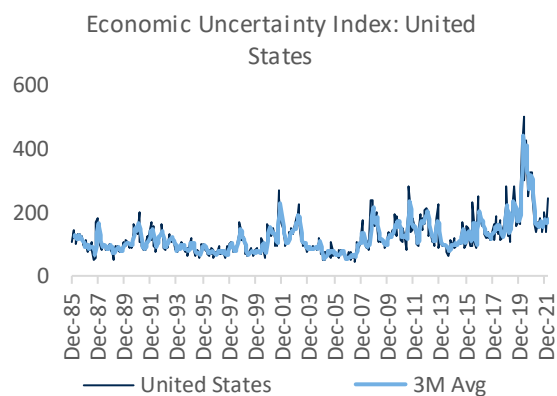
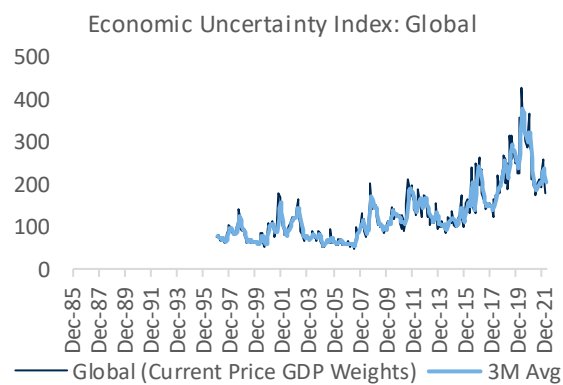
Source: RBC US Equity Strategy, Bloomberg. Study based on returns since 1979.

US Equities Tend To Lag Non-US Equities When Democrats Control the White House & Congress



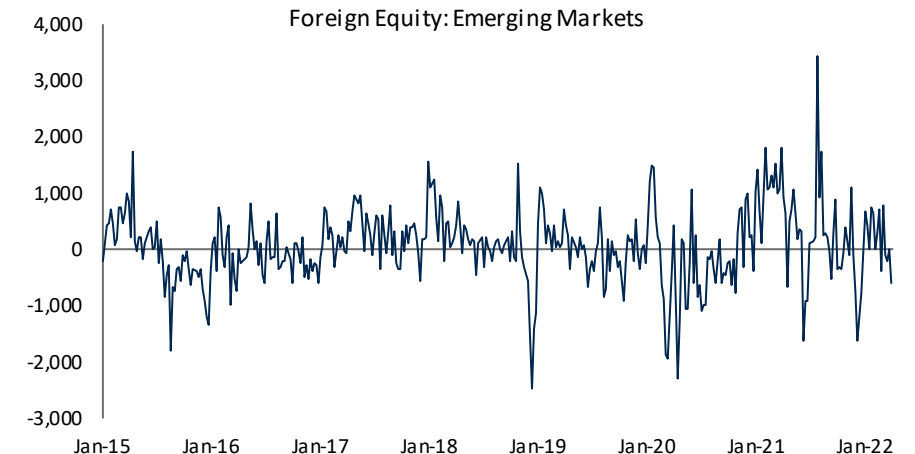
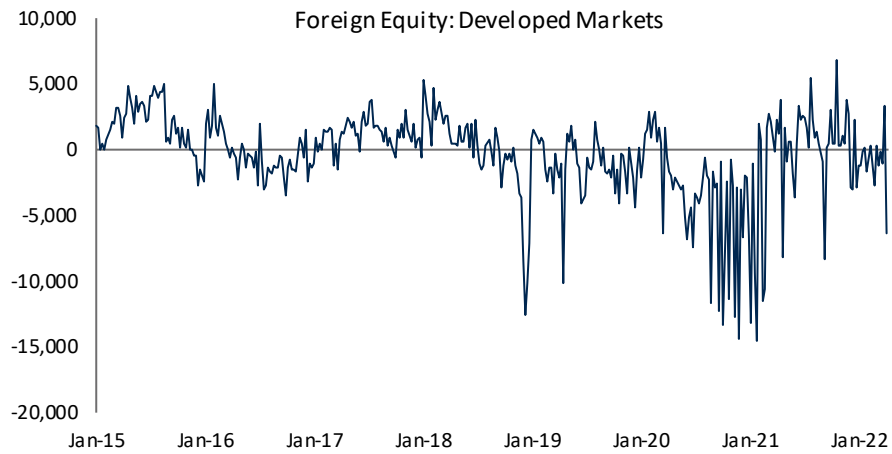
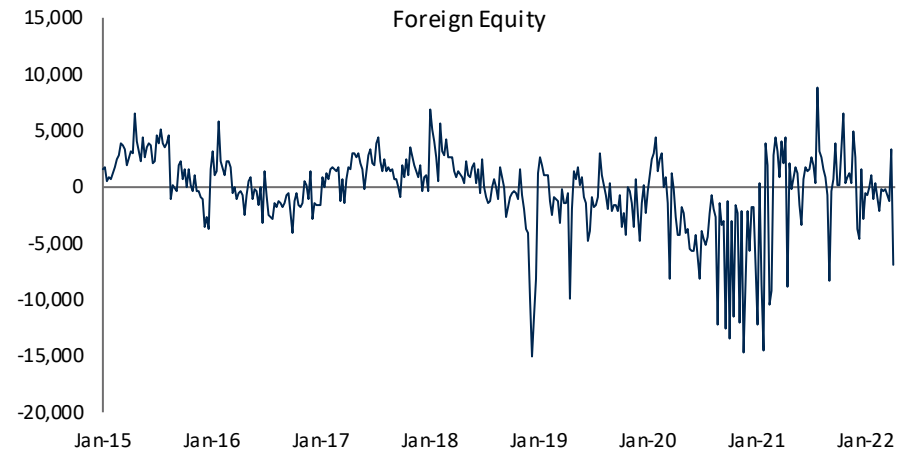
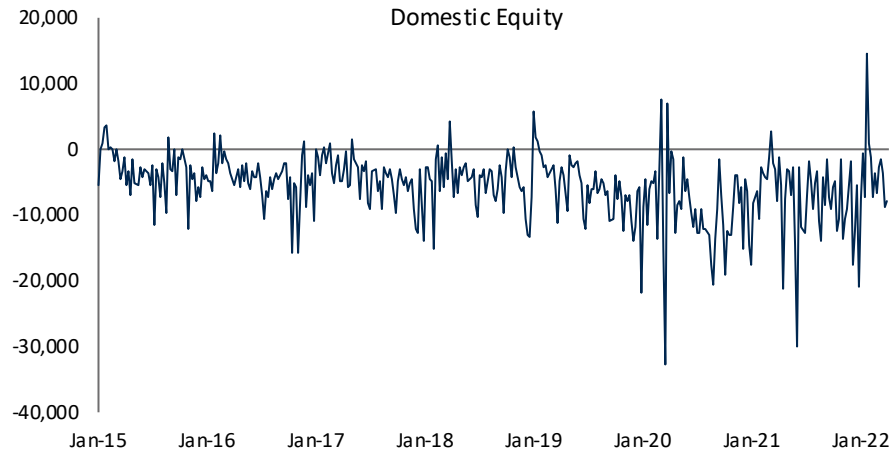
Source: RBC US Equity Strategy, Bloomberg. Study based on returns since 1979.

Economic Uncertainty Staring To Rise Again, More So in Europe & China Than in the US



Source: RBC US Equity Strategy, Bloomberg, Baker, Bloom & Davis; as of March 2022

Foreign Equity Funds Flows Attempting to Perk Up As Domestic Equity Funds Flows Have Faded



Source: RBC US Equity Strategy, Haver Analytics, ICI; does not include Exchange-Traded Funds (ETFs); as of April 13, 2022

Large Cap Growth vs. Value

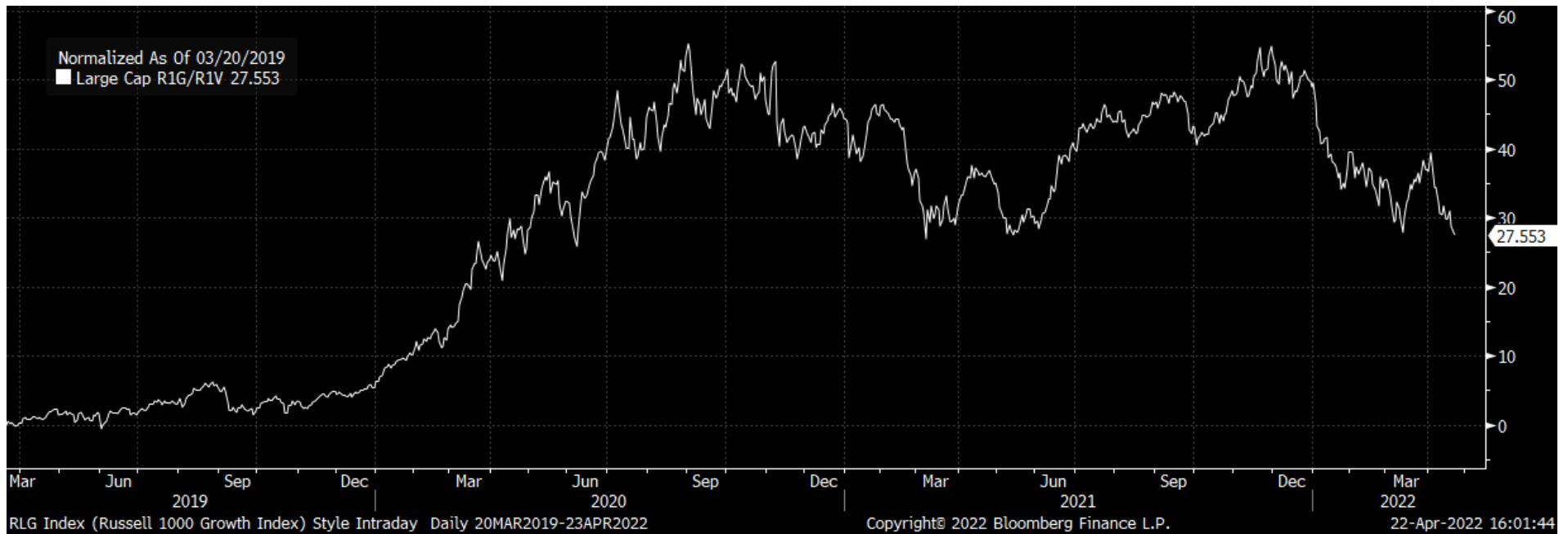
The Style Trade



Capital
Markets

Large Cap Growth vs. Value / Performance Context

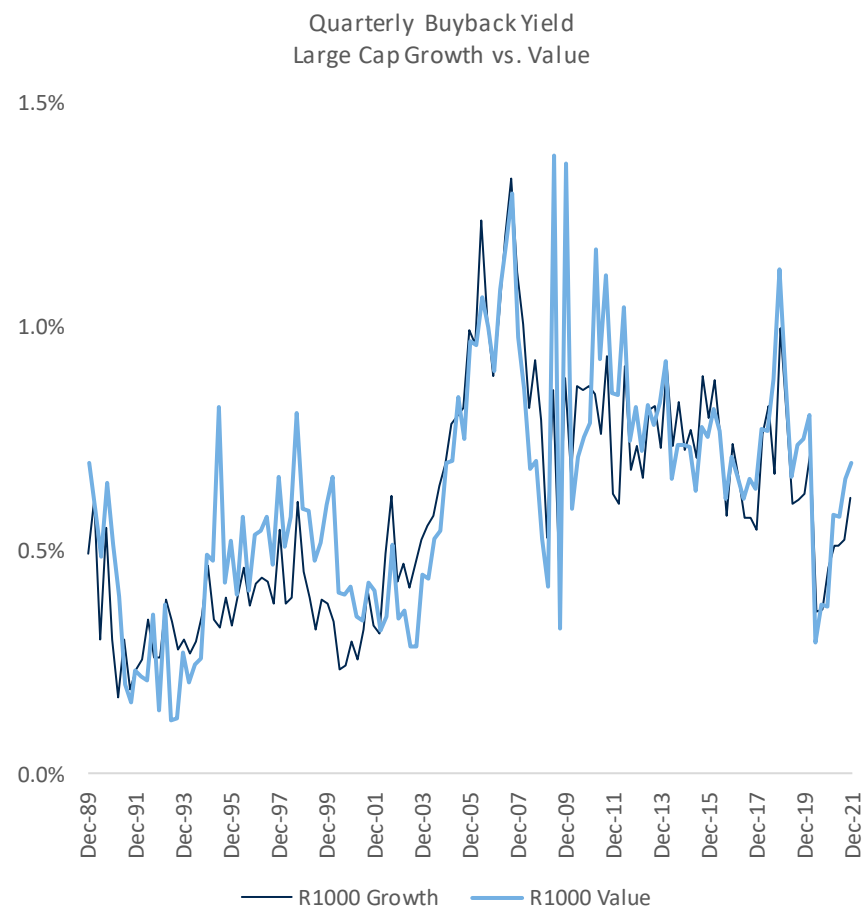
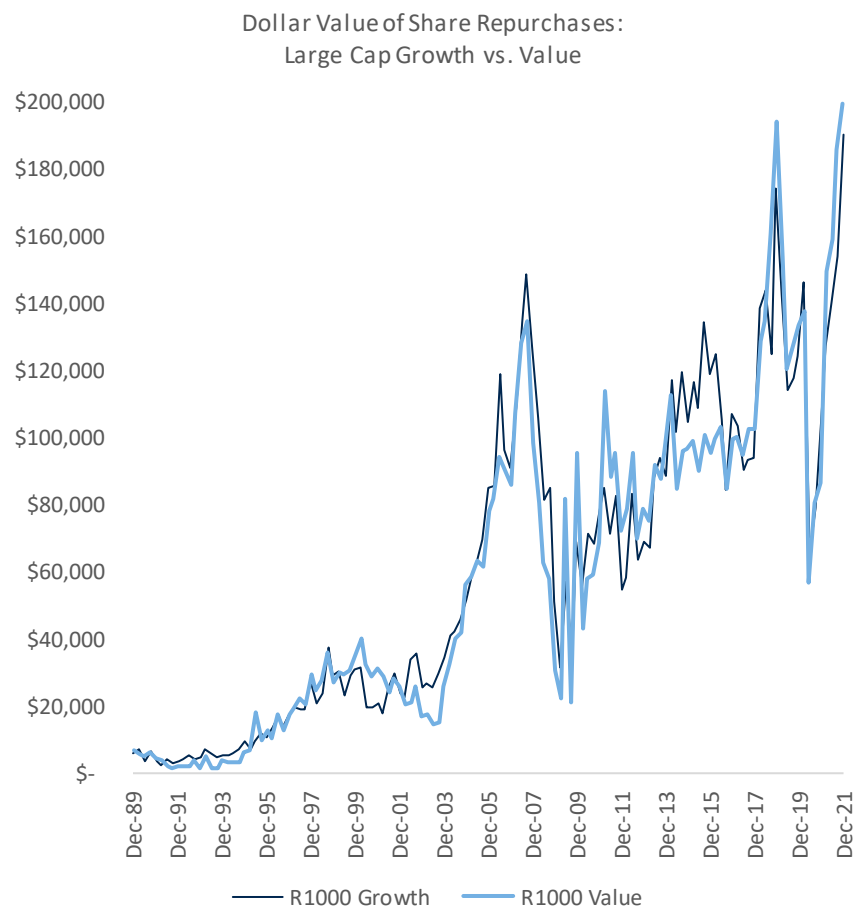
Growth Trade Attempting To Stabilize vs. Value



Source: RBC US Equity Strategy, Russell, Bloomberg; as of April 22, 2022

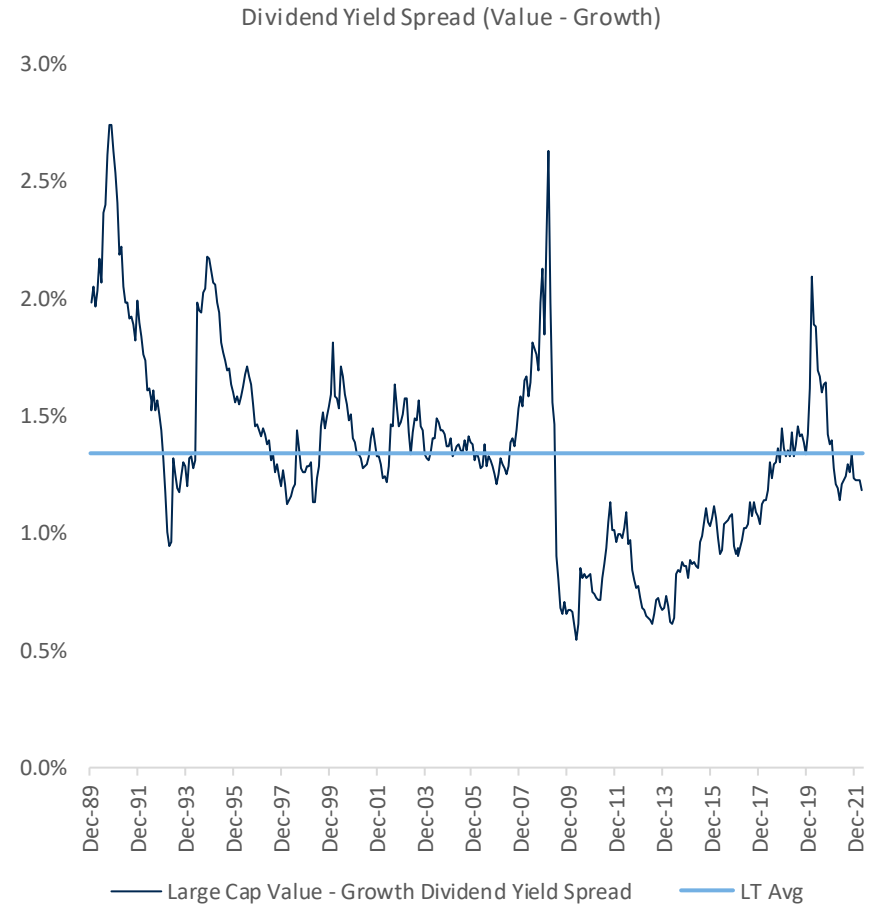
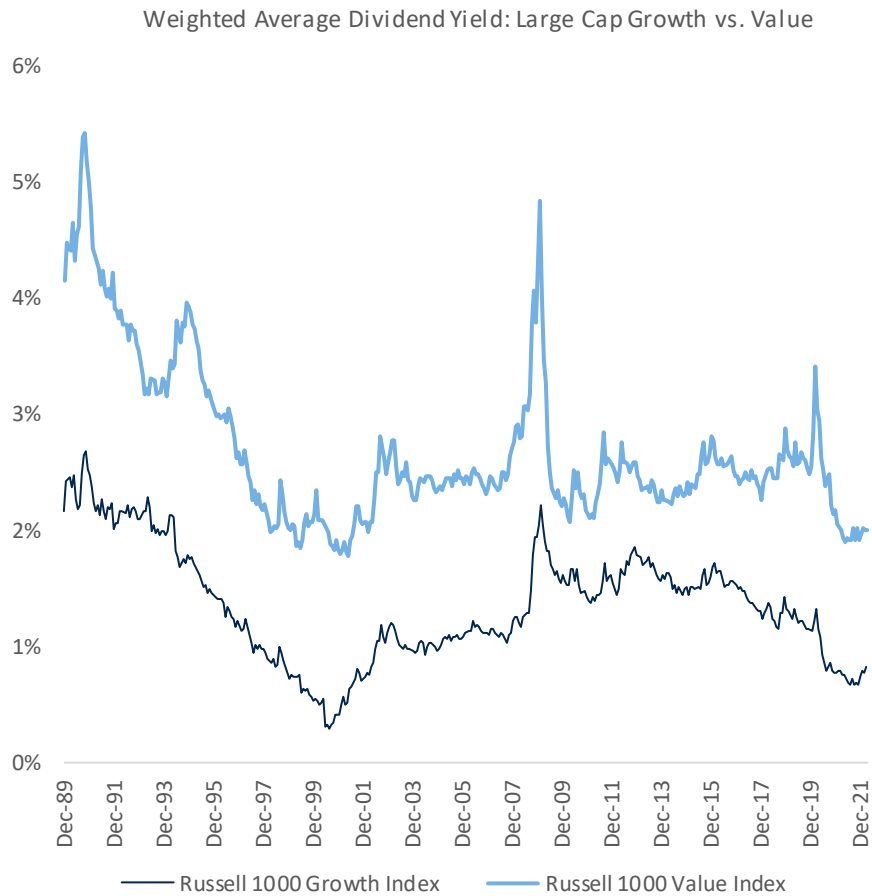
Large Cap Growth vs. Value / Deals & Cash Deployment

Buybacks Have Bounced Back in Both Styles, With a Stronger Move in Value



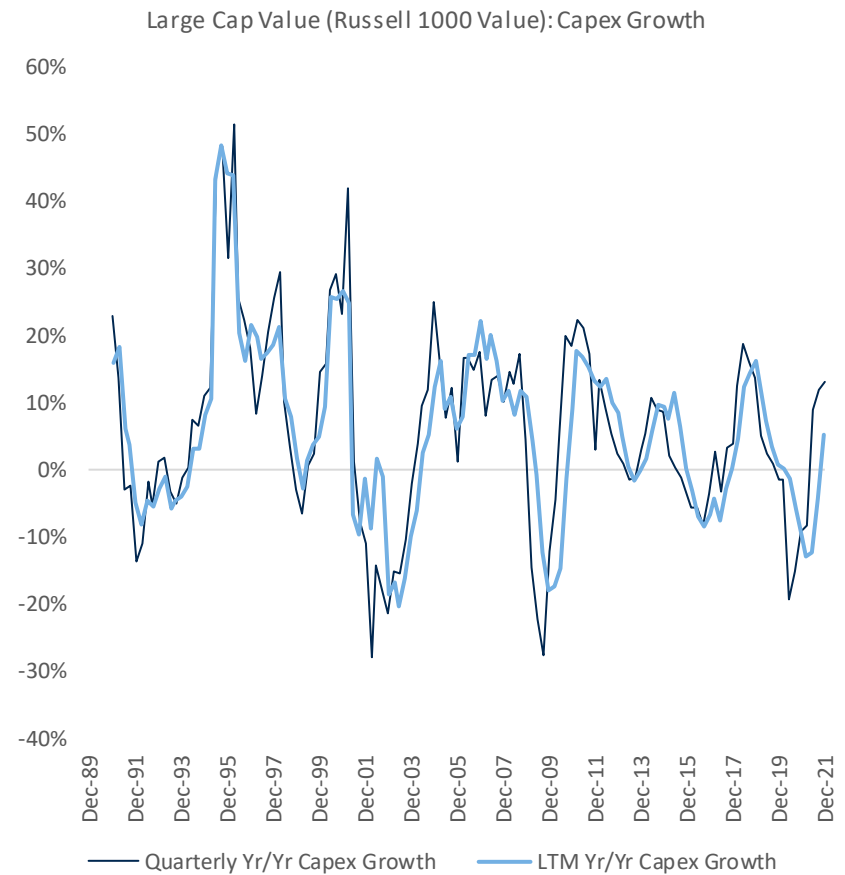
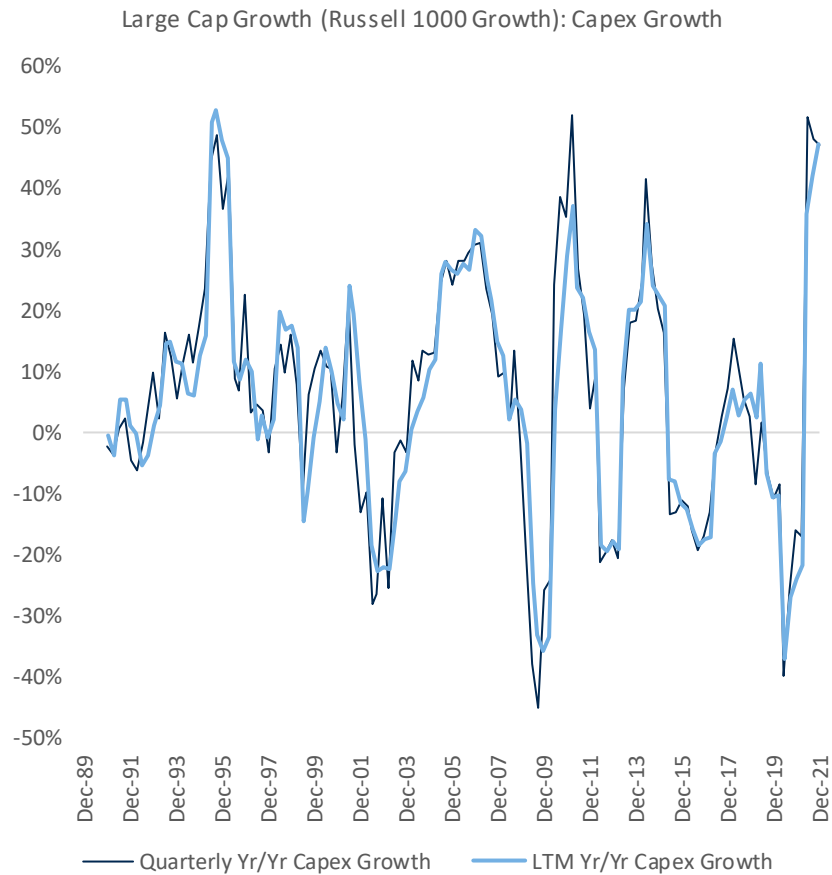
Source: RBC US Equity Strategy, S&P Capital IQ/ClariFI, Russell, Compustat. Latest data point is for 4Q21.

Dividend Yield Higher in Value Than Growth, Stabilizing in Both



Large Cap Growth vs. Value / Deals & Cash Deployment

Capex Rebounding for Both Growth & Value

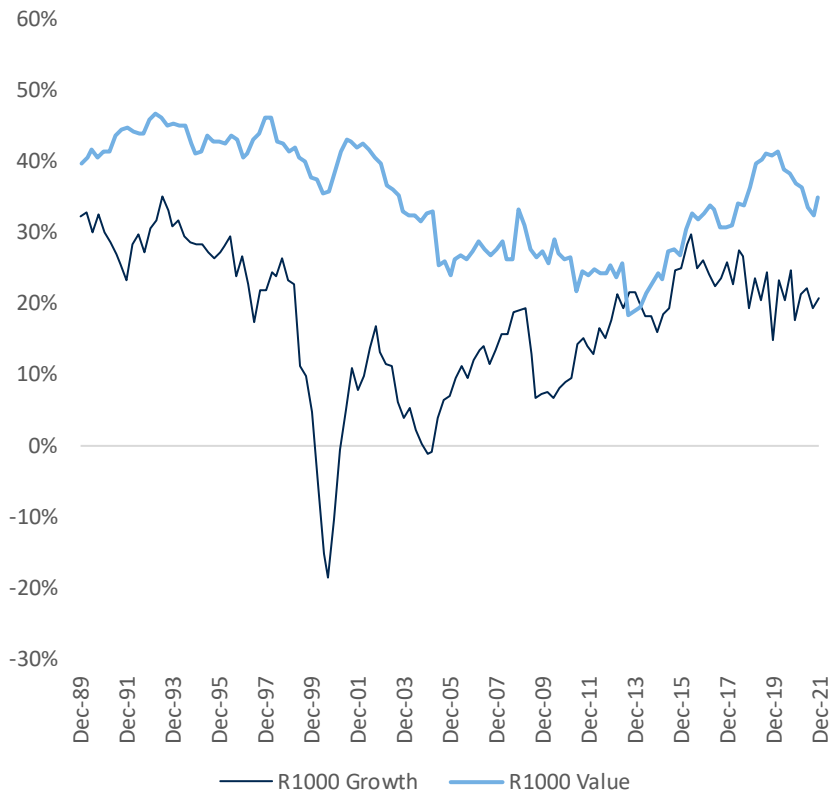


Source: RBC US Equity Strategy, S&P Capital IQ/ClariFI, Russell, Compustat. Latest data point is for 4Q21.

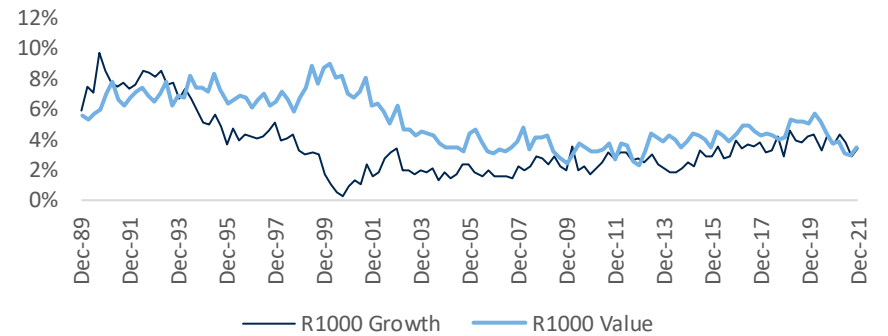
Large Cap Growth vs. Value / Deals & Cash Deployment

Debt Paydown Has Been Underway in Both Styles

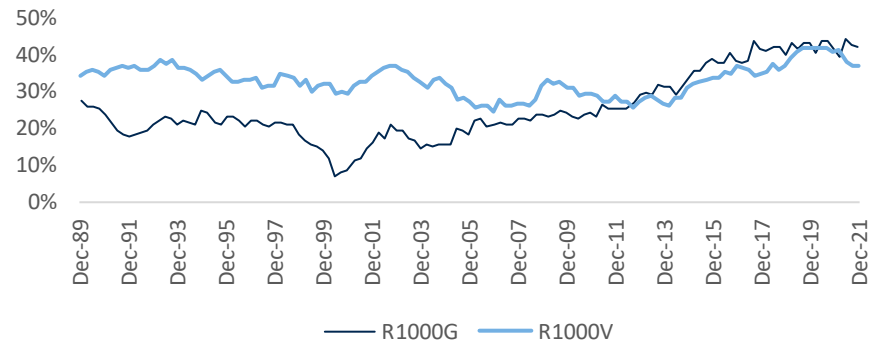
Large Cap Growth vs. Value: Net Debt to Cap
(Weighted Median, Ex Financials)



Large Cap Growth vs. Value: ST Debt to Cap
(Weighted Median, Ex Financials)



Large Cap Growth vs. Value: LT Debt to Cap
(Weighted Median, Ex Financials)

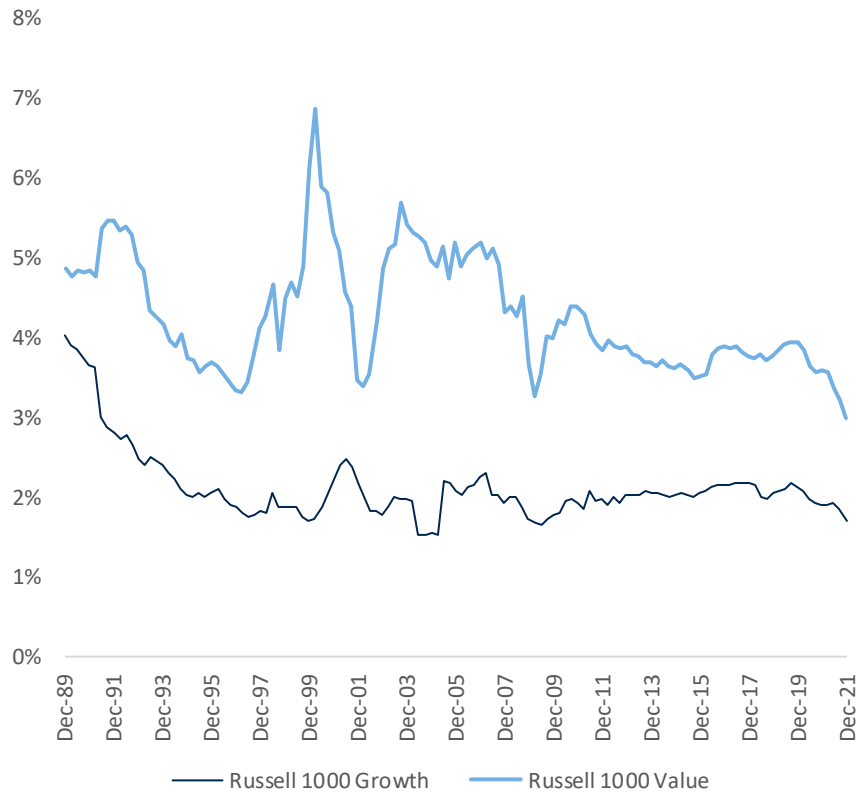


Source: RBC US Equity Strategy, S&P Capital IQ / ClariFI, Russell, Compustat. Latest data point is for 4Q21.

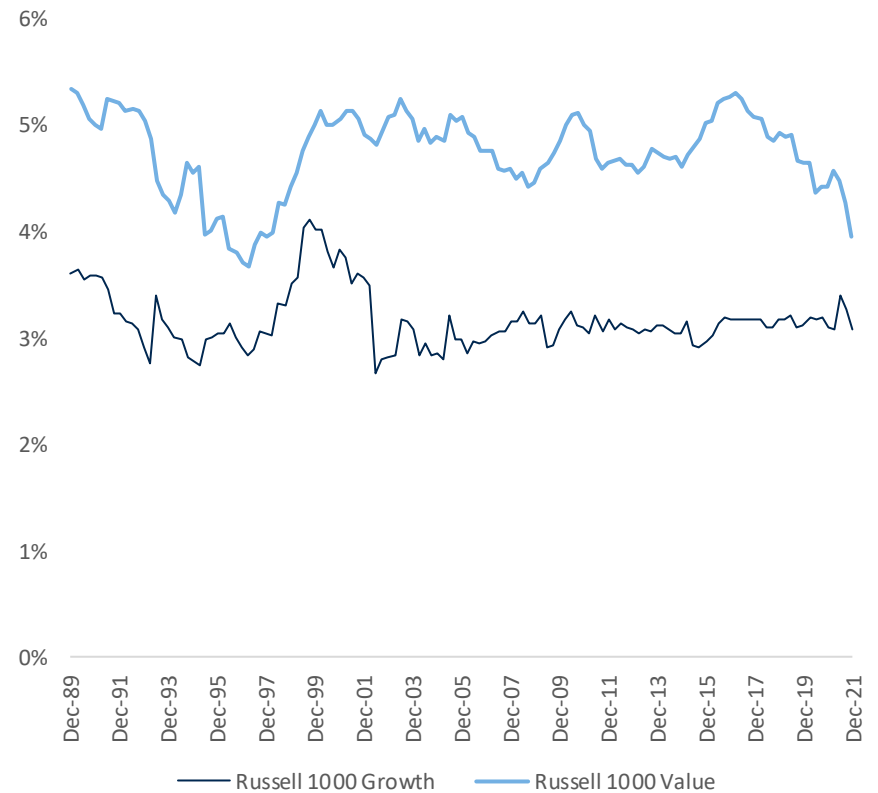
Large Cap Growth vs. Value / Deals & Cash Deployment

Interest Expense Relative to Sales Is Higher for Value, Has Been Declining in Both Styles

Russell 1000 Growth vs. Russell 1000 Value:
Weighted Average Interest Expense % Sales



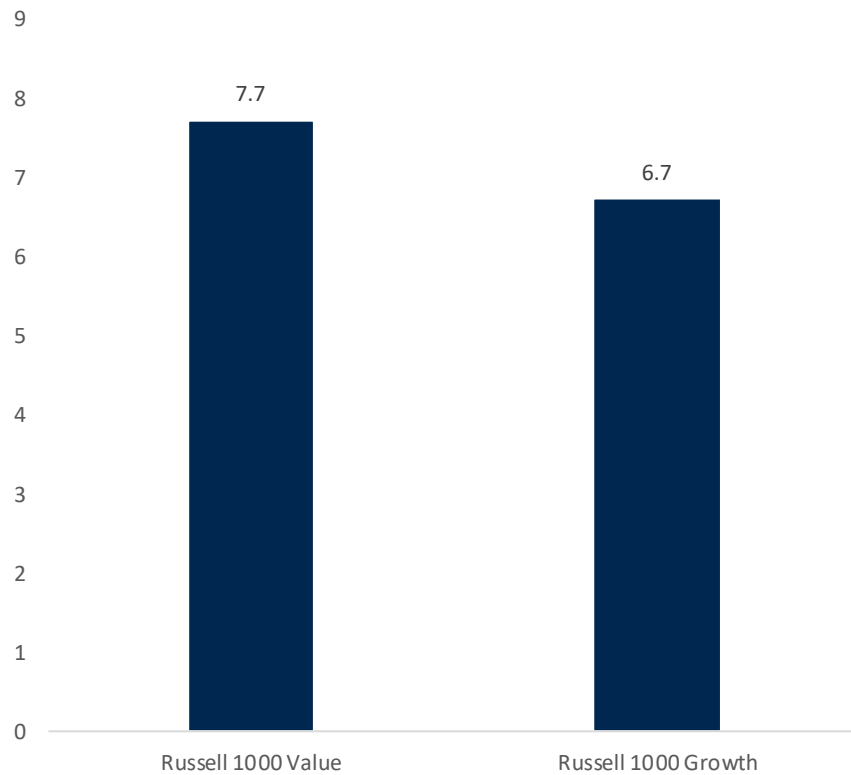
Russell 1000 Growth vs. Russell 1000 Value:
Average Interest Expense % Sales



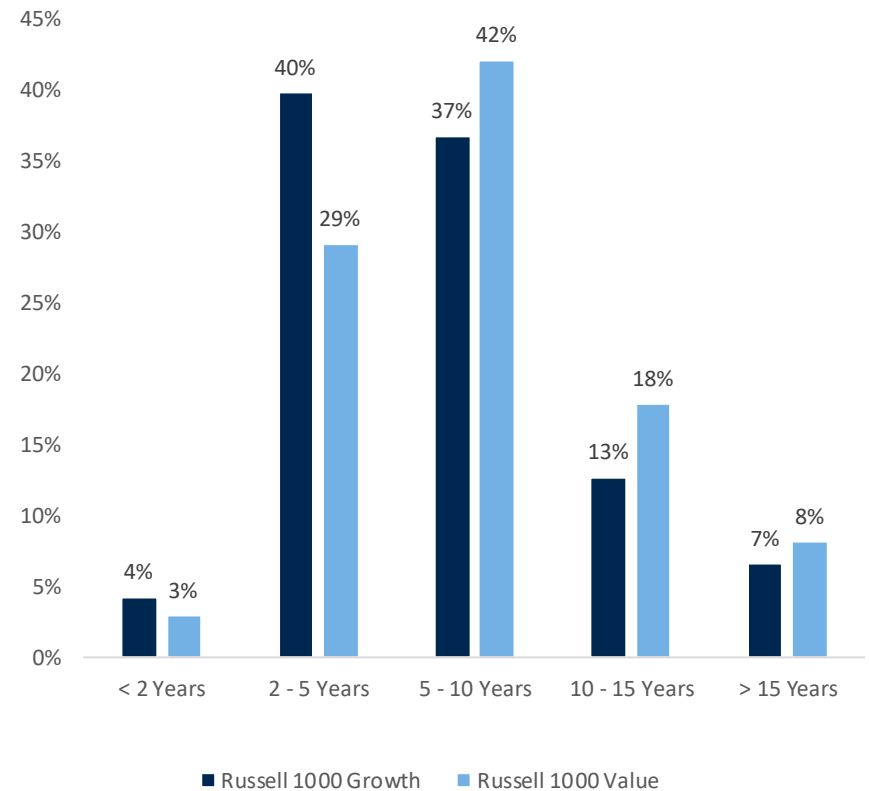
Source: RBC US Equity Strategy, S&P Capital IQ / ClariFI, Russell, Compustat. Latest data point is for 4Q21.

Growth Balance Sheets Look Slightly Worse Than Value Due to Shorter Debt Maturities

Russell 1000 Growth vs. Value Companies: Average Wgt
Average Maturity Dates
(# Years, Includes Parent & Subsidiary Debt)



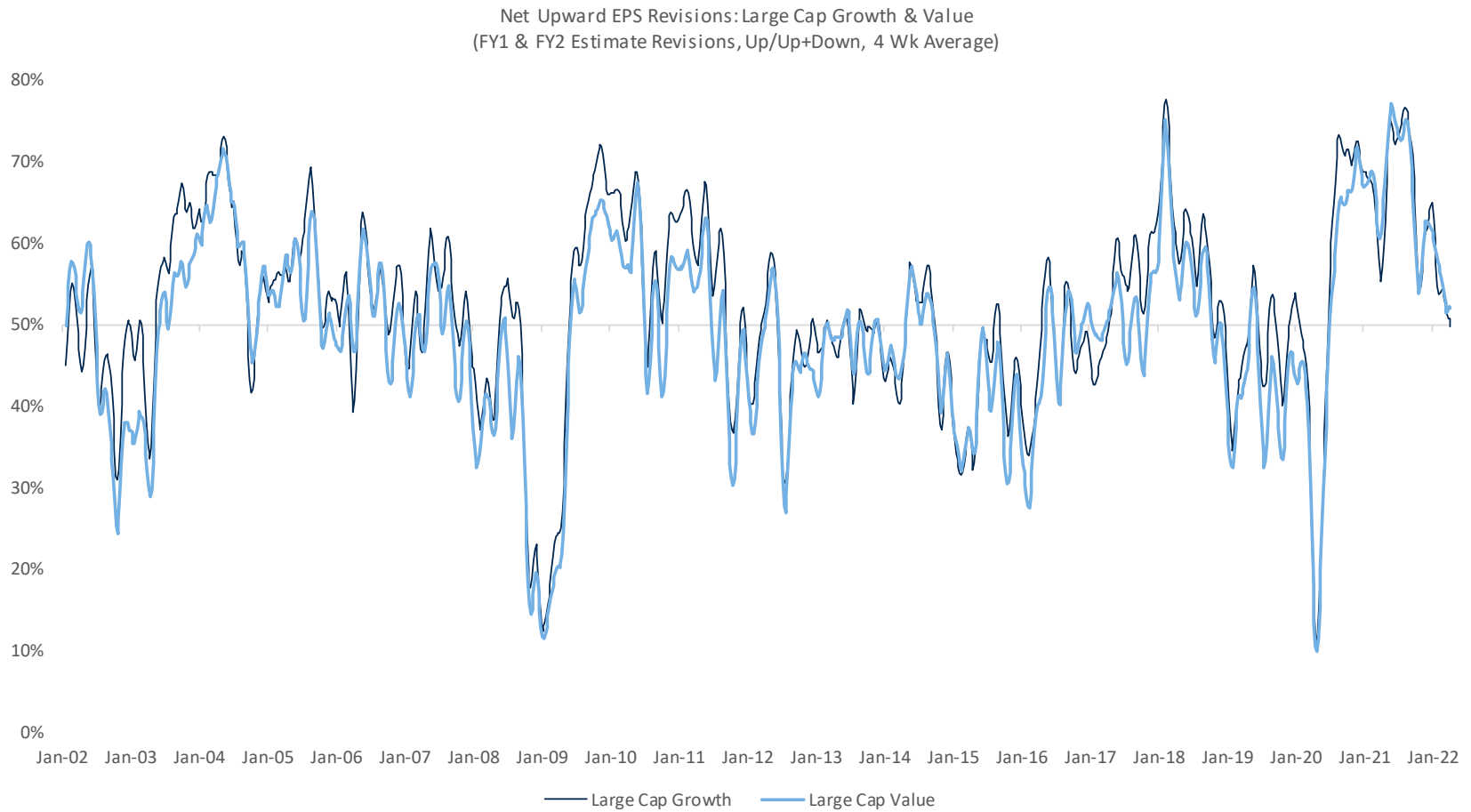
Russell 1000 Growth vs. Value Companies: Breakdown of Wgt
Average Maturity Dates
(% Companies, Includes Parent & Subsidiary Debt)



Source: RBC US Equity Strategy, Russell, Bloomberg; as of April 20, 2022

Large Cap Growth vs. Value / Revisions & Earnings

Earnings Revisions Are Slipping for Both Growth & Value

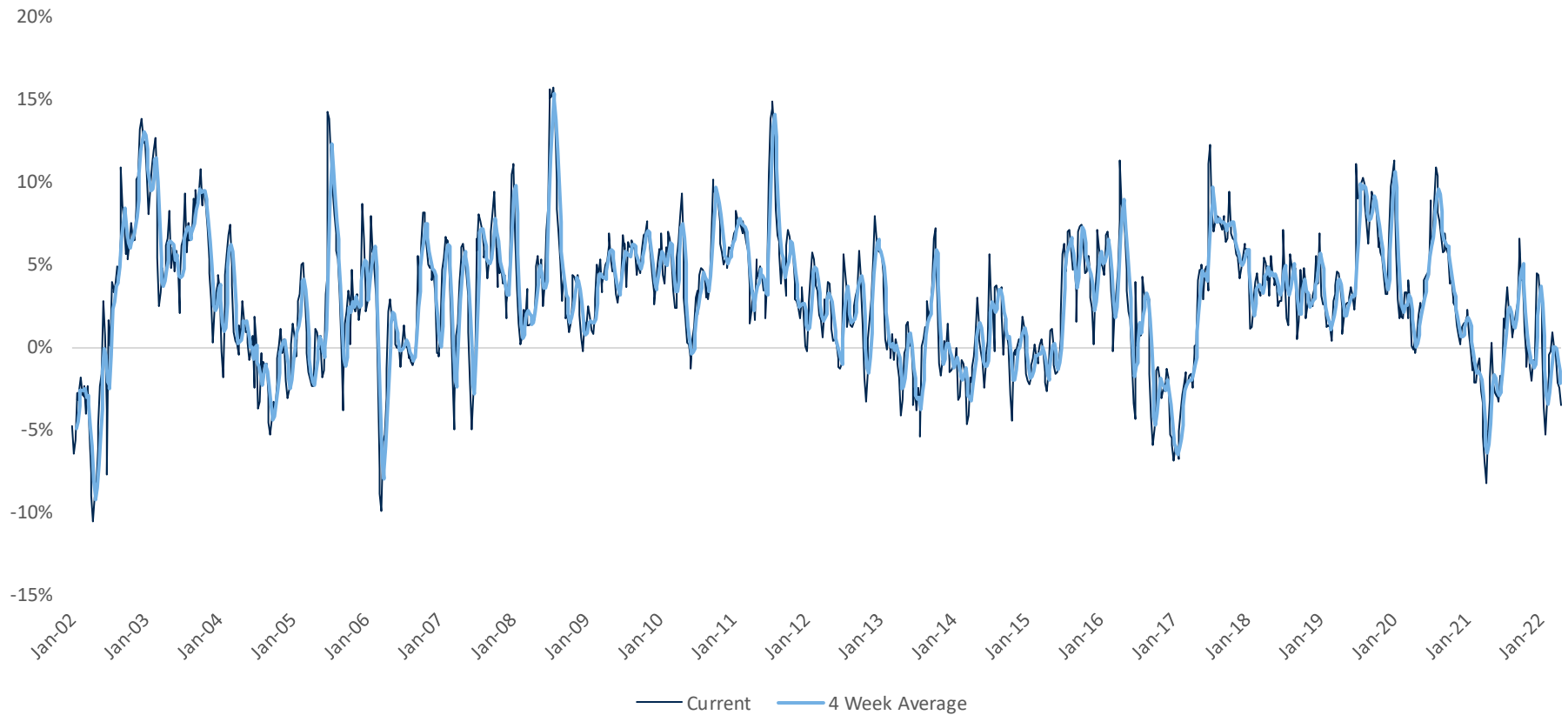


Source: RBC US Equity Strategy, S&P Capital IQ/ClariFI, CIQ estimates, Russell; as of April 15, 2022

Large Cap Growth vs. Value / Revisions & Earnings

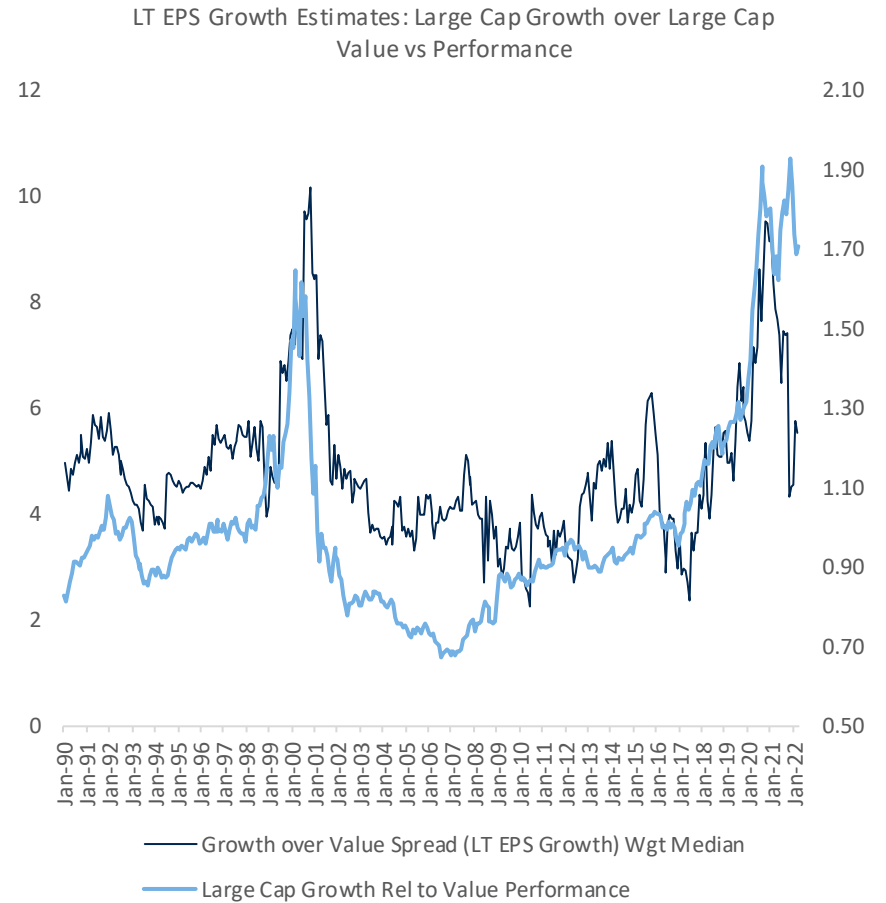
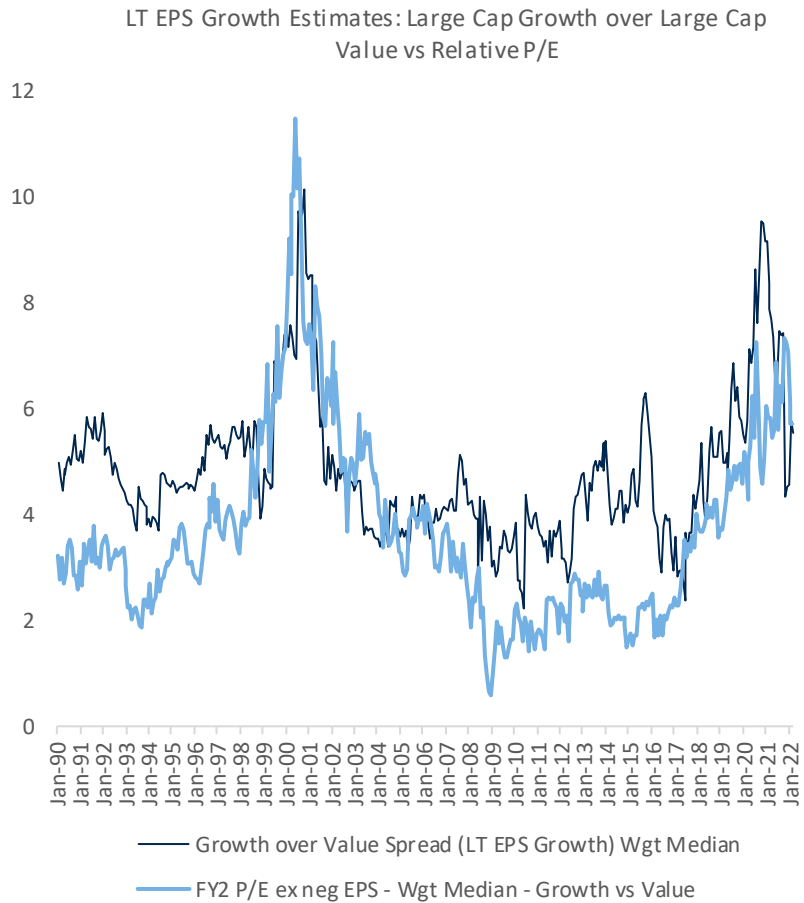
Earnings Revisions Trends Favor Value Over Growth, but Only Slightly

Net Upward EPS Revisions: Large Cap Growth Less Value (FY1 & FY2 Estimate Revisions, Up/Up+Down)



Source: RBC US Equity Strategy, S&P Capital IQ/ClariFI, CIQ estimates, Russell. As of April, 15 2022.

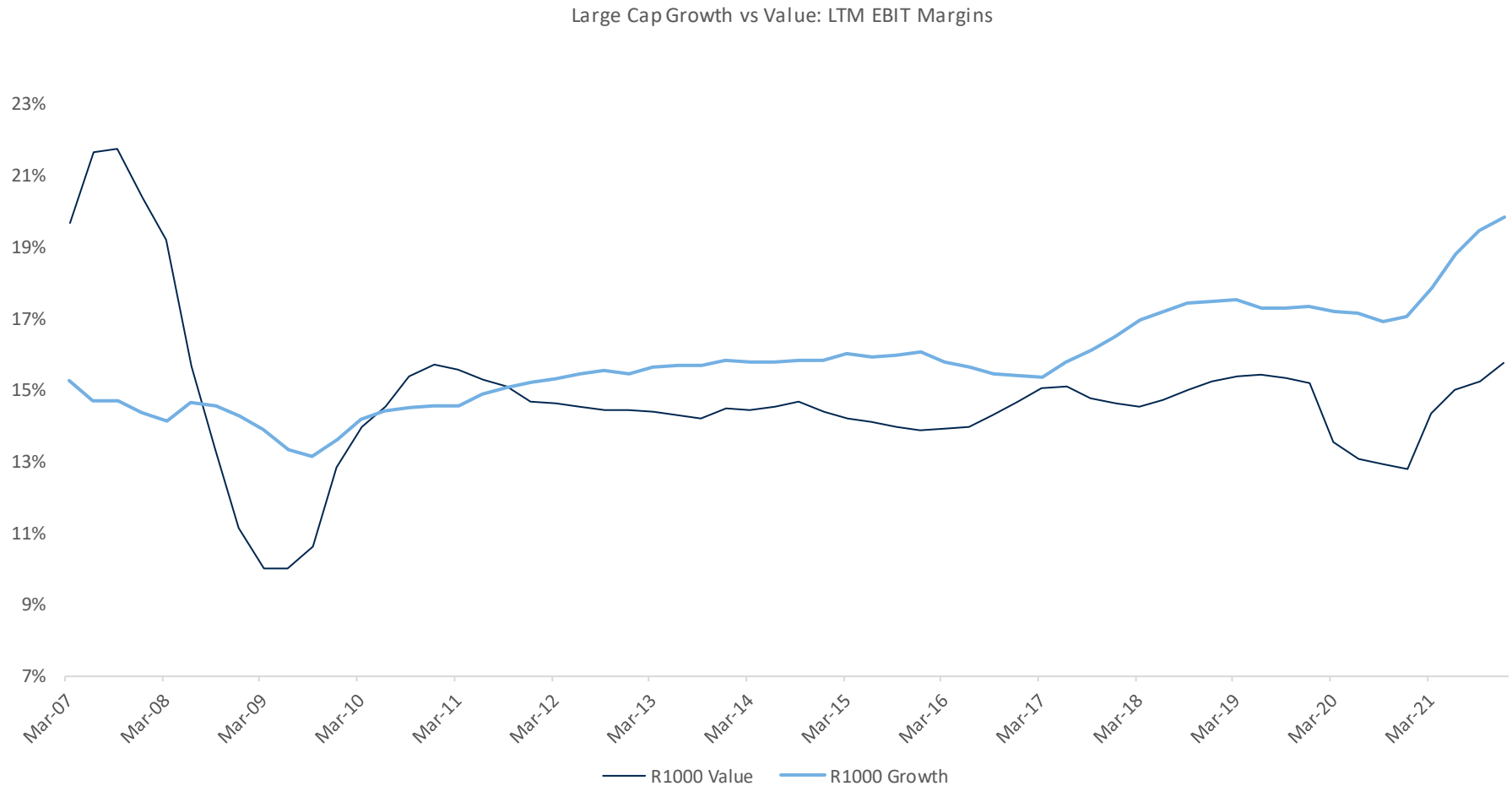
Growth/Value Relative P/E Compressed As the Gap in Growth Rates Narrowed



Source: RBC US Equity Strategy, S&P Capital IQ/ClariFI, IBES Estimates, LT Growth as of mid March 2022, long-term expectations based on 3-5-year outlook, pricing and performance as of the end of March 2022

Large Cap Growth vs. Value / Revisions & Earnings

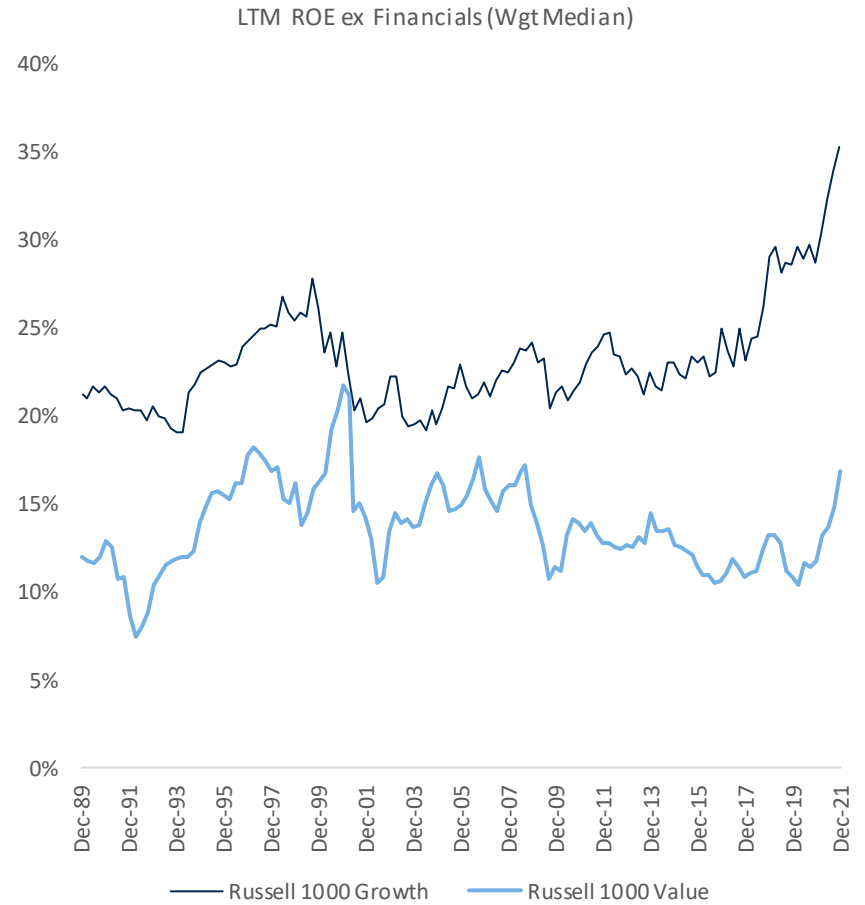
Margins Were More Resilient in Growth Than Value, Recovering in Both Recently



Source: RBC US Equity Strategy, S&P Capital IQ/ClariFI, Russell. Latest data point is as of 4Q21.

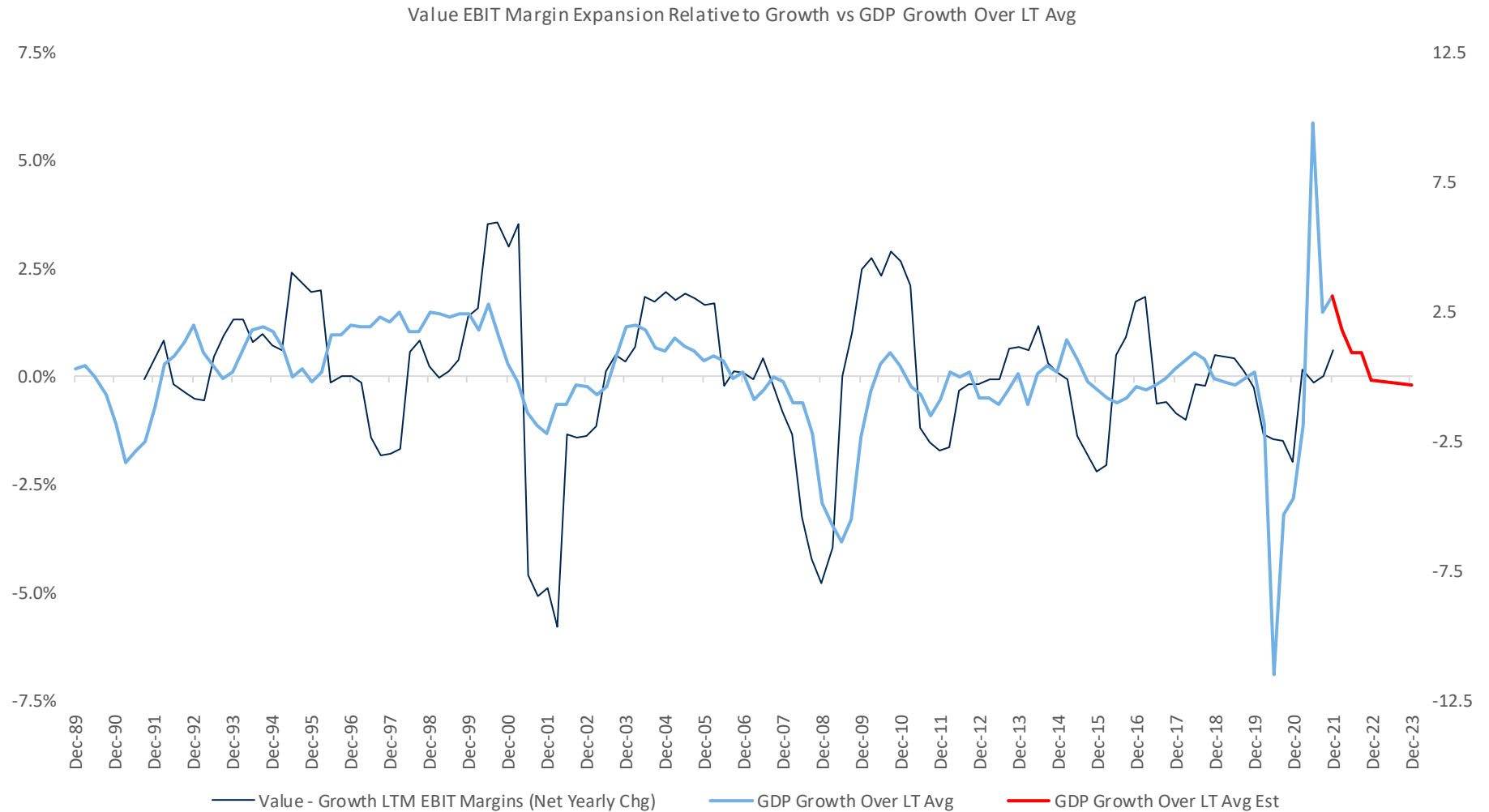
Large Cap Growth vs. Value / Revisions & Earnings

Growth is Seen as Higher Quality Than Value



Source: RBC US Equity Strategy, S&P Capital IQ/Clarifi, Russell, Compustat. Latest datapoint is for 4Q21.

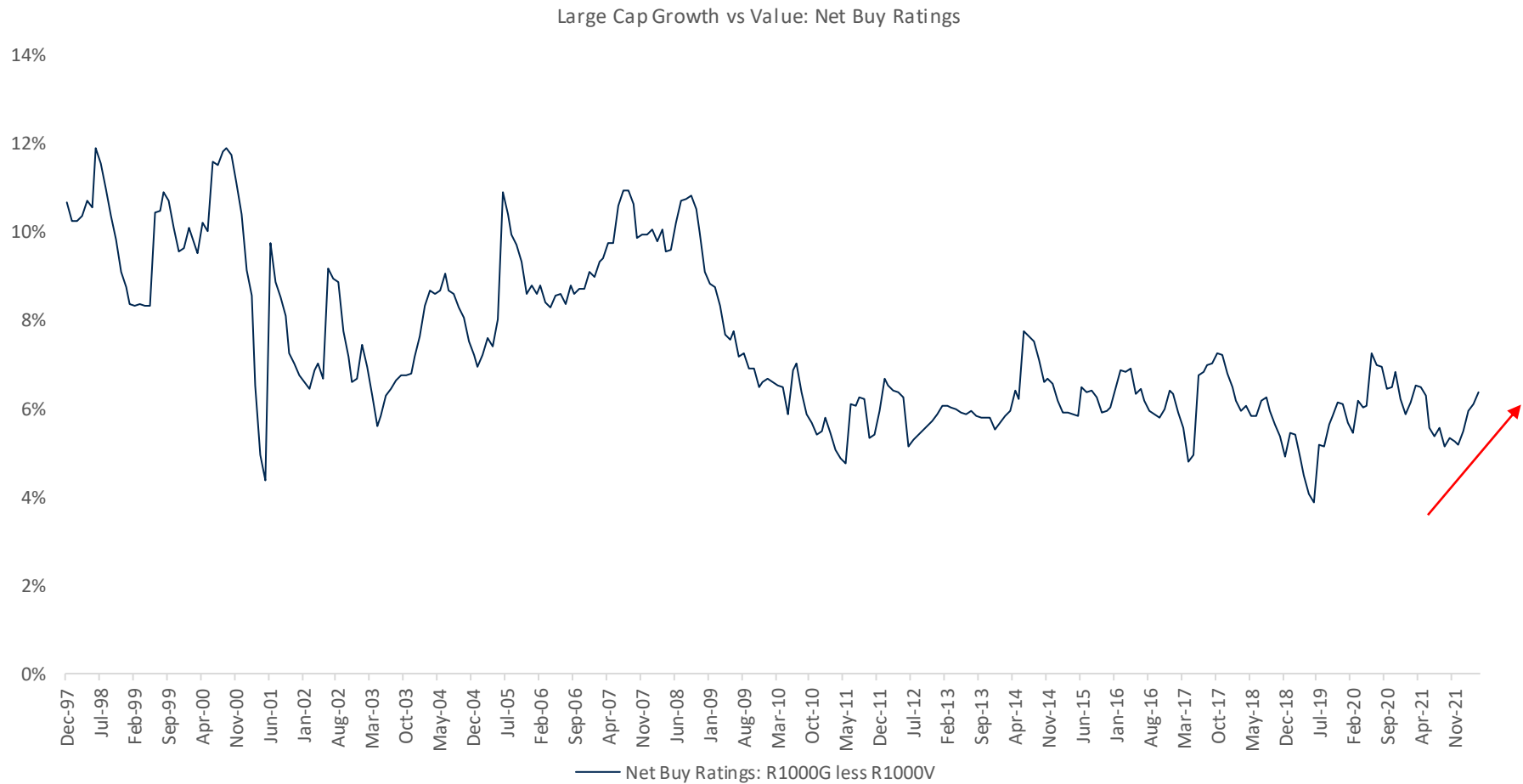
Value Margins Tend to Expand Faster Than Growth Margins When GDP Growth Is Above Trend



Source: RBC US Equity Strategy; S&P Capital IQ/Clarifi, Bloomberg, Compustat; GDP forecasts as of April 20, 2022, and margins as of 4Q21

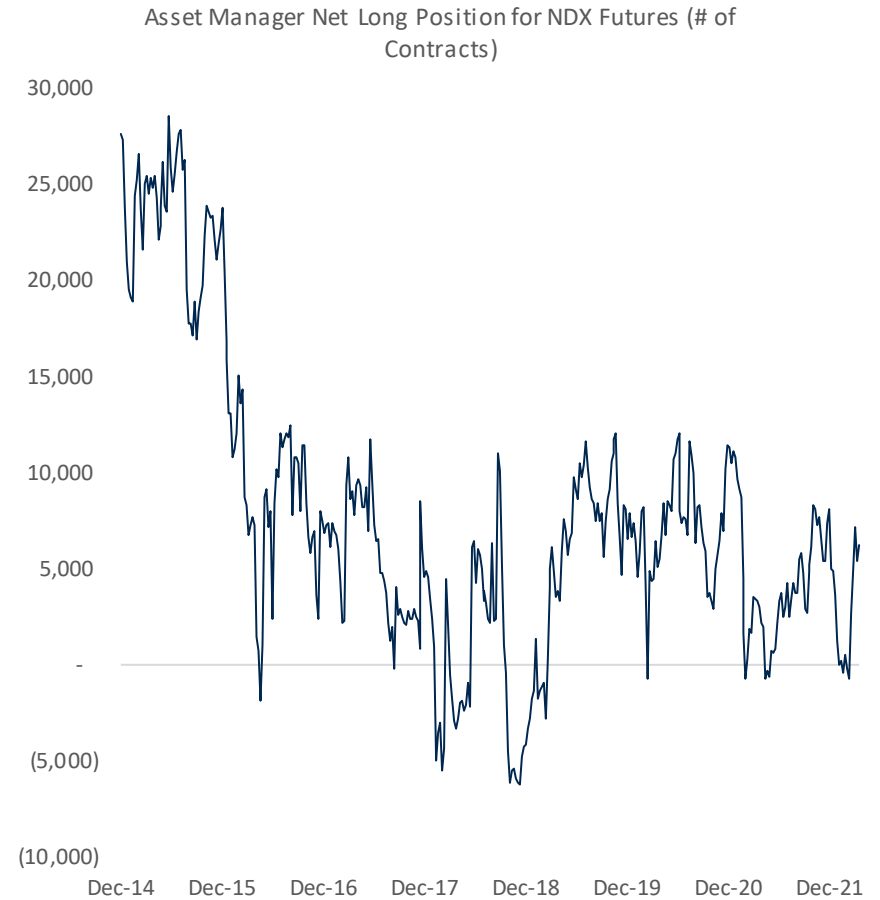
Large Cap Growth vs. Value / Investor Sentiment & Positioning

Growth Ratings Picking Up Relative to Value Again



Source: RBC US Equity Strategy, S&P Capital IQ/ClariFI, Russell, CIQ estimates; as of April 14, 2022

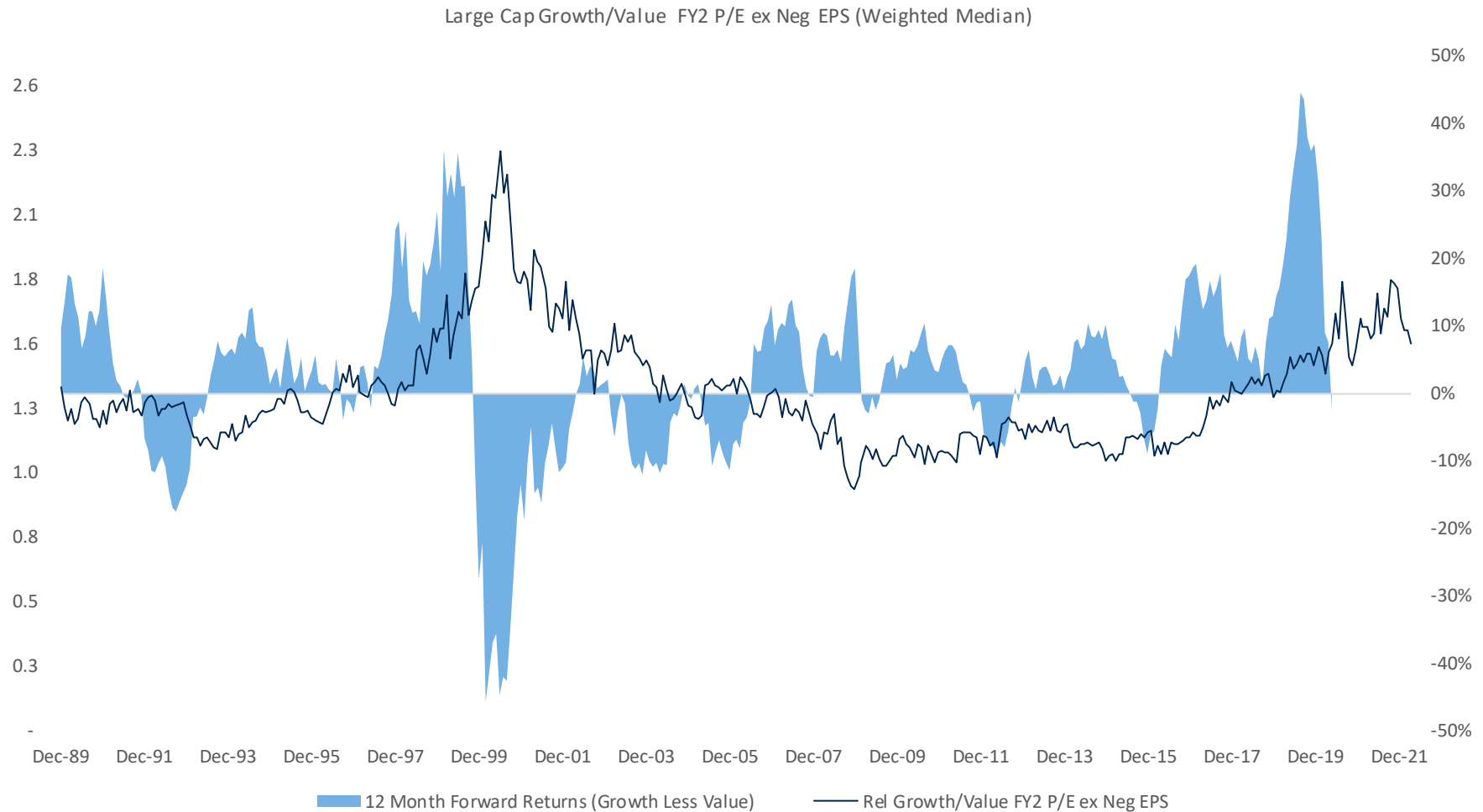
Positioning in Nasdaq Futures Has Rebounded After Returning to 2020-2021 Lows



Asset Manager/Institutional: These are institutional investors, including pension funds, endowments, insurance companies, mutual funds, and portfolio/investment managers whose clients are predominantly institutional.
 Source: RBC US Equity Strategy, RBC Futures Desk, CFTC. As of 4/19/22.

Large Cap Growth vs. Value / Valuation

Growth Still Looks Expensive vs. Value on P/E, but Is Close to Pre-Pandemic Levels



Source: RBC US Equity Strategy, S&P Capital IQ/ClariFI, Russell, Compustat, CIQ estimates, IBES estimates; as of April 18, 2022

Large Cap Growth vs. Value / Valuation

Growth/Value Relative Valuations by Metrics

Russell 1000 Growth vs. Russell 1000 Value (Relative Multiples)																			
Unweighted Medians	LTM P/E	Norm P/E	Norm P/E	LTM P/S	LTM EV/S	LTM EV/EBITDA ex neg	LTM P/EBITDA ex neg	LTM EV/EBIT ex neg	LTM P/EBIT ex neg	LTM P/OCF ex neg	LTM P/FCF ex neg	LTM NTM P/E ex neg	FY1 P/E ex neg	FY2 P/E ex neg	NTM				
	ex neg EPS	ex neg - 5 Yr Avg	ex neg - 10 Yr Avg												NTM P/S	P/CF ex neg CF	FY2 PEG ex neg	Price/Book	
Current	1.4	1.4	1.5	1.5	1.4	1.4	1.5	1.2	1.3	1.5	1.5	1.3	1.3	1.2	1.4	1.5	1.0	2.4	
Z Score	0.2	(0.4)	(0.6)	(0.2)	0.3	0.8	(0.3)	0.3	(0.5)	(0.3)	0.1	0.1	0.0	(0.2)	(0.1)	0.6	1.1	1.0	
Avg	1.3	1.5	1.6	1.6	1.3	1.3	1.6	1.2	1.5	1.6	1.4	1.3	1.3	1.3	1.5	1.3	0.9	2.0	
Median	1.3	1.4	1.5	1.5	1.3	1.3	1.5	1.1	1.4	1.5	1.4	1.3	1.3	1.2	1.4	1.3	0.9	1.9	

Russell 1000 Growth vs. Russell 1000 Value (Relative Multiples)																			
Weighted Medians	LTM P/E	Norm P/E	Norm P/E	LTM P/S	LTM EV/S	LTM EV/EBITDA ex neg	LTM P/EBITDA ex neg	LTM EV/EBIT ex neg	LTM P/EBIT ex neg	LTM P/OCF ex neg	LTM P/FCF ex neg	LTM NTM P/E ex neg	FY1 P/E ex neg	FY2 P/E ex neg	NTM				
	ex neg EPS	ex neg - 5 Yr Avg	ex neg - 10 Yr Avg												NTM P/S	P/CF ex neg CF	FY2 PEG ex neg	Price/Book	
Current	1.4	1.7	2.0	2.4	2.2	1.7	1.9	1.4	1.6	1.6	1.3	1.5	1.5	1.6	2.4	1.7	1.0	4.8	
Z Score	(0.1)	0.1	0.5	1.4	2.4	0.9	0.2	0.4	(0.3)	(0.3)	(0.3)	0.4	0.3	0.9	1.2	0.4	0.8	2.5	
Max	2.4	3.2	3.9	3.9	2.6	2.8	4.3	2.6	3.7	3.0	3.4	2.4	2.6	2.3	5.7	4.9	1.5	5.7	
Min	1.0	1.2	1.3	1.2	0.9	1.0	1.3	0.9	1.1	1.2	1.1	1.0	1.0	1.0	1.1	0.5	0.6	1.5	
Avg	1.4	1.6	1.8	1.8	1.5	1.4	1.8	1.3	1.6	1.7	1.4	1.4	1.4	1.4	1.7	1.5	0.9	2.5	
Median	1.4	1.6	1.7	1.7	1.4	1.4	1.8	1.2	1.6	1.7	1.3	1.3	1.4	1.3	1.5	1.5	0.9	2.1	

Source: RBC US Equity Strategy, S&P Capital IQ/ClariFI, Russell, Compustat, CIQ estimates, IBES estimates; as of April 18, 2022

Large Cap Growth vs. Value / Valuation

Growth Slightly Attractive vs. Value on Normalized P/Es and Cash Flow Metrics

5 Year Normalized P/E (Ex neg EPS, Median) -
R1000 Growth Rel to R1000 Value



LTM P/OCF (Ex neg, Median) -
R1000 Growth Rel to R1000 Value



10 Year Normalized P/E (Ex neg EPS, Median) -
R1000 Growth Rel to R1000 Value

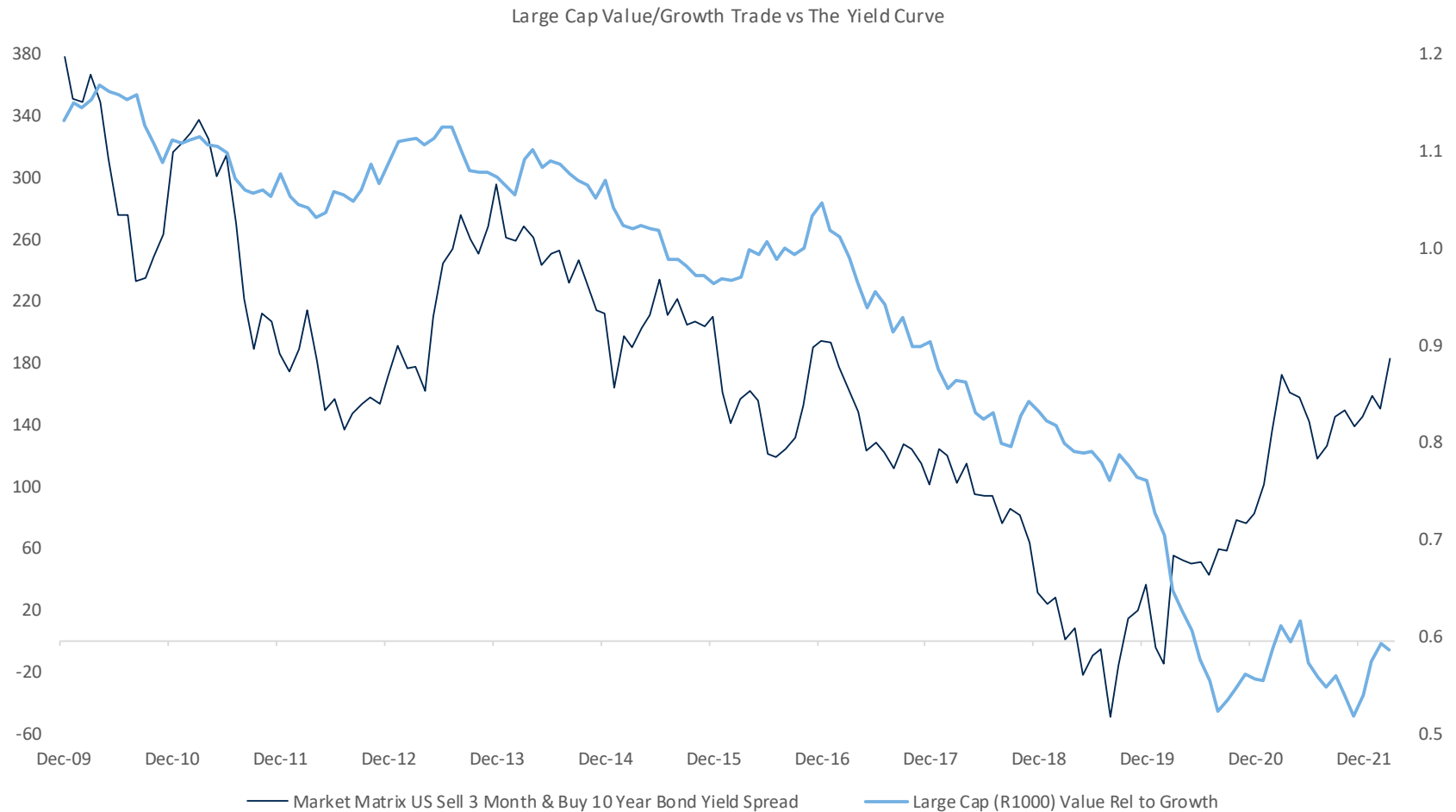


LTM P/FCF (Ex neg, Median) -
R1000 Growth Rel to R1000 Value



Source: RBC US Equity Strategy, S&P Capital IQ/ClariFI, Russell, Compustat, CIQ estimates, IBES estimates; as of April 18, 2022

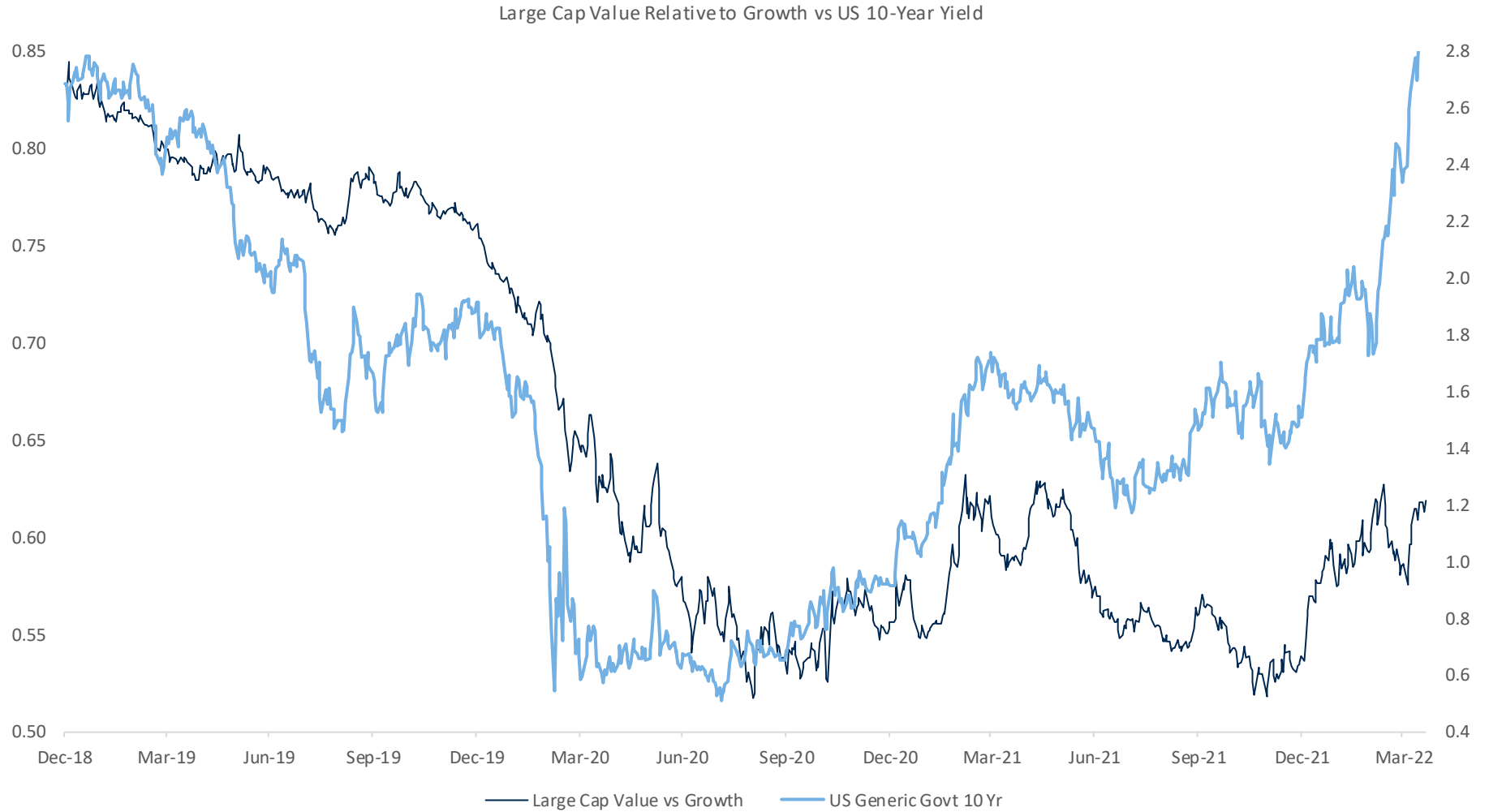
Yield Curve Remains an Important Barometer for the Style Trade



Source: RBC US Equity Strategy, Haver Analytics, Russell, Bloomberg; as of March 2022

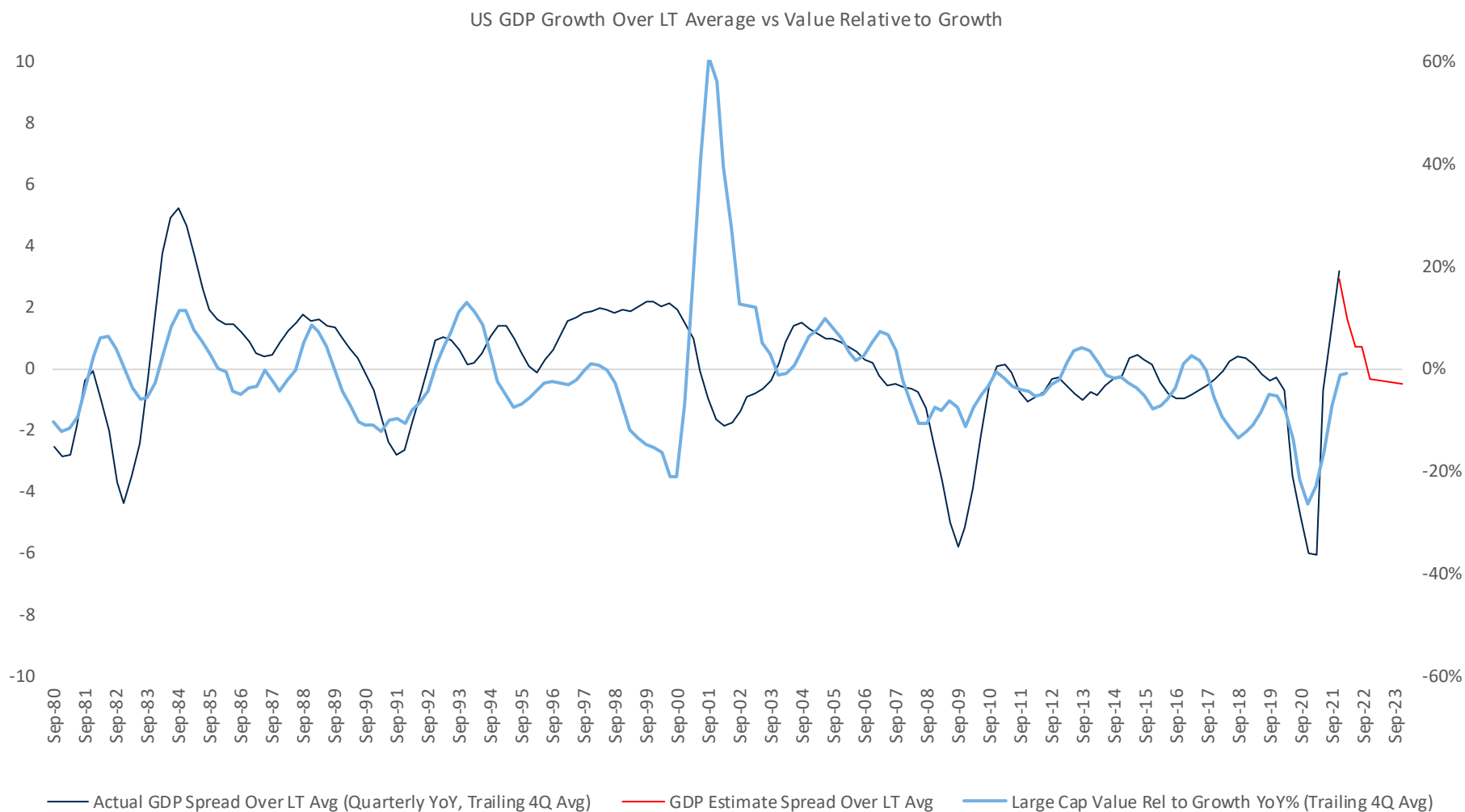
Large Cap Growth vs. Value / Economy

In 2021, Value Leadership Peaked Alongside 10-Year Yields



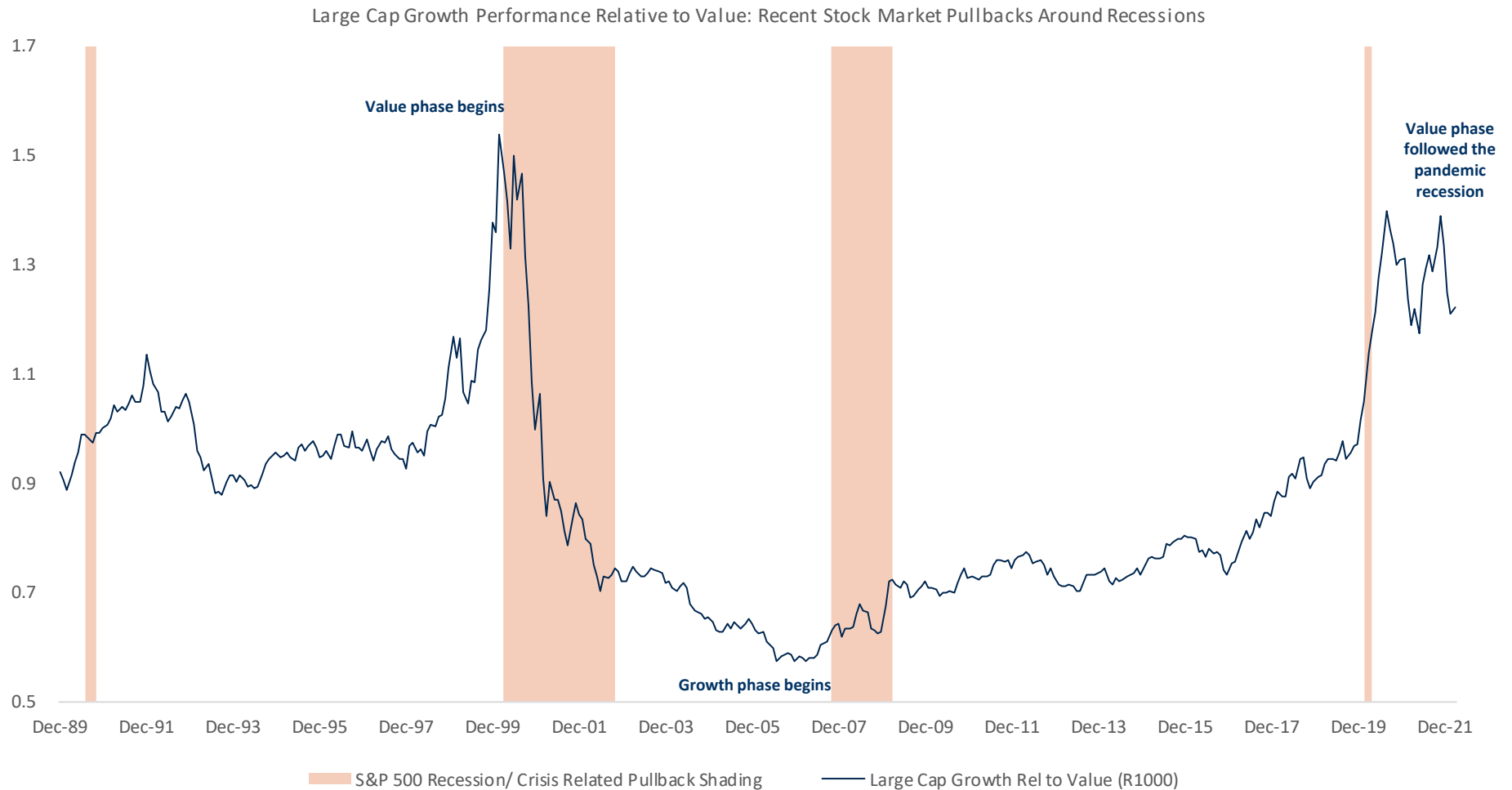
Source: RBC US Equity Strategy, Bloomberg; as of April 20, 2022

2022 GDP Backdrop Has Been Supportive of the Value Trade, but Seems Unlikely to Last



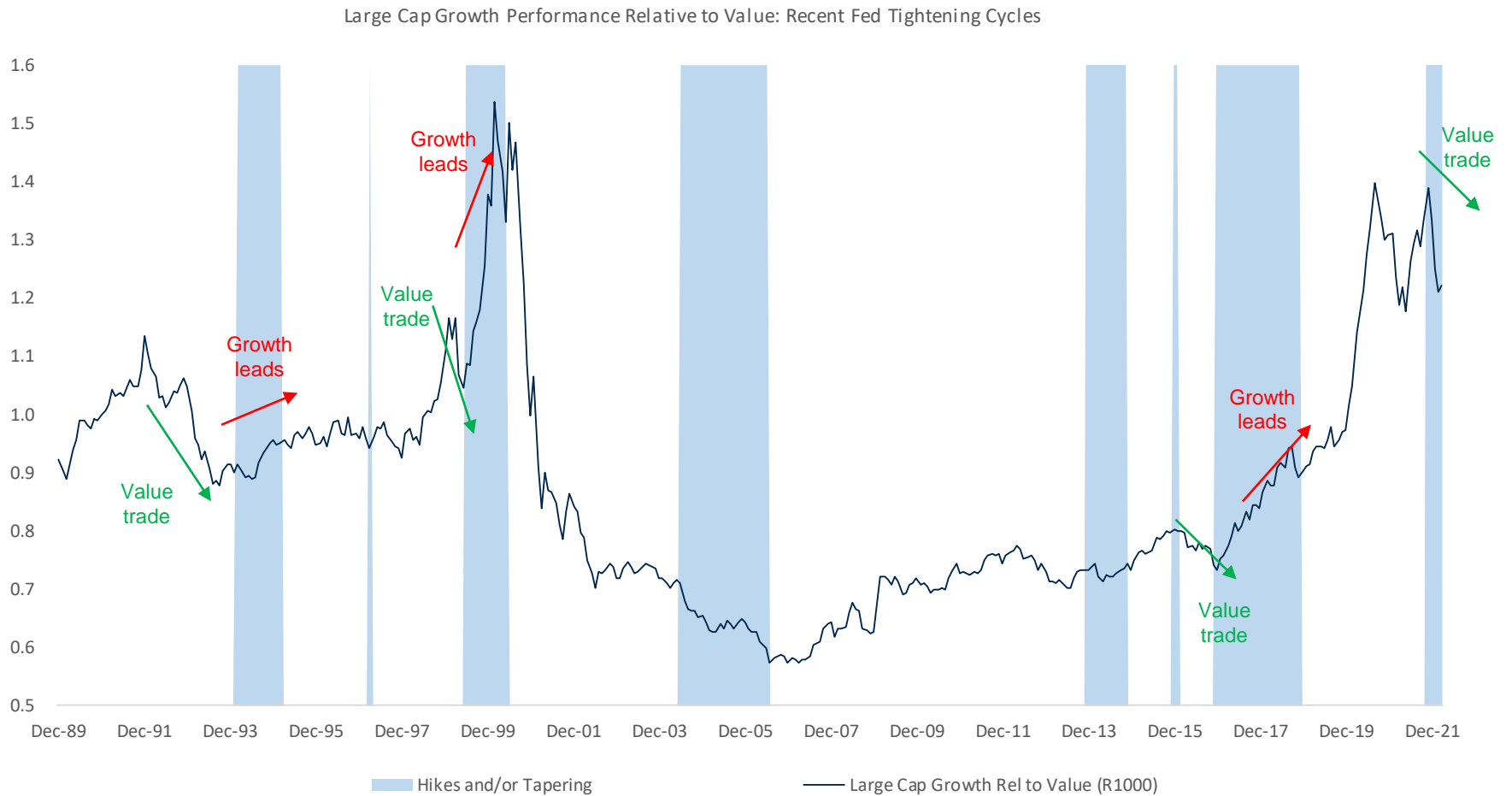
Source: RBC US Equity Strategy, Russell, Bloomberg; as of April 20, 2022

The Last Two Recessions Have Ushered in Sticky Shifts in Style Leadership



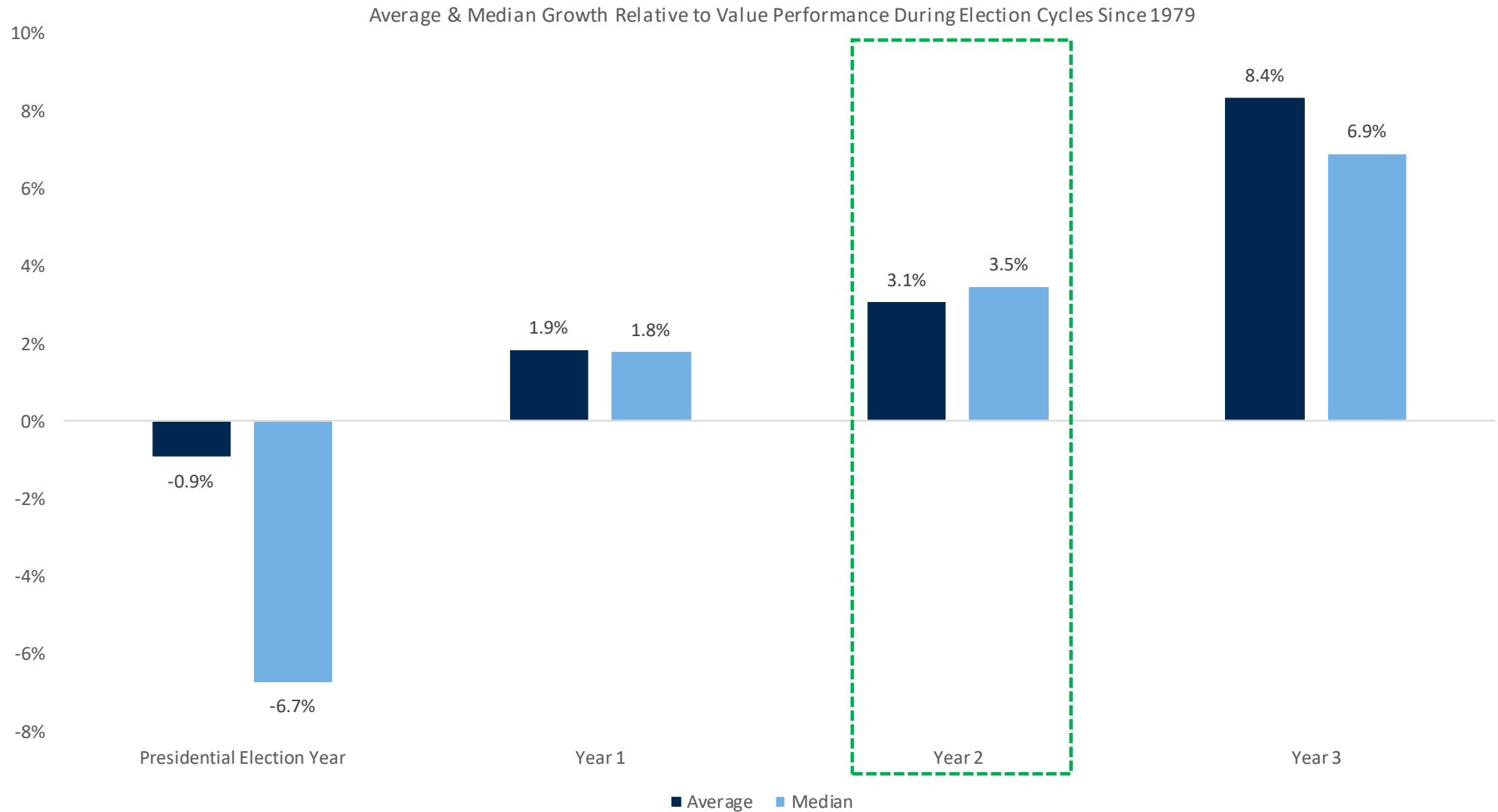
Source: RBC US Equity Strategy, Bloomberg; as of March 2022

Edge to Value Ahead of Hiking, Edge to Growth During Hiking



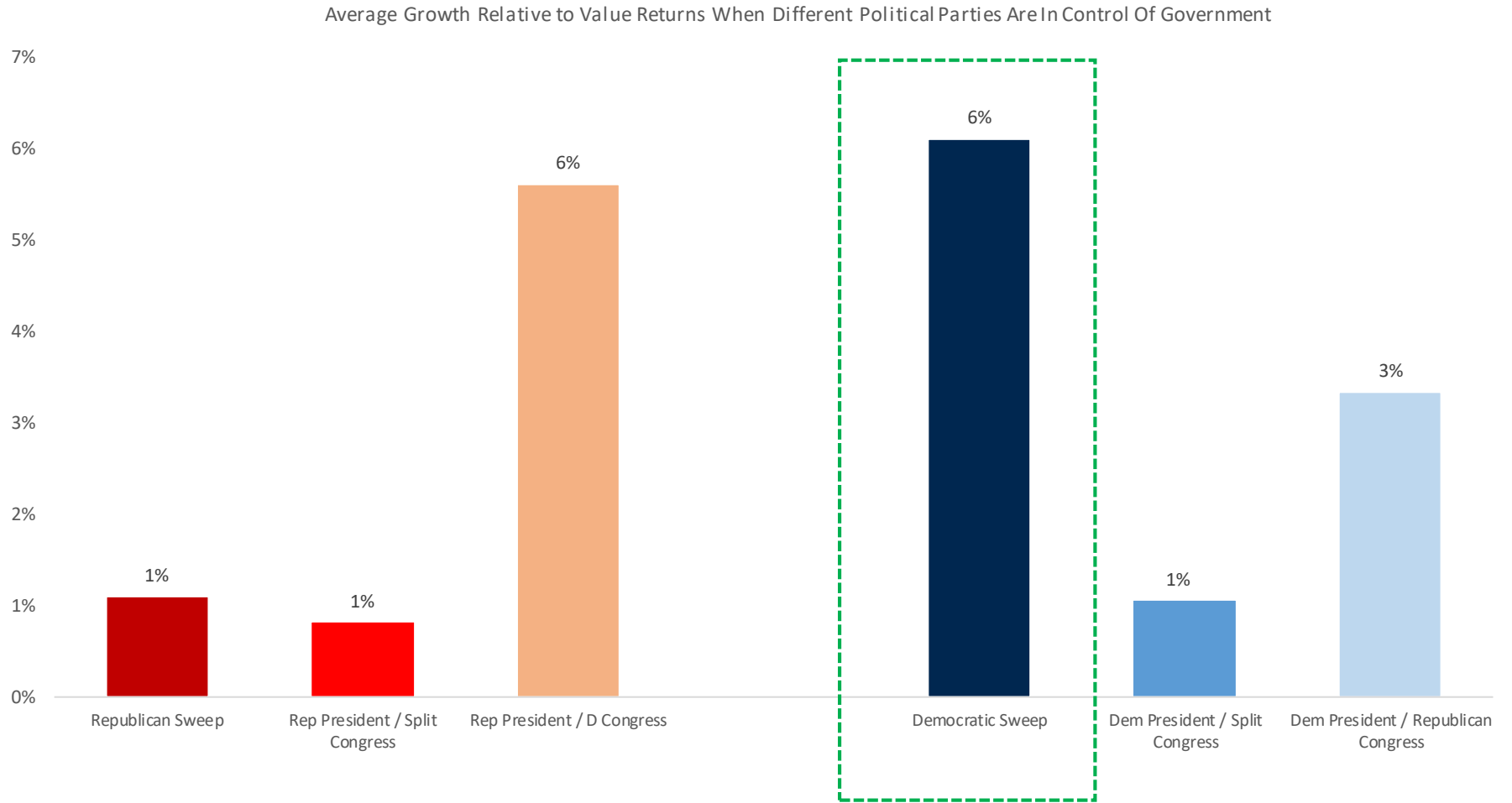
Source: RBC US Equity Strategy, Haver, Bloomberg; as of March 2022

Growth Tends to Outperform in Year 2 of Election Cycles



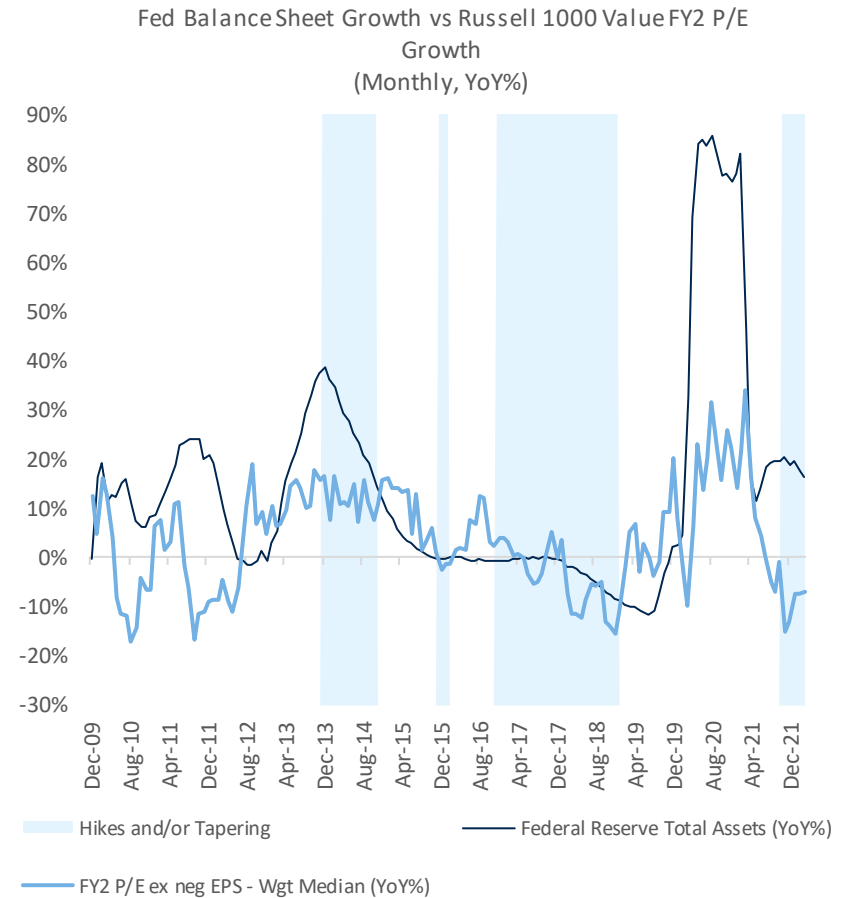
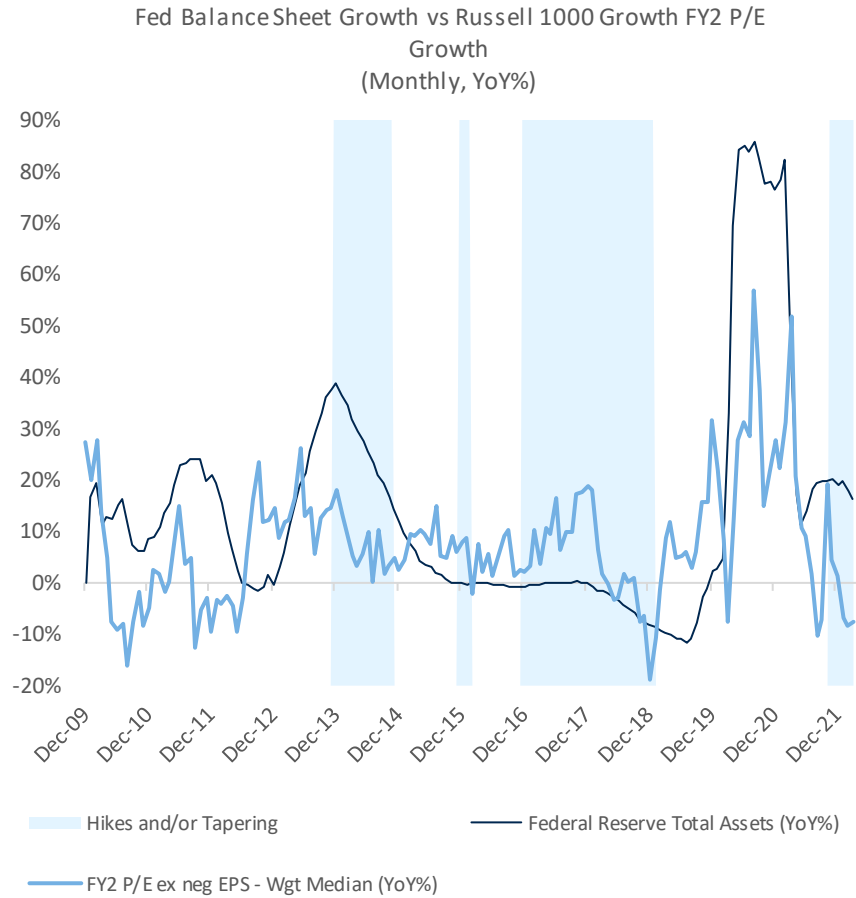
Source: RBC US Equity Strategy, Russell, Bloomberg. Study based on returns since 1979.

Growth Usually Outperforms Under United Democratic Government



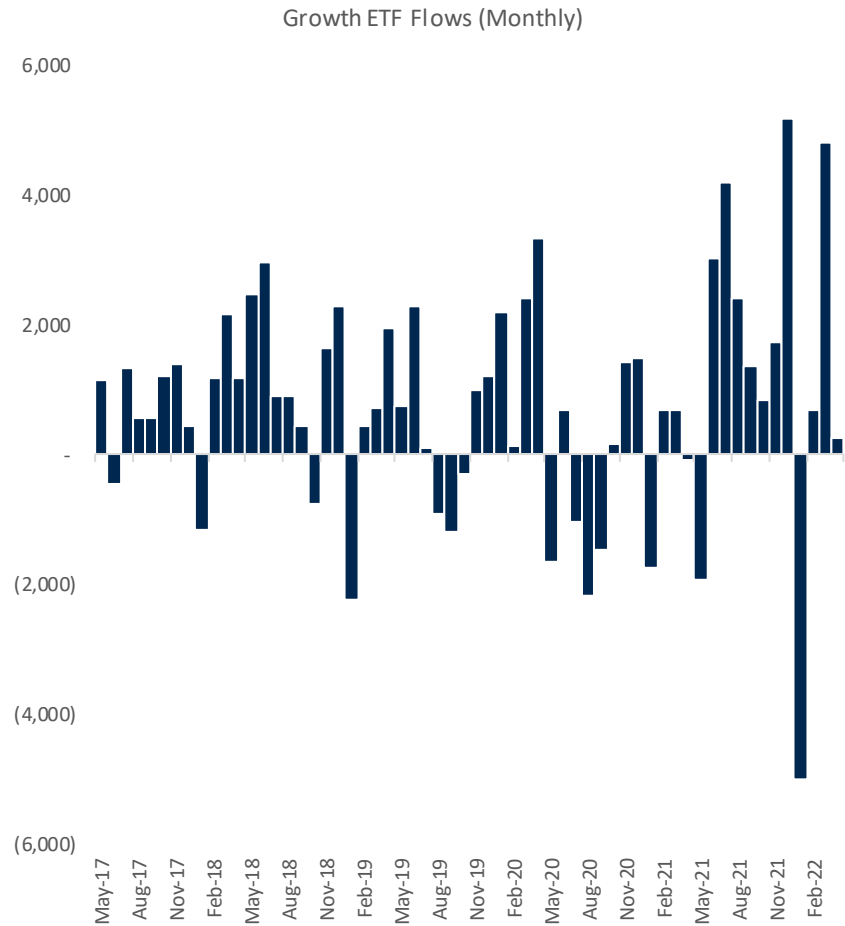
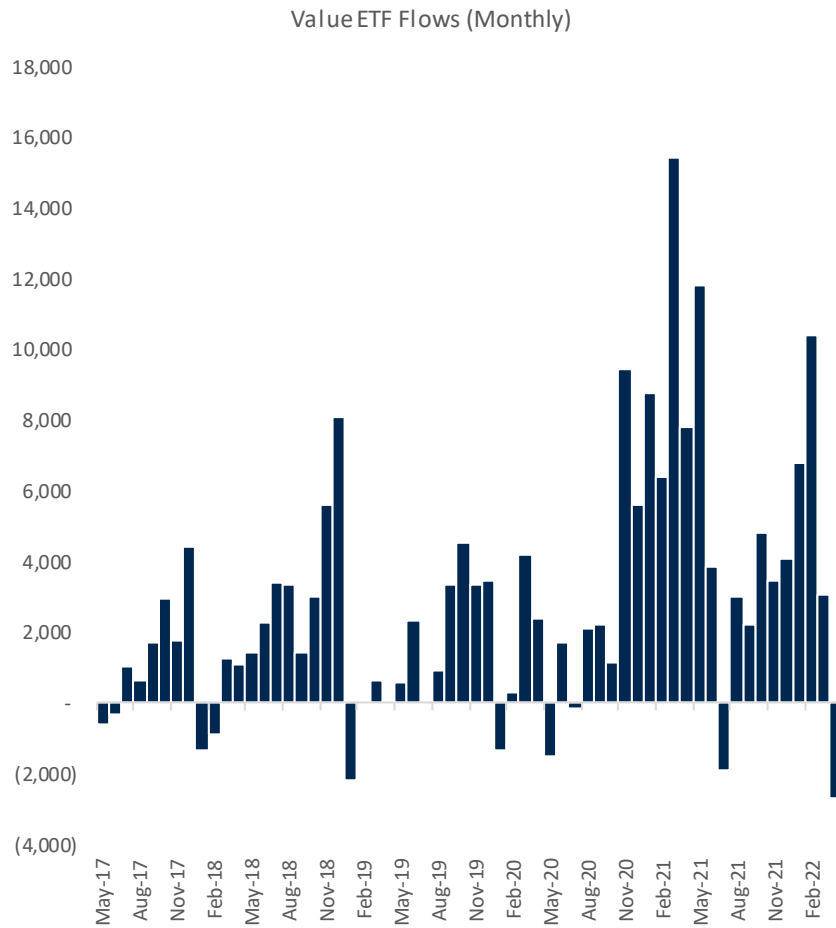
Source: RBC US Equity Strategy, Russell, Bloomberg. Study based on returns since 1979.

Growth & Value P/Es Both Already Baking in Balance Sheet Contraction



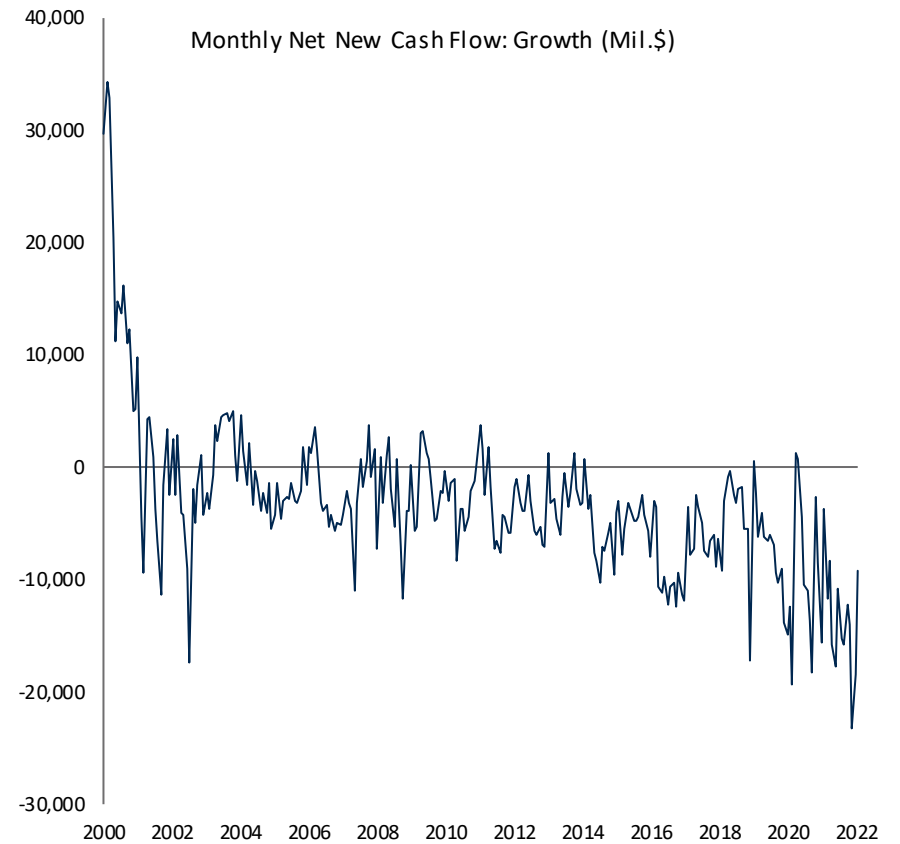
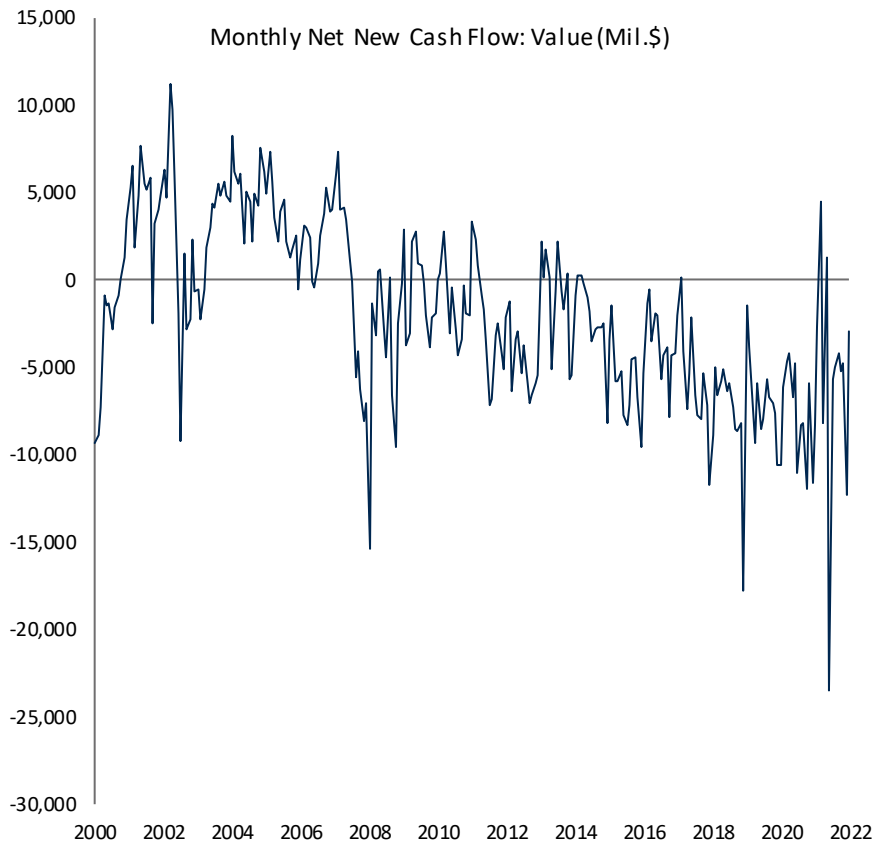
Source: RBC US Equity Strategy, Bloomberg, S&P Capital IQ/ClariFi, P/Es based on actuals and consensus forecasts; as of March 2022

Value ETF Flows Have Stumbled, While Growth ETF Flows Have Bounced Back



Source: RBC US Equity Strategy, Bloomberg; as of April 20, 2022

Net New Cash Flow for Actively Managed Funds Trending Negative for both Growth and Value



Source: RBC US Equity Strategy, Haver, Investment Company Institute; as of February 2022

Large Cap Sectors

S&P 500 GICS Level 1 Sectors



Capital
Markets

Higher Level Views on Cyclical, Secular Growth & Defensives

Cyclicals: Seems late innings to us.

Arguments in favour of Cyclicals:

- Cyclicals are still outpacing both Secular Growth and Defensives in terms of EPS revisions.
- Cyclicals look undervalued vs. Defensives.

Why the trade feels late innings to us:

- Cyclicals are still outperforming Secular Growth, but performance is starting to stall relative to Defensives.
- Cyclicals usually lag Secular Growth and Defensives after rate hikes begin and when GDP is trending below average.
- Cyclicals look fairly valued vs. Secular Growth again.
- Cyclicals are improving in terms of quality (ROE) but still lag Secular Growth and Defensives on this basis.

Sector biases:

- Preferred areas – Financials (OW)
- Other sectors – Industrials (MW), Materials (MW), Energy (MW)

Secular Growth: Getting to be the more interesting bucket to us.

Problems with Secular Growth:

- Secular Growth has lagged Cyclicals and Defensives in early 2022.
- Secular Growth EPS revisions lagging Cyclicals, though they're holding up better than Defensives.

Why we've been looking for a shift back to Secular Growth leadership:

- Secular Growth is seen as highest quality, with the highest ROEs – this is the time in the recovery to shift back to high quality.
- Secular Growth is looking undervalued vs. Defensives and fairly valued vs. Cyclicals (no longer expensive).
- Secular Growth tends to outperform Cyclicals when GDP growth is below average, a growing risk.
- Secular Growth often outperforms Cyclicals once Fed rate hikes begin, though this is not the case with performance vs. Defensives.

Sector biases:

- Stick with Tech (OW), neutral Cons Disc (MW), cautious on Comm Svcs (UW)

Defensives: We sympathize with the desire to add exposure, but are having a hard time finding a sector we want to OW here.

Why we feel like we should be getting a bit more intrigued:

- Defensives performance improved vs. both Cyclicals and Secular Growth recently.
- Defensives tend to outperform both Cyclicals and Secular Growth after trends in ISM manufacturing peak – which appears to have happened in 2021.
- Defensives also tend to outperform both Cyclicals and Secular Growth after rate hikes begin, as a cooling off of the economy starts to get baked in.
- Defensives tend to outperform both Cyclicals and Secular Growth when GDP growth is below average, a growing risk for 2023.

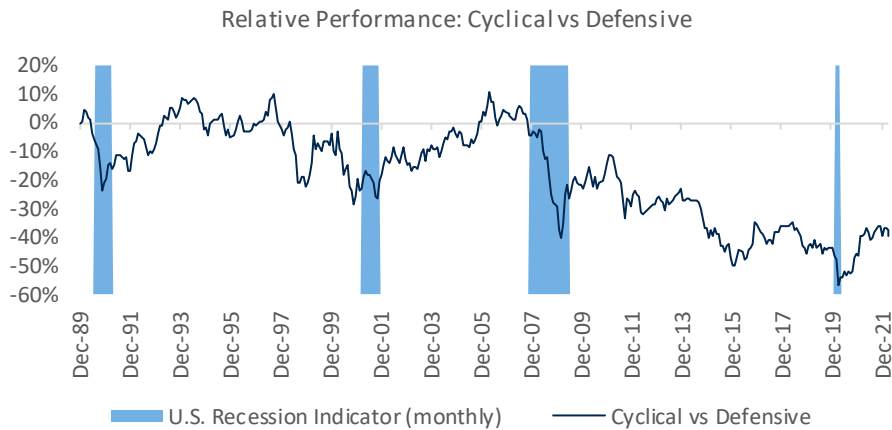
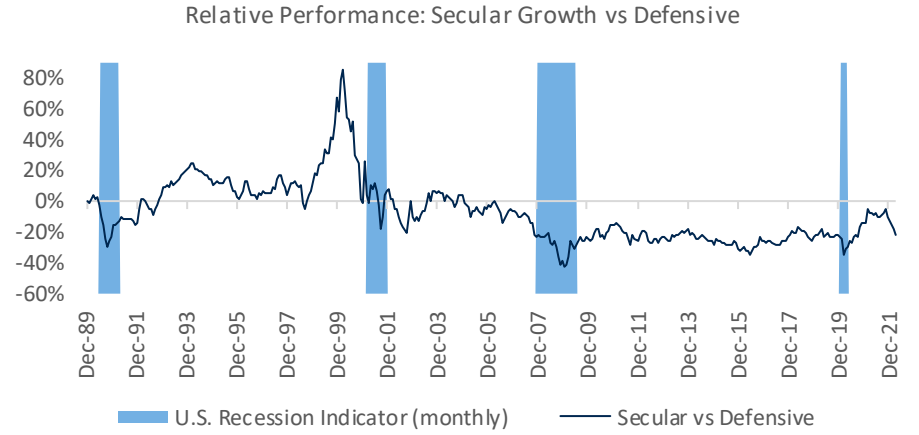
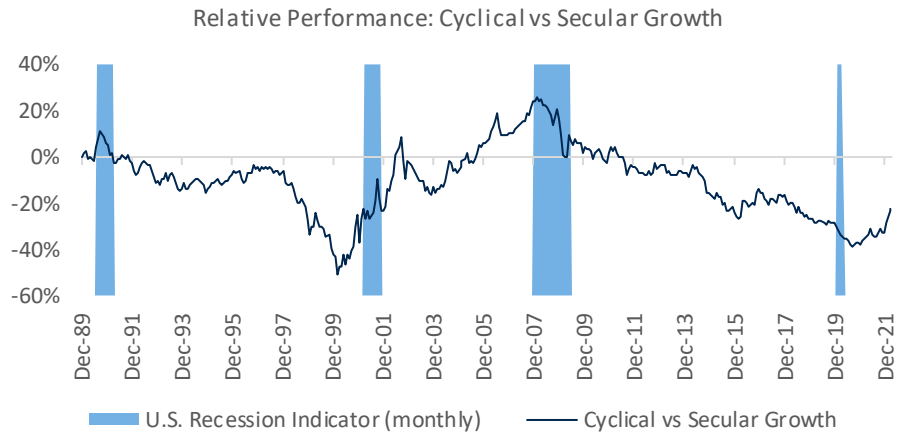
Lingering problems/concerns that keep us on the sidelines, and other things we're watching:

- Defensives are lagging both Cyclicals and Secular Growth on the rate of upward EPS estimate revisions trends.
- Defensives look expensive vs. both Cyclicals and Secular Growth – close to extremes vs. the latter.
- Defensives are seen as in between on quality, with higher ROEs than Cyclicals and lower ROEs than Secular Growth.

Sector biases:

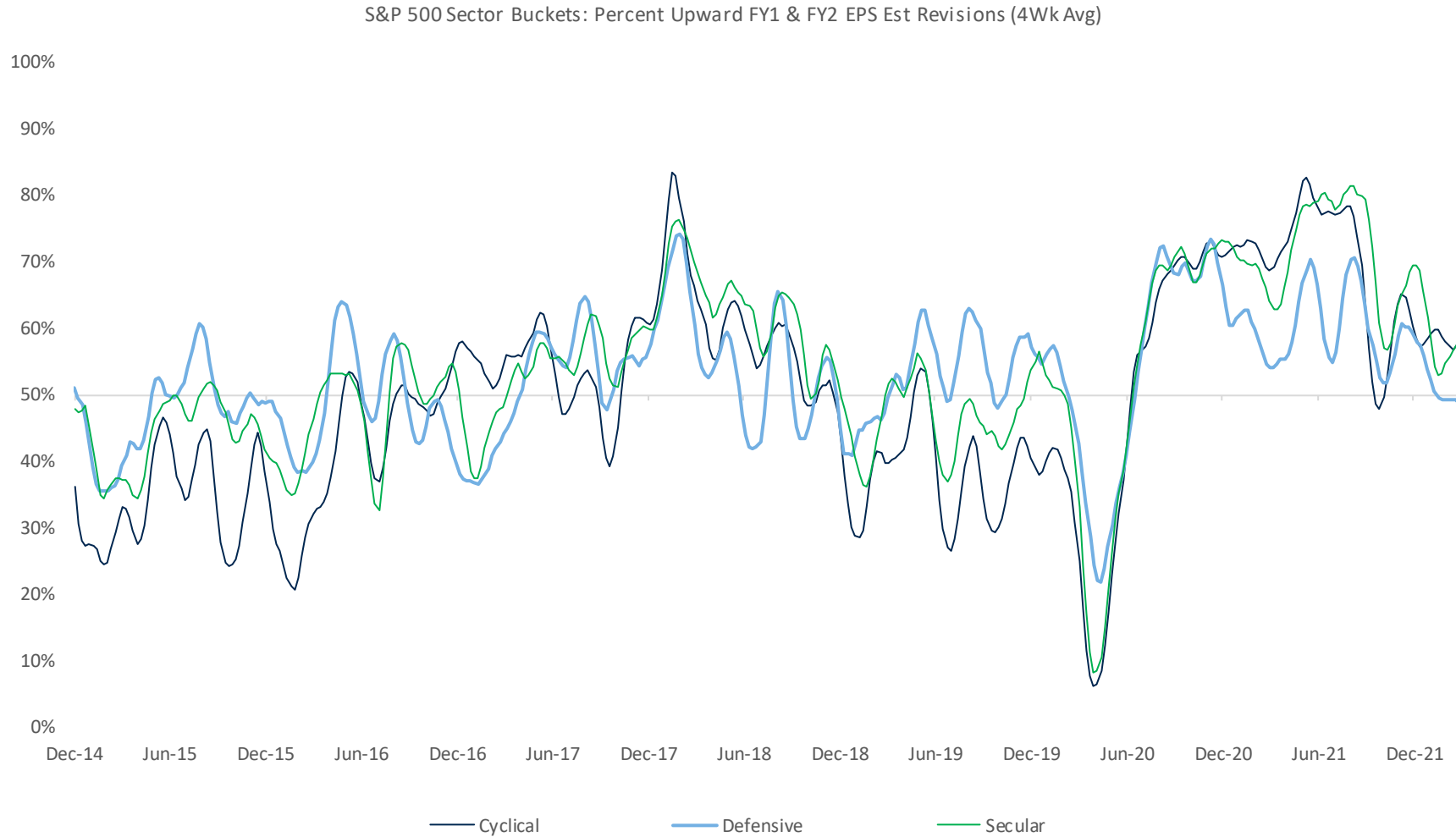
- Sectors: Health Care (MW), Utilities (MW), Consumer Staples (MW), REITs (UW)

Defensives & Cyclical Have Been Outperforming Secular Growth



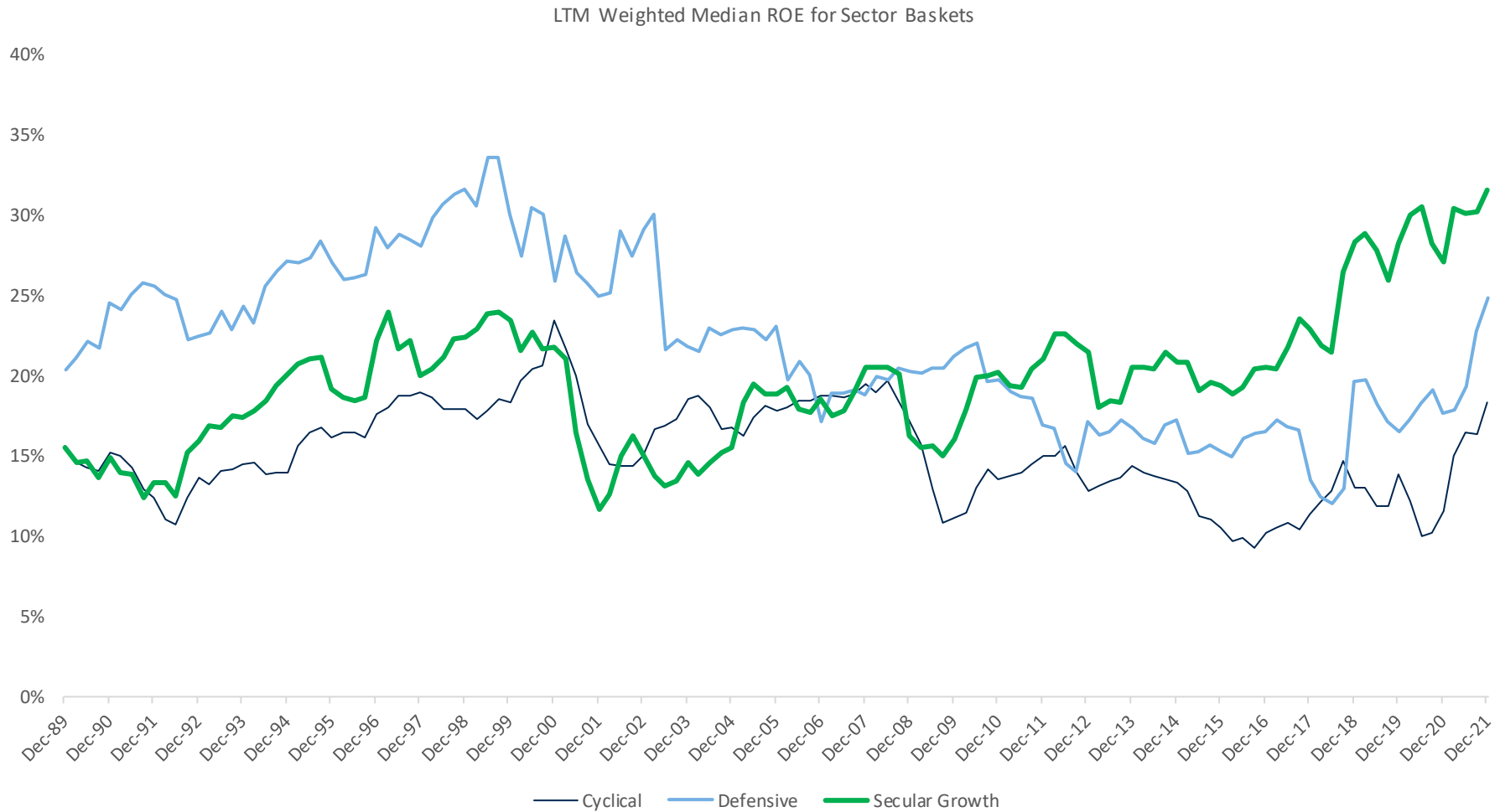
Source: RBC US Equity Strategy; S&P Capital IQ/ClariFi. As of April 14, 2022. Cyclical Sectors: Financials, Industrials, Materials & Energy. Defensive Sectors: Consumer Staples, Utilities, Health Care. Secular Growth Sectors: Tech, Internet, Communications Services, Consumer Discretionary.

EPS Revisions Trends Flipping Negative for Defensives & Growth, Resilient for Cyclical



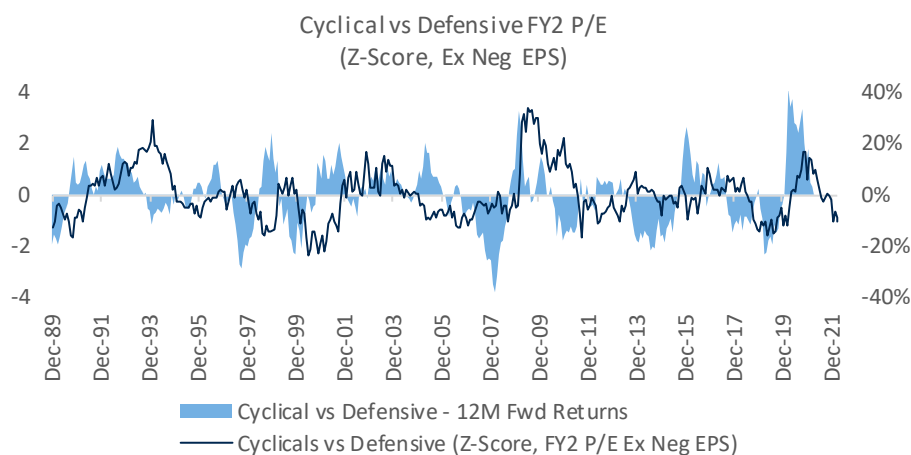
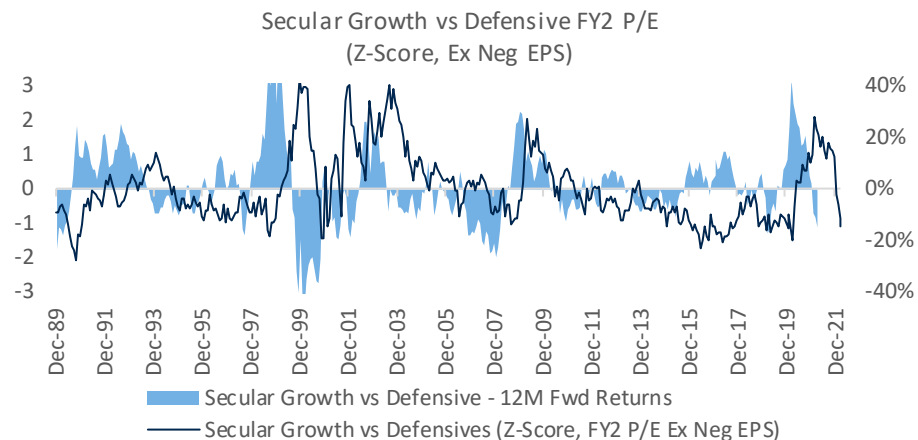
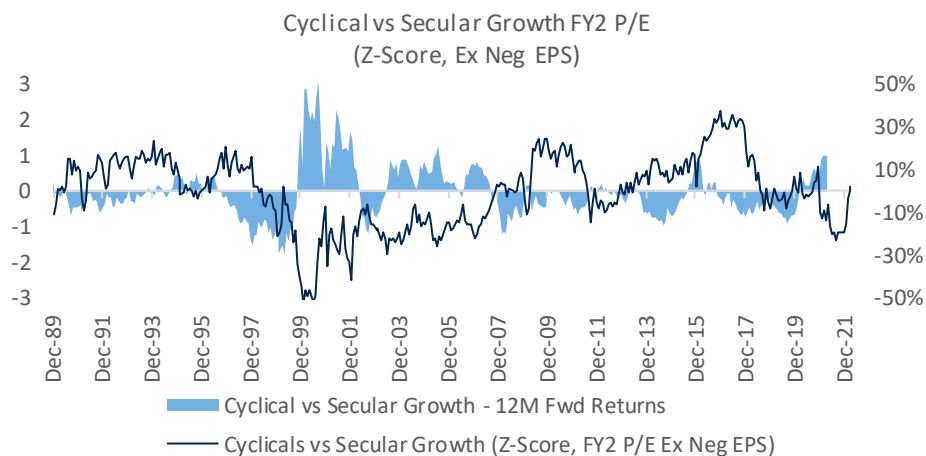
Source: RBC US Equity Strategy; S&P Capital IO/ClariFi, Compustat, CIQ estimates. As of April 15, 2022. Cyclical Sectors: Financials, Industrials, Materials & Energy. Defensive Sectors: Consumer Staples, Utilities, Health Care. Secular Growth Sectors: Tech, Internet, Communications Services, Consumer Discretionary.

Secular Growth Is Seen as Higher Quality Than Cyclical & Defensives



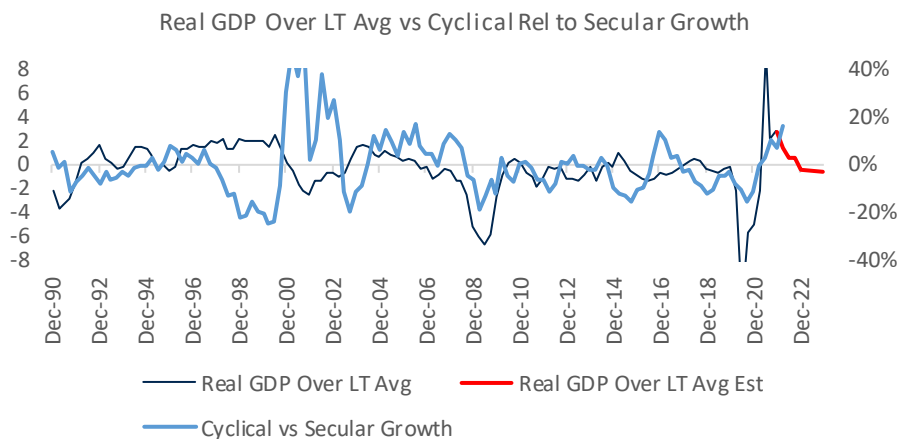
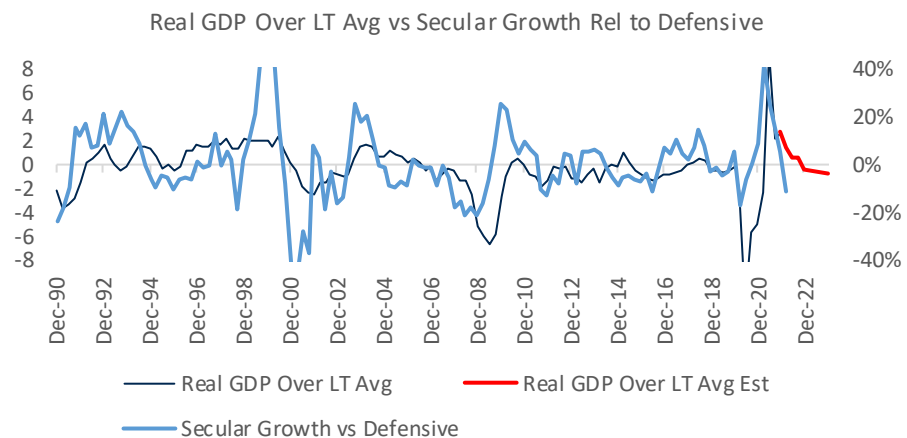
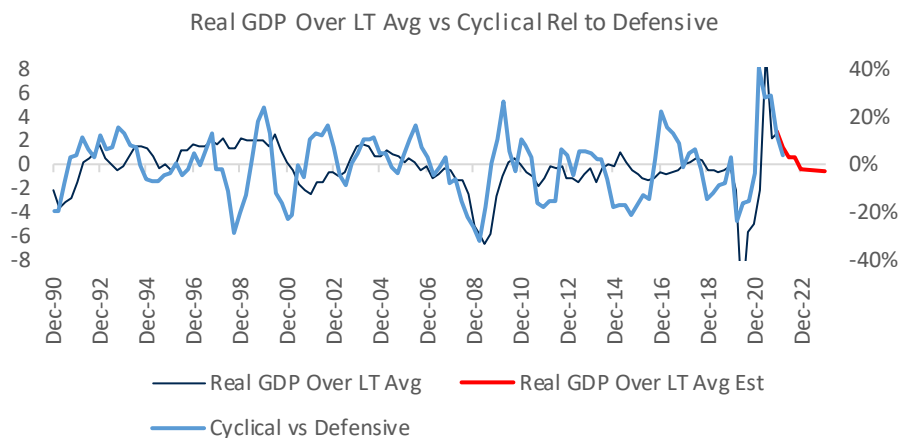
Source: RBC US Equity Strategy, S&P Capital IQ/Clarifi, Compustat; latest datapoint is final for 4Q21

Defensives Look Expensive vs. Both Secular Growth & Cyclical



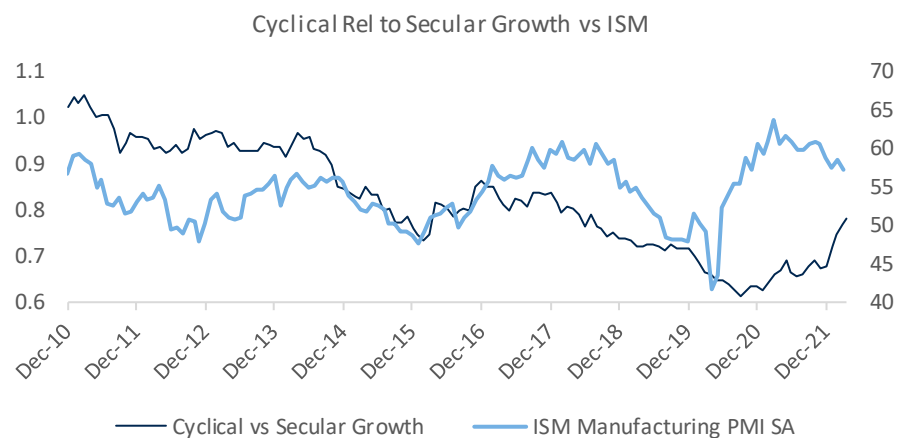
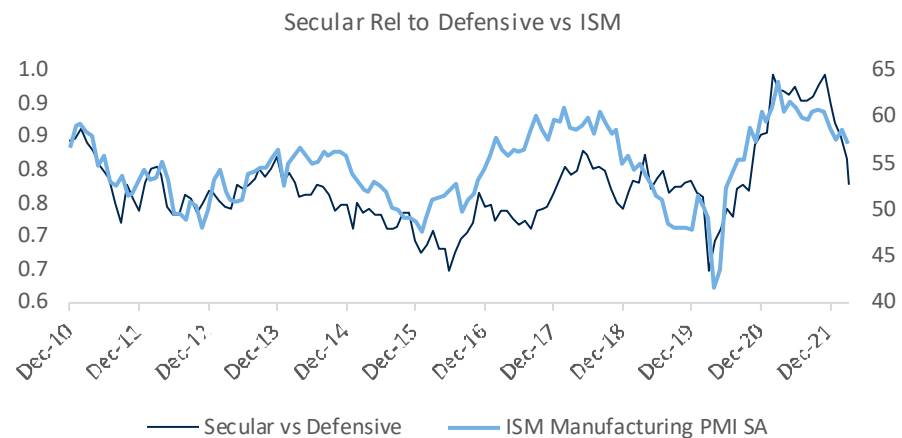
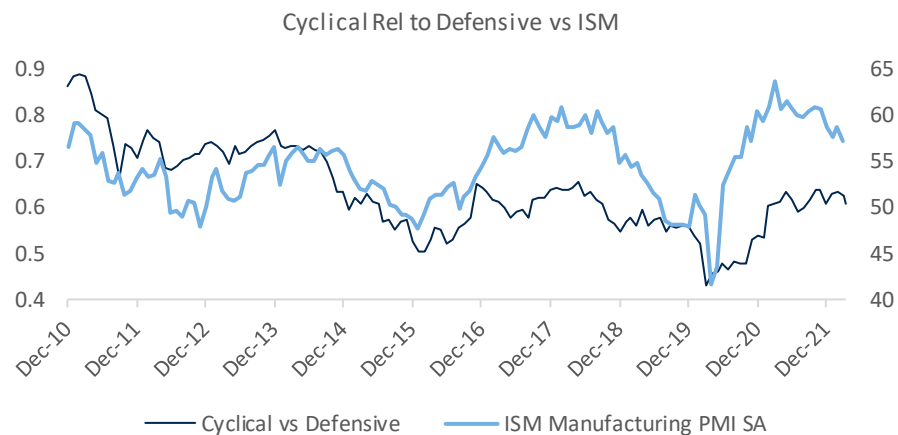
Source: RBC US Equity Strategy; S&P Capital IO/ClariFi, Compustat, CIQ estimates. Cyclical Sectors: Financials, Industrials, Materials, and Energy. Defensive Sectors: Consumer Staples, Utilities, and Health Care. Secular Growth Sectors: Tech, Internet, Communications Services, and Consumer Discretionary. As of April 14, 2022.

Cyclicals Tend to Lag Both Defensives & Secular Growth When GDP Is Decelerating To Below Avg



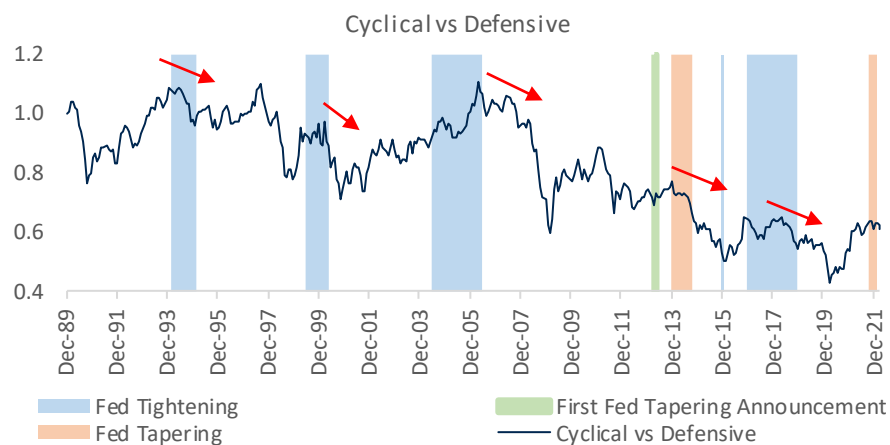
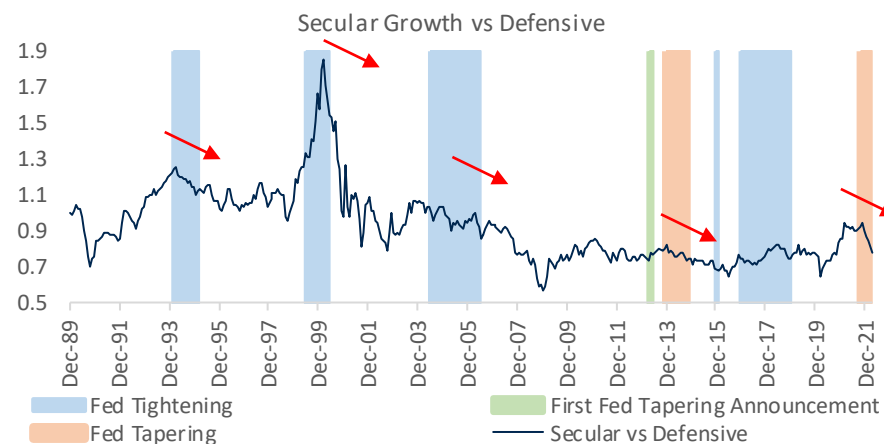
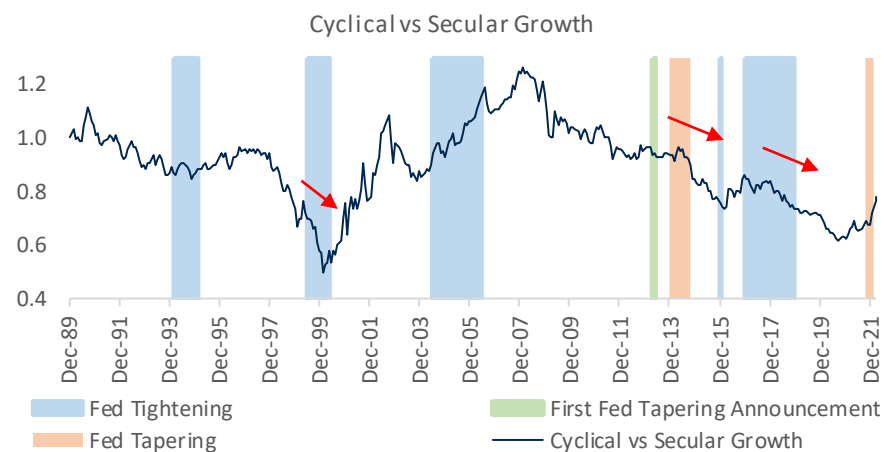
Source: RBC US Equity Strategy; S&P Capital IO/ClariFi, Bloomberg. As April 14, 2022. Cyclical Sectors: Financials, Industrials, Materials & Energy. Defensive Sectors: Consumer Staples, Utilities, Health Care. Secular Growth Sectors: Tech, Internet, Communications Services, Consumer Discretionary.

Defensives Have Been Trading Better Since The ISM Mfg Peak



Source: RBC US Equity Strategy; S&P Capital IO/ClariFi, Compustat, CIQ estimates, Bloomberg. As of April 14, 2022. Cyclical Sectors: Financials, Industrials, Materials & Energy. Defensive Sectors: Consumer Staples, Utilities, Health Care. Secular Growth Sectors: Tech, Internet, Communications Services, Consumer Discretionary.

Defensives Often Start To Lead Secular & Cyclical After Fed Starts Tapering/Hiking



Source: RBC US Equity Strategy; S&P Capital IO/ClariFi. Cyclical Sectors: Financials, Industrials, Materials, and Energy. Defensive Sectors: Consumer Staples, Utilities, and Health Care. Secular Growth Sectors: Tech, Internet, Communications Services, and Consumer Discretionary. As of April 14, 2022.

S&P 500 Sector Quality Factor Heat Map: Key Quality Factor Rankings by Sector

Large Cap Quality Factor Rankings	ROE	Net Debt To Capital	Short Interest % Shr/O	Market Cap	Average Rank
Communication Services	3	1	8	3	3.8
Consumer Discretionary	4	5	11	1	5.3
Consumer Staples	2	8	2	4	4.0
Energy	9	4	7	6	6.5
Financials	7	3	1	7	4.5
Health Care	6	6	3	5	5.0
Industrials	5	10	9	8	8.0
Information Technology	1	2	4	2	2.3
Materials	8	7	6	9	7.5
Real Estate	10	9	10	11	10.0
Utilities	11	11	5	10	9.3
Ranking Criteria	#1 is highest ROE	#1 is lowest Net Debt To Capital	#1 is lowest SI % Shr/O	#1 is highest Market Cap	#1 Is Most Desired

Source: RBC US Equity Strategy, Compustat, S&P Capital IQ/ClariFi. Wgt median used for all metrics. ROE and Debt To Capital are as of 4Q21 (final), Market Cap as of 1Q22, and Short Interest as of 3/31.

Large Cap Sectors / ESG Scorecard

ESG Heat Map for US Sectors

In the table below, we compare where US sectors are currently in favor and out of favor in actively managed ESG funds and where ESG profiles are improving the most and the least - to gauge current positioning pressures and where positioning could shift.

Please see the ESG Strategy team's [latest Stat Pack](#) for more details.

GICS Level 1 Sectors	OW / UW in Global Sustainable Funds	OW / UW in US Sustainable Funds	Aggregate ESG Momentum Score	Key Details Behind Our ESG Momentum Score
Communication Services	Underweight	Underweight	Low	Media & Entertainment drives the low momentum score, due to rising risks related to competitive behavior and employee engagement, diversity & inclusion. Telecom scores high.
Consumer Discretionary	Underweight	Slightly Underweight	Low	Trends are mixed within the sector. Autos and Consumer Durables & Apparel rank high on ESG momentum, but Retail scores low.
Consumer Staples	Underweight	Neutral	Low	All three subsectors rank low on our ESG momentum rankings, in part driven by higher human capital management risks.
Energy	Underweight	Underweight	Medium	Overall the sector ranks middle of the pack across our ESG momentum indicators. Real-time ESG sentiment scores are pointing to meaningful improvement, a positive development.
Financials	Underweight	Underweight	High	Within the sector, all three subsectors rank high on ESG momentum. Overall we see increased focus on integrating ESG into products/services, while business ethics risks have improved.
Health Care	Overweight	Overweight	Medium	Within the sector, Pharma/Biotech scores worst on ESG momentum (in part driven by product governance risks). HC Equipment & Services ranks middle of the pack.
Industrials	Overweight	Overweight	Medium	Overall the sector ranks middle of the pack across our ESG momentum indicators.
Info Tech	Overweight	Overweight	Low	Within the sector, Software & Services ESG momentum drags down the overall sector, with rising risks related to competitive behavior.
Materials	Overweight	Neutral	Medium	Overall the sector ranks middle of the pack across our ESG momentum indicators.
Real Estate	Neutral	Neutral	High	The sector ranks high across our ESG momentum indicators as companies have stepped up activities targeting emissions & energy management, and business ethics risks have eased.
Utilities	Overweight	Slightly OW	High	The sector ranks relatively high across our aggregate ESG momentum indicators. However, real-time ESG sentiment scores are pointing to some deterioration which bears watching.

Source: RBC US Equity Strategy

Most Performance Enthusiasm on Fins, HC & Tech; HC & Uts Rank High on Most Key Issues

	Performance	Valuations	Fundamentals	Margins	Supply Chains	Pricing Power	Demand	Russia/Direct	Russia/Indirect	All Questions
	Avg Score	Avg Score	Avg Score	% Expand	% Major Problem	Avg Score	Avg Score	Avg Score	Avg Score	Avg Score ex Mgns & Sp Chn Ex Margins & Supply Chains
All Industries	0.52	0.54	0.79	54%	19%	0.67	1.15	0.40	-0.13	
Communication Services	-0.25	0.50	0.75	50%	0%	0.00	0.50	0.00	-0.50	0.14
Consumer Discretionary	-0.60	0.00	-0.60	40%	60%	0.20	0.60	-0.20	-1.20	-0.26
Consumer Staples	-1.00	-1.00	-1.00	0%	100%	1.00	2.00	-1.00	-2.00	-0.43
Energy	0.80	0.60	1.40	80%	0%	-0.20	1.00	1.00	0.20	0.69
Financials	1.17	1.00	1.33	83%	0%	0.67	1.00	0.17	-0.67	0.67
Health Care	1.00	1.00	1.20	40%	0%	1.00	1.60	1.20	1.00	1.14
Industrials	0.67	0.00	0.83	83%	33%	1.67	1.67	0.33	-0.17	0.71
Information Technology	1.00	1.33	1.33	33%	0%	0.67	1.33	0.00	-0.33	0.76
Materials	0.50	0.38	0.50	25%	38%	0.63	1.13	0.38	0.13	0.52
REITs	0.50	0.00	1.00	NA	0%	0.50	1.00	0.00	0.00	0.43
Utilities	0.67	1.33	1.00	67%	0%	1.33	1.33	1.33	1.00	1.14

Numbers: +2 (Very bullish, very attractive, very strong, not worried at all), +1 (bullish, attractive, strong, not very worried), 0 (neutral/don't know), -1 (bearish, expensive, weak, a little worried), -2 (very bearish, very expensive, very weak, very worried)

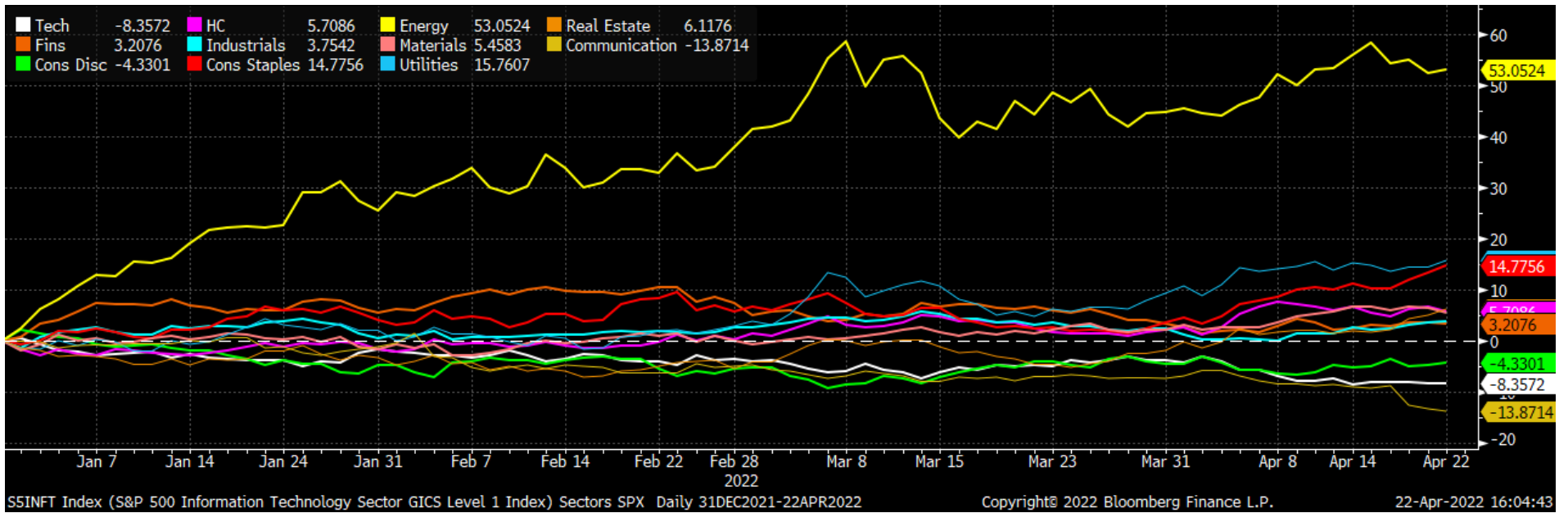
US Equity Strategy Sector Views

	Recommendation (6-12 Months)	Attributes
Comm Svcs	Underweight	Attractive valuations vs. the S&P 500 and ranks well on quality. But a pessimistic outlook from RBC's analyst teams and weaker ESG profile. ETF flows have also been weak. Some risk from Russia/Ukraine.
Cons Disc	Market Weight	Attractive valuations vs. the S&P 500, but a mixed quality profile, weak ETF flows, pessimistic outlook from RBC's analyst teams. ESG profile is also weak. Some risk from Russia/Ukraine.
Cons Staples	Market Weight	High quality relative to other defensives and strong ETF flows, but expensive valuations vs. the S&P 500, pessimistic outlook from RBC's analyst teams, weak ESG profile, high risk from Russia/Ukraine. Our analyst team believes EPS risks will become more apparent in 2H.
Energy	Market Weight	Attractive valuations vs. the S&P 500, strong EPS/sales revisions trends, less risk from Russia/Ukraine, and high dividend yield appeal. But low quality profile, and weak ESG profile. Optimistic outlook from RBC's analyst teams, though less so late 2021. ETF flows weakening.
Financials	Overweight	Attractive valuations vs. the S&P 500, strong EPS/sales revisions trends vs. other sectors, strong buyback trends, and high quality profile. Optimistic outlook from RBC's analyst teams. Mixed on ESG. Some risk from Russia/Ukraine. Weak ETF flows.
Health Care	Market Weight	Optimistic outlook from RBC's analyst, strong on ESG, less risk from Russia/Ukraine, strong ETF flows. But expensive valuations vs. the S&P 500, weak EPS/sales revisions vs. other sectors, and mixed quality profile.
Industrials	Market Weight	Modestly attractive valuations vs. the S&P 500, strong on ESG and less risk from Russia/Ukraine. But low quality profile, neutral/mixed outlook from RBC's analyst teams, and weak ETF flows.
Info Tech	Overweight	Modestly attractive valuations vs. the S&P 500, strong EPS/sales revisions trends vs. other sectors, high quality profile, optimistic outlook from RBC's analyst teams, strong on ESG, less risk from Russia/Ukraine, and strong ETF flows.
Materials	Market Weight	Attractive valuations vs. the S&P 500, strong EPS/sales revisions trends vs. other sectors, strengthening ETF flows, solid on ESG, less risk from Russia/Ukraine. But low quality profile, and neutral/mixed outlook from RBC's analyst teams.
REITs	Underweight	Strong EPS/sales revisions trends vs. other sectors, solid on ESG, less risk from Russia/Ukraine. But expensive valuations vs. the S&P 500, low quality profile, and weak ETF flows. Our analysts are neutral in their assessment but have gotten incrementally more constructive.
Utilities	Market Weight	Strong EPS/sales revisions trends vs. other sectors, high dividend yield appeal, strong on ESG, and strong ETF flows. But expensive valuations vs. the S&P 500, low quality profile, and neutral performance outlook from RBC's analyst teams.

Source: RBC US Equity Strategy, RBC Capital Markets

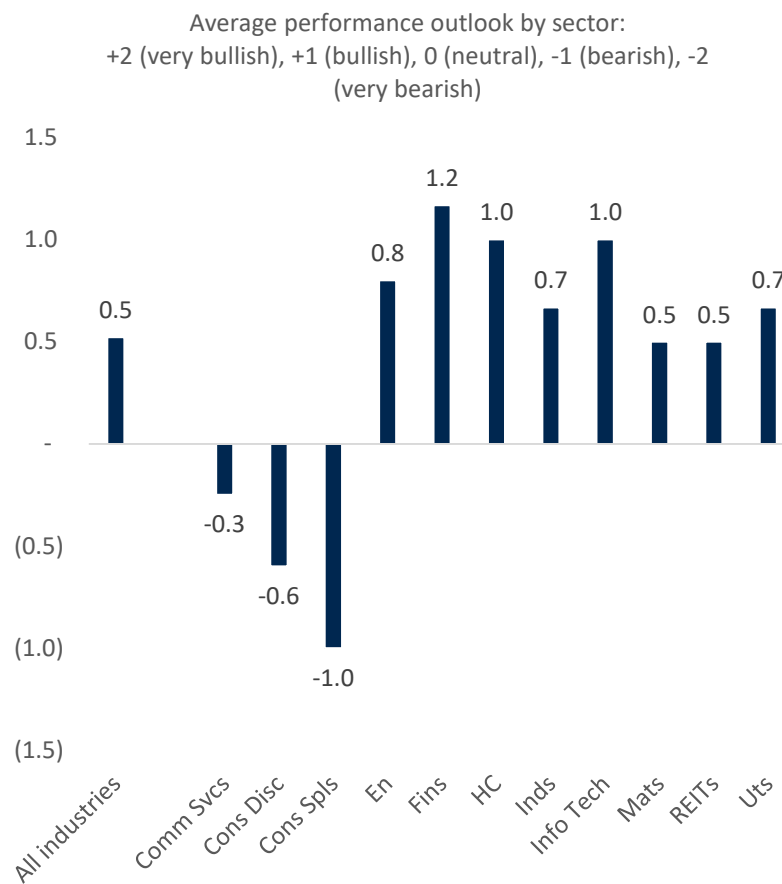
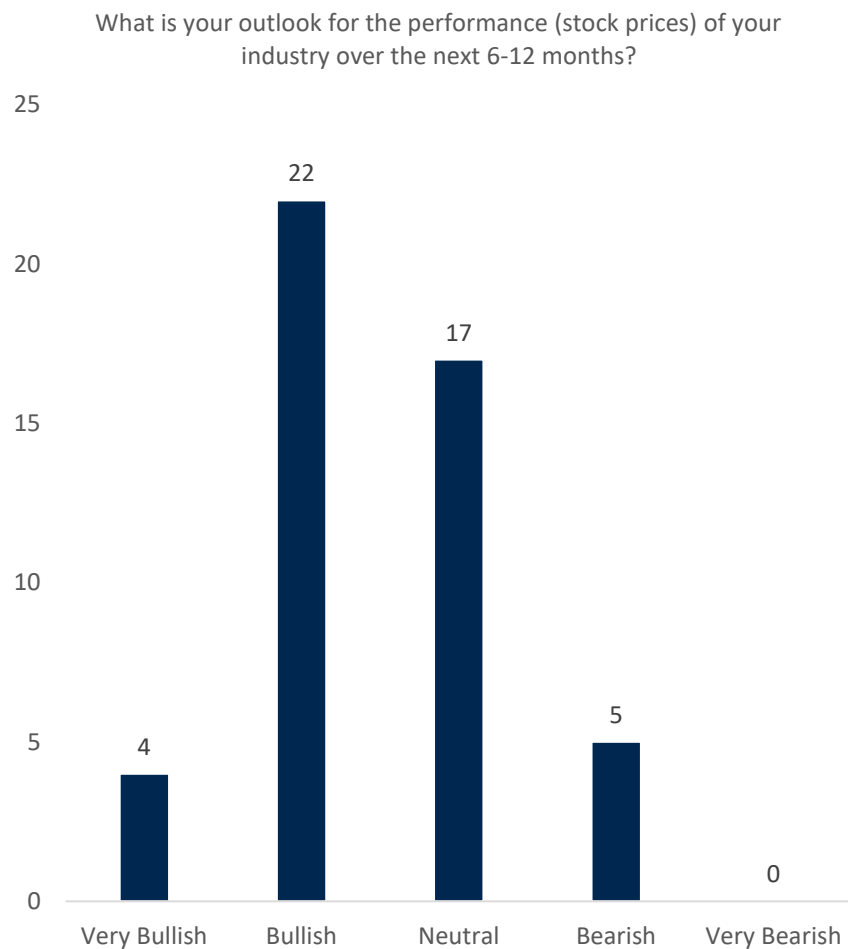
Energy Still in the Lead for the Year, but Relative Performance Has Stalled

These charts show sector performance relative to the S&P 500 YTD – when the line is rising, the sector is outperforming and when the line is falling, the sector is underperforming



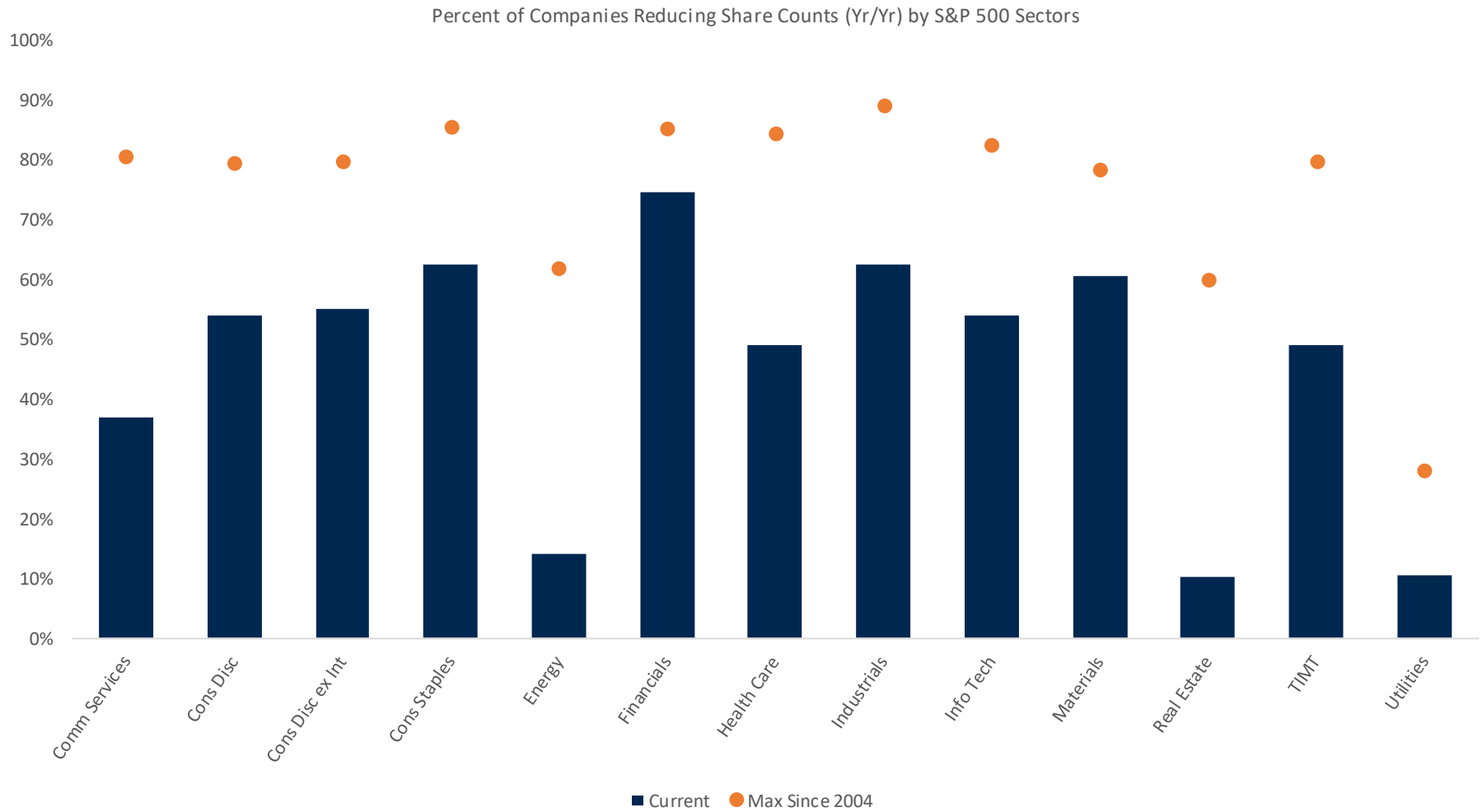
Source: RBC US Equity Strategy, Bloomberg; as of April, 22, 2022

Most RBC Analysts Have Been Constructive on Performance, Led by Fins, Health Care, & Tech



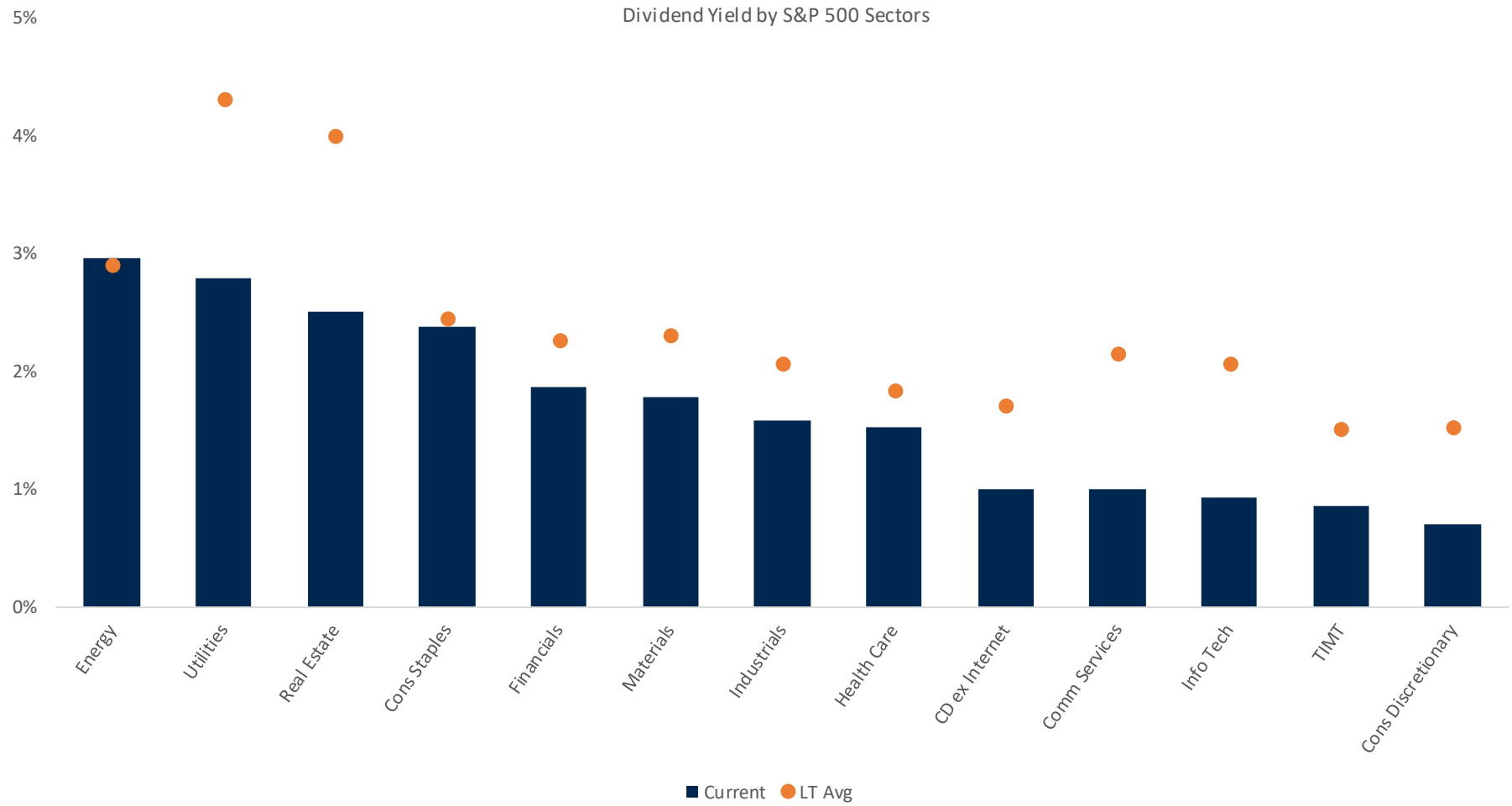
Source: RBC US Equity Strategy, RBC Capital Markets estimates; from the quarterly RBC equity analyst survey taken late March 2022

Financials Are the Biggest Participants in Share Buybacks



Source: RBC US Equity Strategy, S&P Capital IQ/ClariFi; as of 4Q21 (final)

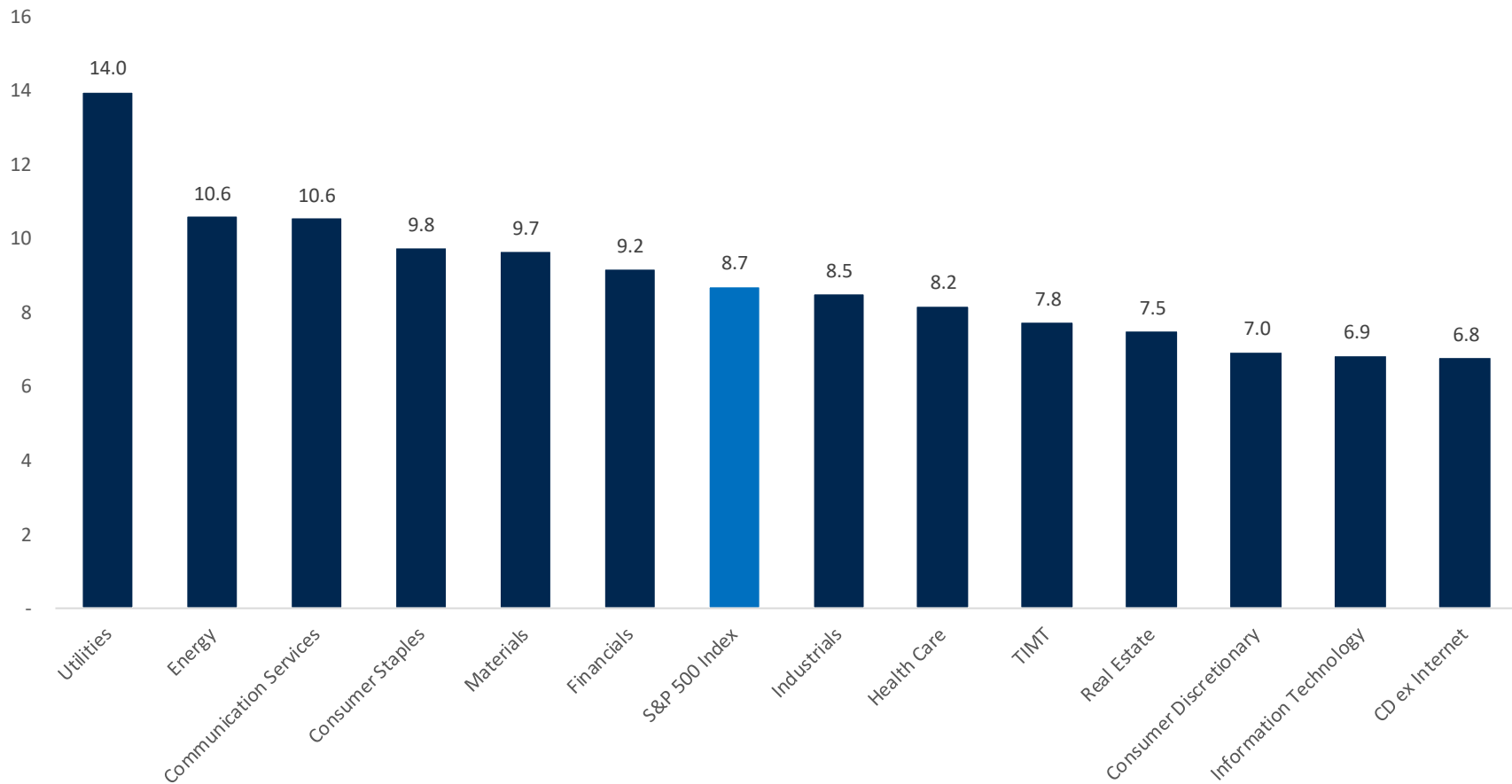
Dividend Yield by Sector



Source: RBC US Equity Strategy, S&P Capital IQ/Clarifi; as of April 18, 2022

Utilities Has the Highest Debt Maturity by Sector, Consumer Discretionary Has the Lowest

S&P 500 Sectors Ranked by Avg Debt Maturity (# Years, Includes Parent & Subsidiary Debt)



Source: RBC US Equity Strategy, Bloomberg; as April 14, 2022

Energy, Industrials, Cons Discretionary Boosting Full Year S&P 500 EPS Expectations for 2022

2022 Estimates			
	Revenue Growth	Op Margin	EPS Growth
Communication Services	8.2%	23.5	2.7%
Consumer Discretionary	12.1%	10.5	19.8%
Consumer Staples	3.9%	9.2	3.8%
Energy	25.0%	15.7	86.2%
Financials	2.7%	NA	-13.1%
Real Estate	13.9%	NA	8.8%
Health Care	7.1%	13.5	6.7%
Industrials	11.1%	13.9	30.7%
Information Technology	9.6%	32.1	6.9%
Materials	8.9%	17.9	11.1%
Utilities	-1.4%	20.7	4.3%
S&P 500	8.8%	16.5	8.6%

2023 Estimates			
	Revenue Growth	Op Margin	EPS Growth
Communication Services	5.5%	24.7	16.2%
Consumer Discretionary	10.4%	11.2	25.1%
Consumer Staples	3.7%	9.4	8.0%
Energy	-7.2%	8.3	-9.4%
Financials	7.2%	NA	15.0%
Real Estate	6.8%	NA	6.0%
Health Care	3.1%	12.1	-1.8%
Industrials	7.1%	14.8	20.6%
Information Technology	8.0%	32.4	12.2%
Materials	-0.7%	17.1	-4.5%
Utilities	2.7%	20.2	7.7%
S&P 500	4.8%	16.0	9.7%

Tech & Comm Svcs Propping Up Margin Expectations on the Sell-Side

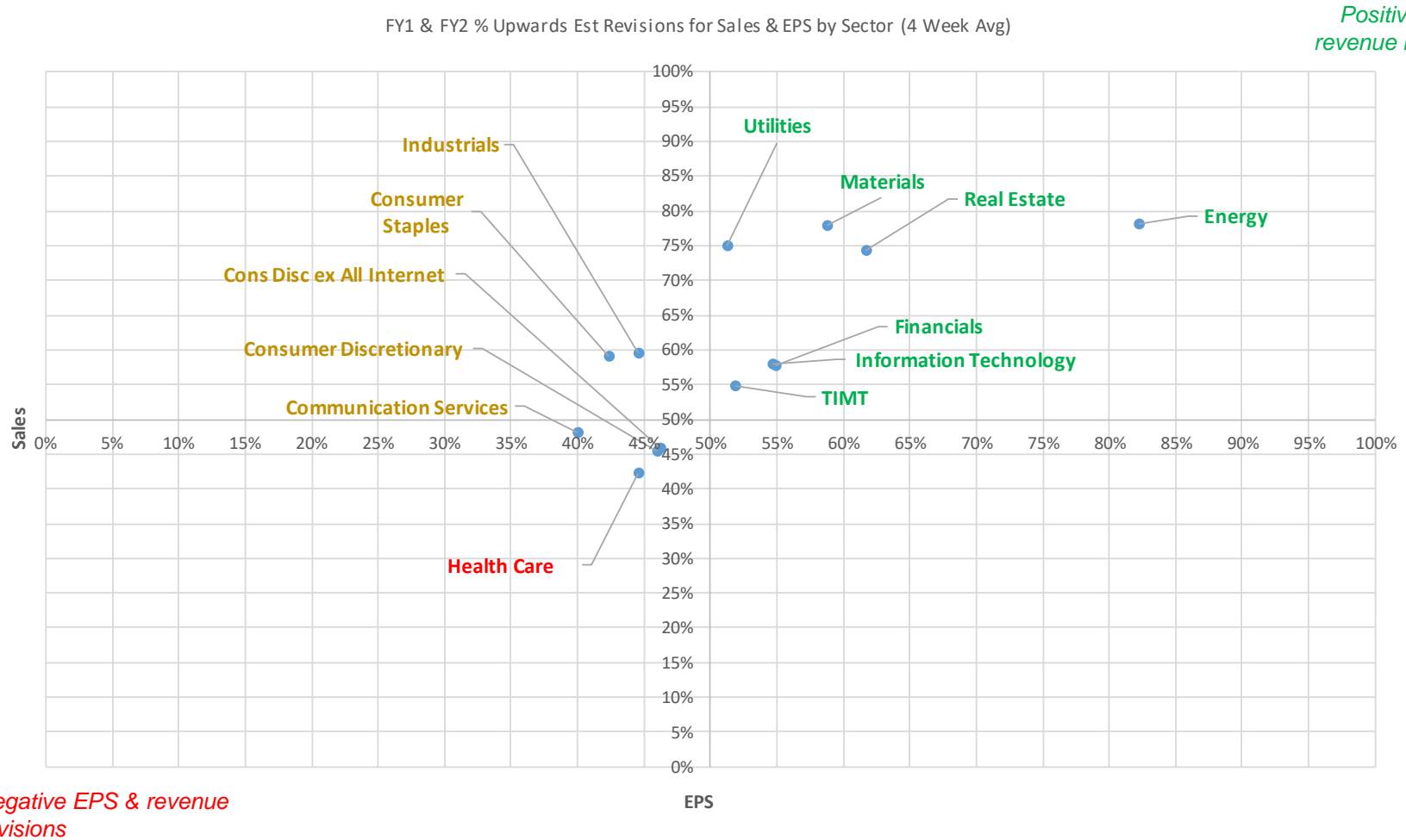
EPS Growth - T12M YoY%													
	03/31/2021	06/30/2021	09/30/2021	12/31/2021	03/31/2022	06/30/2022	09/30/2022	12/31/2022	03/31/2023	06/30/2023	09/30/2023	12/31/2023	Trend
Communication Services	9.5%	31.3%	39.1%	39.9%	24.0%	9.0%	3.5%	2.7%	7.6%	12.4%	14.8%	16.2%	
Consumer Discretionary	-6.0%	43.6%	42.9%	53.9%	21.9%	2.3%	13.1%	19.8%	33.8%	37.9%	31.6%	25.1%	
Consumer Staples	4.7%	11.2%	10.5%	10.6%	8.2%	3.8%	3.6%	3.8%	5.2%	6.9%	7.9%	8.0%	
Energy	-105.6%	3.1%	458.9%	-2500.0%	-3793.7%	432.3%	188.2%	86.2%	43.0%	11.0%	-3.6%	-9.4%	
Financials	11.7%	59.2%	74.6%	69.1%	26.4%	-3.2%	-10.5%	-13.1%	-3.8%	6.0%	11.0%	15.0%	
Real Estate	-4.6%	4.3%	10.6%	14.2%	16.8%	11.8%	9.7%	8.8%	6.6%	7.5%	6.1%	6.0%	
Health Care	11.9%	17.1%	20.4%	23.8%	18.6%	14.7%	10.1%	6.7%	4.7%	2.0%	0.4%	-1.8%	
Industrials	-48.7%	-6.1%	34.1%	73.7%	90.2%	47.1%	36.2%	30.7%	31.6%	30.1%	25.2%	20.6%	
Information Technology	18.5%	28.9%	37.1%	36.9%	27.8%	18.0%	9.7%	6.9%	8.1%	10.3%	12.3%	12.2%	
Materials	11.3%	53.2%	79.5%	87.4%	73.6%	42.7%	23.5%	11.1%	3.1%	-1.9%	-3.9%	-4.5%	
Utilities	0.1%	0.1%	-0.2%	2.1%	4.7%	3.0%	3.9%	4.3%	2.9%	5.0%	6.3%	7.7%	
S&P 500	-0.4%	25.9%	38.8%	46.3%	34.1%	18.1%	12.2%	8.6%	10.2%	11.0%	10.5%	9.7%	

Revenue Growth - T12M YoY%													
	03/31/2021	06/30/2021	09/30/2021	12/31/2021	03/31/2022	06/30/2022	09/30/2022	12/31/2022	03/31/2023	06/30/2023	09/30/2023	12/31/2023	Trend
Communication Services	5.8%	12.7%	15.4%	16.4%	15.0%	11.0%	8.9%	8.2%	7.2%	6.9%	6.4%	5.5%	
Consumer Discretionary	3.2%	15.4%	18.9%	20.0%	16.5%	10.9%	11.4%	12.1%	13.7%	13.8%	12.0%	10.4%	
Consumer Staples	3.3%	5.7%	7.2%	7.5%	7.4%	5.8%	4.6%	3.9%	3.7%	3.8%	3.9%	3.7%	
Energy	-32.8%	-6.9%	18.1%	56.4%	72.4%	56.2%	43.9%	25.0%	12.8%	2.3%	-4.4%	-7.2%	
Financials	1.5%	4.7%	7.8%	9.5%	7.5%	5.2%	3.6%	2.7%	4.2%	5.8%	6.6%	7.2%	
Real Estate	-3.7%	1.6%	6.2%	11.6%	16.4%	15.8%	15.7%	13.9%	10.9%	9.4%	7.6%	6.8%	
Health Care	7.9%	12.5%	14.0%	14.5%	15.2%	12.3%	10.0%	7.1%	4.5%	3.1%	2.8%	3.1%	
Industrials	-11.8%	0.7%	8.9%	14.9%	16.9%	12.5%	11.6%	11.1%	10.8%	9.9%	8.2%	7.1%	
Information Technology	11.1%	14.7%	18.2%	18.3%	15.5%	12.6%	10.5%	9.6%	9.2%	9.0%	8.6%	8.0%	
Materials	-1.9%	11.1%	20.9%	27.1%	28.7%	21.6%	15.0%	8.9%	4.5%	1.3%	-0.4%	-0.7%	
Utilities	1.1%	5.1%	8.3%	14.7%	9.1%	7.0%	6.0%	-1.4%	0.2%	0.5%	-0.1%	2.7%	
S&P 500	0.0%	8.3%	13.2%	17.0%	16.9%	13.2%	11.2%	8.8%	7.6%	6.5%	5.3%	4.8%	

Operating Margins - Quarterly													
	03/31/2021	06/30/2021	09/30/2021	12/31/2021	03/31/2022	06/30/2022	09/30/2022	12/31/2022	03/31/2023	06/30/2023	09/30/2023	12/31/2023	Trend
Communication Services	24.69	25.20	23.83	23.26	22.38	23.35	23.81	23.53	24.72	25.16	25.26	24.67	
Consumer Discretionary	11.00	10.96	10.85	8.24	8.95	10.98	12.01	10.47	11.03	12.30	12.84	11.24	
Consumer Staples	9.29	9.71	10.81	8.40	9.05	9.27	9.46	9.20	9.17	9.61	9.70	9.44	
Energy	6.79	8.84	11.80	11.88	15.52	17.56	16.83	15.72	11.03	11.37	11.88	8.25	
Health Care	14.58	13.93	14.44	13.17	14.17	14.11	14.31	13.49	13.18	13.17	13.45	12.06	
Industrials	9.89	12.90	12.92	11.58	11.22	13.86	14.40	13.95	13.81	15.47	15.52	14.77	
Information Technology	29.98	30.39	30.18	32.05	30.28	30.17	31.10	32.06	31.06	30.99	31.85	32.39	
Materials	16.20	20.43	18.31	17.65	18.20	19.90	18.58	17.86	17.49	18.90	17.82	17.12	
Utilities	19.37	15.05	21.14	13.16	23.18	21.91	25.14	20.74	22.74	21.56	24.86	20.25	
S&P 500	15.36	15.78	16.18	15.03	15.77	16.53	16.96	16.50	16.01	16.42	16.82	16.01	

Source: RBC US Equity Strategy, Bloomberg; as of April 20, 2022; 2022-2023 are bottom-up sell-side consensus forecasts as tracked by Bloomberg

Energy & Materials, Plus REITs, Seeing the Strongest Revisions Lately; HC Remains Weakest

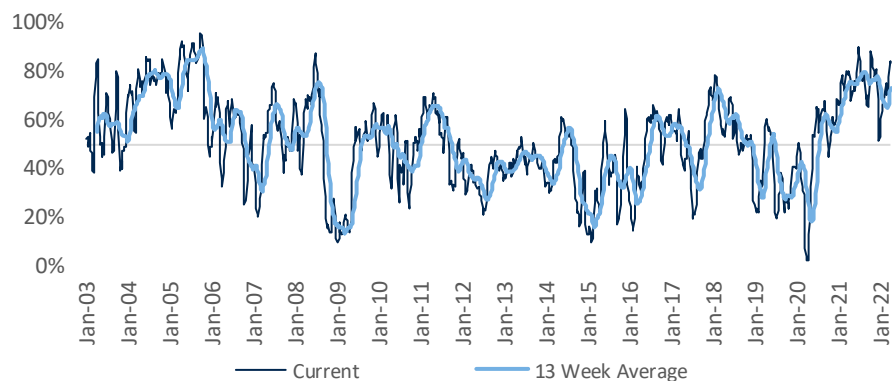


For REITs, FFO/share revisions are used instead of EPS revisions.
 Source: RBC US Equity Strategy, S&P Capital IQ/ClariFI, CIQ estimates; as of April 15, 2022

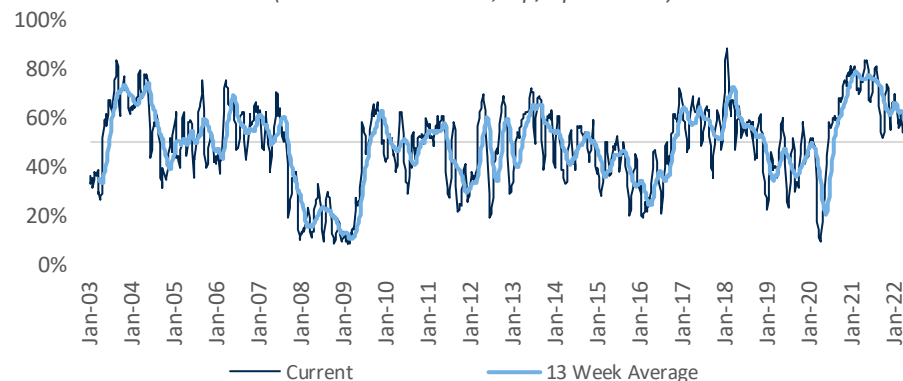
Large Cap Sectors / Revisions & Earnings

Within Cyclical, Commodity Sectors Are Strengthening, Financials & Industrials Are Weakening

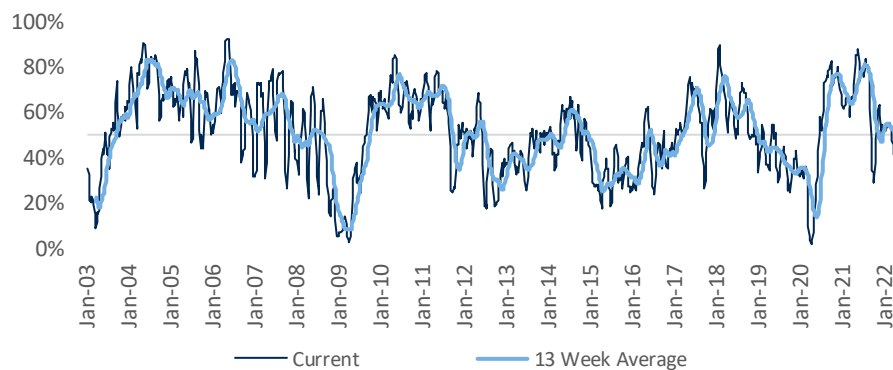
S&P 500 Energy: % Upward EPS Revisions
(FY1 & FY2 Revisions, Up/Up + Down)



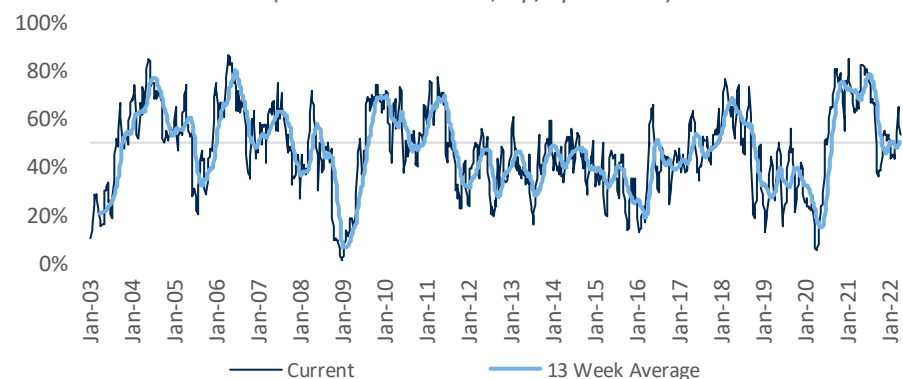
S&P 500 Financials: % Upward EPS Revisions
(FY1 & FY2 Revisions, Up/Up + Down)



S&P 500 Industrials: % Upward EPS Revisions
(FY1 & FY2 Revisions, Up/Up + Down)

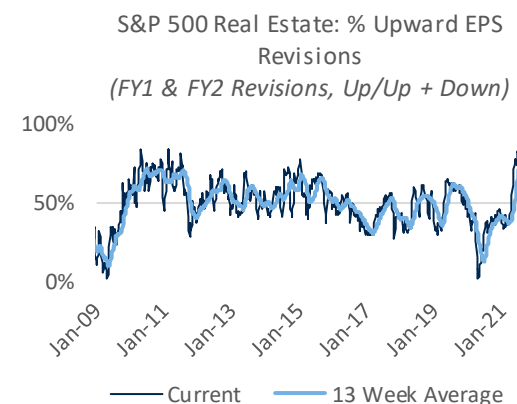
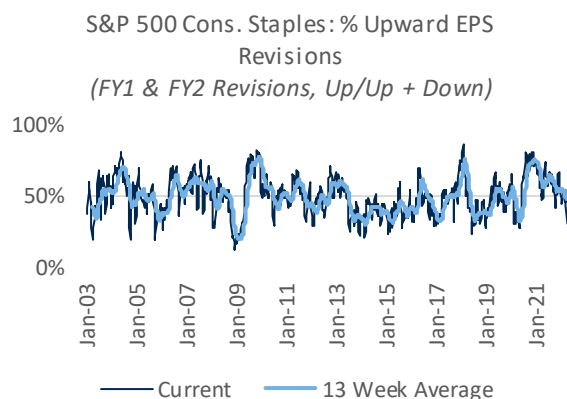
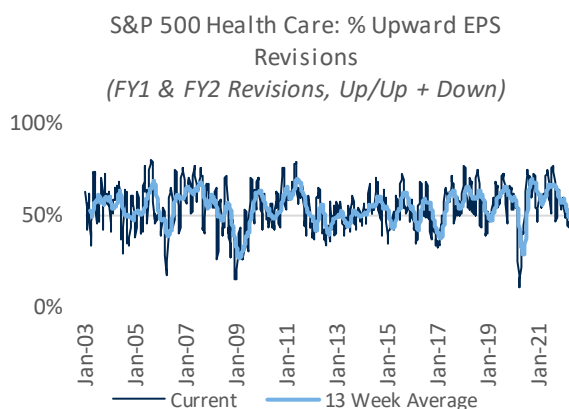
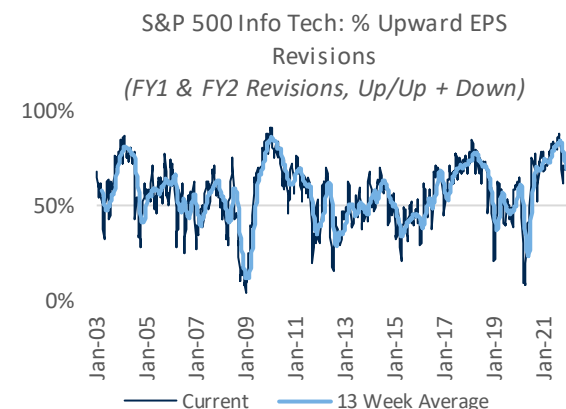
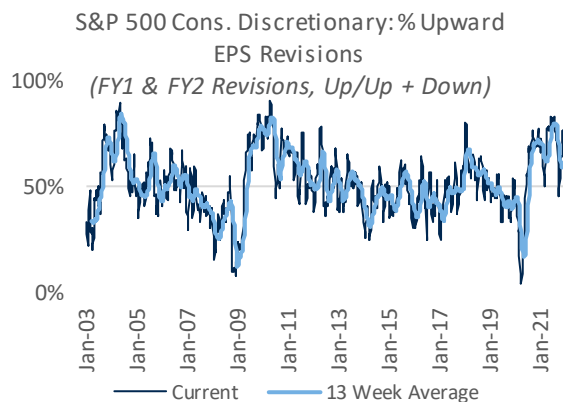
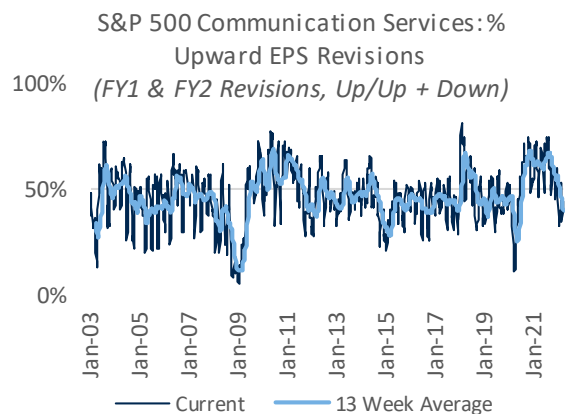


S&P 500 Materials: % Upward EPS Revisions
(FY1 & FY2 Revisions, Up/Up + Down)



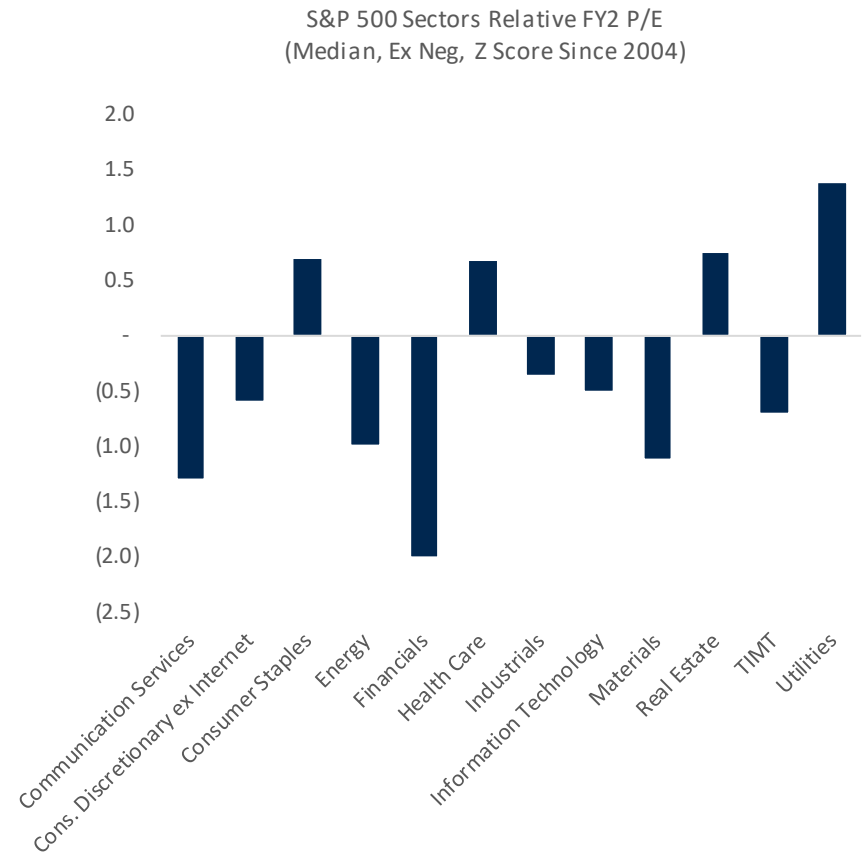
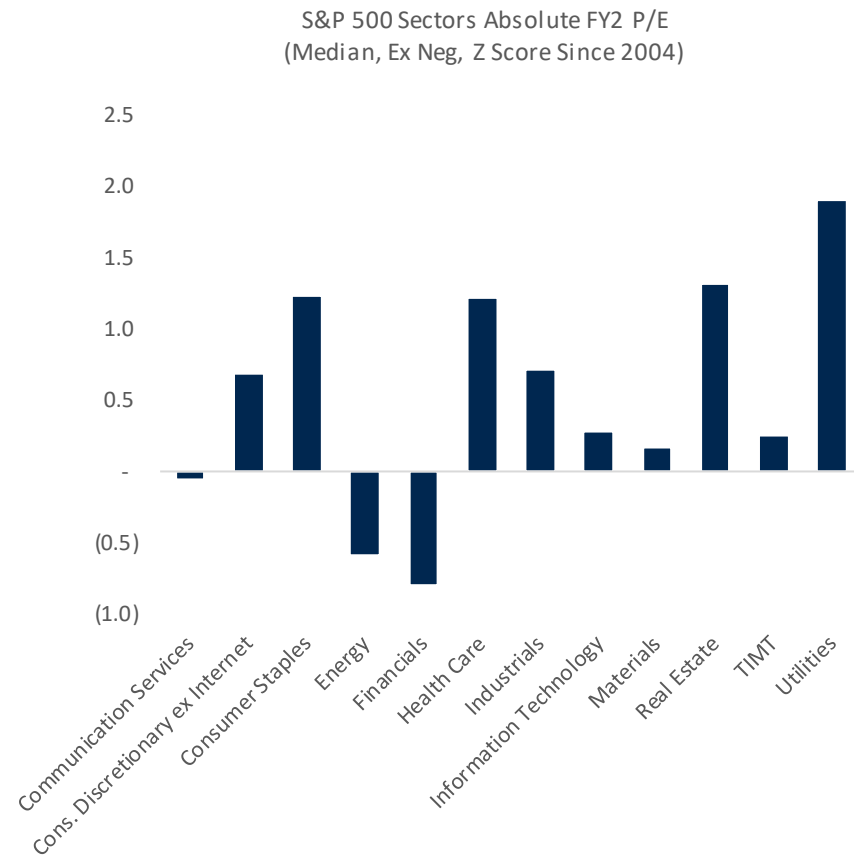
For REITs, FFO/share revisions are used instead of EPS revisions.
Source: RBC US Equity Strategy, S&P Capital IQ/ClariFI, CIQ estimates; as of April 15, 2022

Among Secular Growth & Defensives, Communication Svcs Weakest on EPS Revisions



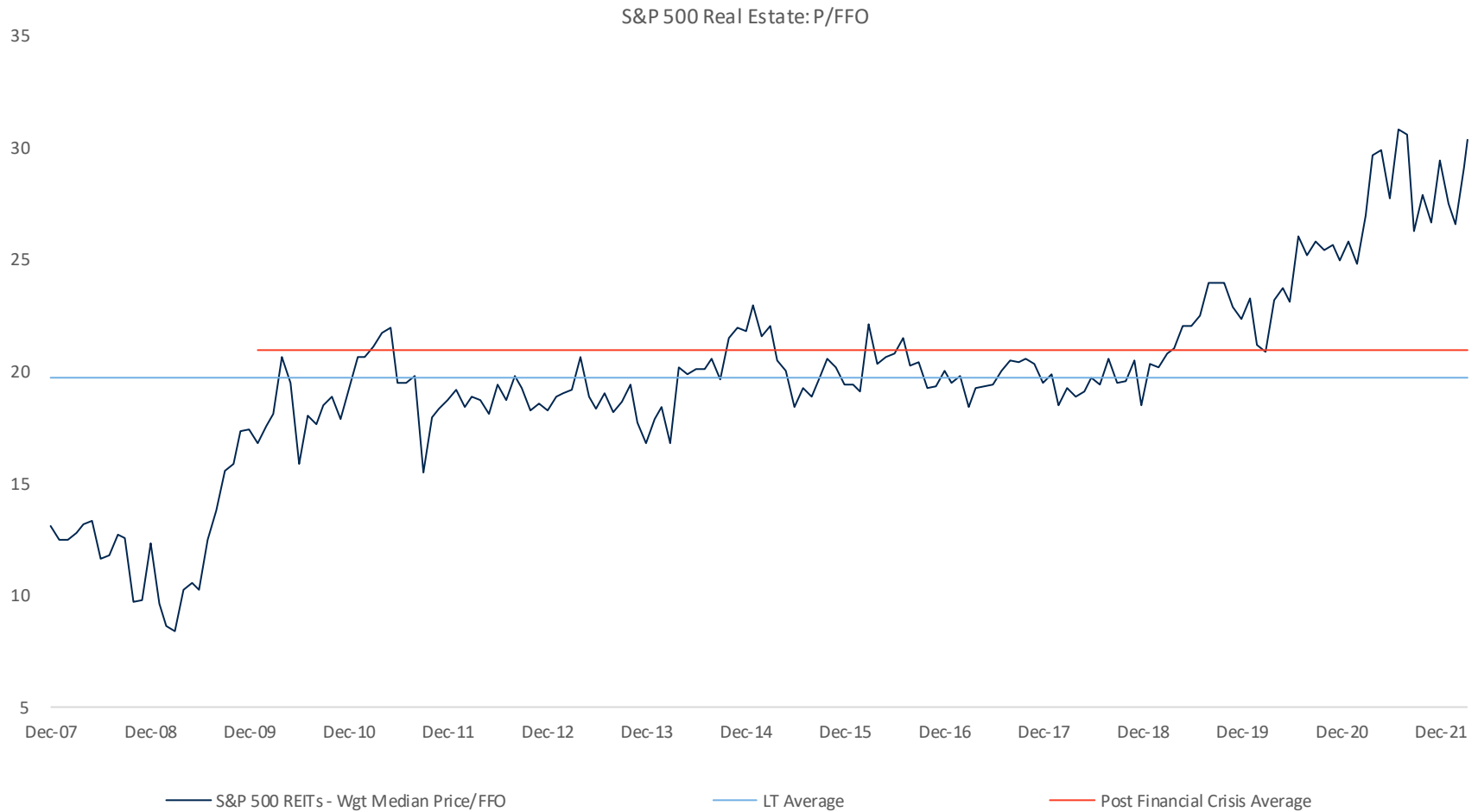
For REITs, FFO/share revisions are used instead of EPS revisions.
Source: RBC US Equity Strategy, S&P Capital IQ/ClariFI, CIQ estimates; as of April 15, 2022

Defensives Expensive, Commodities & Fins Attractive, Growth Sectors Attractive on Relative P/E



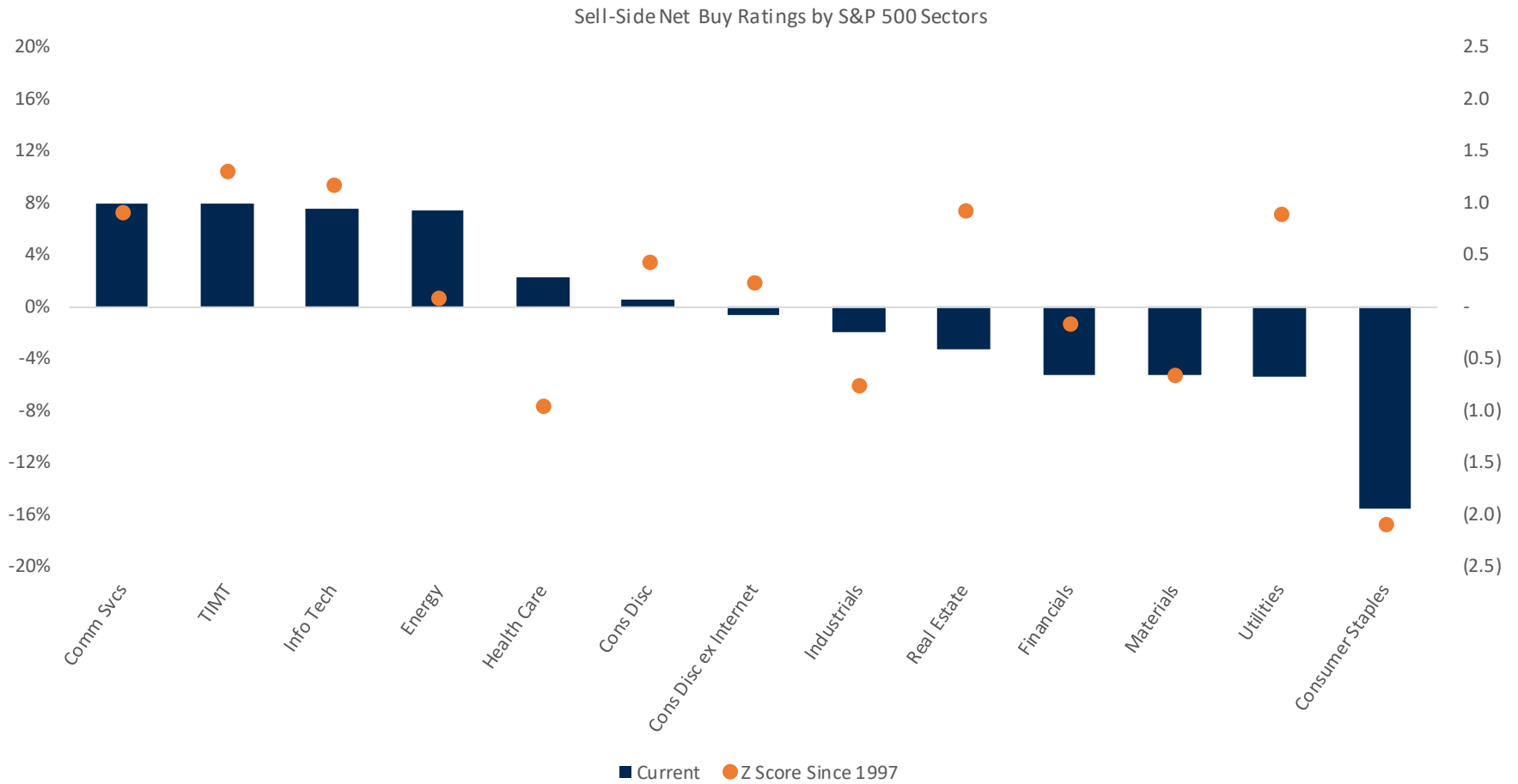
Source: RBC US Equity Strategy, S&P Capital IQ/ClariFI, Compustat, CIQ estimates, IBES estimates; as of April 14, 2022

REITs Remain Highly Expensive Relative to History



Source: RBC US Equity Strategy, S&P Capital IQ/ClariFI, Compustat, CIQ estimates, IBES estimates; as of April 14, 2022

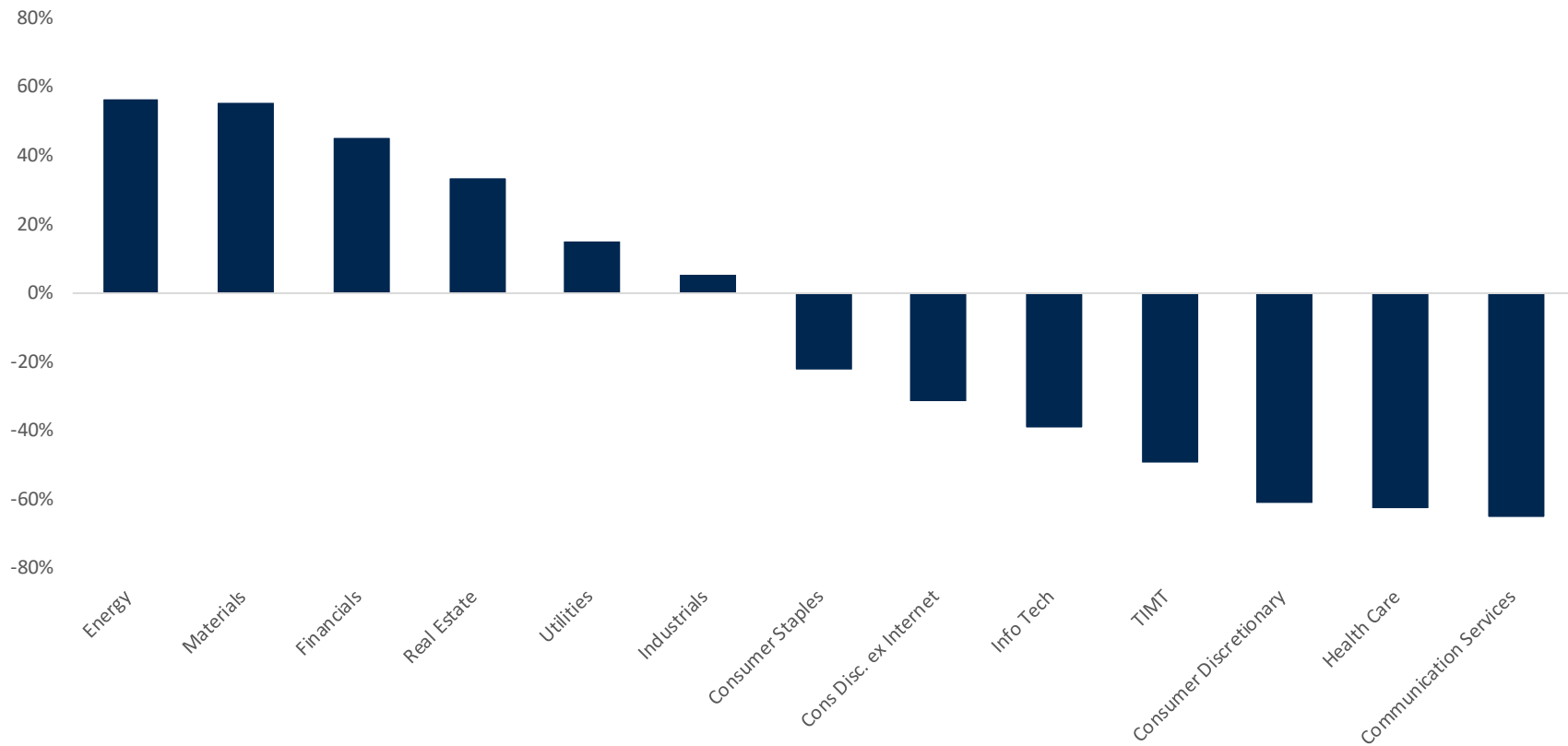
TIMT Most in Favor, Staples Least Favored



Source: RBC US Equity Strategy, S&P Capital IQ/ClariFi; as of April 14, 2022

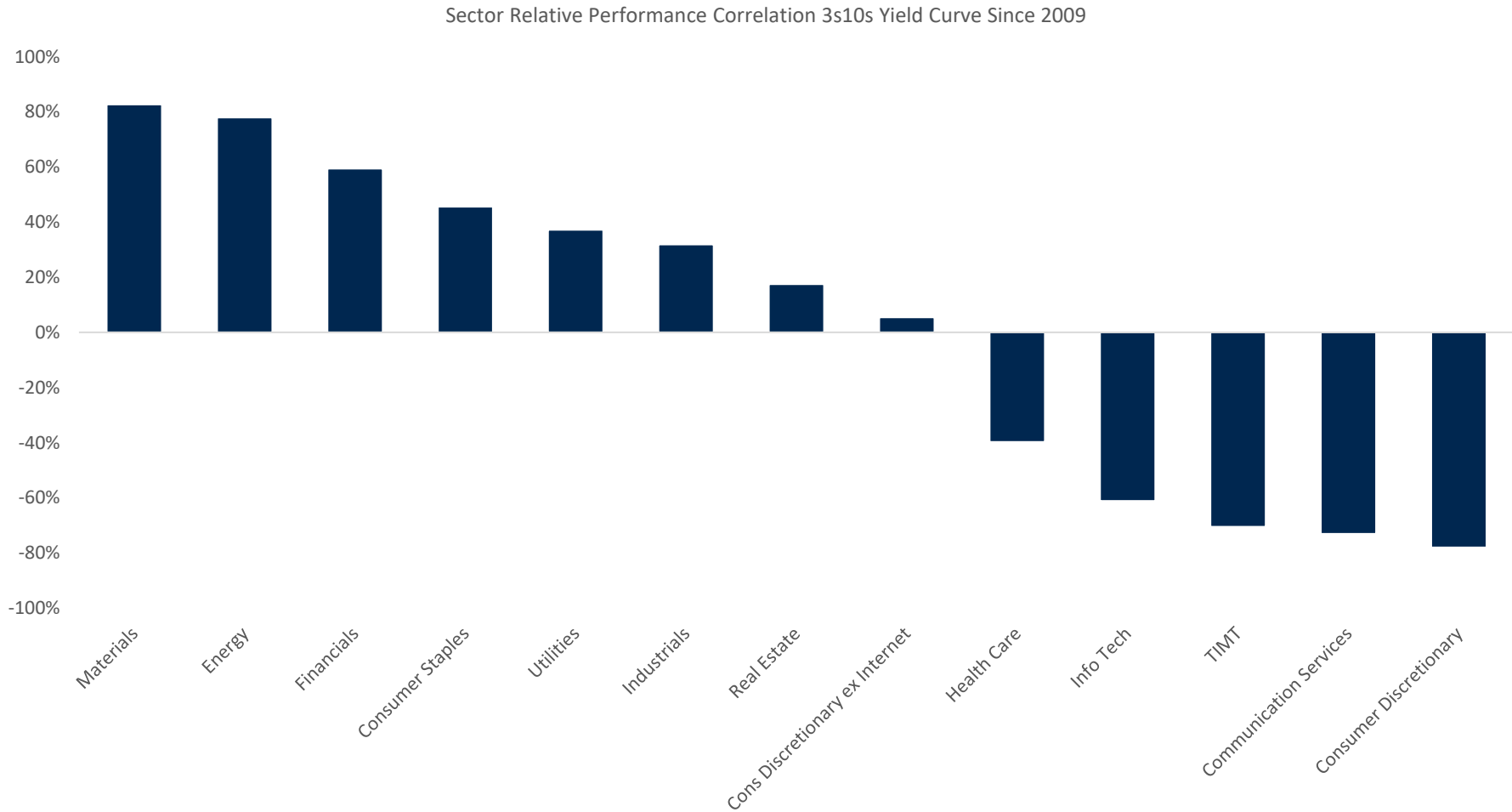
Commodities & REITs Tend to Lead When Inflation Expectations Are Rising, Growth Sectors Lag

Correlations of S&P 500 Sector Performance (Rel to S&P 500) With Next 5-Years Inflation Expectations Since 2004



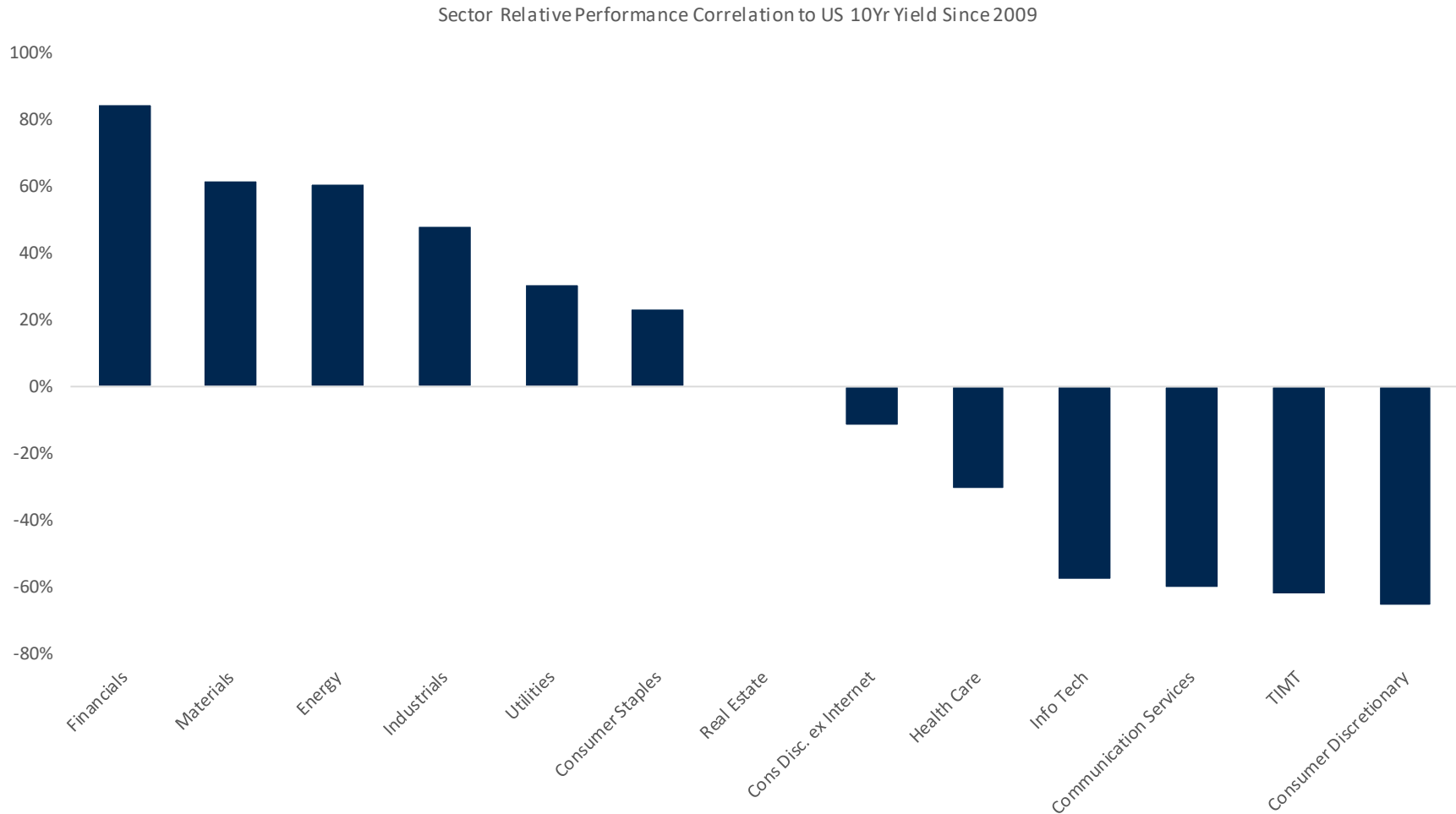
Source: RBC US Equity Strategy, Haver, S&P Capital IQ/ClariFi; As of March 2022.

Commodity Sectors Tend To Outperform When the Yield Curve Steepens, Growth Sectors Lag



Source: RBC US Equity Strategy, Bloomberg, S&P Capital IQ/ClariFi; as of March 2022

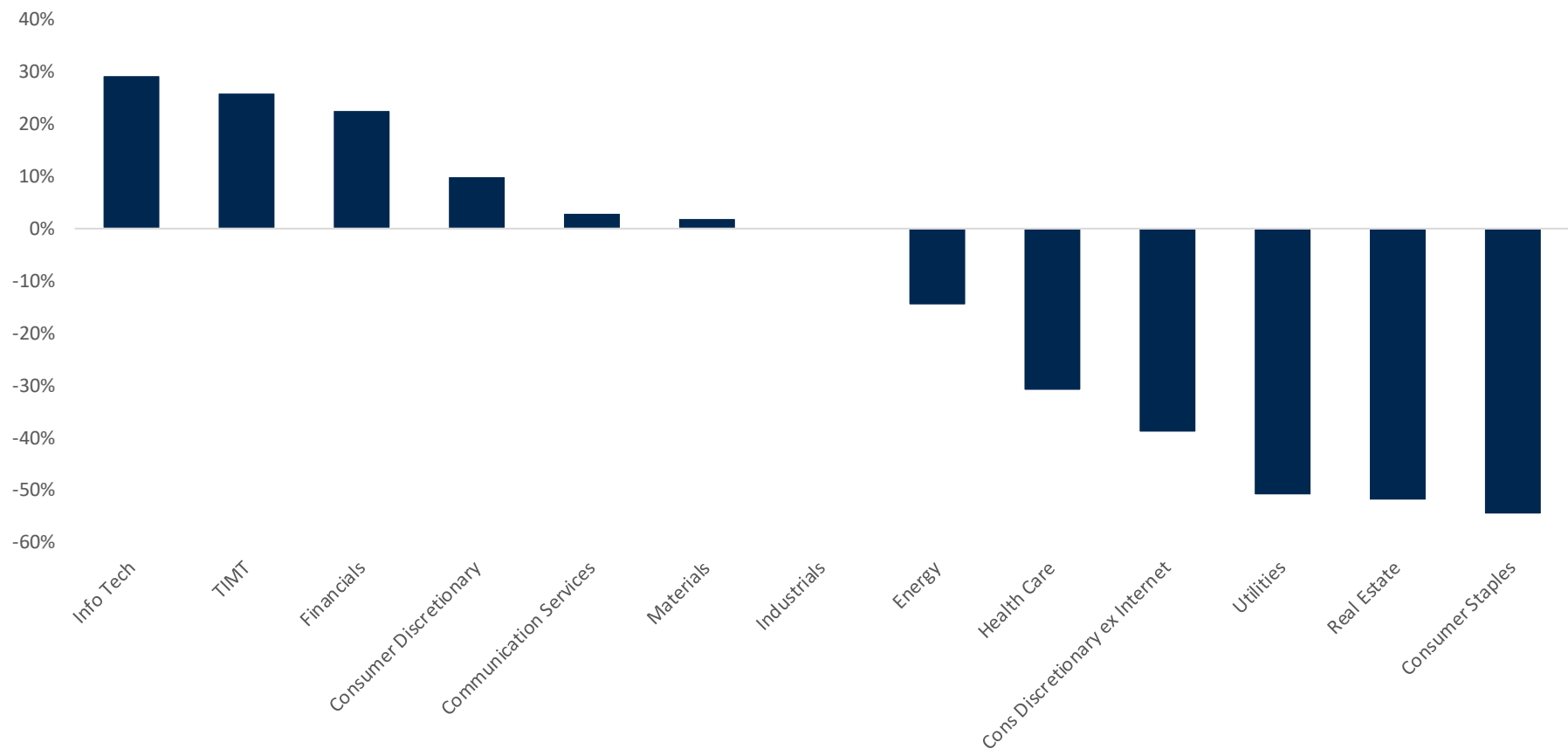
Cyclicals Trend Closely With Shifts in 10-Year Yields, Growth Sectors Move Inversely



Source: RBC US Equity Strategy, Bloomberg, S&P Capital IQ/ClariFi; as of March 2022

Classic Defensives, Consumer Discretionary, Most Resilient in an ISM Mfg Downtrend

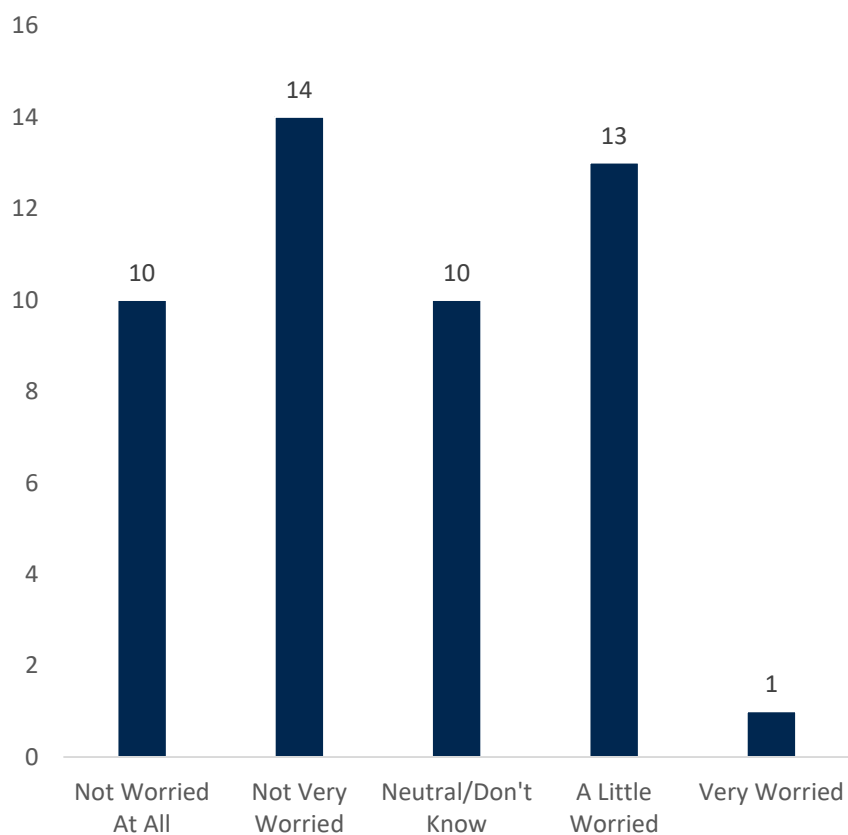
Correlation Between S&P 500 Sector Performance (Relative to the S&P 500) & ISM Mfg Since 2010



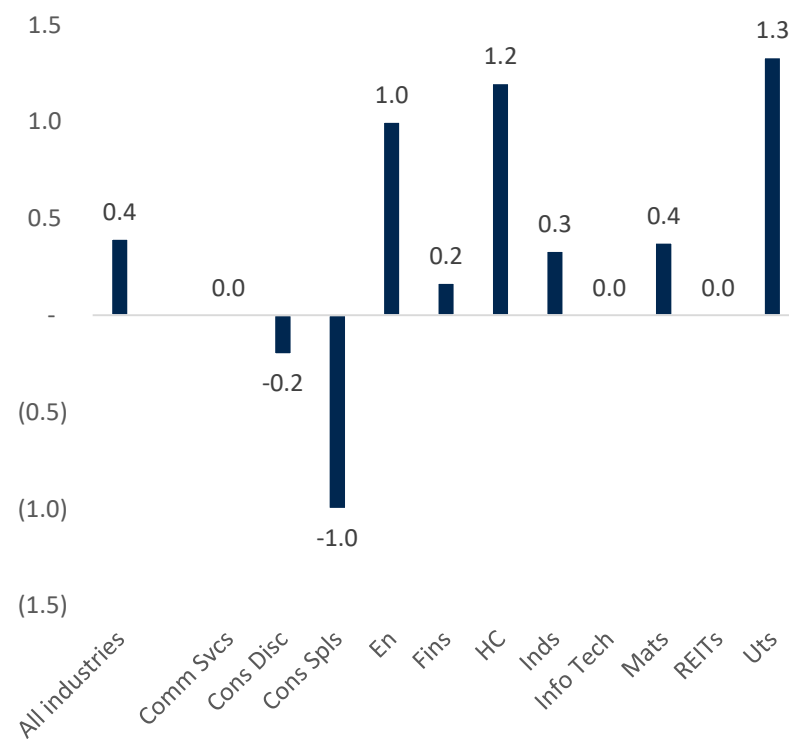
Source: RBC US Equity Strategy, Bloomberg; as of March 2022

Most of Our Analysts Not Concerned About Direct Russia/Ukraine Impacts

When thinking about the outlook for the industry you cover, how concerned are you about the Russian invasion of Ukraine in terms of direct impacts?



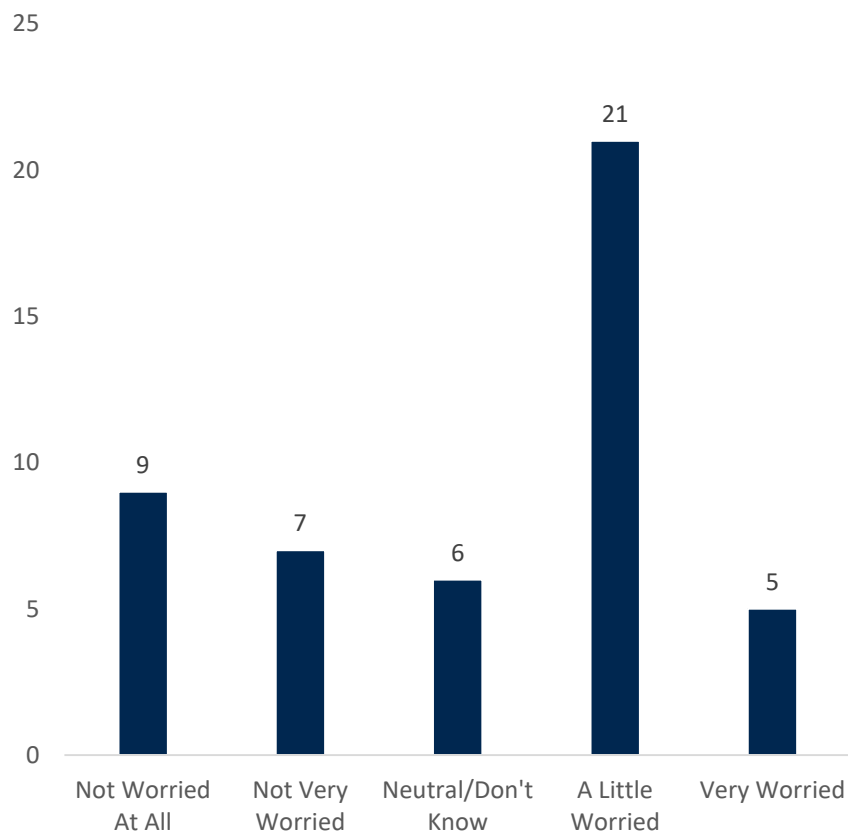
Average view on direct impacts of Russian invasion of Ukraine by sector: +2 (not worried at all), +1 (not very worried), 0 (neutral/don't know), -1 (a little worried), -2 (very worried)



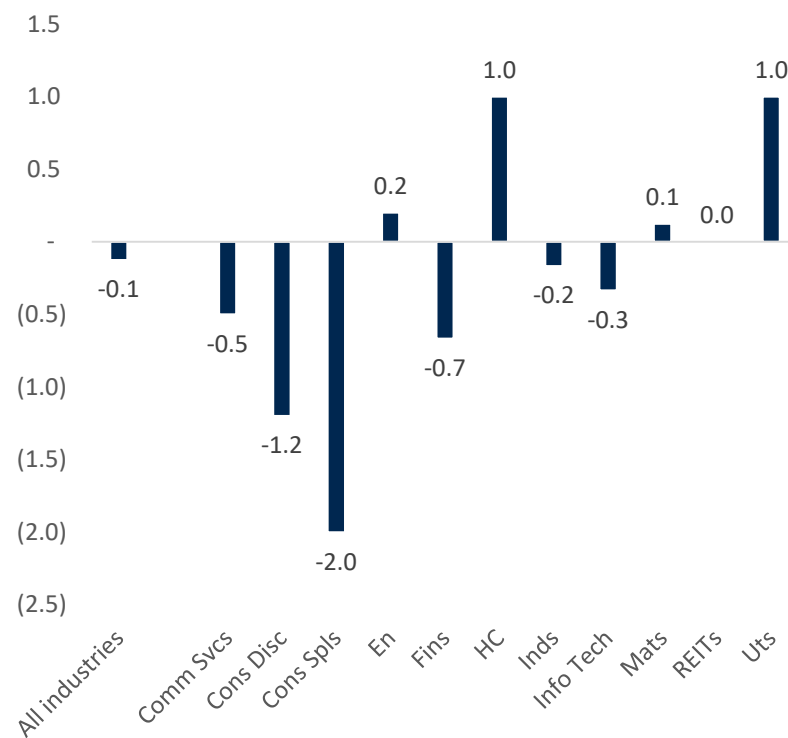
Source: RBC US Equity Strategy, RBC Capital Markets estimates; from the late-March 2022 RBC equity analyst survey; analysts were asked to assume the conflict continues for quite some time and is not resolved soon

Most of Our Analysts Have Been Worried About Indirect Russia/Ukraine Impacts

When thinking about the outlook for the industry you cover, how concerned are you about the Russian invasion of Ukraine in terms of indirect impacts?



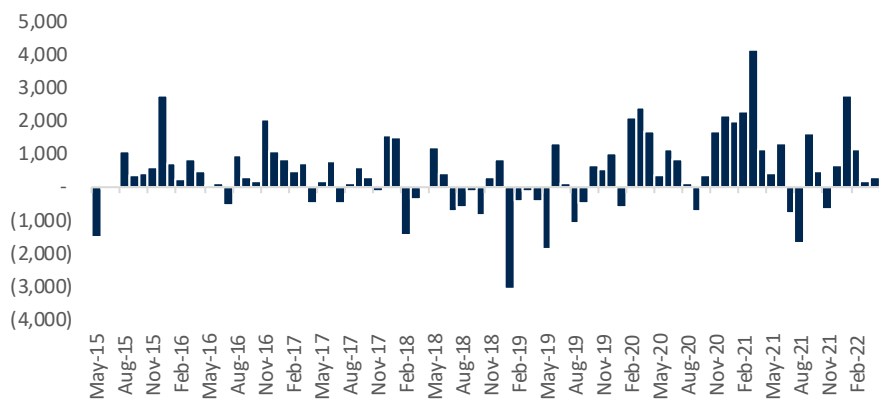
Average view on indirect impacts of Russian invasion of Ukraine by sector: +2 (not worried at all), +1 (not very worried), 0 (neutral/don't know), -1 (a little worried), -2 (very worried)



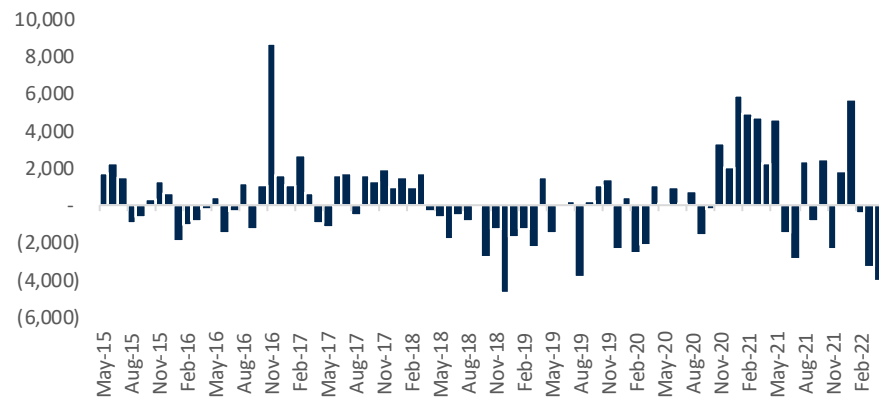
Source: RBC US Equity Strategy, RBC Capital Markets estimates; from the late-March 2022 RBC equity analyst survey; analysts were asked to assume the conflict continues for quite some time and is not resolved soon

Within Commodities/Cyclicals, Materials Flows Strongest Lately While Fins & Industrials Weaker

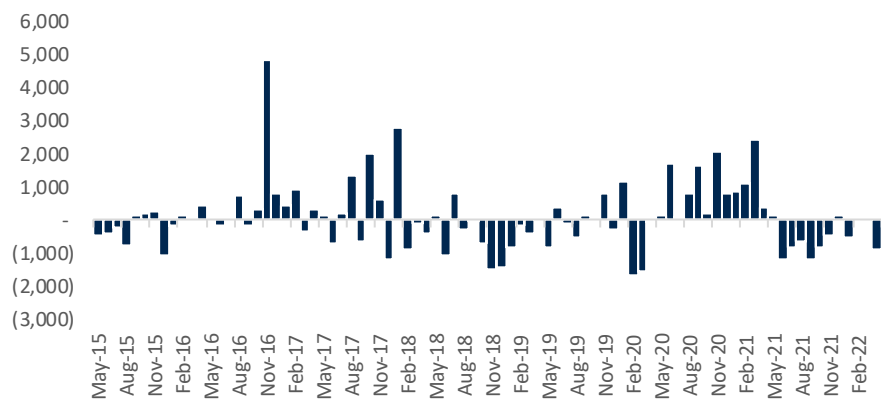
Energy ETF Flows (Monthly)



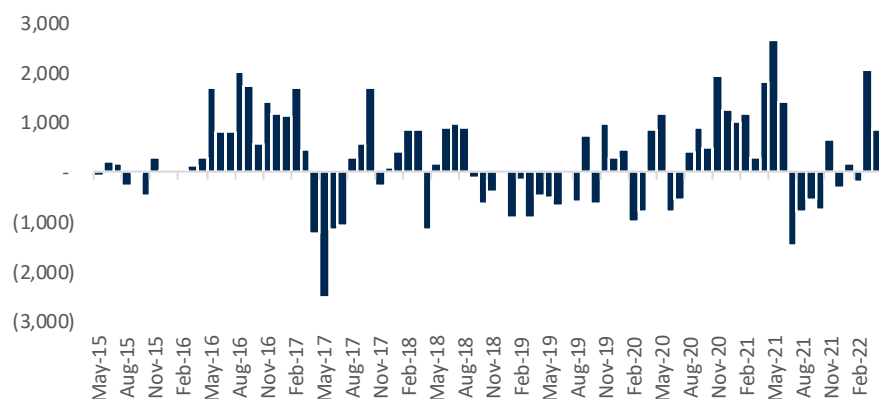
Financials ETF Flows (Monthly)



Industrials ETF Flows (Monthly)



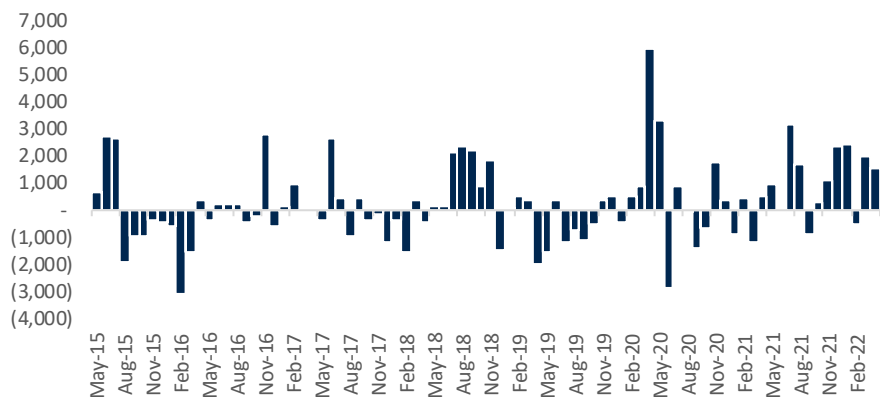
Materials ETF Flows (Monthly)



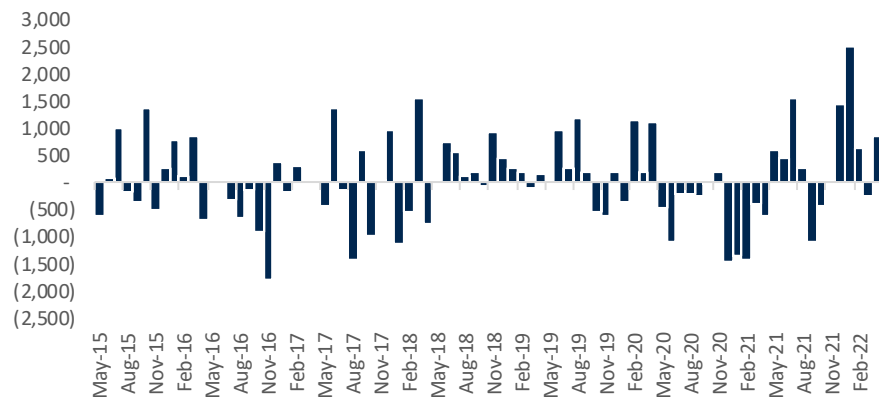
Source: RBC US Equity Strategy, Bloomberg; monthly with preliminary April 2022 data point as of April 19, 2022

Within Defensives, HC, Staples & Utilities Flows Strong, REITs Weaker

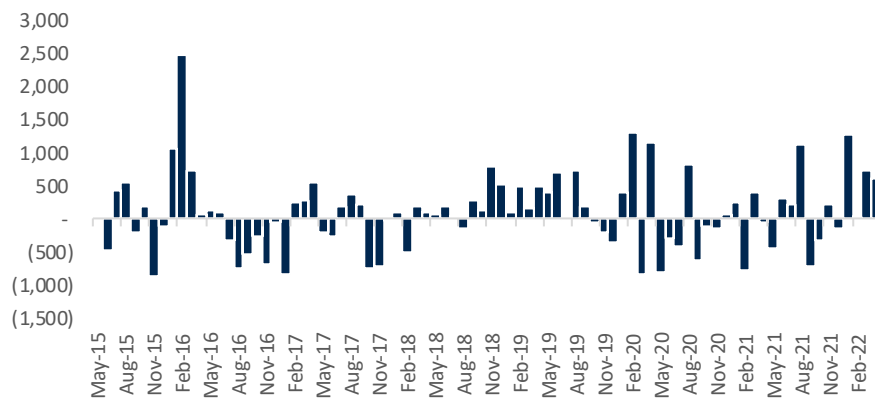
Health Care ETF Flows (Monthly)



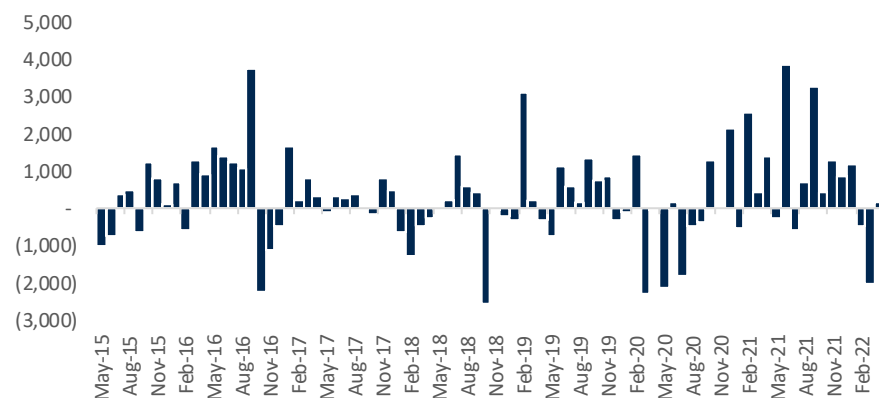
Cons. Staples ETF Flows (Monthly)



Utilities ETF Flows (Monthly)



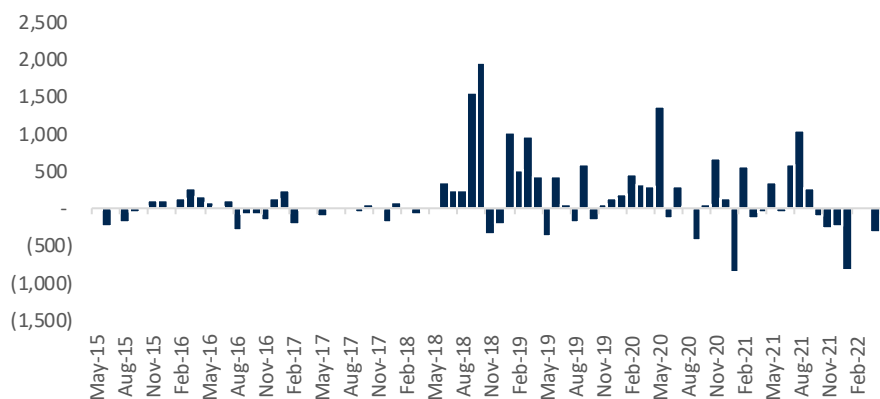
Real Estate ETF Flows (Monthly)



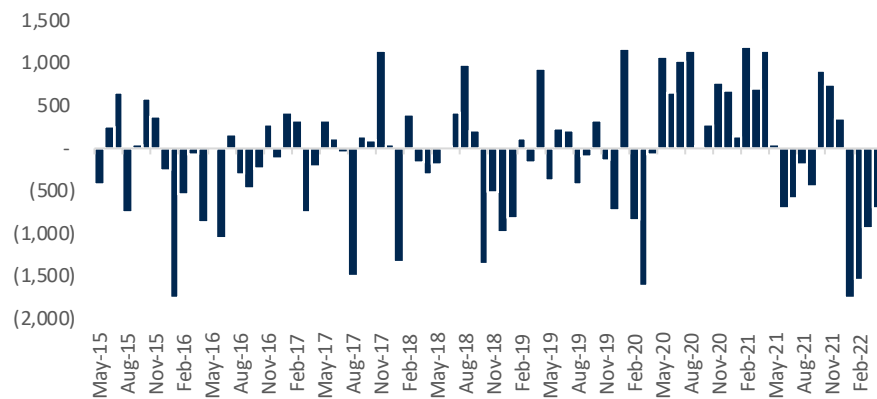
Source: RBC US Equity Strategy, Bloomberg; monthly with preliminary April 2022 data point as of April 19, 2022

Within Growth, Tech Flows Still Strong but Comm & Consumer Discretionary Have Been Weak

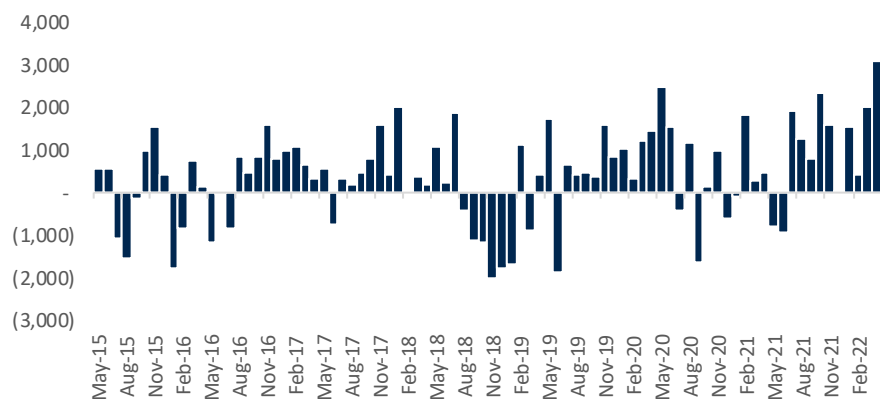
Communication Services ETF Flows (Monthly)



Cons. Discretionary ETF Flows (Monthly)



Info Tech ETF Flows (Monthly)



Source: RBC US Equity Strategy, Bloomberg; monthly with preliminary April 2022 data point as of April 19, 2022

Large Cap Industries & Factors

Russell 1000 GICS Level 3 Industries & Select Factors



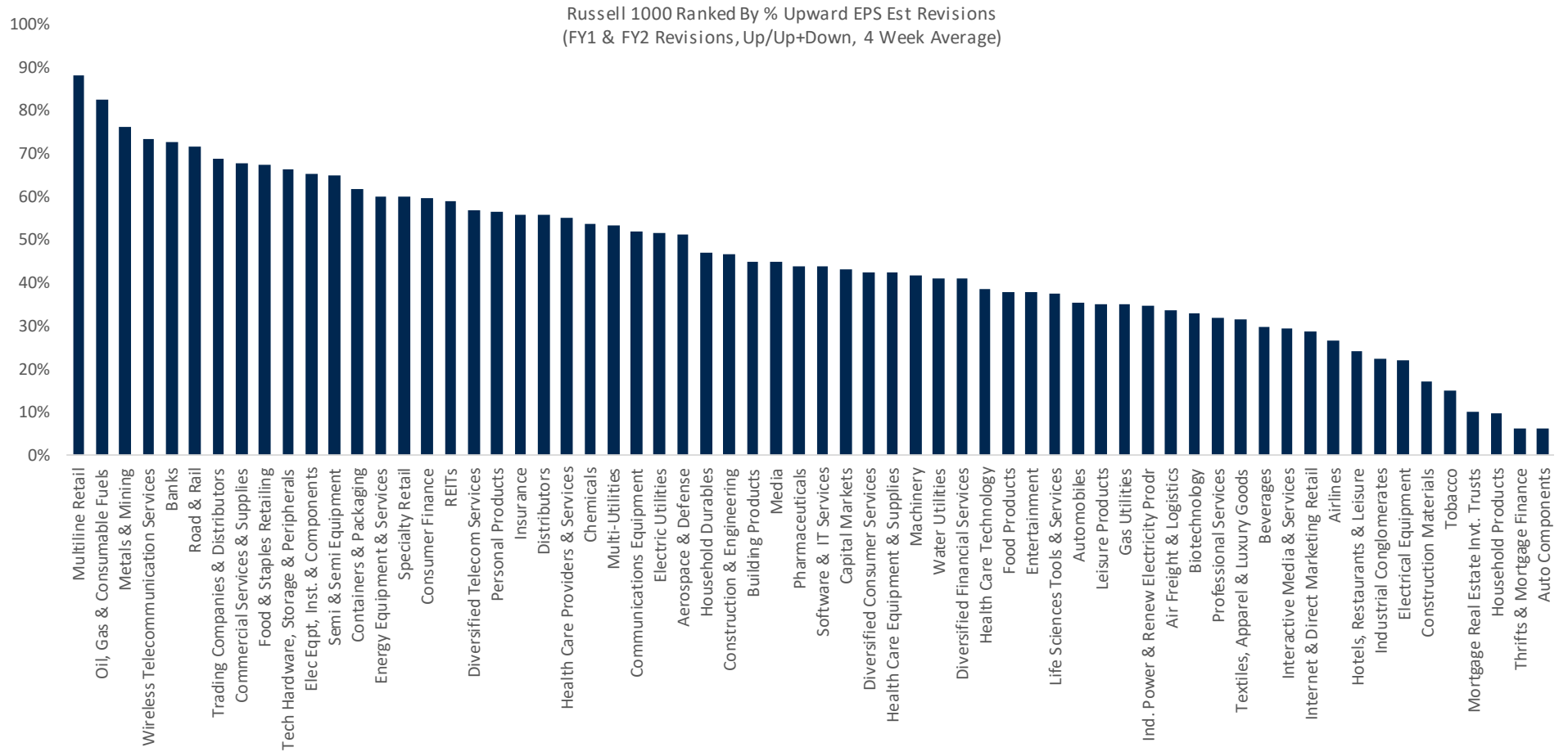
Capital
Markets

Energy Industries Have Dominated Returns in 2022, While Consumer Groups Have Lagged

Industry	YTD Relative Performance	Industry	YTD Relative Performance	Industry	YTD Relative Performance
Energy Equipment & Svcs	69.2%	Diversified Consumer Svcs	12.0%	Capital Markets	-5.3%
Oil, Gas & Consumable Fuels	56.5%	Gas Utilities	11.3%	Thrifts & Mortgage Finance	-7.5%
Metals & Mining	45.0%	Containers & Packaging	6.6%	HC Technology	-7.7%
Wireless Telecomm Svcs	24.6%	Consumer Finance	6.1%	Paper & Forest Products	-8.1%
Multi-Utilities	24.4%	Household Products	4.4%	Air Freight & Logistics	-8.1%
Diversified Financial Svcs	22.9%	Media	3.1%	Electrical Equipment	-9.6%
Aerospace & Defense	22.6%	REITs	2.8%	Communications Equip	-9.6%
Tobacco	21.8%	Machinery	2.1%	Software & IT Svcs	-9.7%
Marine	21.8%	Chemicals	1.6%	Textiles, Apparel & Luxury Goods	-9.8%
Food Products	19.2%	Tech Hardware, Storage & Peripherals	1.1%	Construction Materials	-10.1%
Insurance	17.8%	Mortgage REITs	1.1%	Life Sciences Tools & Svcs	-10.9%
Multiline Retail	17.2%	Industrial Conglomerates	0.0%	Distributors	-11.1%
Food & Staples Retailing	16.0%	Commercial Svcs & Supplies	-0.4%	Electronic Equip, Instruments & Comp	-11.4%
Airlines	15.4%	Trading Companies & Distributors	-0.7%	Leisure Products	-12.0%
HC Providers & Svcs	15.4%	HC Equipment & Supplies	-1.5%	Specialty Retail	-12.7%
Diversified Telecom Svcs	15.0%	Professional Svcs	-1.6%	Interactive Media & Svcs	-13.5%
Biotechnology	13.5%	Water Utilities	-2.6%	Semis & Semis Equipment	-15.9%
Electric Utilities	13.4%	Internet & Direct Mktg Retail	-2.8%	Entertainment	-17.1%
Ind. Power and Renewable Elec	12.8%	Hotels, Restaurants & Leisure	-2.9%	Building Products	-19.3%
Construction & Engineering	12.7%	Automobiles	-3.1%	Household Durables	-21.8%
Pharmaceuticals	12.2%	Road & Rail	-4.0%	Personal Products	-22.4%
Beverages	12.1%	Banks	-5.3%	Auto Components	-23.0%

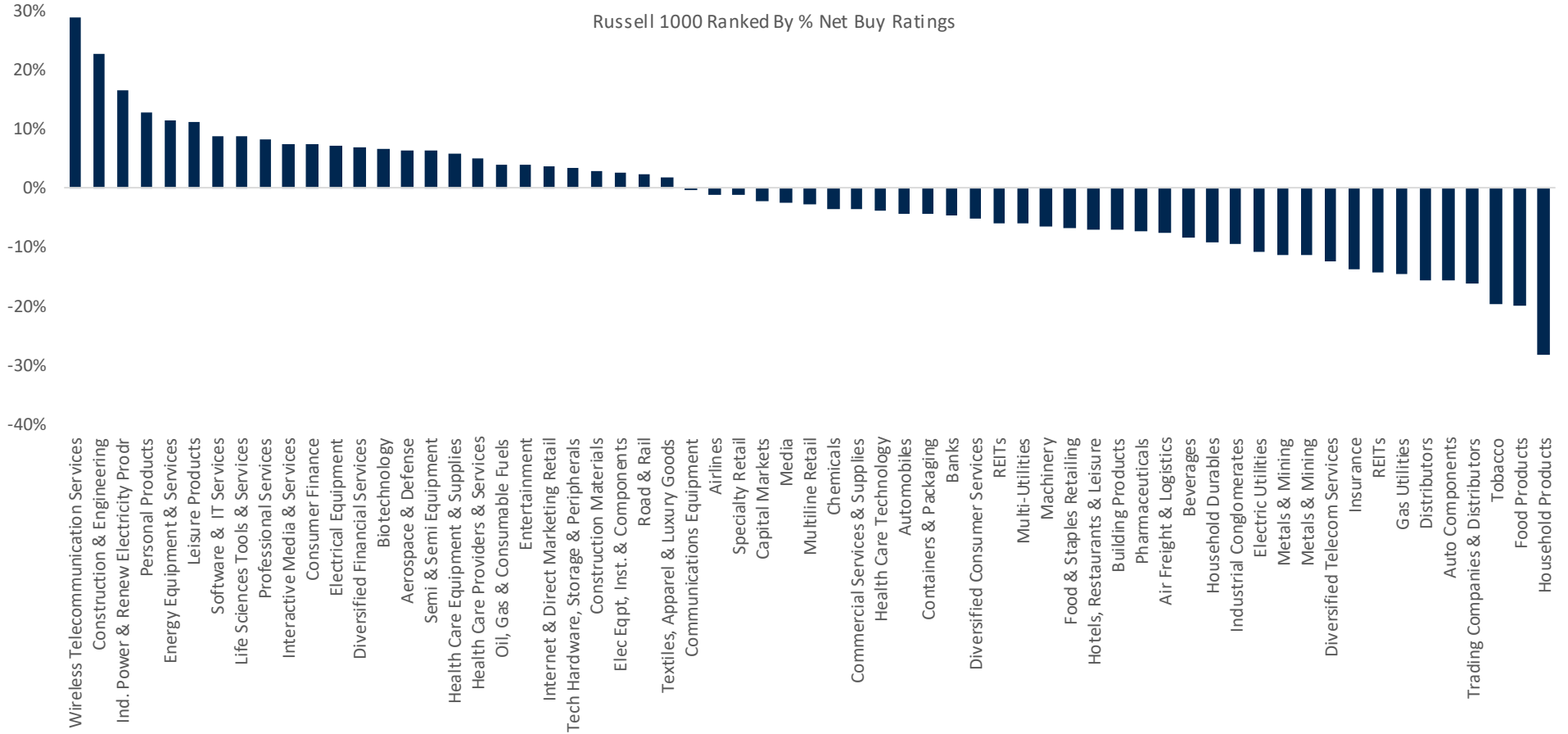
Source: RBC US Equity Strategy, S&P Capital IQ/ClariFi; as of April 14, 2022

Commodity Groups Have Led on EPS Revisions Recently, While Consumer Groups Have Lagged



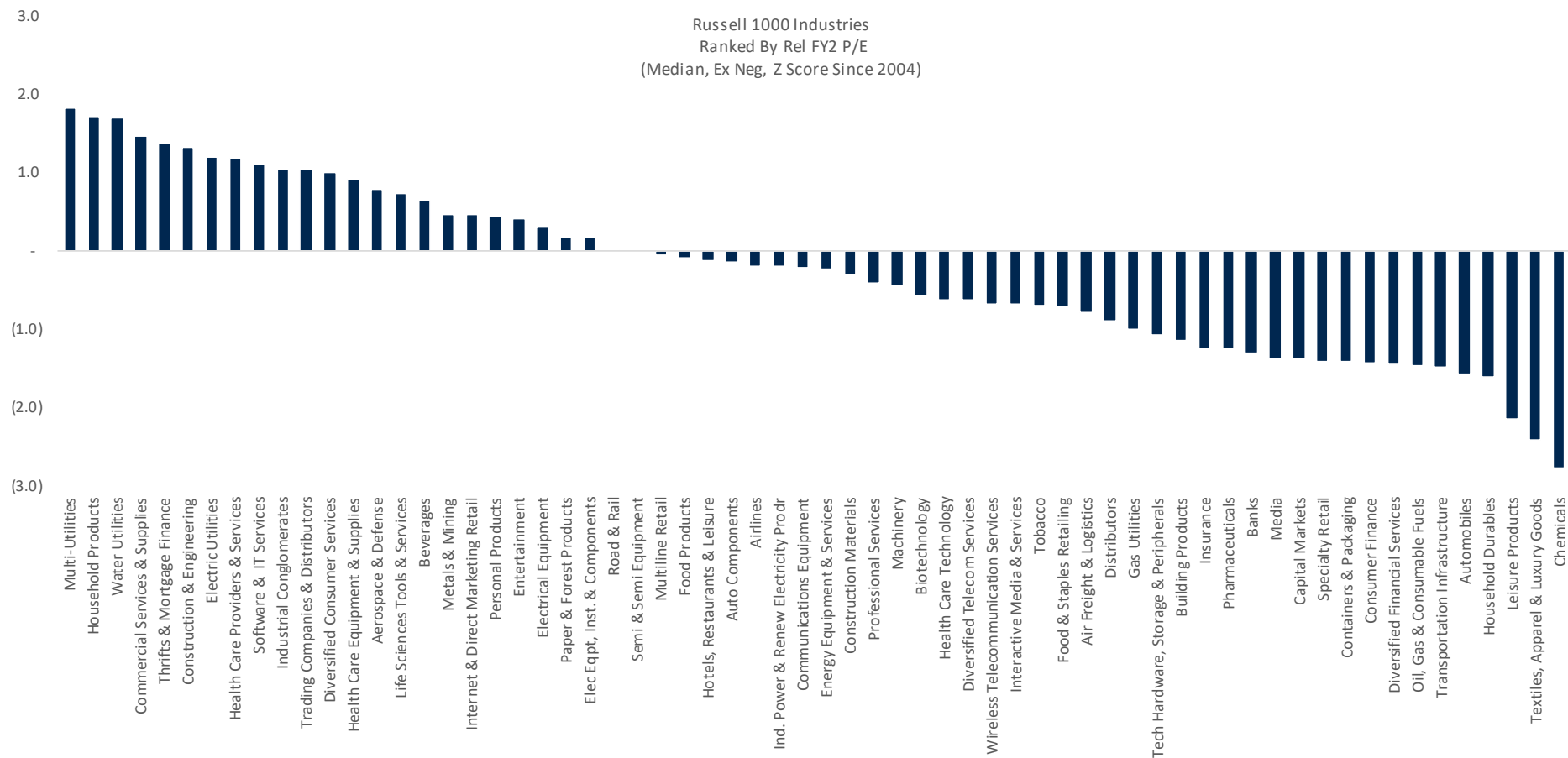
Source: RBC US Equity Strategy, S&P Capital IQ/ClariFi; as of April 15, 2022

Consumer Groups Dominate the List of Least Favored Groups



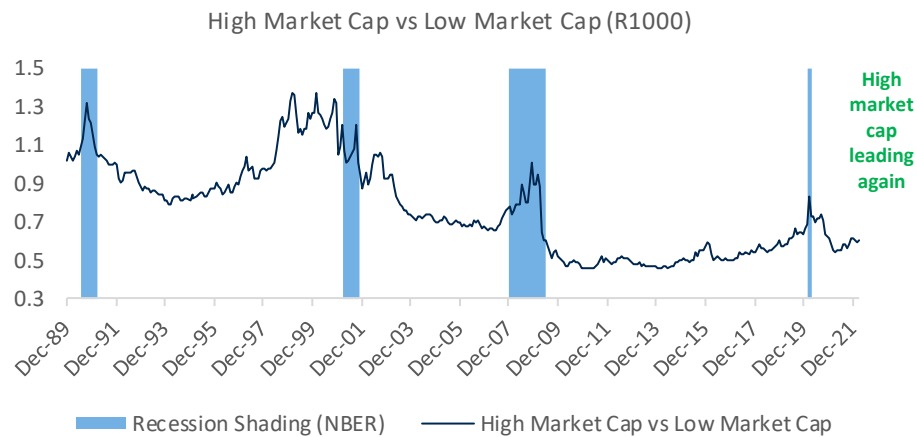
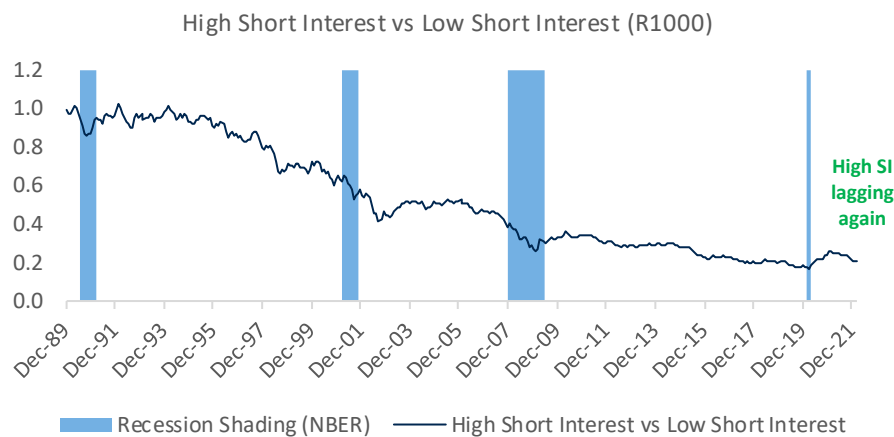
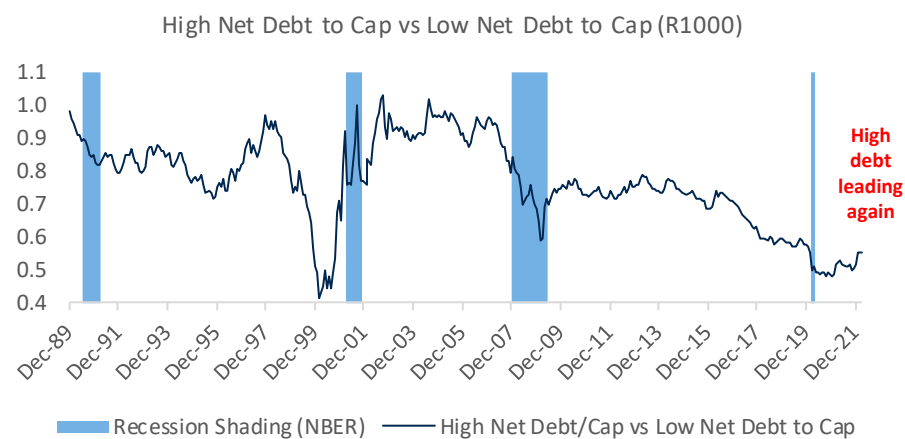
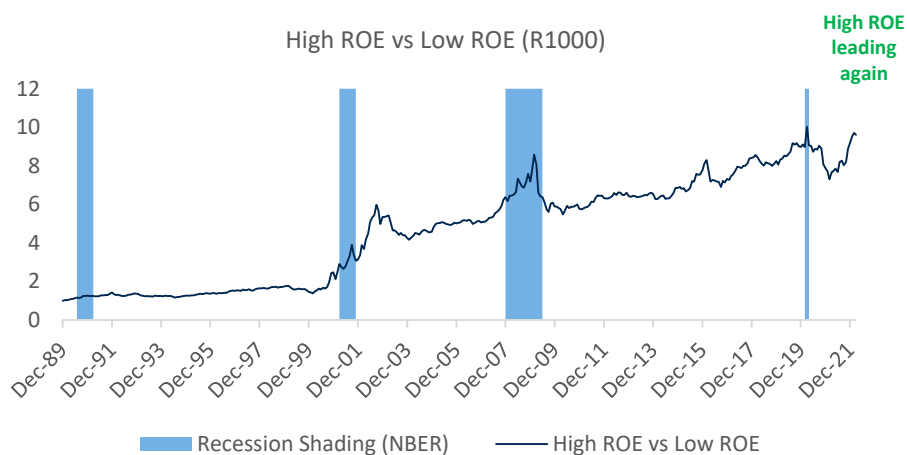
Source: RBC US Equity Strategy, S&P Capital IQ/ClariFi; as of April 14, 2022

Utilities Groups Among the Most Expensive, Commodities & Consumer Among the Cheapest



Source: RBC US Equity Strategy, S&P Capital IQ/ClariFi; as of April 14, 2022

High Quality Starting to Work Again on Most Metrics



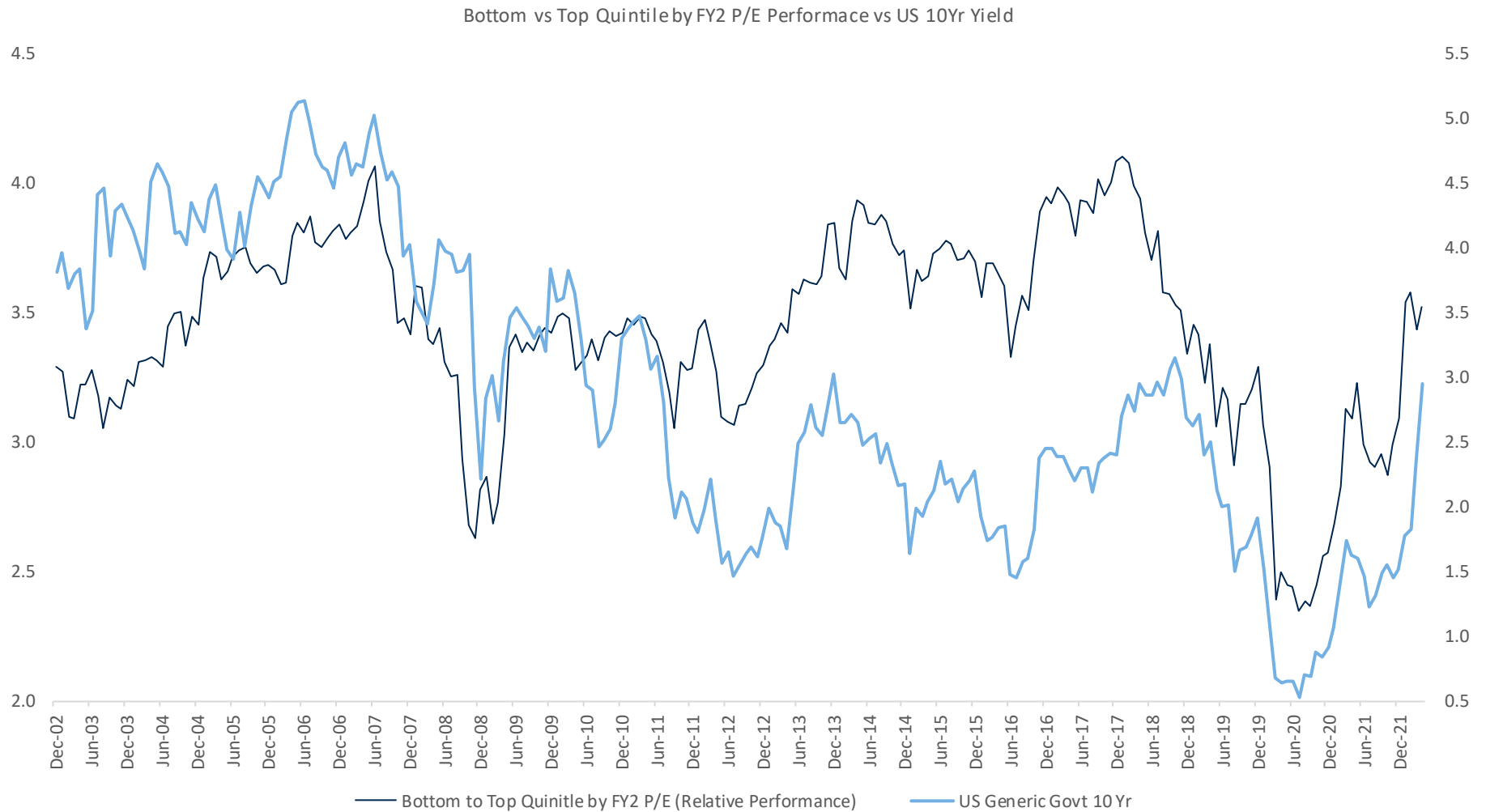
Source: RBC US Equity Strategy, S&P Capital IQ/ClariFi, through March 2022

P/Es of the Priciest Stocks Near Pre-Pandemic Levels vs. the Cheapest Stocks



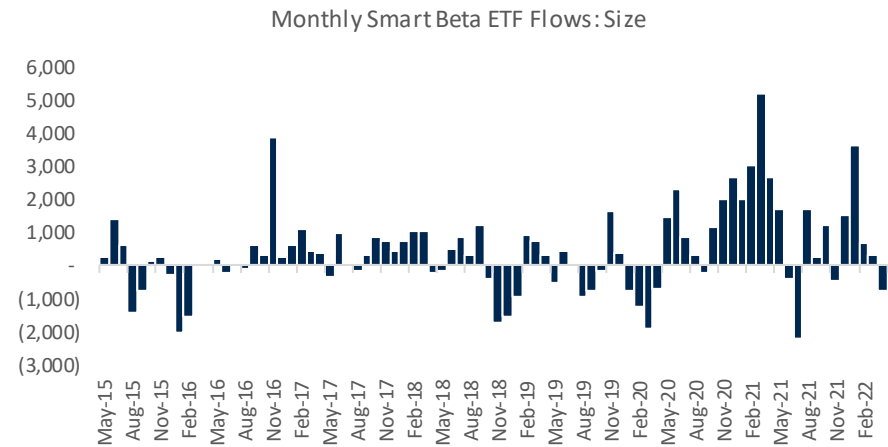
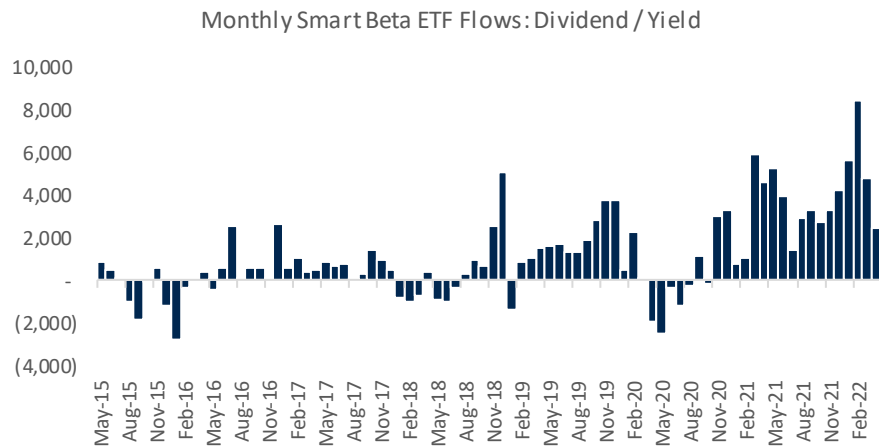
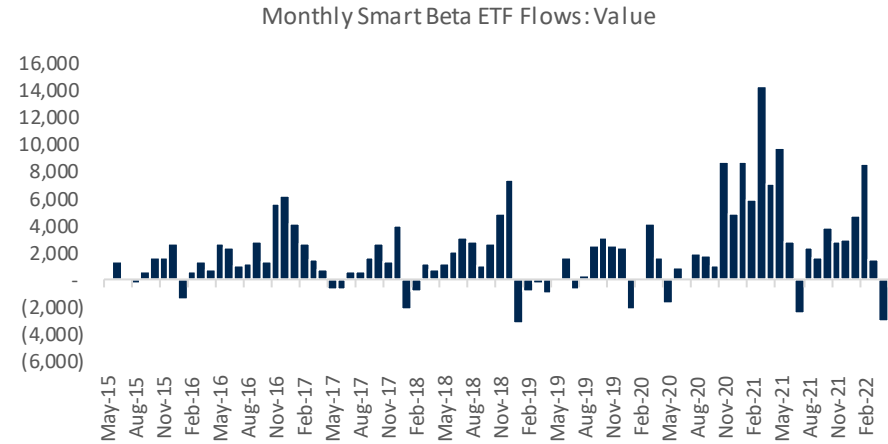
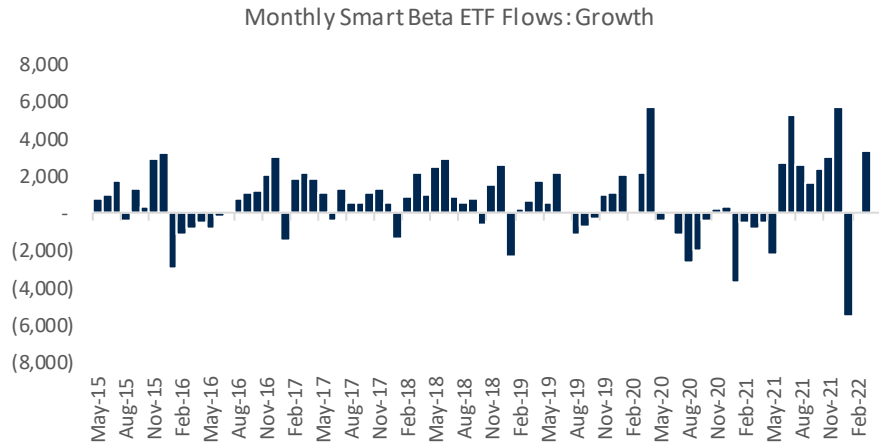
Source: RBC US Equity Strategy, S&P Capital IQ/ClariFi, CIQ Estimates. Bloomberg, Large Cap Universe is the Russell 1000 Index, Quintiles are ranked based on FY2 P/E ex Neg EPS, Median FY2 P/E is used to represent every quintile. As of April 15, 2022

Cheapest Stocks Tend To Outperform Most Expensive Stocks When 10-Year Yields Rise



Source: RBC US Equity Strategy, S&P Capital IQ/ClariFi, CIQ estimates, Bloomberg. Large Cap Universe is the Russell 1000 Index. Quintiles are ranked based on FY2 P/E ex Neg EPS. Median FY2 P/E is used to represent every quintile. As of April 18, 2022

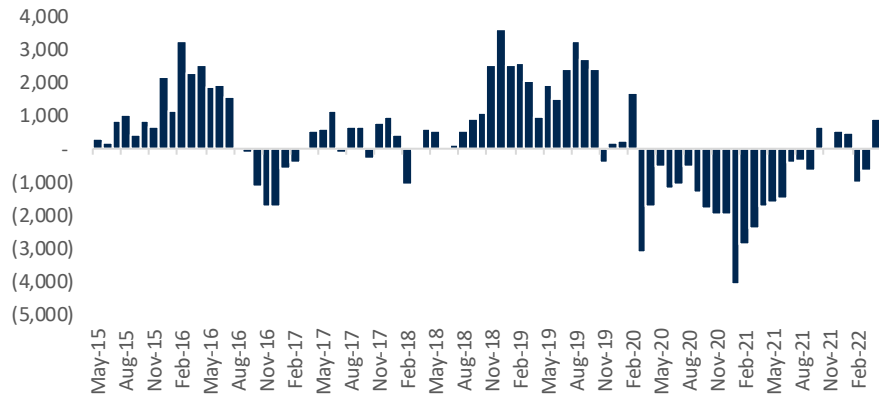
Growth Flows Have Bounced Back, While Value & Size Flows Have Faded, Yield Remains Positive



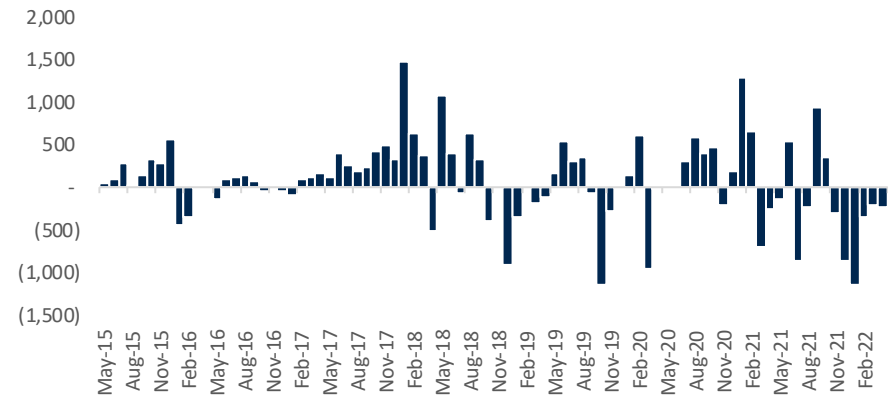
Source: RBC US Equity Strategy, Bloomberg; as of April 19, 2022

Low Vol & Quality Are Seeing Inflows, Momentum Outflows Persist, ESG Inflows Have Faded

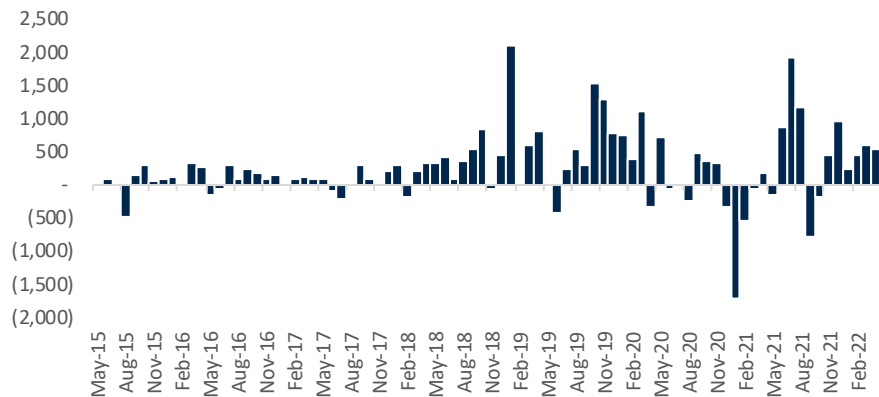
Monthly Smart Beta ETF Flows: Low Vol



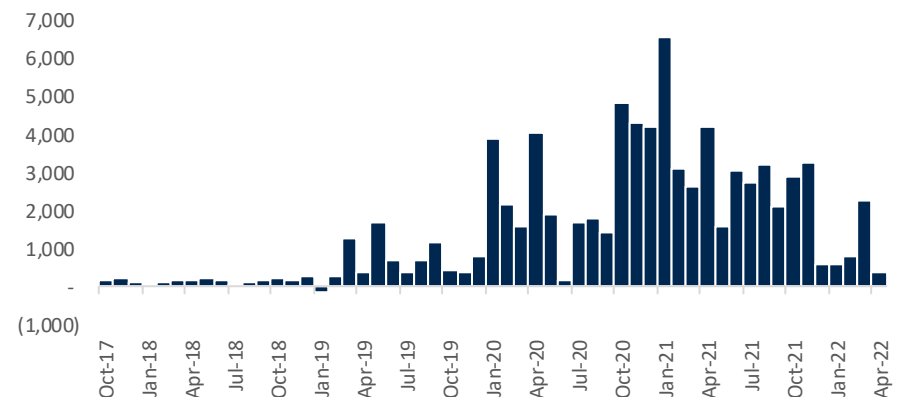
Monthly Smart Beta ETF Flows: Momentum



Monthly Smart Beta ETF Flows: Quality



Monthly Smart Beta ETF Flows: ESG



Source: RBC US Equity Strategy, Bloomberg; as of April 19, 2022

Small Cap

The Russell 2000 & Small Cap vs. Large Cap

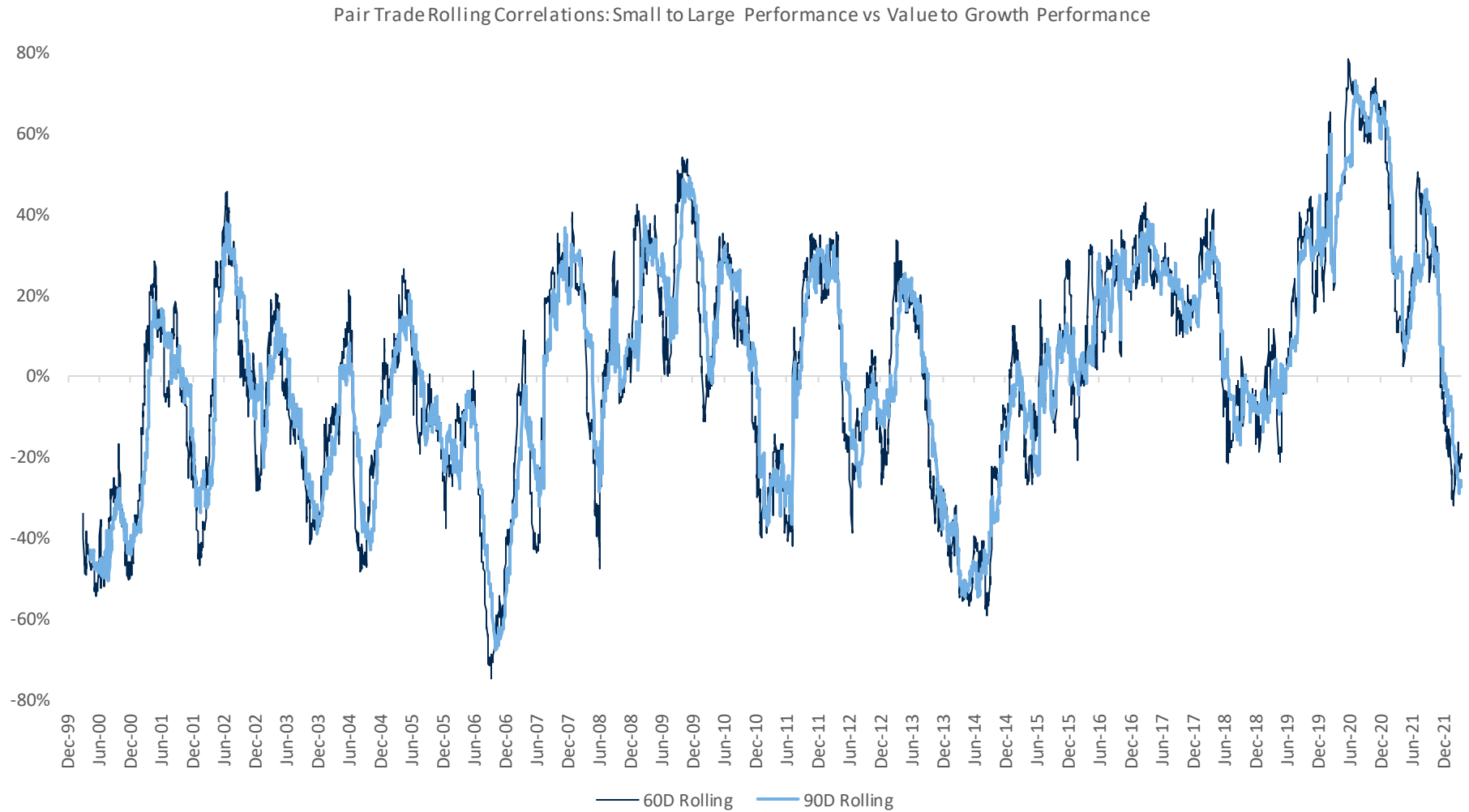


Capital
Markets

Small Caps Are Trying to Stabilize Relative to Large Cap

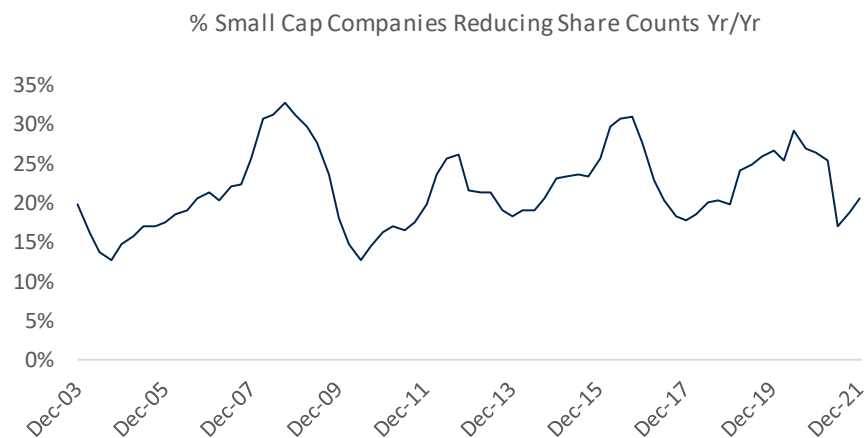
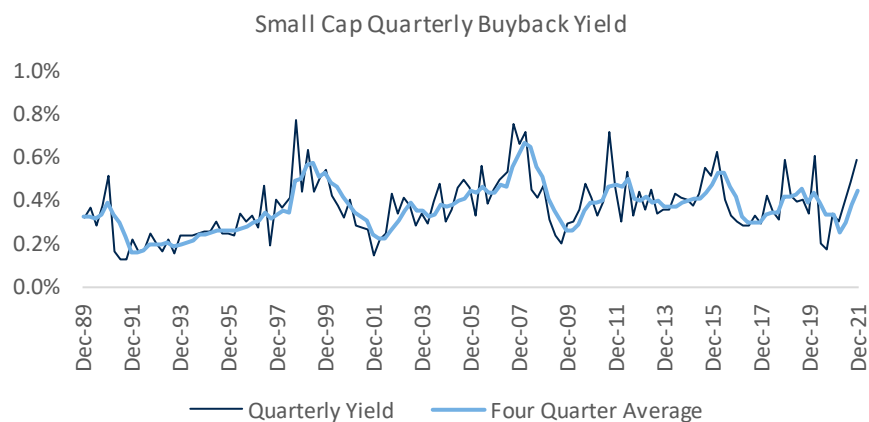
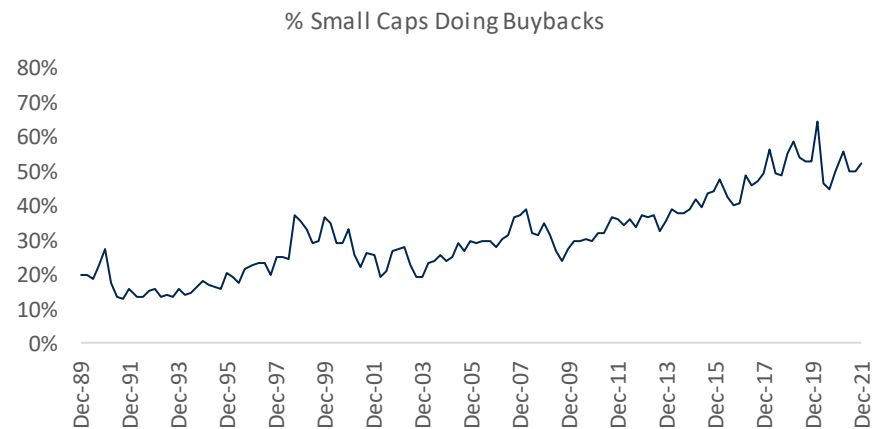
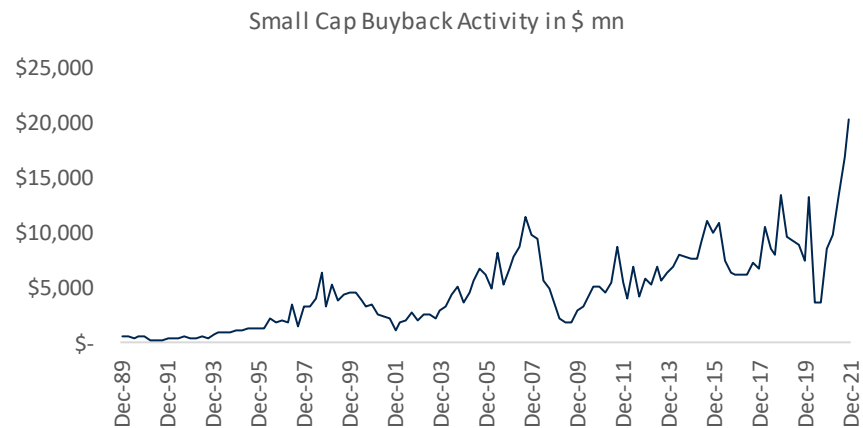


The Size Trade Has Decoupled From the Broader Reflation Trade



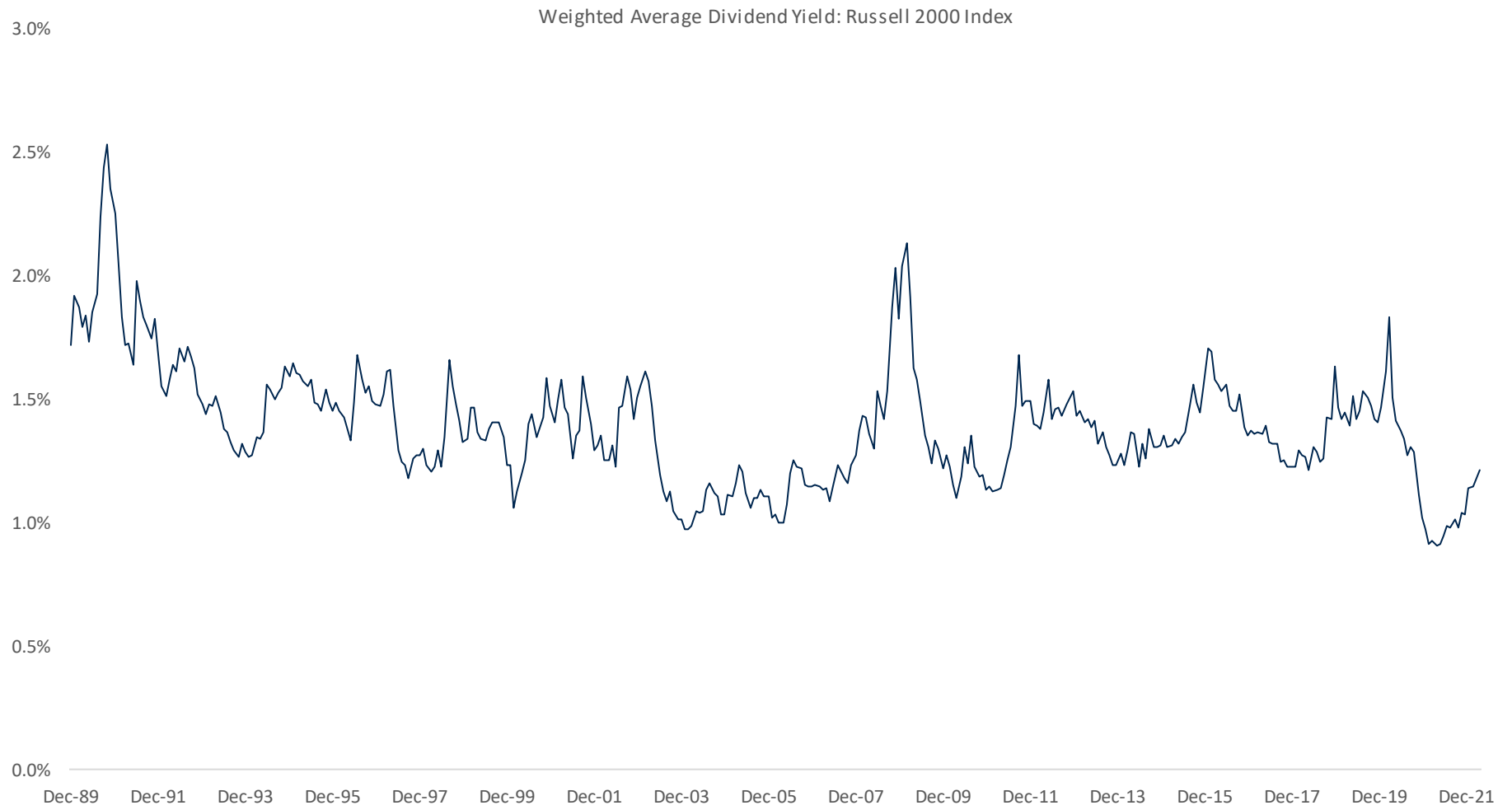
Source: RBC US Equity Strategy, Bloomberg; as of April 20, 2022

Buyback Activity Has Started to Bounce Back



Source: RBC US Equity Strategy, S&P Capital IQ/ClariFi, Russell, Compustat; as of 4Q21

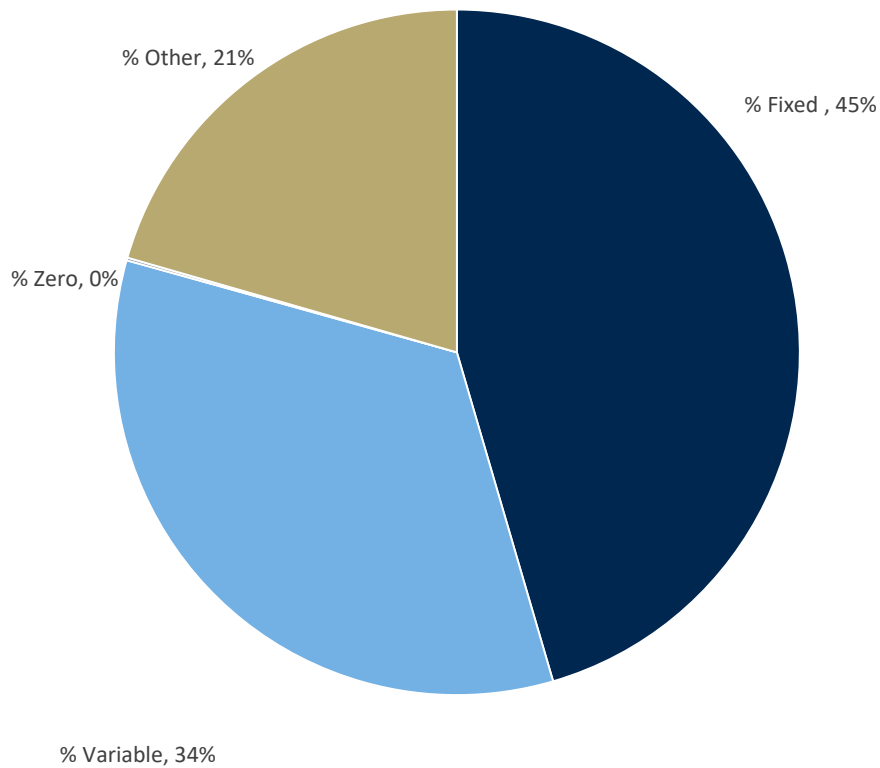
Dividends Are on the Mend



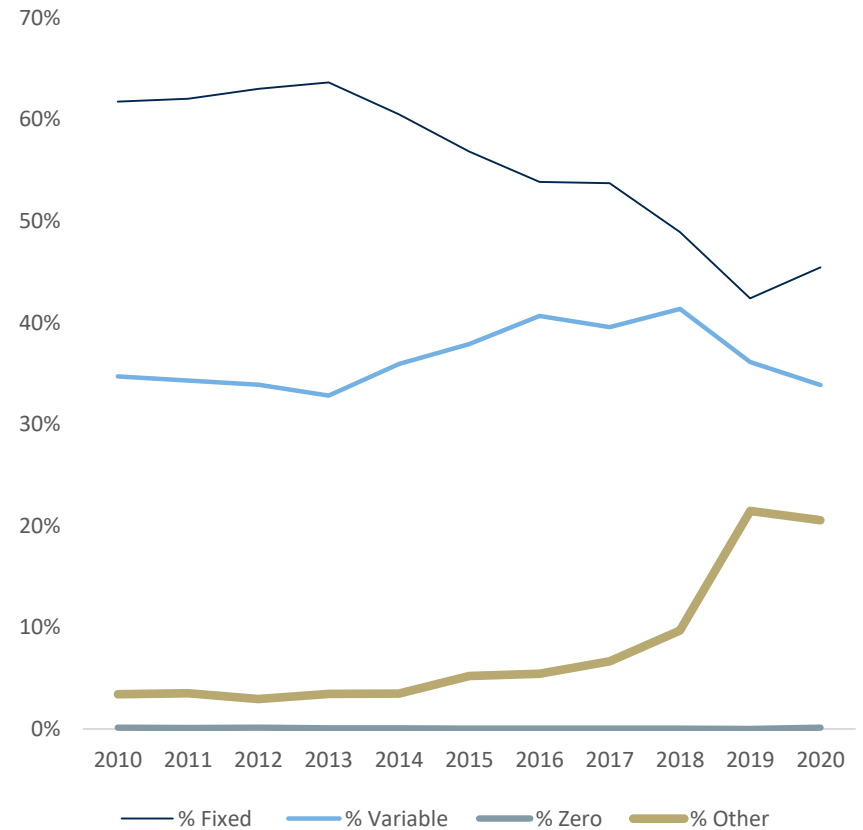
Source: RBC US Equity Strategy, S&P Capital IQ/ClariFi, Russell, as of April 14, 2022

Half of Small Cap Debt Is Fixed Rate

Russell 2000 ex Financials & REITs: Breakdown of Total Principal Due: Fixed vs. Variable/Floating Rate

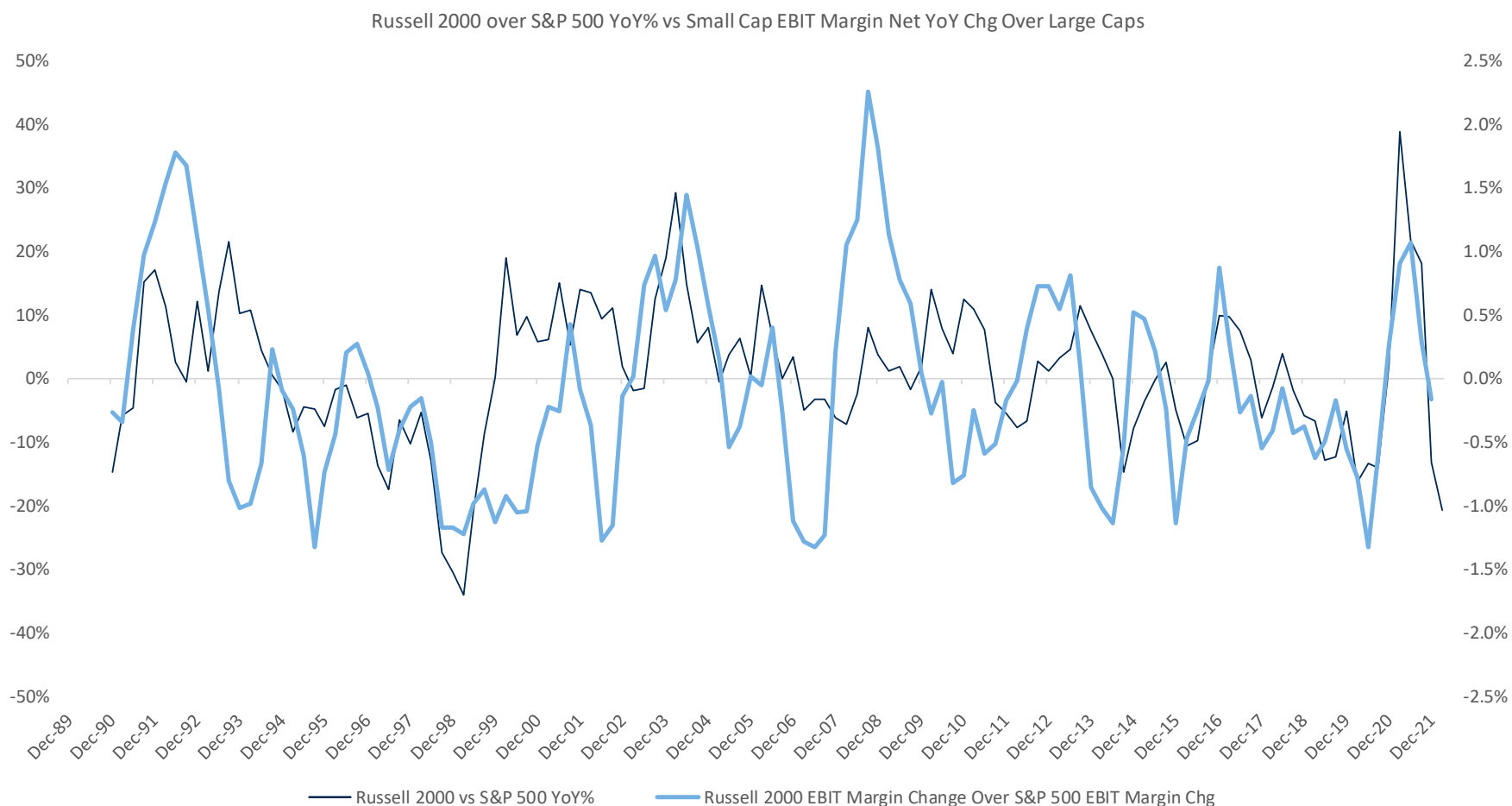


Russell 2000 ex Financials & REITs: Breakdown of Total Principal Due: Fixed vs. Variable/Floating Rate



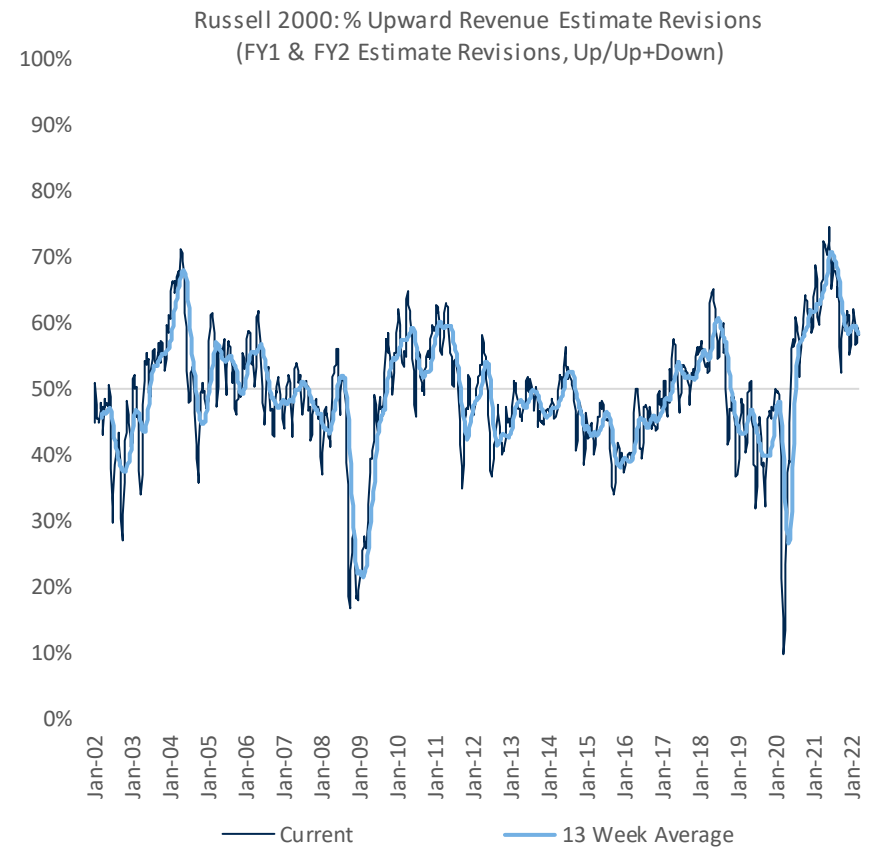
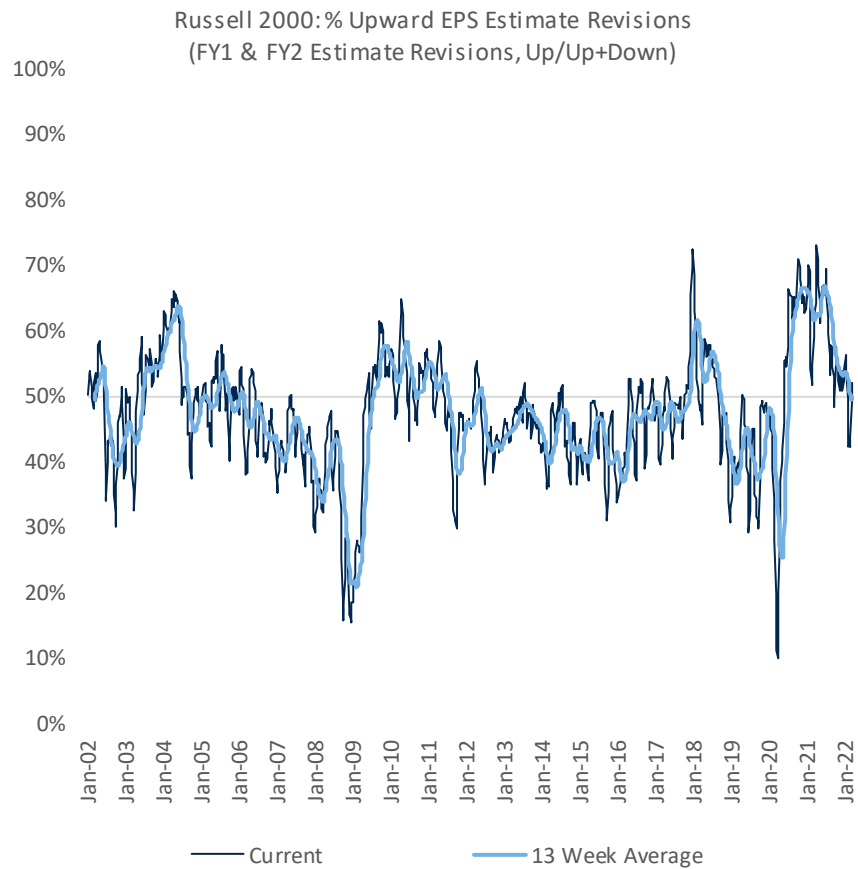
Source: RBC US Equity Strategy, Capital IQ, Russell; data as of 2020 (latest available)

Small Caps Have Underperformed Large Caps As Margins Have Lagged Behind



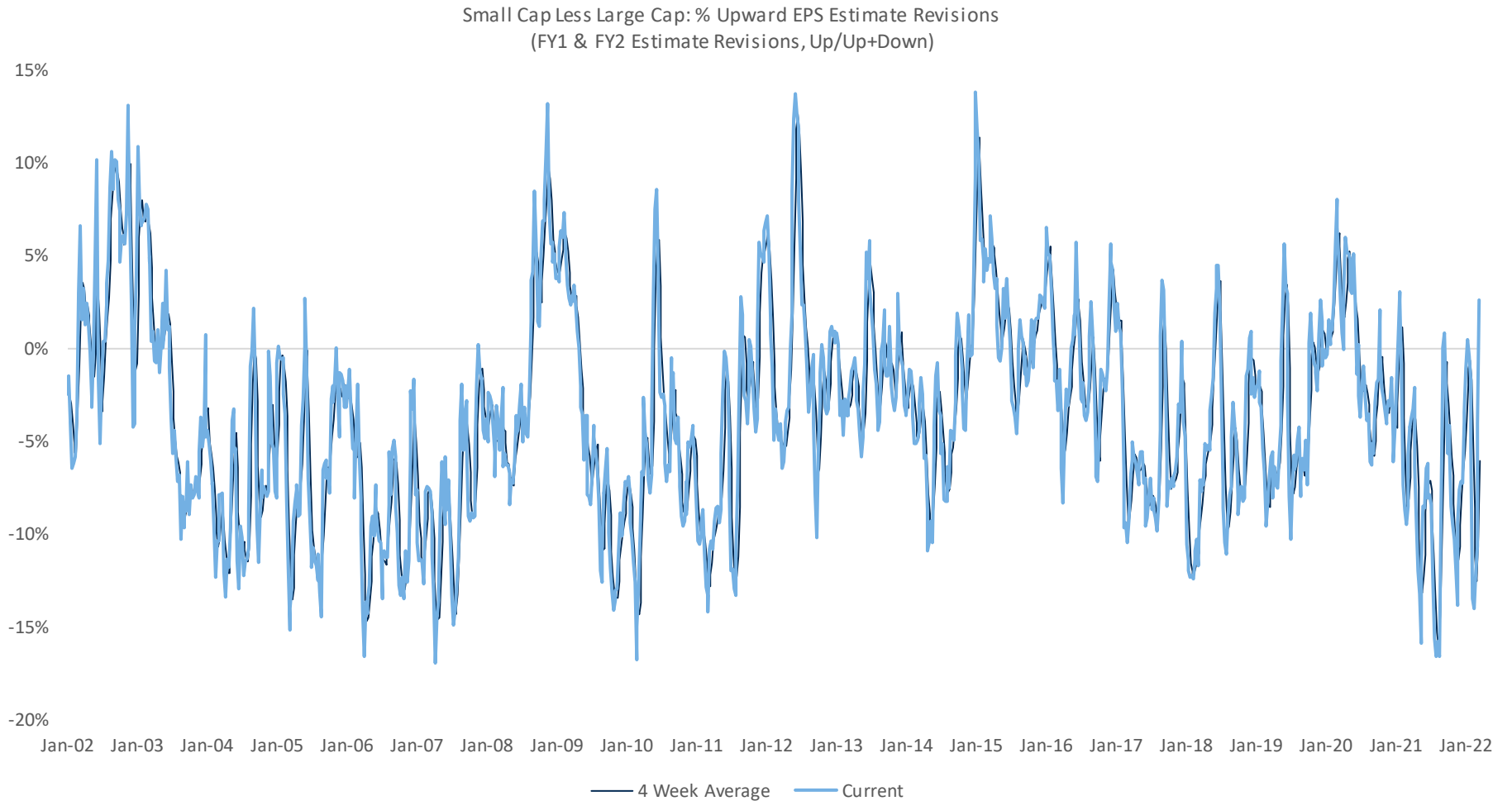
Source: RBC US Equity Strategy, S&P Capital IQ/ClariFi, Russell, Bloomberg, BLS. Performance as of 1Q22, margins as of 4Q21

EPS Revisions Have Flipped Negative in Small Cap, But Sales Revisions Have Stayed Positive



Source: RBC US Equity Strategy, S&P Capital IQ/ClariFi, Russell, CIQ estimates; as of April 15, 2022

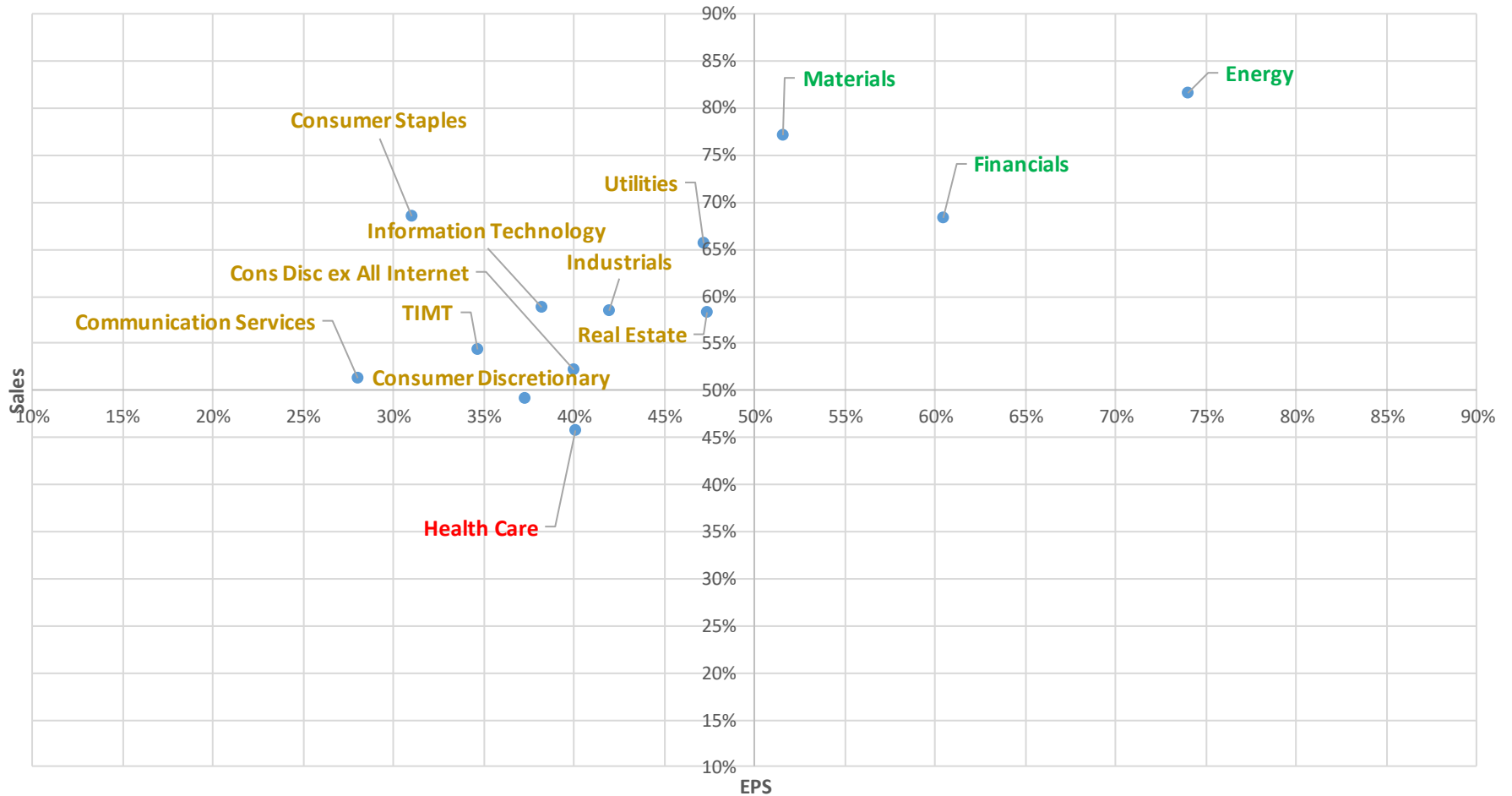
EPS Revisions Trends Have Favored Large Caps over Small Caps



Source: RBC US Equity Strategy, S&P Capital IQ/ClariFi, Russell, CIQ estimates; as of April 15, 2022

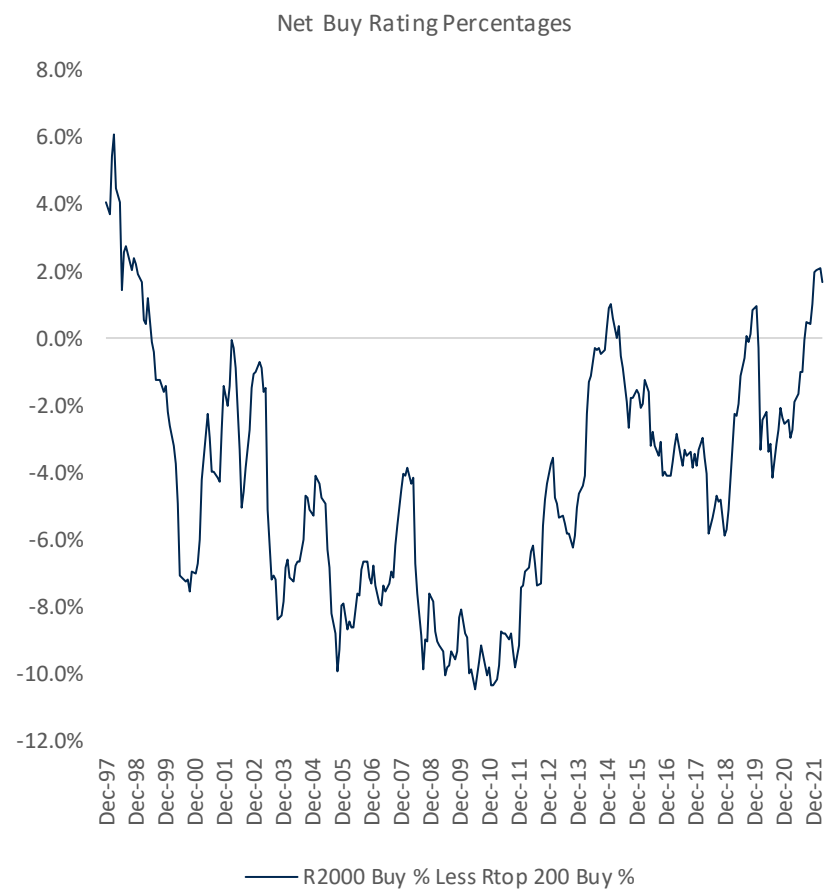
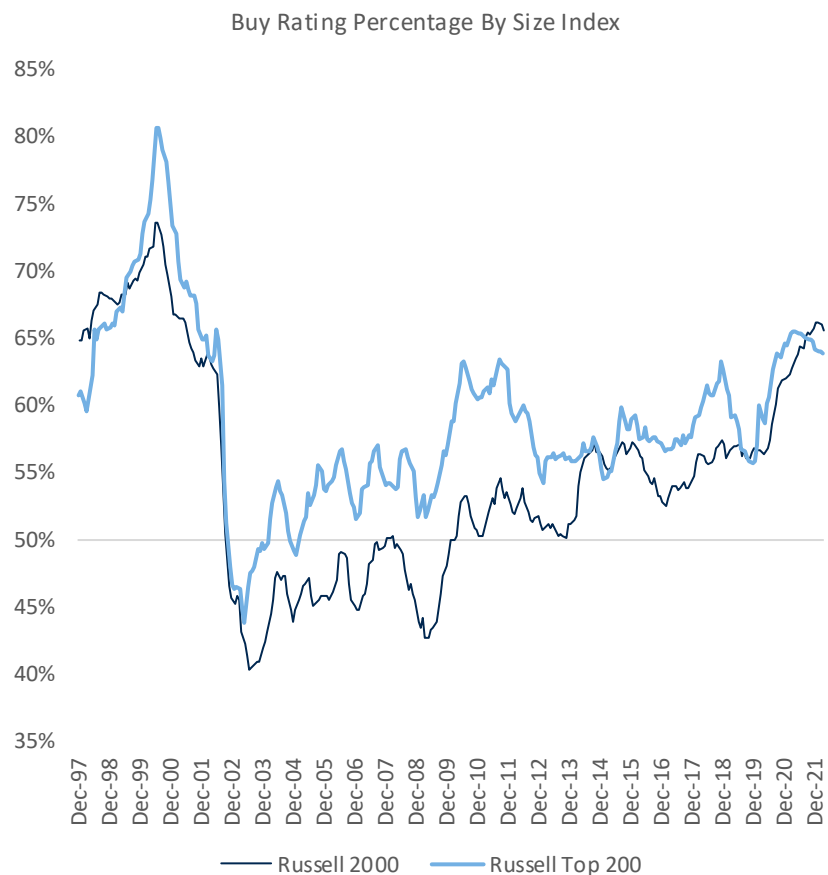
Most Small Cap Sectors Seeing Negative EPS Revisions but Positive Sales Revisions

Small Cap Sectors - FY1 & FY2 % Upwards Est Revisions for Sales & EPS by Sector (4 Week Avg)



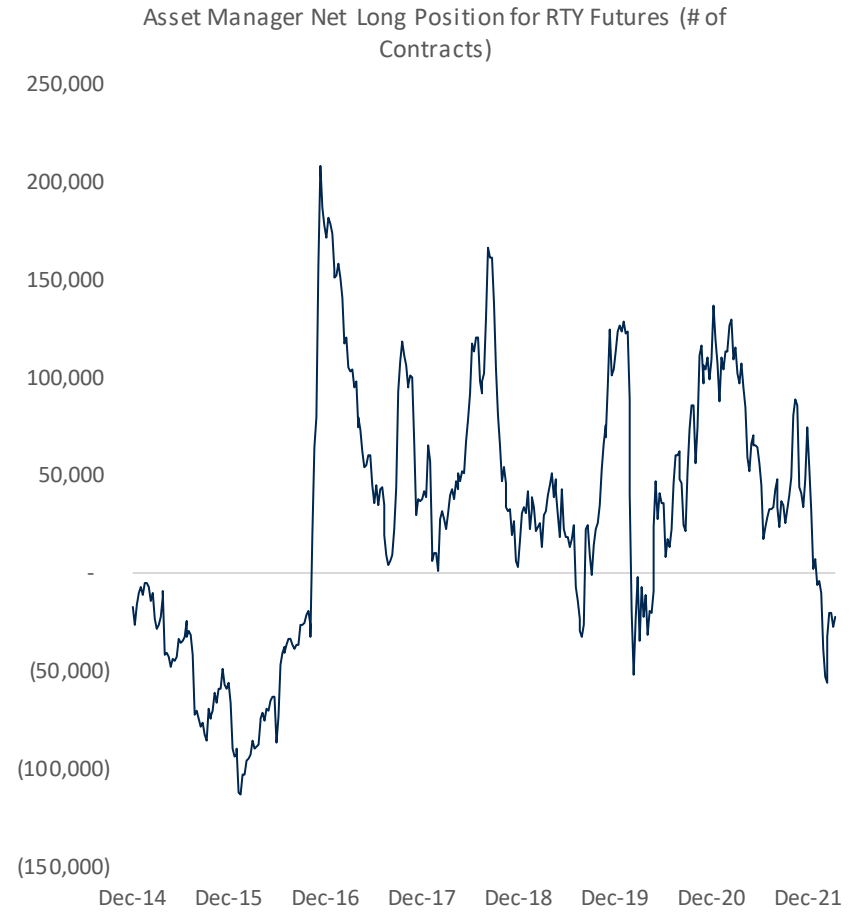
Source: RBC US Equity Strategy, S&P Capital IQ/ClariFi, Russell, CIQ estimates, FactSet, Thomson Reuters. As of April 15, 2022.

Small Caps Are Now in Favor on the Sell-Side, As Mega Cap Ratings Have Slipped



Source: RBC US Equity Strategy, S&P Capital IQ/ClariFi, Russell, CIQ estimates. As of April 14, 2022.

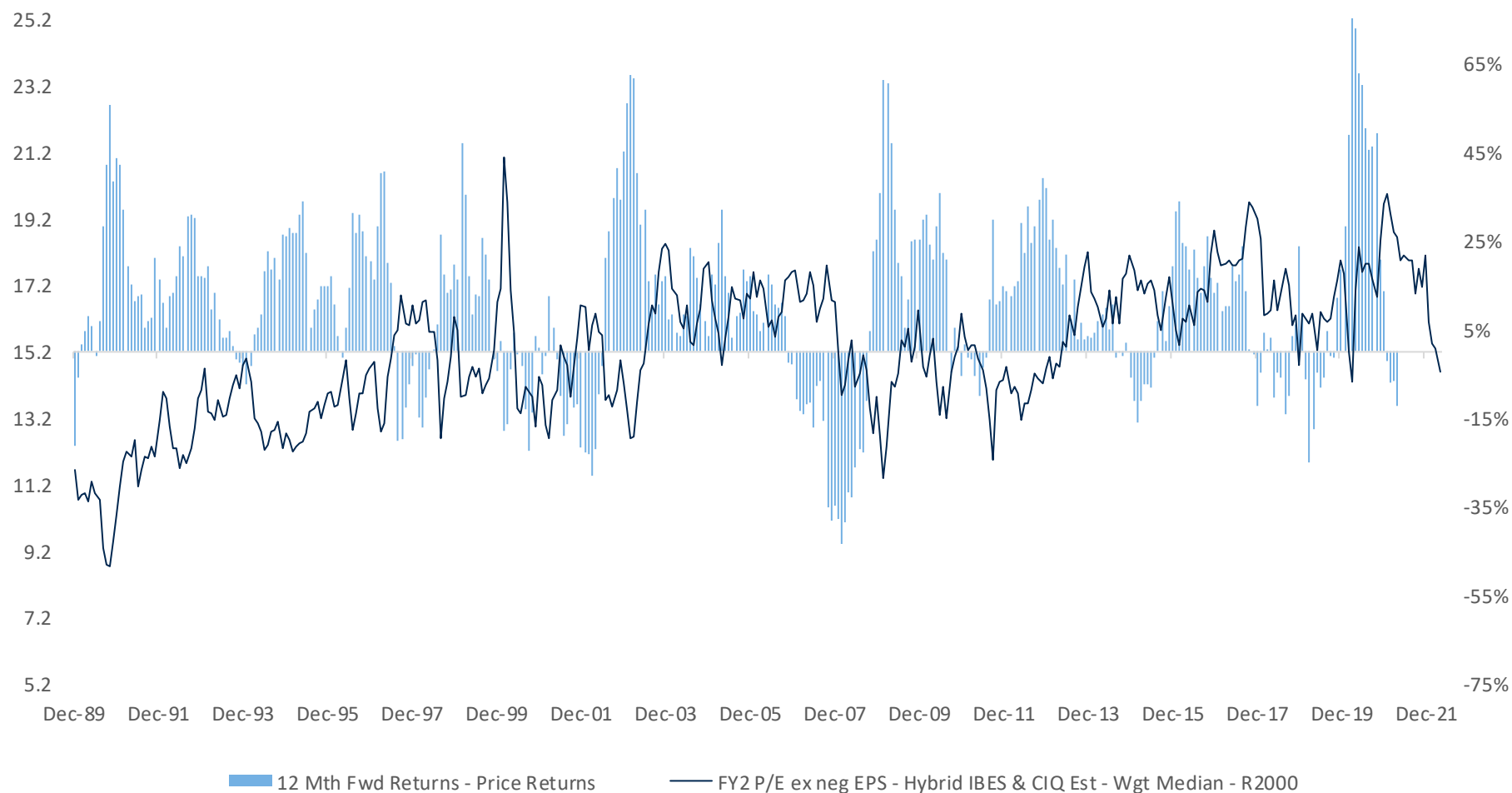
Positioning in Small Cap Futures Has Bounced After Hitting/Surpassing 2016 & 2020 Lows



Asset Manager/Institutional: These are institutional investors, including pension funds, endowments, insurance companies, mutual funds, and portfolio/investment managers whose clients are predominantly institutional.
Source: RBC US Equity Strategy, RBC Futures Desk, CFTC. As of 04/19/2022.

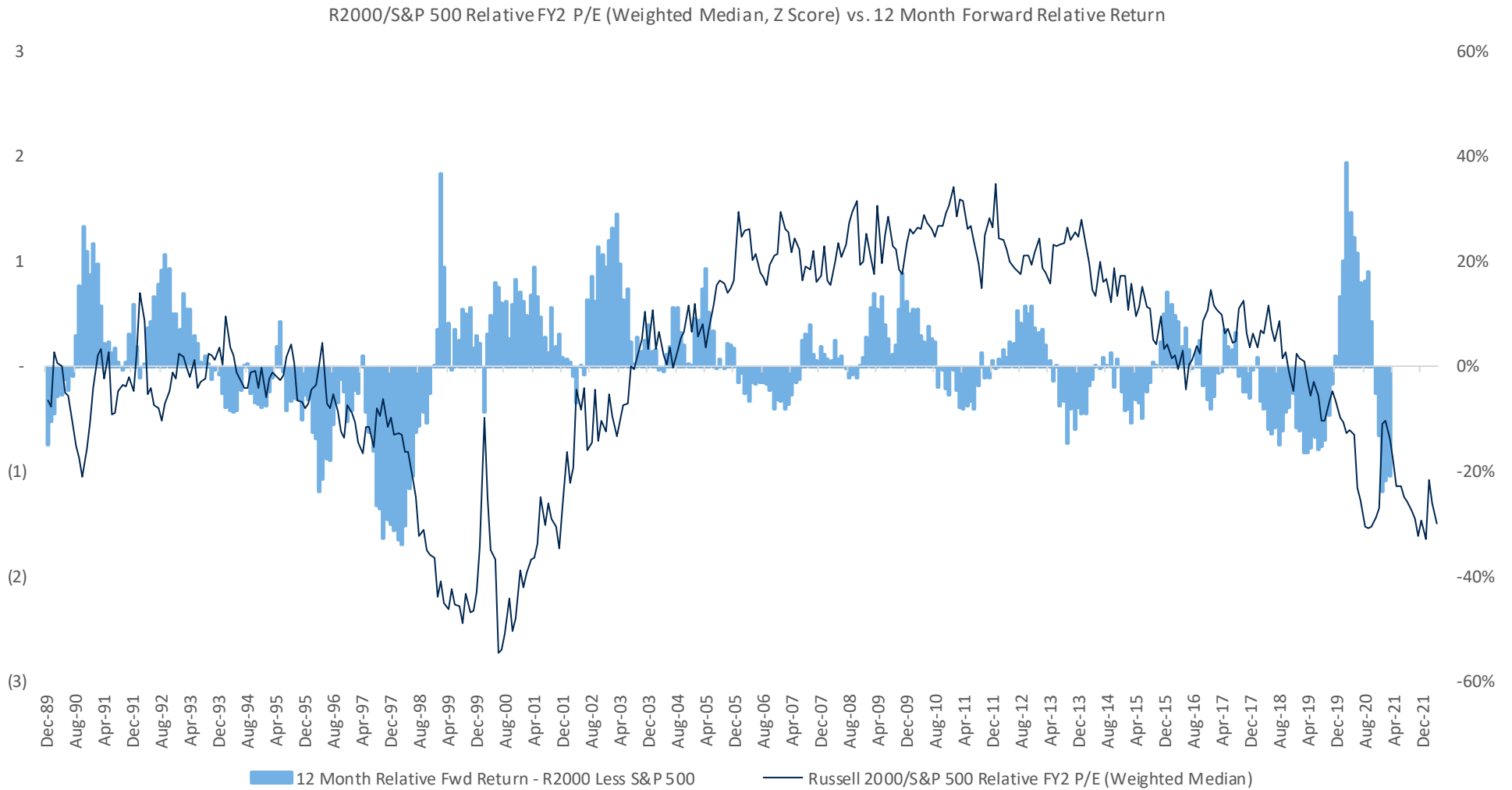
Small Cap P/E Back Below Average Relative to History

R2000 FY2 P/E ex neg EPS (Wgt Median) vs. 12 Month Fwd Russell 2000 Performance



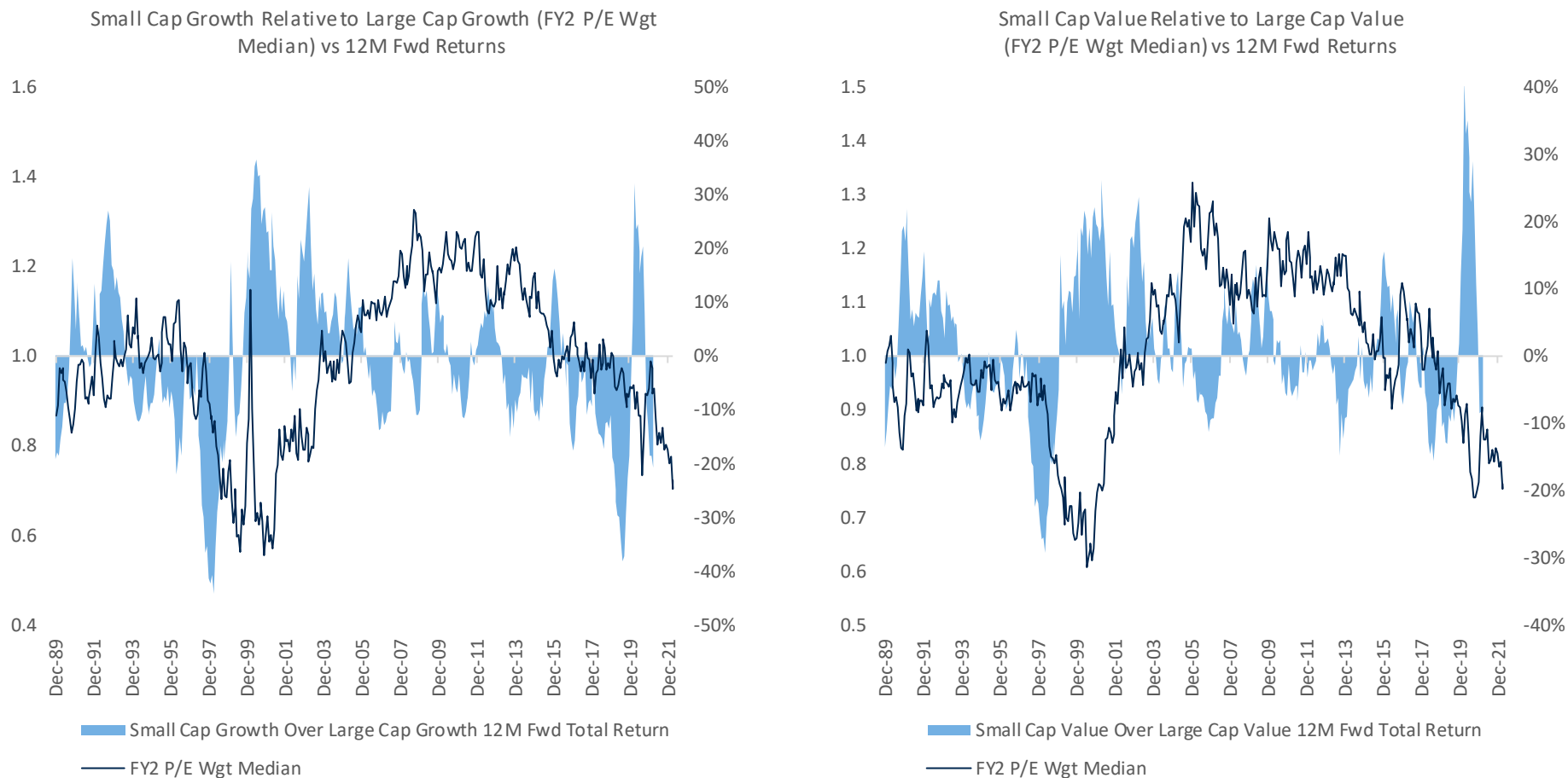
Source: RBC US Equity Strategy, Russell, S&P Capital IQ/ClariFi, CIQ estimates, IBES estimates; as of April 18, 2022

Small Caps Deeply Undervalued vs. Large Cap, Close to Late-2020 Lows



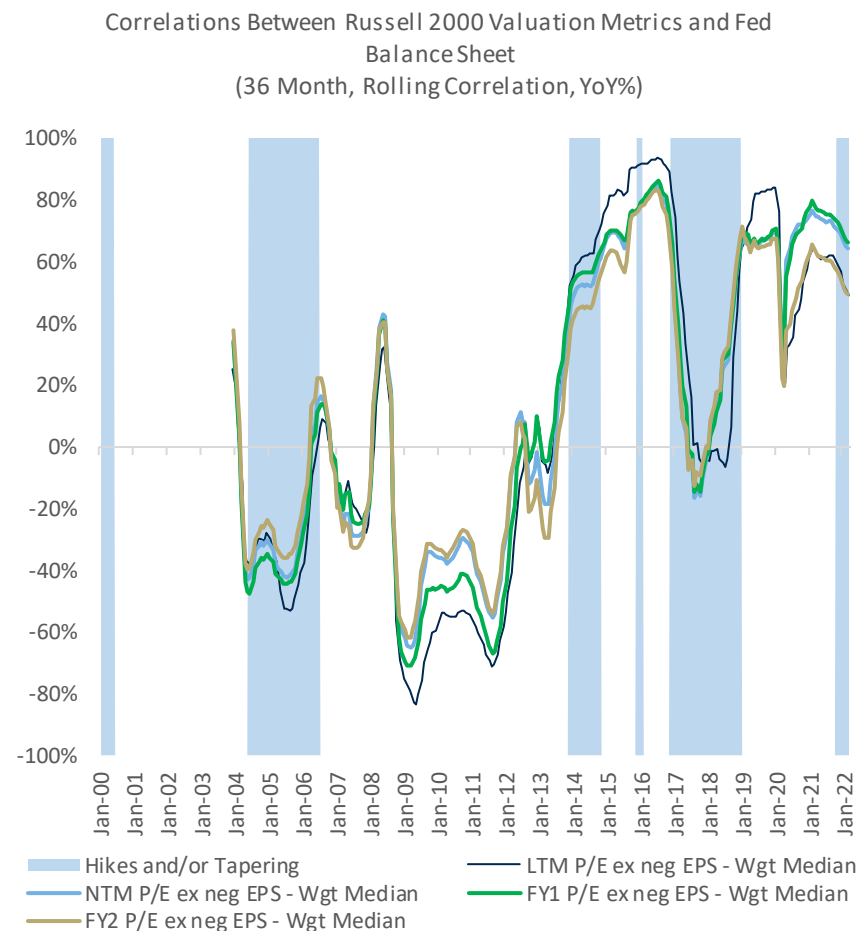
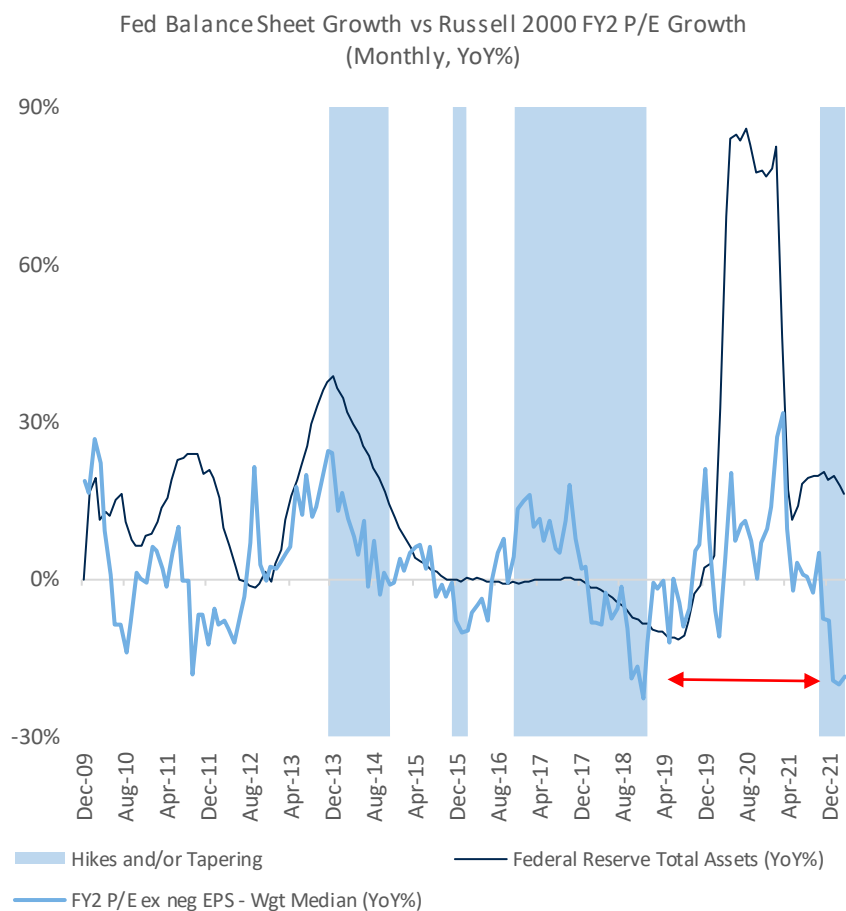
Source: RBC US Equity Strategy, Russell, S&P Capital IQ/ClariFi, CIQ estimates, IBES estimates; as of April 18, 2022

Small Cap Looks Deeply Attractive vs. Large Cap Within Both Growth and Value



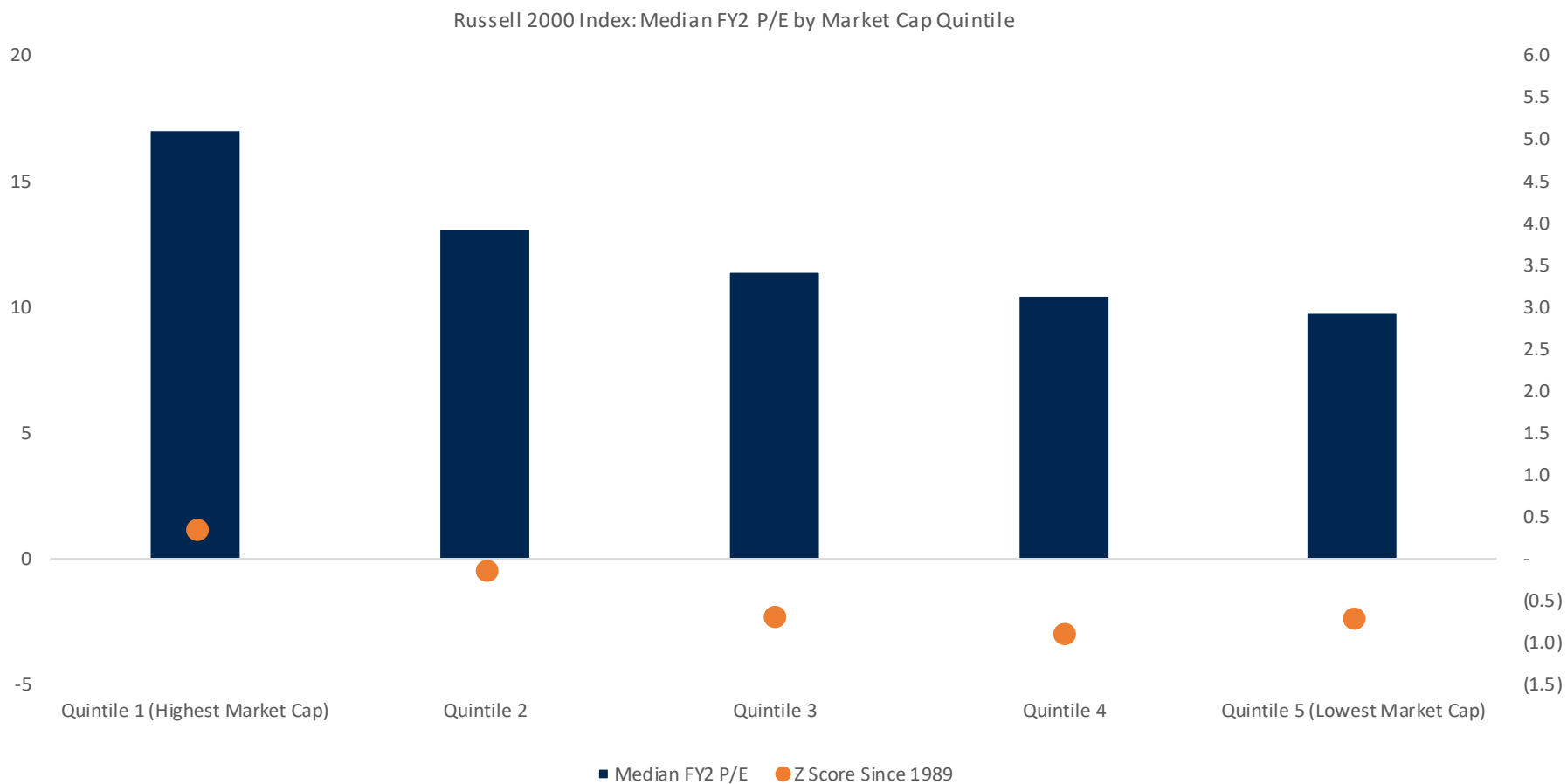
Source: RBC US Equity Strategy, Russell, S&P Capital IQ/ClariFi, CIQ estimates, IBES estimates; as of April 18, 2022

Small Cap's Recent P/E Contraction In Line With Prior Balance Sheet Contractions



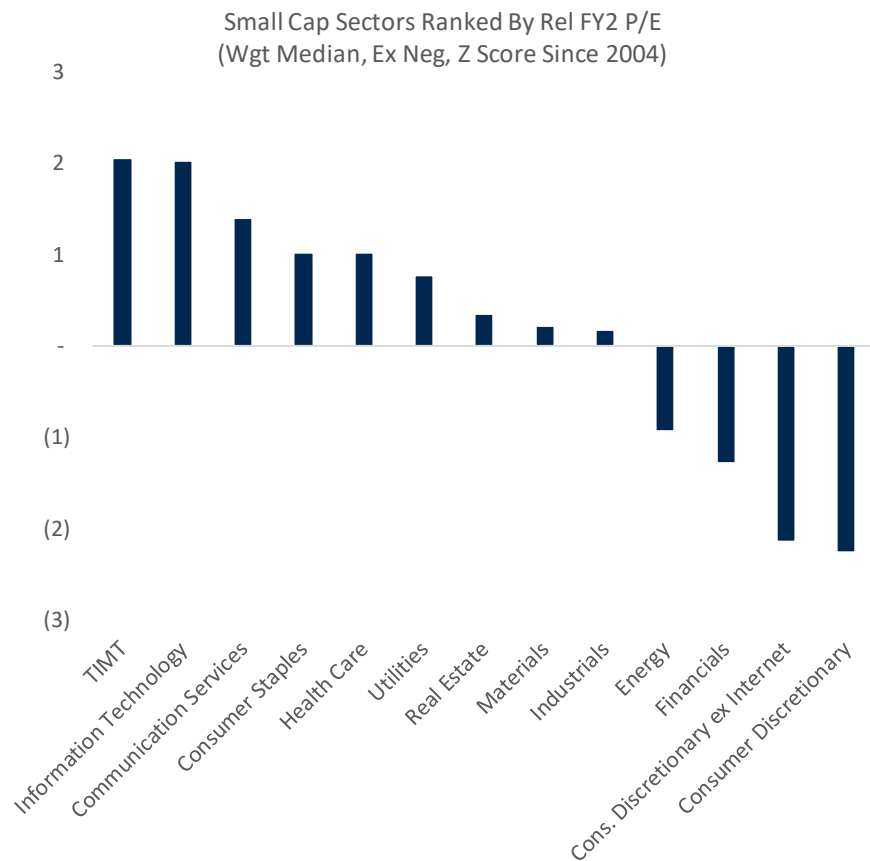
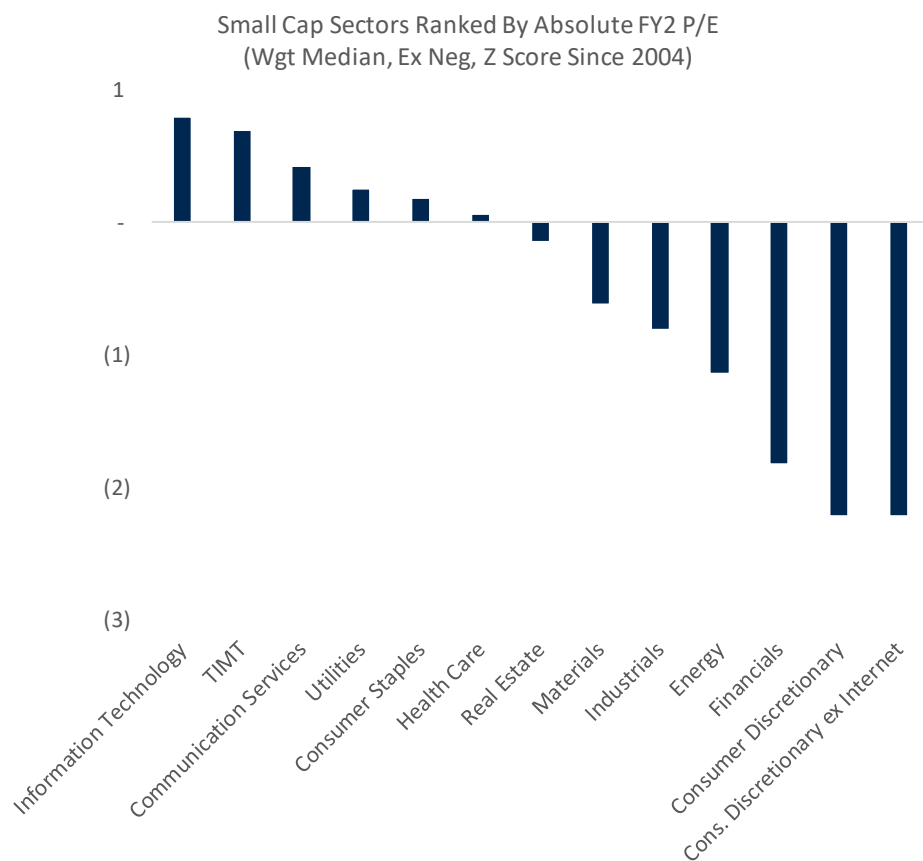
Source: RBC US Equity Strategy, Bloomberg, S&P Capital IQ/ClariFi. P/Es based on actuals and consensus forecasts; as of April 18, 2022

Small Caps Look Reasonably Valued or Slightly Attractive Across All Market Cap Quintiles



Source: RBC US Equity Strategy, Russell, S&P Capital IQ/ClariFi, CIQ estimates, IBES estimates; valuation stats as of April 20, 2022

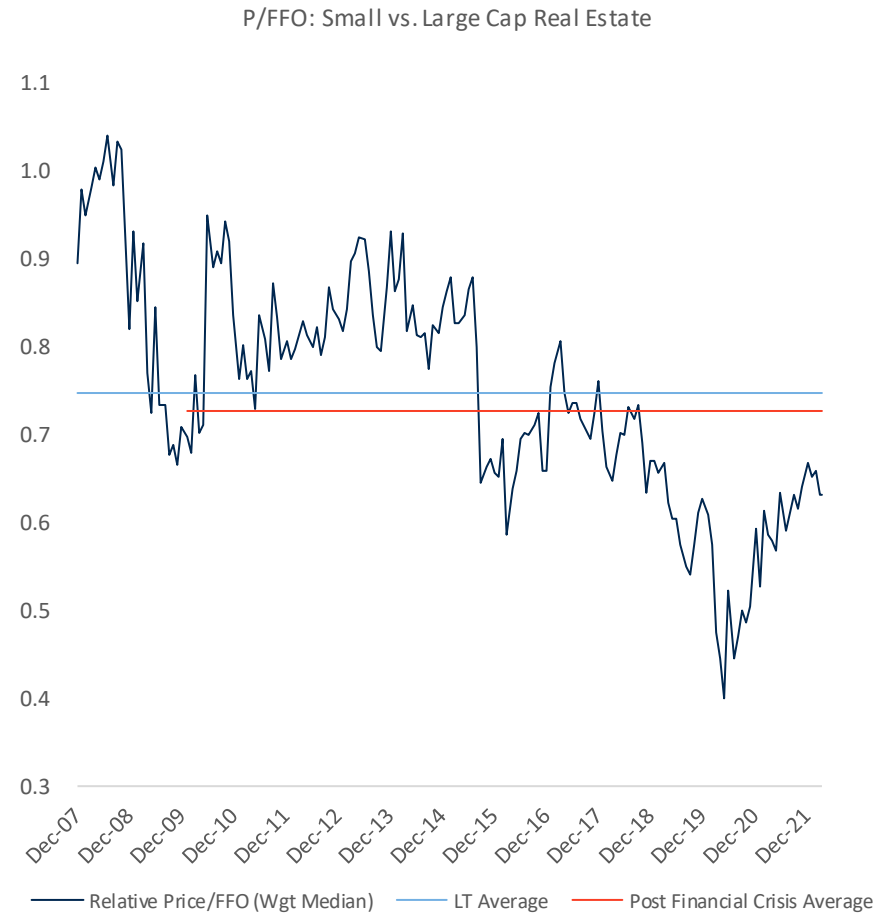
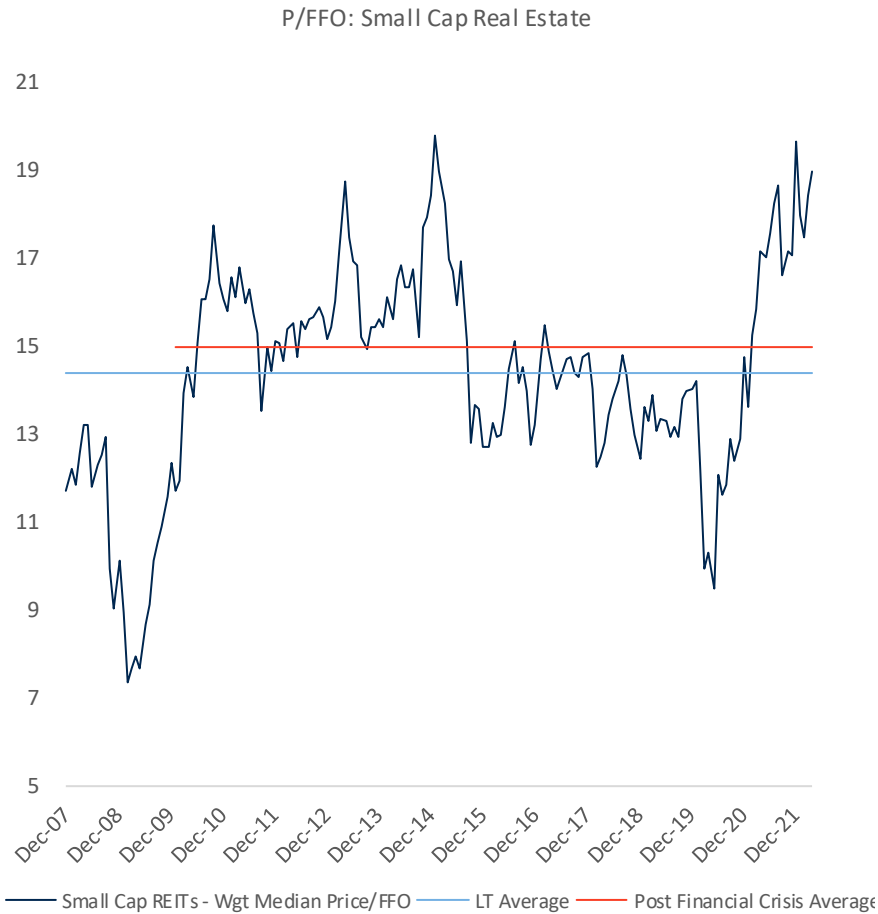
Most Sectors Undervalued or Reasonably Valued vs. History, Cyclical & CD Cheapest



Source: RBC US Equity Strategy, S&P Capital IQ/ClariFi, Compustat, CIQ estimates, IBES estimates. As of April 18, 2022.

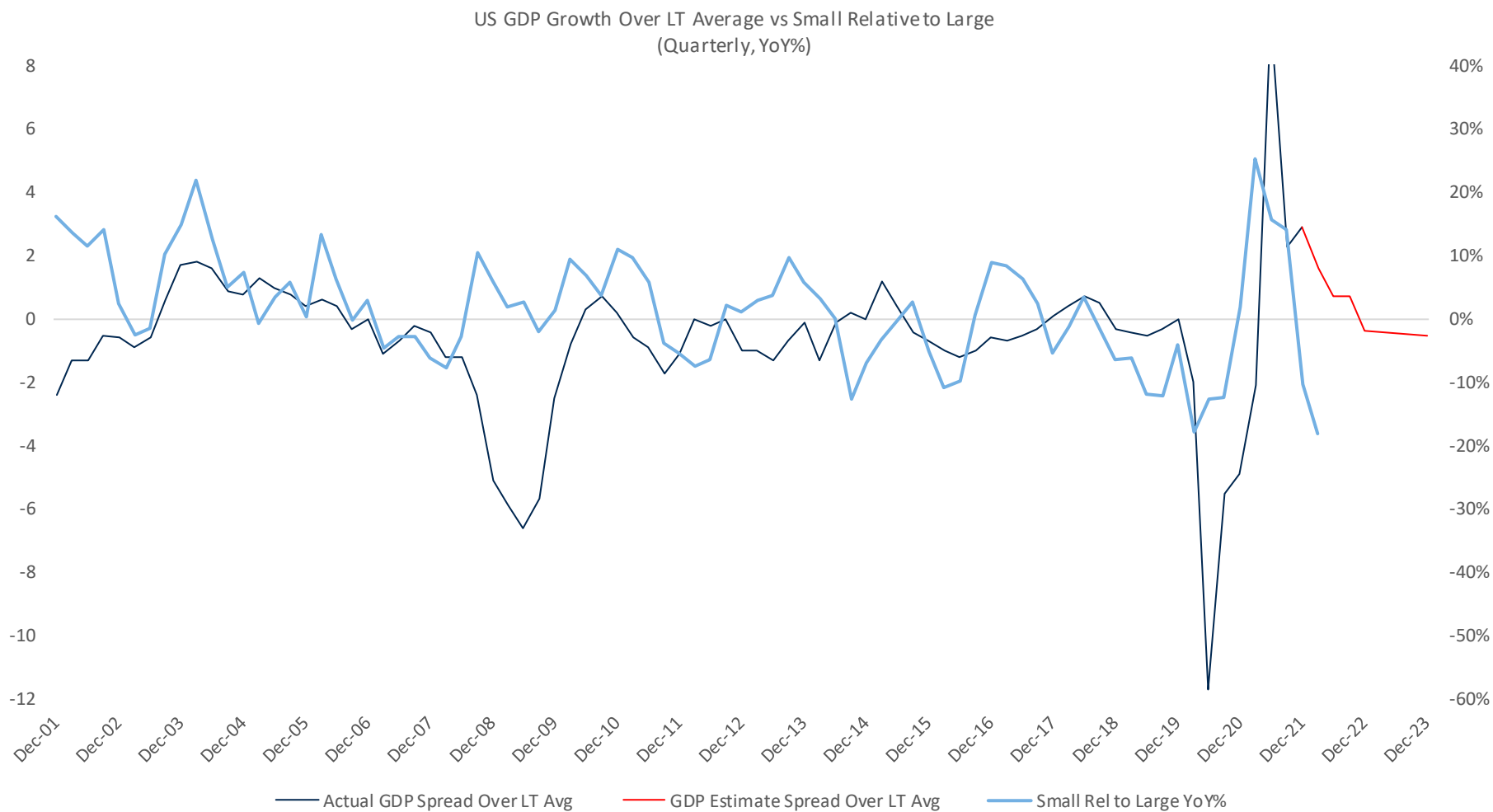
Small Cap / Valuation

Small Cap REITs Are Still Expensive vs. History, but Undervalued vs. Their Large Cap Peers



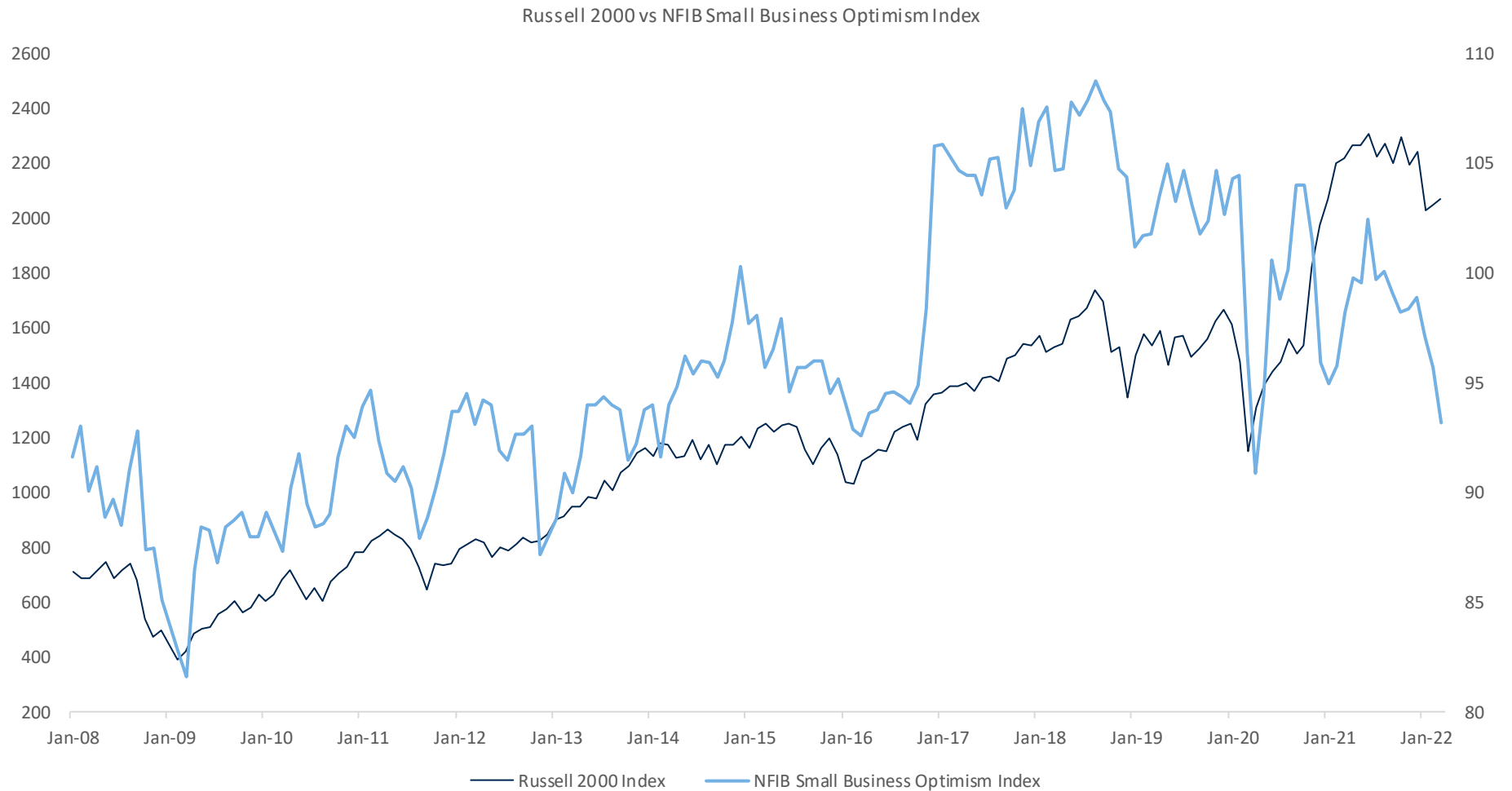
Source: RBC US Equity Strategy, S&P Capital IQ/ClariFi, Compustat, CIQ estimates, IBES estimates. As of April 18, 2022.

Small Cap Underperformance Has Been Discounting a Cooling Off of GDP Growth



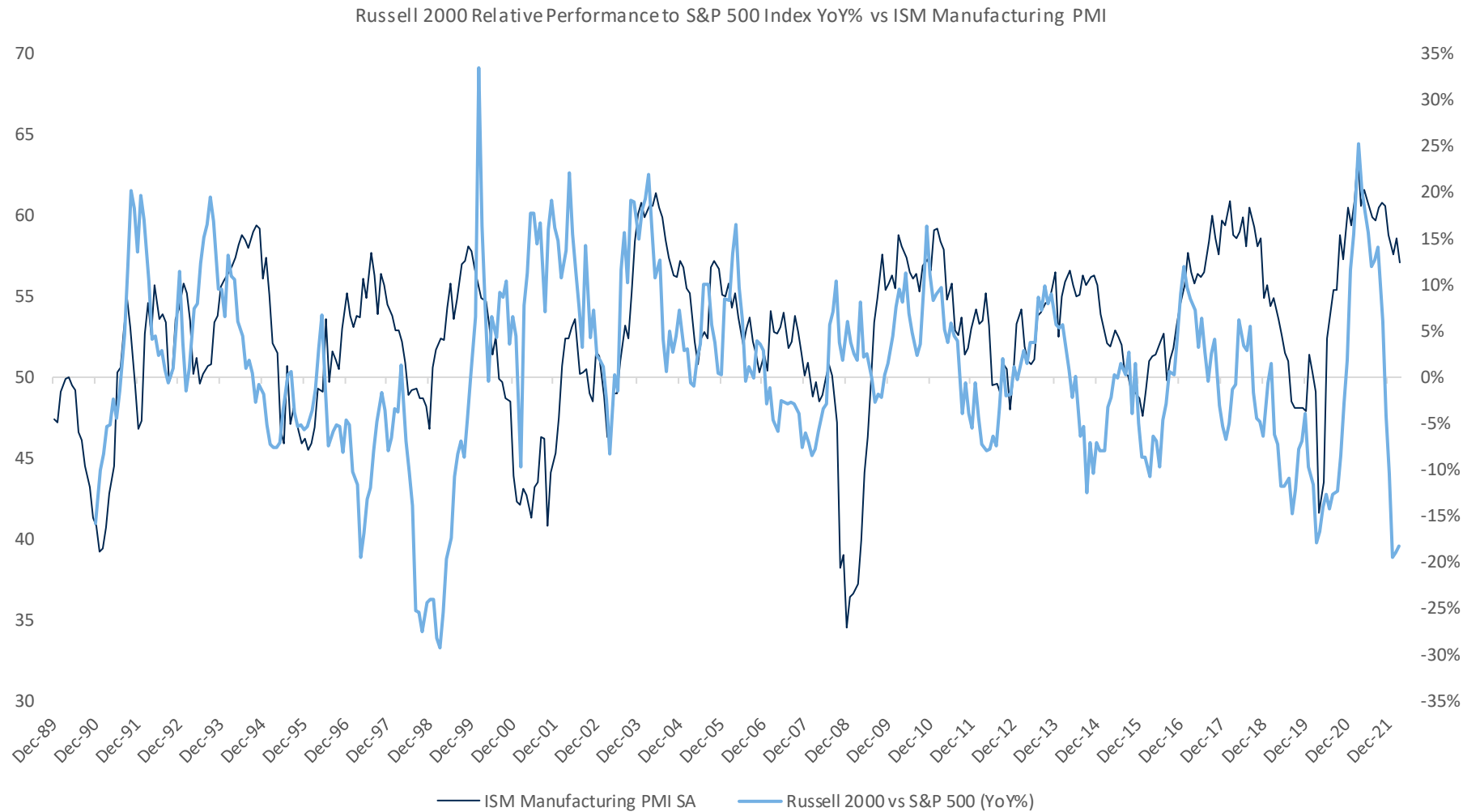
Source: RBC US Equity Strategy, Russell, Bloomberg; as of April 20, 2022

Small Caps Usually Move in Sync with Small Business Optimism, Which Has Weakened



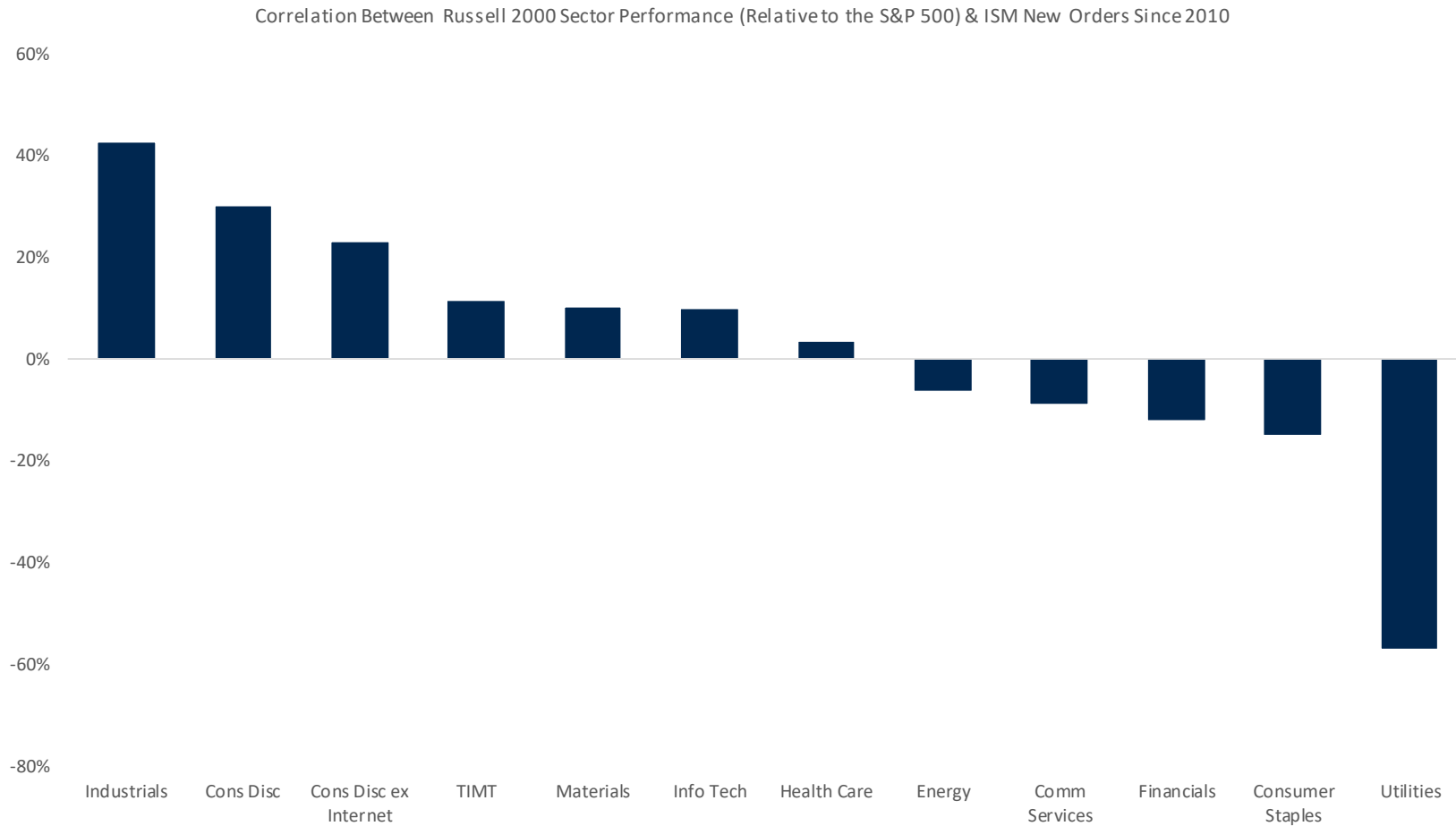
Source: RBC US Equity Strategy, Bloomberg. Pricing as of end of March, NFIB; as of March 2022

Small/Large Relative Performance Moves in Sync with ISM Manufacturing Trends



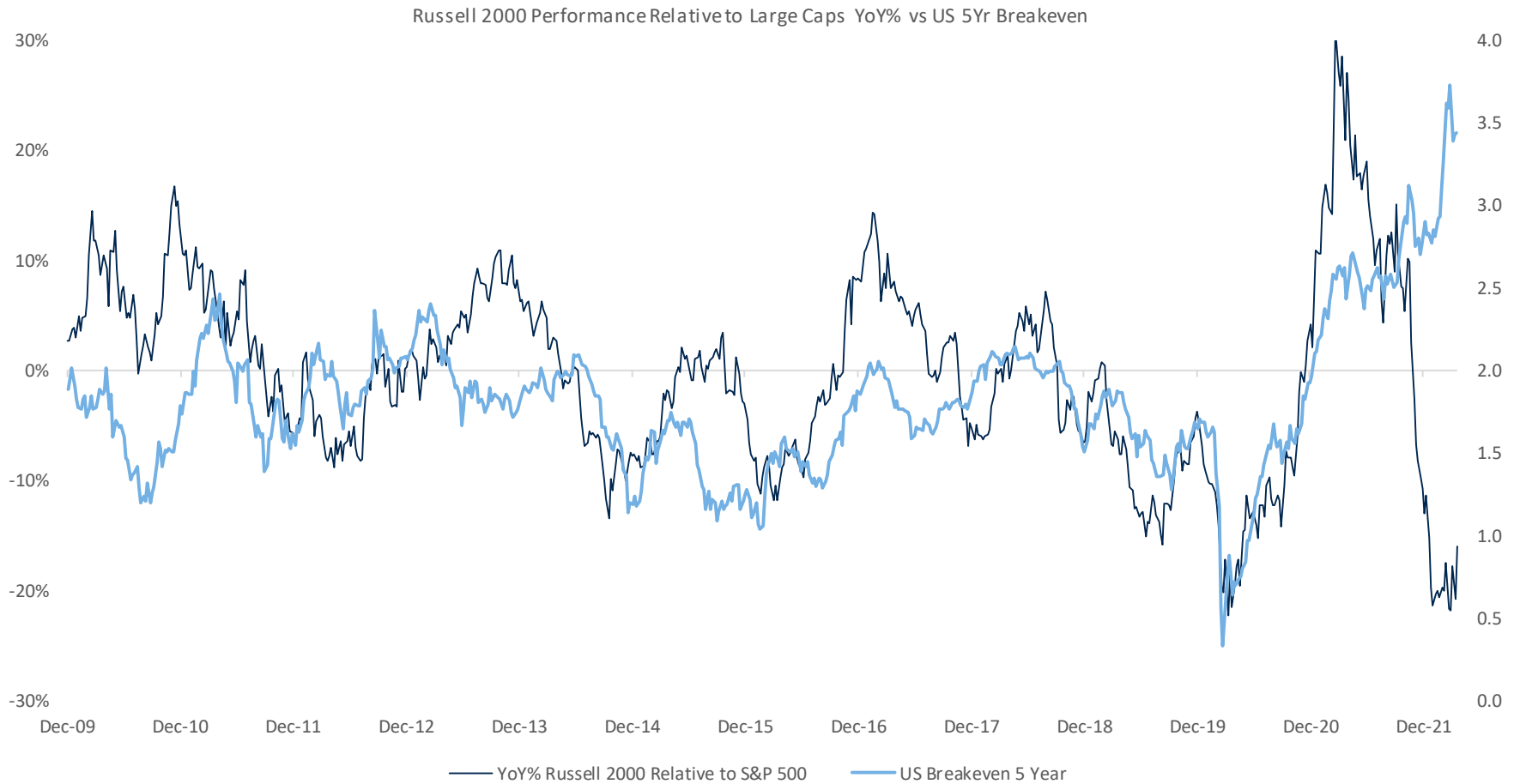
Source: RBC US Equity Strategy, Bloomberg; as of March 2022

Sector Sensitivities to ISM New Orders



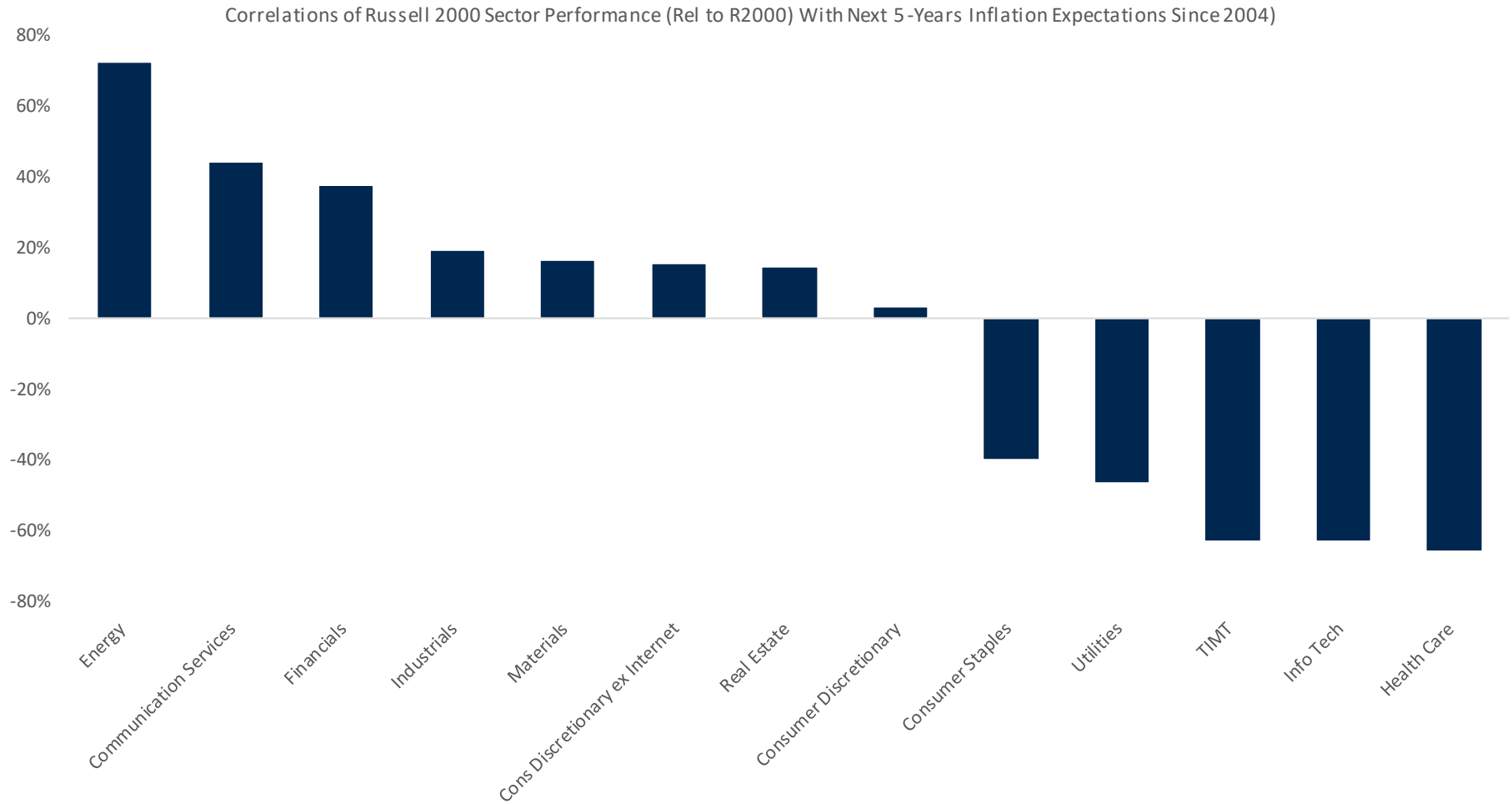
Source: RBC US Equity Strategy, Bloomberg; as of March 2022

Higher Inflation Expectations Have Not Helped Small Cap Recently



Source: RBC US Equity Strategy, Bloomberg; as of April 15, 2022

Sector Sensitivities to Inflation Expectations



Source: RBC US Equity Strategy, Haver. As of March 2022.

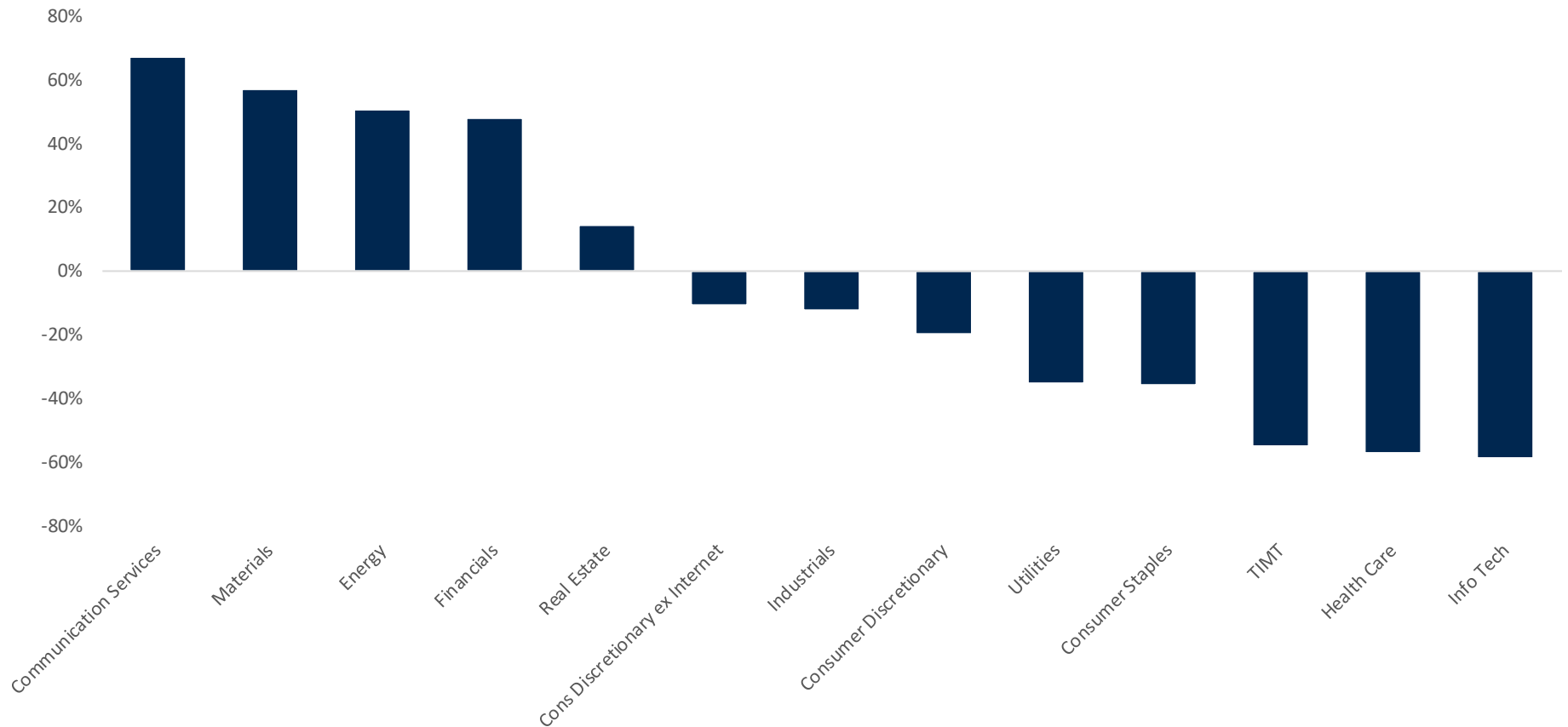
Higher Yields Haven't Helped Small Caps Recently Either



Source: RBC US Equity Strategy, Russell, S&P Capital IQ/ClariFi, Bloomberg; as of March 2022

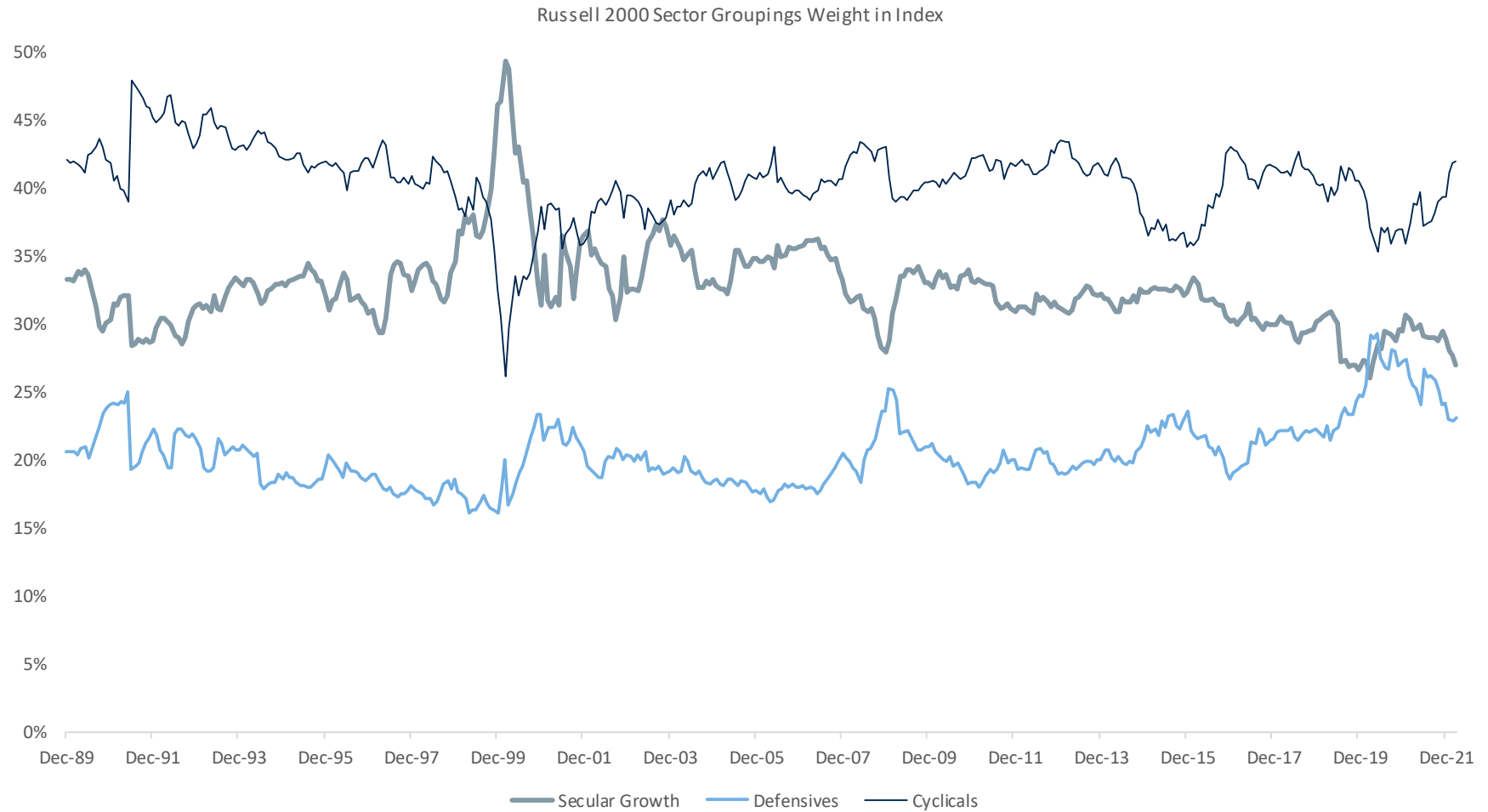
Comm Svcs, Commodities & Financials Are the Biggest Beneficiaries of Rising 10-Year Yields

Correlation Between Small Cap Sector Performance (Relative to the Russell 2000) & US 10-Year Yields Since 2010



Source: RBC US Equity Strategy, Haver, S&P Capital IQ/Clarifi. As of March 2022.

Small Cap Still Has a Cyclical Bias



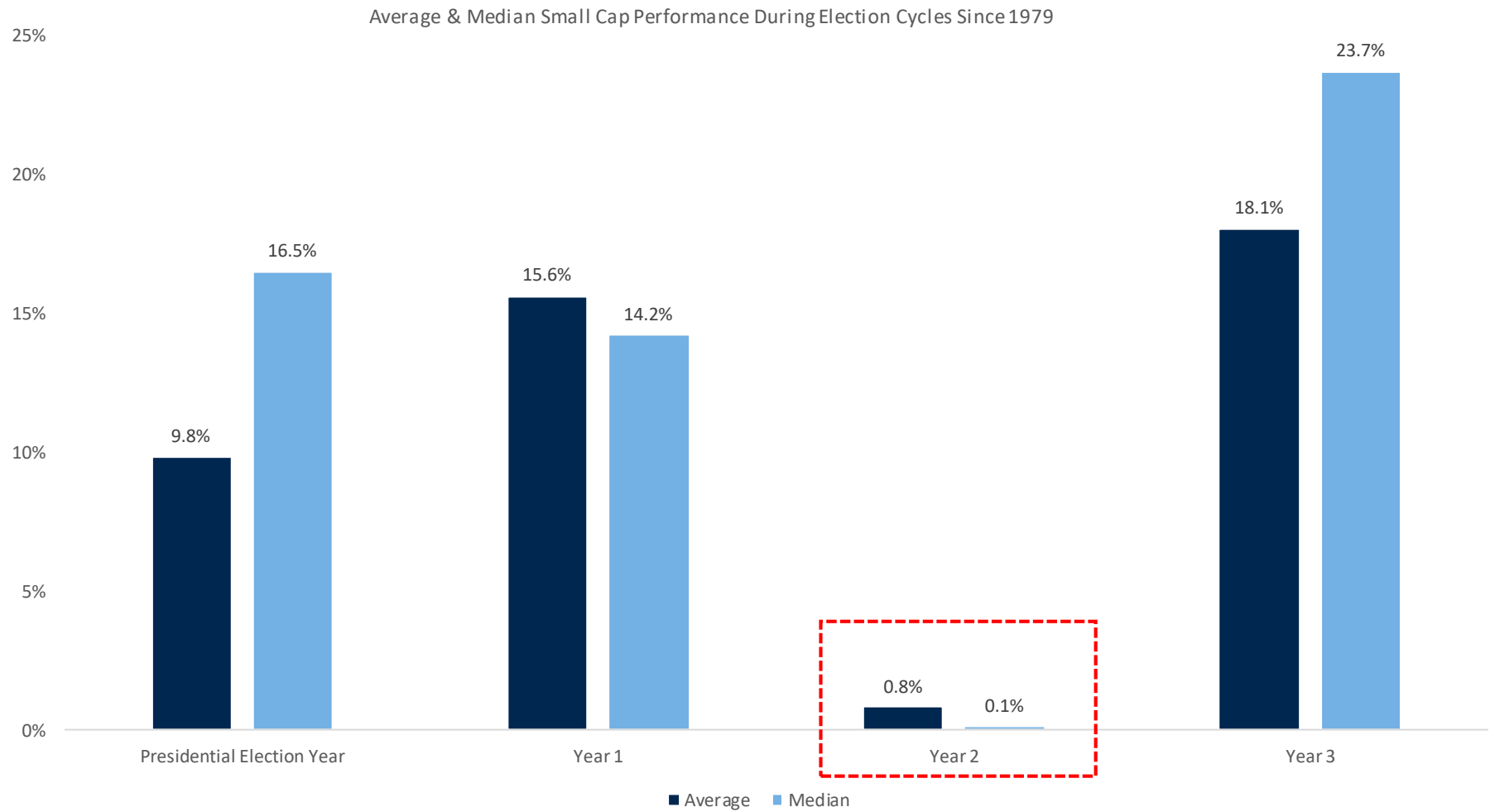
Source: RBC US Equity Strategy, S&P Capital IQ/ClariFi. Cyclical Sectors: Energy, Financials, Industrials and Materials; Defensives: Consumer Staples, Utilities and Health Care; Secular: Consumer Discretionary, Tech, Communication Services, Internet. As of late-March 2022.

Small/Large Relative Performance Peak Normally Seen During Hikes, Came Early This Time



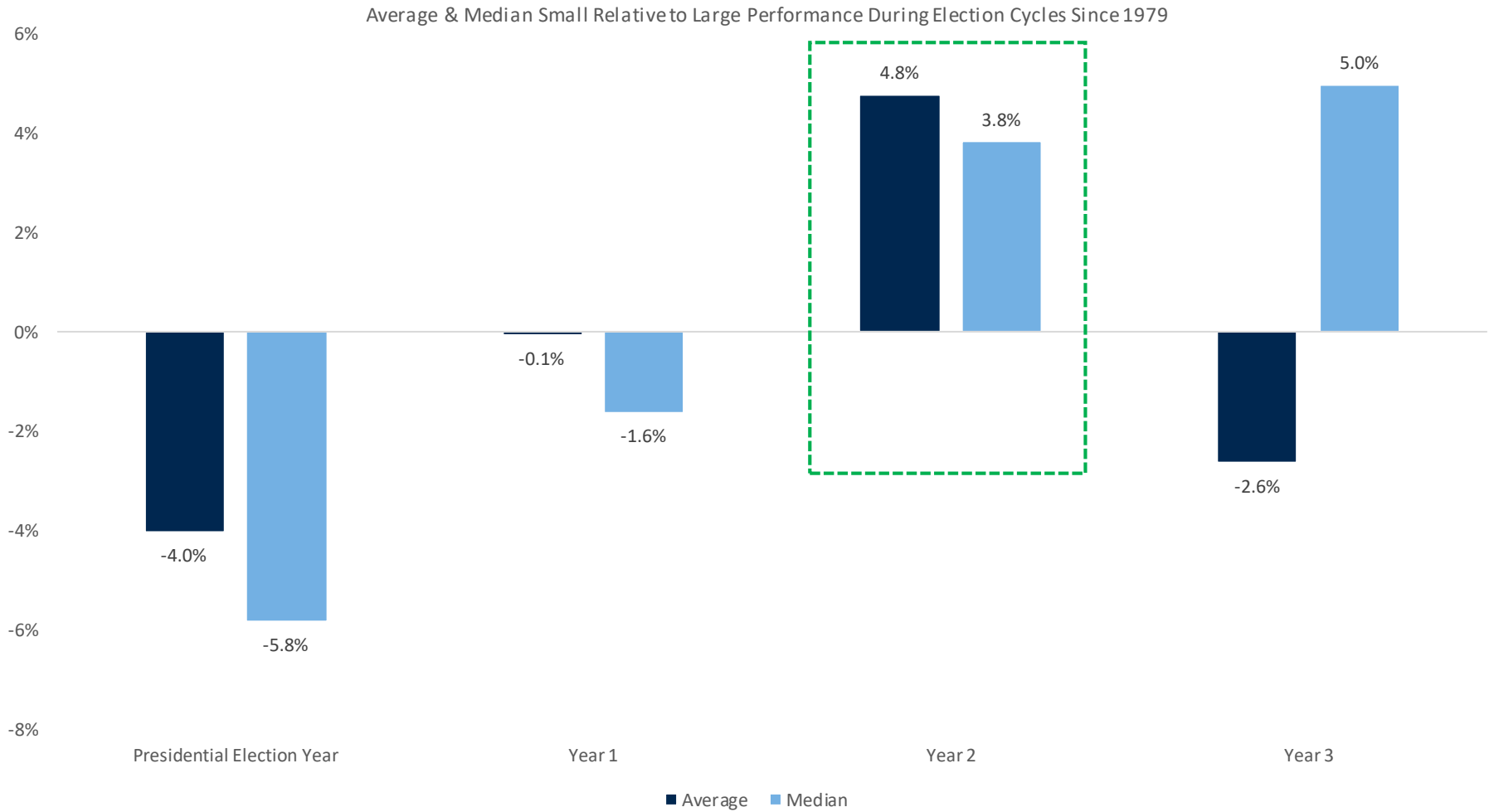
Source: RBC US Equity Strategy, Haver, Bloomberg; as of March 2022

Small Caps Tend to Be Flat in Year 2 of the Election Cycle



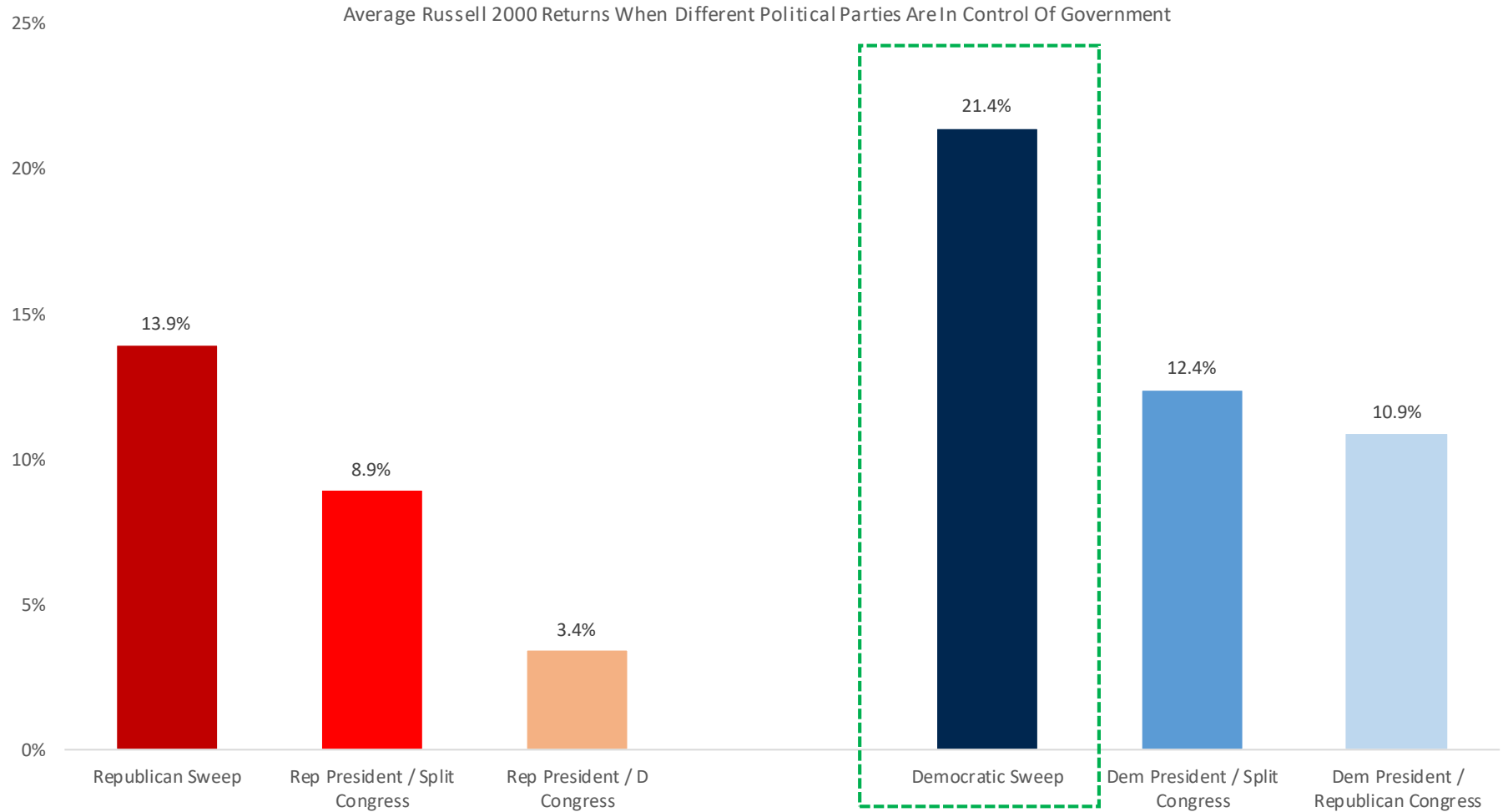
Source: RBC US Equity Strategy, Bloomberg, Russell. Study based on data back to 1979.

Small Caps Tend to Outperform in Year 2 of an Election Cycle



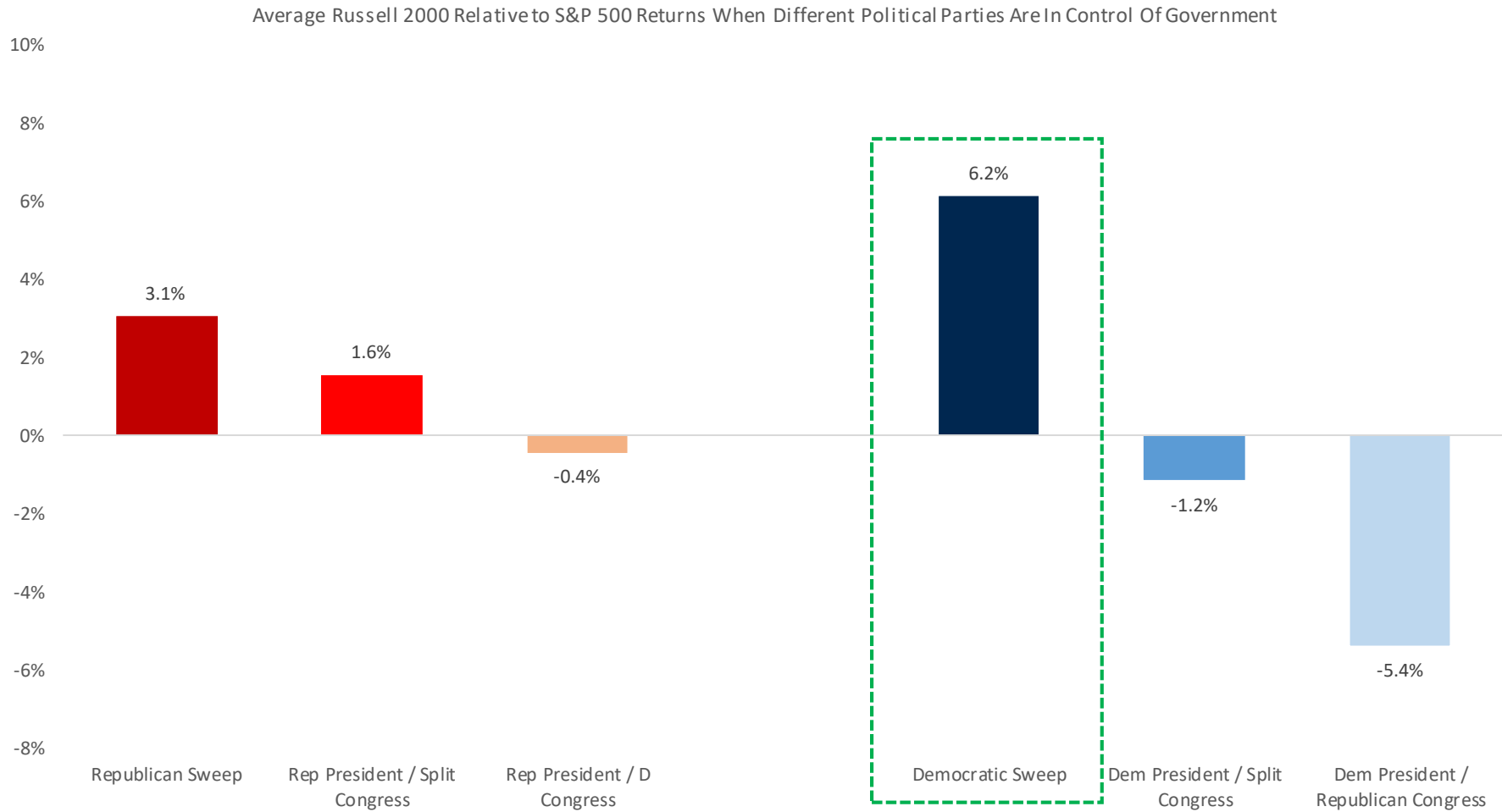
Source: RBC US Equity Strategy, Bloomberg, Russell. Study based on data back to 1979.

Small-Cap Performance Strongest When Democrats Control the White House & Congress



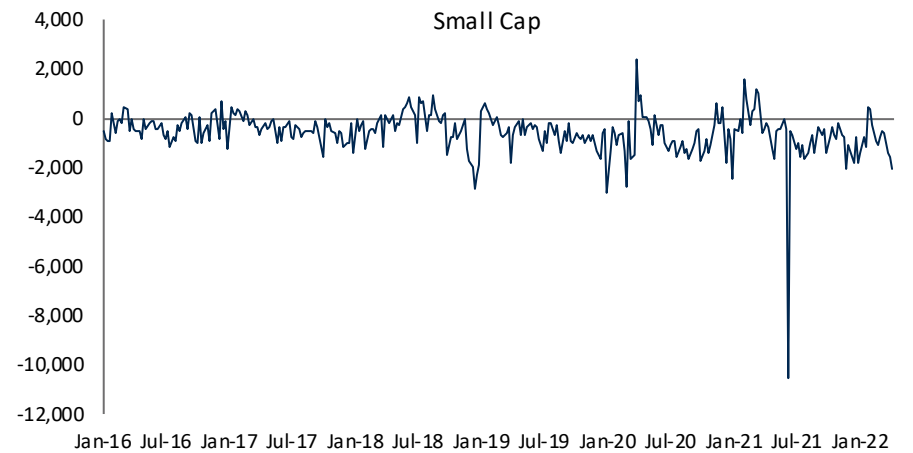
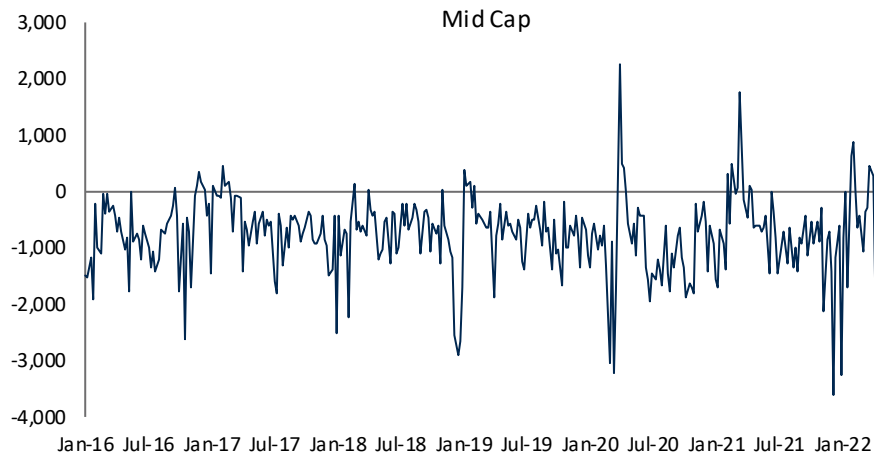
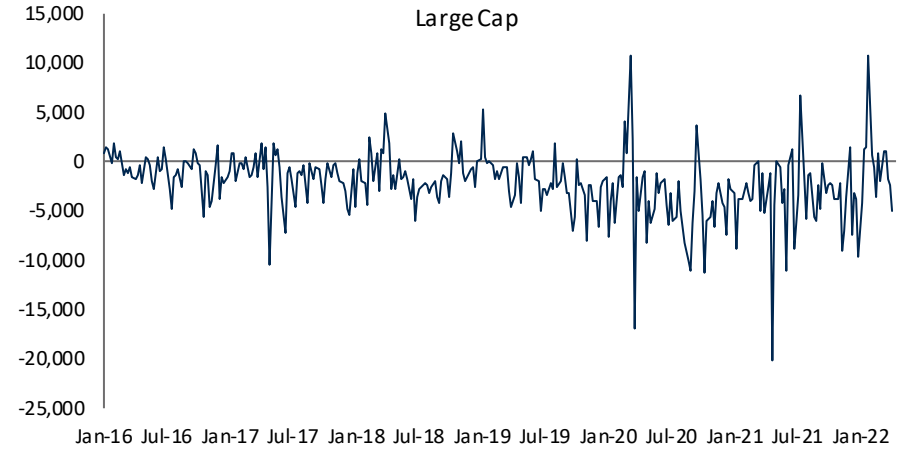
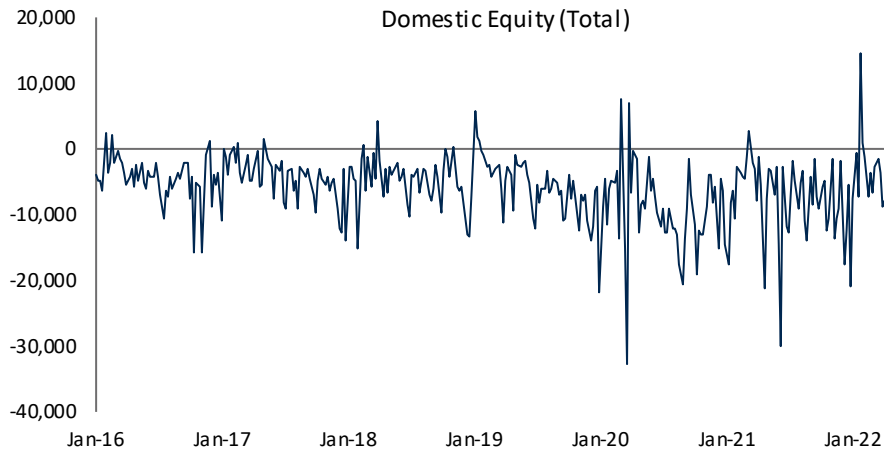
Source: RBC US Equity Strategy, Bloomberg. Includes years since 1979; the 2000 election resulted in a 50/50 tie in the Senate (with a Republican VP acting as the deciding vote after inauguration). However, midway through 2001, one Republican Senator left to become an independent and caucus with the Democrats.

Small Caps Also Tend to Beat Large Caps When Democrats Control the White House & Congress



Source: RBC US Equity Strategy, Bloomberg. Includes years since 1979; the 2000 election resulted in a 50/50 tie in the Senate (with a Republican VP acting as the deciding vote after inauguration). However, midway through 2001, one Republican Senator left to become an independent and caucus with the Democrats.

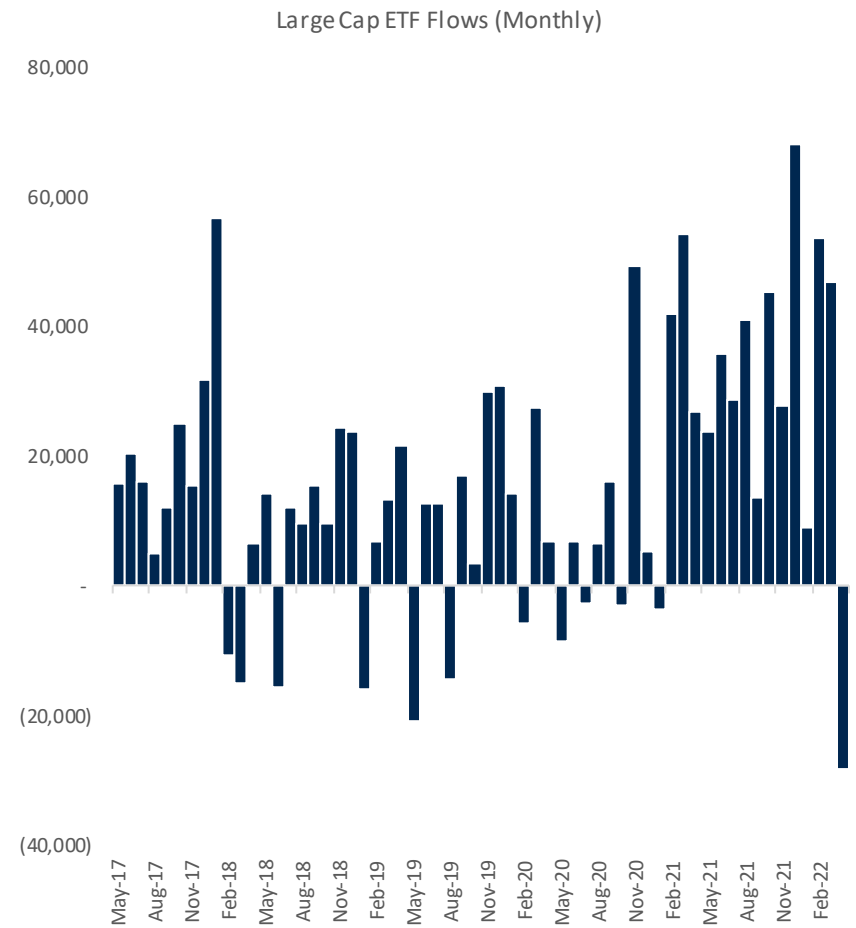
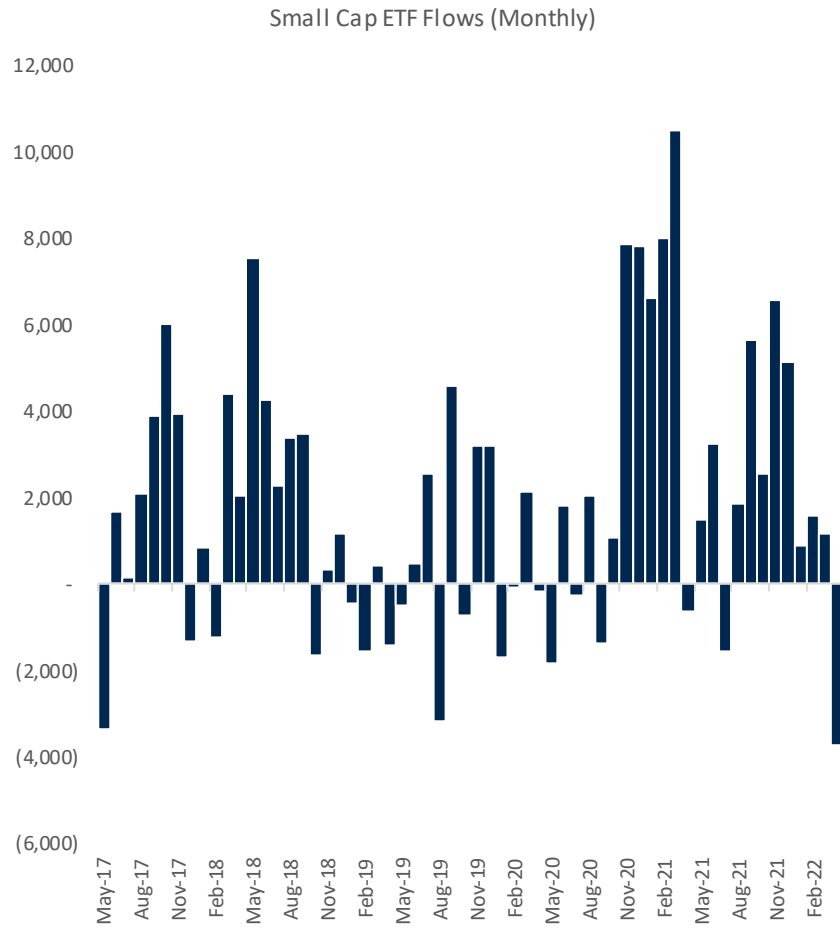
Long-Term Mutual Fund Outflows (Ex ETFs) Have Faded for All Size Segments Recently



Source: RBC US Equity Strategy, Haver, Investment Company Institute; as of April 13, 2022

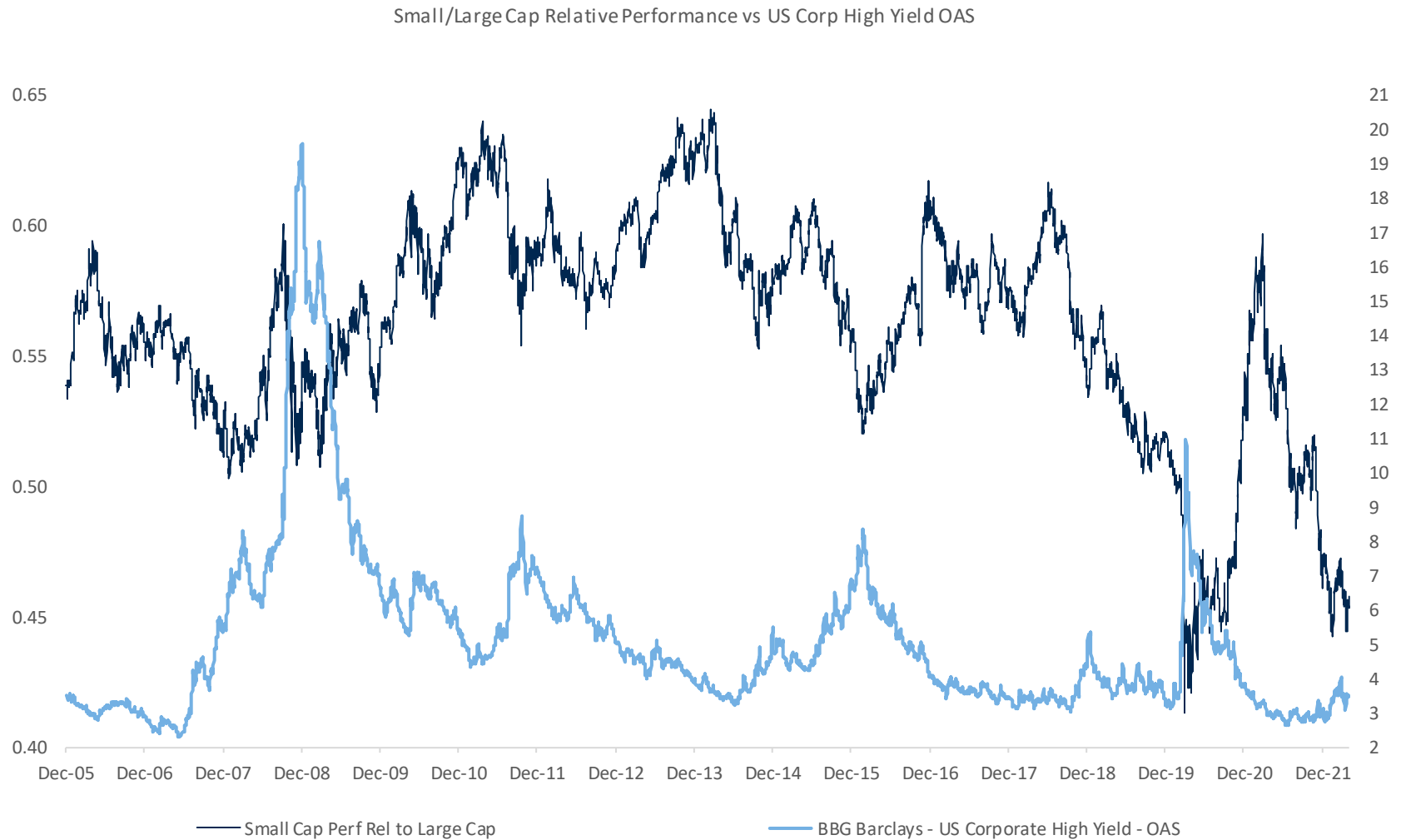
Small Cap / Retail Money Flows

ETF Outflows Have Returned to Both Small Cap & Large Cap Recently



Source: RBC US Equity Strategy, Bloomberg; as of April 20, 2022

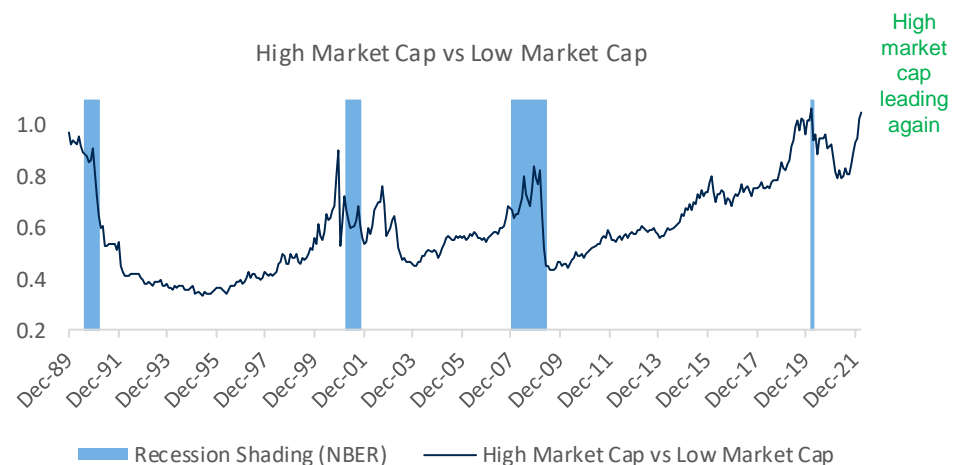
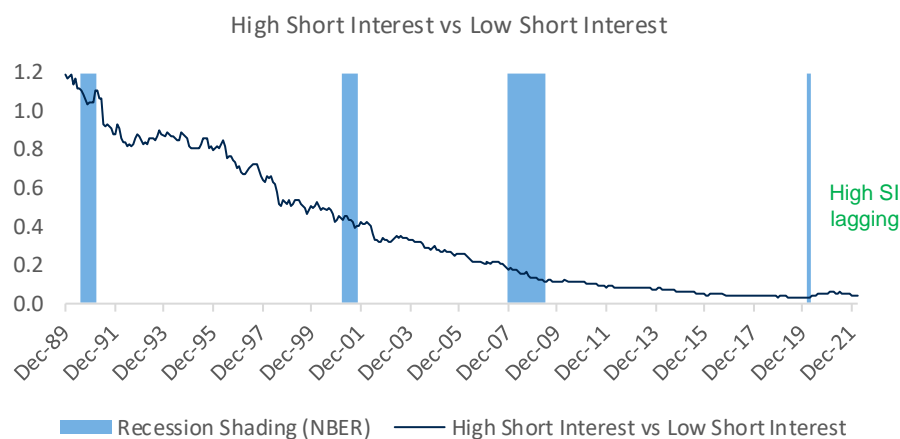
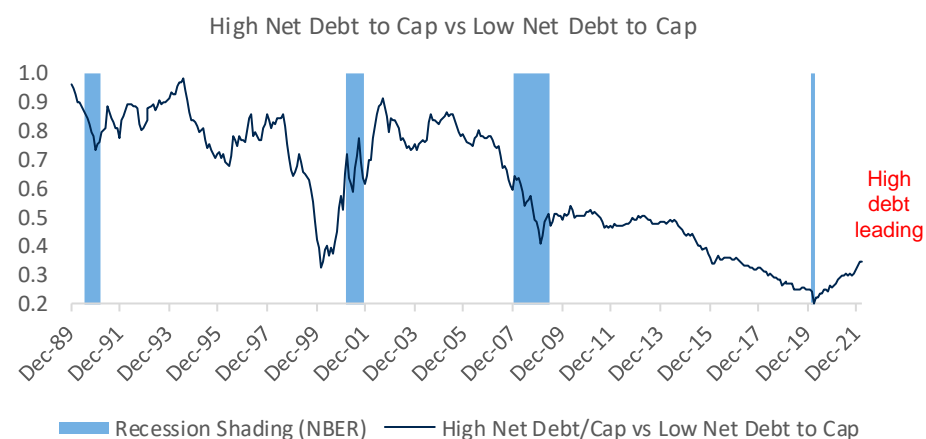
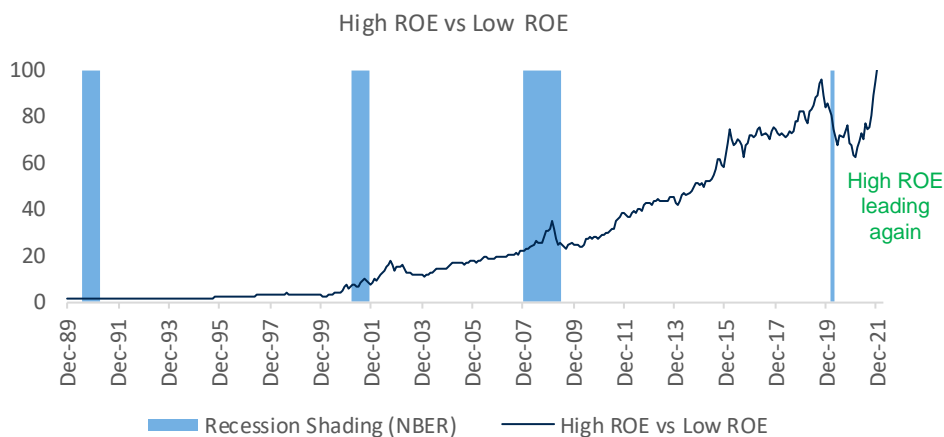
Widening High Yield Spreads a Negative Signal for Small Cap Relative Performance



Source: RBC US Equity Strategy; Bloomberg; as of March 2022

Small Cap / Factors

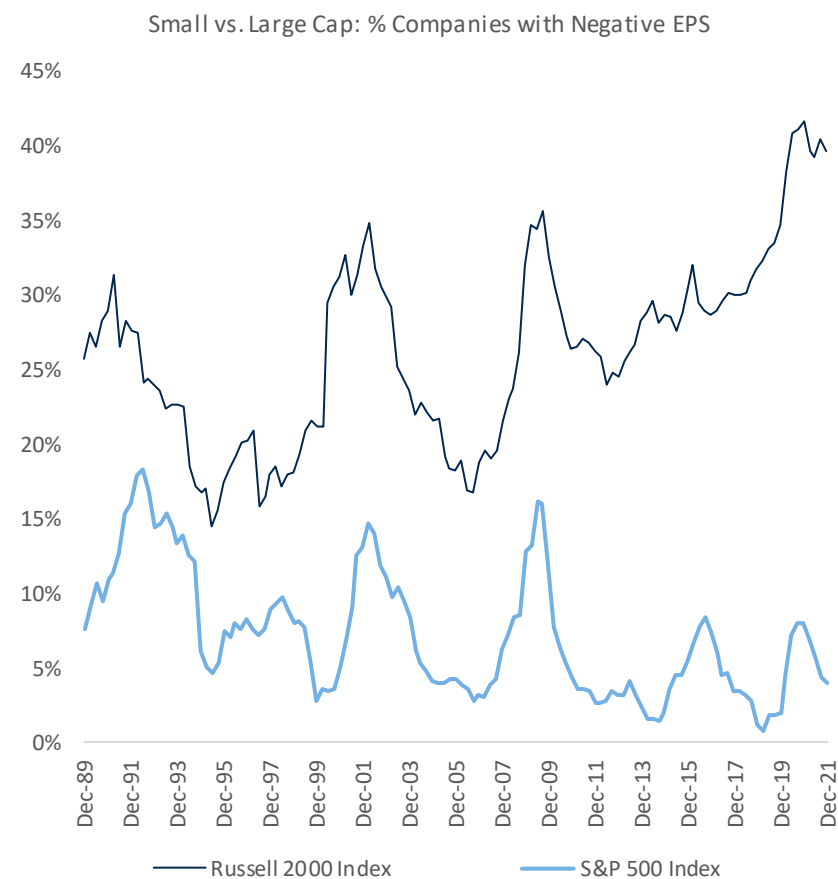
High Quality Tends to Lead Over Time, Mostly Starting To Work Again Within Small Cap



Source: RBC US Equity Strategy, S&P Capital IQ/ClariFi. Based on a universe of Russell 2000 stocks As of March 2022.

Small Cap / Factors

Small Caps Are Seen as Lower Quality Than Large Caps, Gap Has Widened



Source: RBC US Equity Strategy, S&P Capital IQ/Clarifi, Russell, Compustat. As of 4Q21.

Small Cap / Factors

R2000 Sector Quality Factor Heat Map: Key Quality Factor Rankings by Sector

Small Cap Quality Factor Rankings	ROE	Net Debt To Capital	Short Interest % Shr/O	Market Cap	Average Rank
Communication Services	12	10	6	12	10.0
Consumer Discretionary	1	9	13	11	8.5
Consumer Staples	6	5	10	9	7.5
Energy	8	7	9	2	6.5
Financials	4	3	1	7	3.8
Health Care	13	1	11	13	9.5
Industrials	3	6	5	5	4.8
Information Technology	11	2	7	4	6.0
Materials	5	8	4	10	6.8
Real Estate	9	11	3	3	6.5
Utilities	7	13	2	1	5.8
Ranking Criteria	#1 is highest ROE	#1 is lowest Net Debt To Capital	#1 is lowest SI % Shr/O	#1 is highest Market Cap	#1 is Most Desired

Source: RBC US Equity Strategy, Compustat, S&P Capital IQ/ClariFi. Wgt median used for all metrics. ROE, Net Debt To Capital are as of 4Q21 (final), Market Cap as of 1Q22, and Short Interest as of 3/31.

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