



Regime Shifts

February 18th, 2022

Why the S&P 500 could underperform Alternative Weighted ETFs

The largest three passive S&P 500 ETFs have a combined AUM of over a trillion dollars¹ and have not only risen 130% over the past five years but have outperformed 73% of all active managers². A confluence of factors saw technology stocks deliver double the market return over the period, including cheap valuations (Apple was on a P/E of 10x in 2017), Amazon’s dominance over brick-and-mortar retailers and the Pandemic catalyzing a digital revolution. As technology outperformed, the S&P 500 became the best performing major market index in the world (see Appendix).

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Following its persistent outperformance, the risks are now higher than ever that the S&P 500 will underperform if the investment regime changes. Its main holding, large cap technology (which now accounts for 42% of the index³) is highly exposed to several potential headwinds in 2022, including interest rate hikes, rising vaccination rates, increased regulation, and overly optimistic valuations. A change in the prevailing market dynamic could cause one (or more) of these headwinds to reverse the long-run market trends and see cap weighted products underperform their alternatively weighted counterparts.

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In general, investment regimes are a significant driver of the relative performance between cap weighted strategies and alternative weighted strategies. This report explores the different types of regime shifts (Exhibit 1), explaining how and when they occur and their impact on index performance.

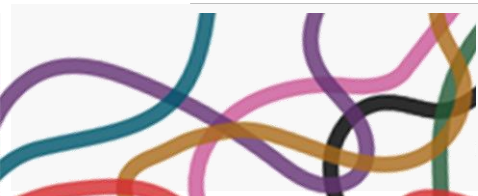
Exhibit 1: Regime shifts and 2022 risk levels

Regime Shift	2022 Risk	Risk Level
Growth / Value Rotation	Growth expectations prove unrealistic	High
Thematic Change	Interest rates rise faster than expected	High
Market Sell-off / Reversal	Large shock a causes volatility spike	Med

¹ Combined AUM of SPY, IVV, VOO as of 2.15.22

² S&P Global SPIVA, www.spglobal.com/spdji/en/research-insights/spiva

³ Syntax, Do You Know What You Own? How Much Technology is Really in the S&P 500?

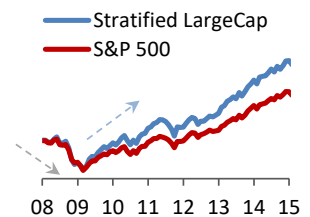


Regime Shifts and Cap Weighted Benchmarks.

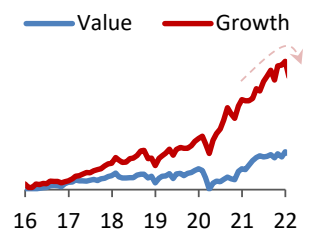
A regime shift is a change in market dynamics, usually brought on by a change in economic conditions. In this note we distinguish between three types of regime shifts:

1. **Sell-offs and Reversals.** Large market moves that are driven by behavioral factors (such as fear and greed) which manifest as changes in discount rate assumptions, causing the market to sharply sell-off and then dramatically reverse as confidence returns and investors scramble to reenter the market in search of a quick profit. Cap weighted strategies usually underperform due to their low weightings in the most sold-off stocks at the trough, which often outperform the most in a recovery.
2. **Growth and Value Rotations.** Changes in investment style can significantly impact portfolio performance. The two most widely followed investment styles are Value (low multiple stocks) and Growth (stocks with high future earnings growth). At the tail-end of a bubble, a realization that growth expectations will not be met causes a crowded exit from popular growth names (as seen recently with Netflix and Facebook). Cap weighted strategies underperform due to their oversized exposures in high multiple, large cap growth stocks.
3. **Thematic Changes.** Secular changes in market conditions that often last for many years, Cap weighted strategies underperform due to their overweight positions in themes that have already prevailed and have become dominant weights in the index. Such positions are at risk of underperforming when the theme reverses. e.g., interest rates normalizing faster than the market anticipates, causing high growth and over-leveraged stocks to underperform.

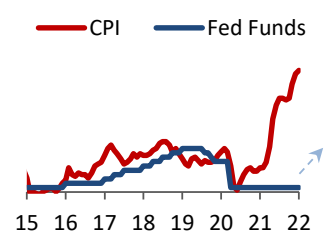
'08 Sell-off & '09+ Reversal



Growth outperformed



Fed chasing inflation



Major regime changes can, and often do, involve a combination of these market forces. For example, the Coronavirus Pandemic caused investor panic and a fear-based sell-off in February and early March 2020, when all risk assets declined. As the Fed stepped in and injected unprecedented liquidity a reversal ensued and all risk assets recovered. As the Pandemic progressed, the overarching theme was “stay at home” stocks outperformed and “reopening” stocks underperformed. When the majority of the population became vaccinated, investor confidence returned and a broader move into value stocks occurred.

We now explore each type of regime shift in the context of market cap vs alternative weighted indices.

Regime Shift #1: Sell-offs and Reversals

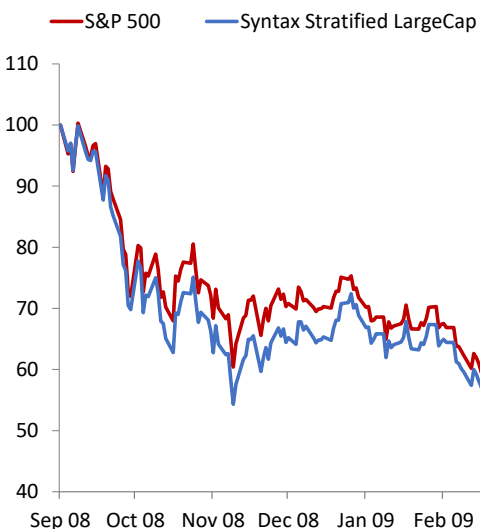
The last two major market shocks, the 2008/9 Global Financial Crisis (GFC) and the COVID pandemic, despite having completely different underlying factors were unified by similar human behaviors, namely fear and greed. While we have seen this behavior replay time and time again for different reasons, the magnitude of loss aversion by investors is often very similar. These two sell-offs, despite having different root causes, later caused strong headwinds for cap-weighted indices. As a result, during the subsequent recovery, Cap Weight significantly underperformed many alternative weight strategies, such as Stratified Weight, over the entire sell-off and recovery episode (see sidebar).

There were two regimes in 2008 and 2009: (i) a sharp sell-off, which picked up steam when Lehman Brothers collapsed on September 15th, 2008 and bottomed out almost six months later on March 9th, 2009; and (ii) a sharp recovery when the Fed intervened and confidence ultimately returned (Exhibit 2).

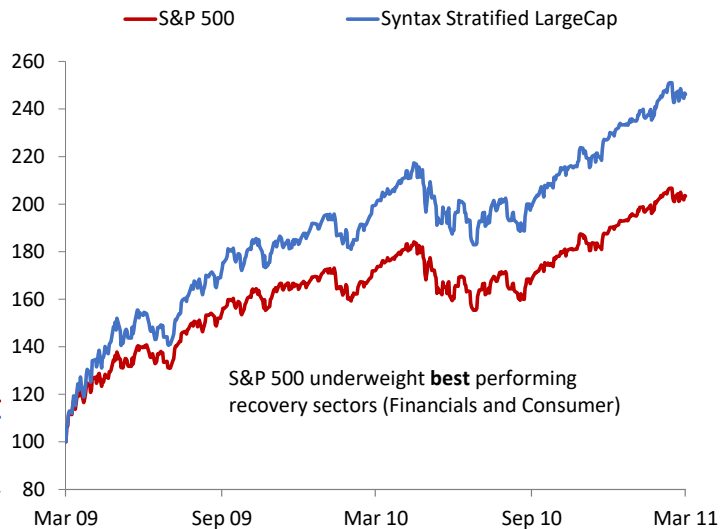
Cap weighted strategies often underperform stratified weight during the recovery phase due to their low weightings in the most sold-off sectors. For example, in March 2009, the S&P 500 had only 8.9% in Financials, down from 20% at the start of 2007. The Financial sector subsequently recovered 143% over the next two years. Cap weight's dynamic of underweighting the worst performers, only to see them revert the most during a recovery is a key driver of the relative performance of alternative weighted indices, especially those which frequently rebalance.

Exhibit 2: Global Financial Crisis: Sell Off and Subsequent Recovery

i. Sell Off (post Lehman Brothers collapse)



ii. Recovery (two years following March 2009 trough)



Cumulative total return, 9.12.2008-3.9.2009 and 3.9.2009-3.9.2011. Performance does not reflect fees or implementation costs as an investor cannot directly invest in an index. Please see important disclaimers regarding backtested data prior to inception.

Source: S&P Dow Jones Indices, Syntax.

S&P 500 (cap weight)

Episode*	Sell-off	Rev.
1987	-28.4%	61.8%
2002	-25.5%	43.9%
GFC	-41.8%	65.5%
COVID	-19.6%	64.7%

Stratified LargeCap index

Episode*	Sell-off	Rev.
1987	NA	NA
2002	-22.9%	68.2%
GFC	-43.8%	93.1%
COVID	-24.2%	74.7%

* See Appendix for dates of Sell-offs and Reversals.

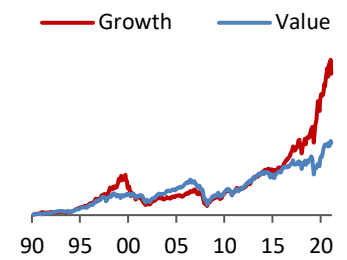
Regime Shift #2. Growth and Value Rotation

Our second regime shift relates to the style rotation between Value and Growth. Value investors are driven by the belief that stocks whose fundamentals are undervalued by the market will eventually benefit from multiple expansion (or those which are expensive will see multiple contraction). Such opportunities are greatest when relative valuations are widest. Growth stocks on the other hand attract investors looking for stocks where the market is underestimating the future earnings growth of a company.

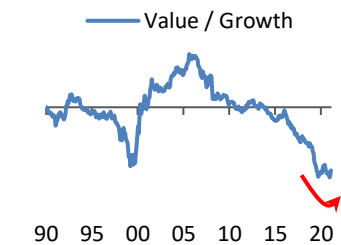
When earnings expectations are at historical highs, which happens after a protracted rally (such as the one seen since 2016), many stocks become “priced to perfection” and the likelihood for future earnings upgrades is low and the potential for disappointment is high. This was the case at the end of the Dotcom bubble when Growth companies were trading at extreme valuations (10x book value or 44x forward earnings) and when earnings eventually disappointed, investors raced to sell Growth stocks and buy Value. This caused Value to outperform Growth for five years following the bursting of the Dotcom bubble.

The switch from Growth to Value is likely a headwind for market cap weighted strategies since cap weight is usually overweight in growth stocks. In a bubble, price growth outstrips earnings growth, especially in growth companies which become relatively more expensive. Alternative weighted strategies frequently rebalance their weights and by doing so sell the outperforming growth stocks and move their weights back to their target, thereby injecting a relative value bias. This was also the case for the Growth / Value rotation following the DotCom bubble (see Appendix). We are beginning to see Value outperform Growth this year and with it Stratified Weight outperform Cap Weight (Exhibit 3).

Growth & Value Indices



Value relative to Growth



Valuations

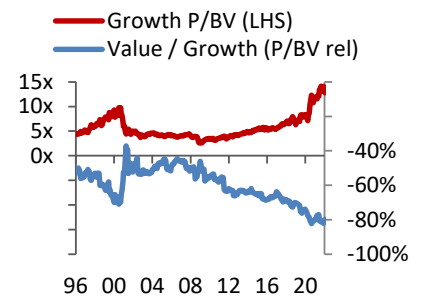
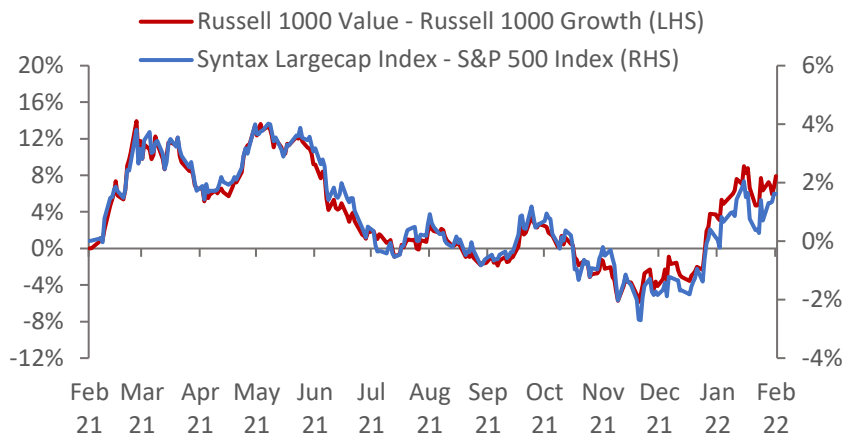


Exhibit 3: S&P 500 recently underperforms as Value outperforms



Correlation = 0.87

i.e., when value is outperforming growth, there is a high probability that the Stratified LargeCap is outperforming the S&P 500.

Source: Syntax, Bloomberg. Cumulative total relative return, 2.1.2021-2.1.2022. Performance does not reflect fees or implementation costs as an investor cannot directly invest in an index.

Regime Shift #3: Thematic Changes

The third type of regime shift is driven by a change in market theme. A theme is a persistent trend which impacts a group of companies simultaneously. Themes often span several different sectors and may persist for a few months (e.g., the supply chain shock in September 2021) or several years (like the outperformance of Technology-related companies). Themes are often driven by commodity prices (e.g. oil), economic trends (e.g. inflation), politics (e.g. infrastructure spending), as well as innovation (e.g. electric vehicles or Artificial Intelligence).

The most dominant theme so far in 2022 has been high inflation. The Headline CPI rate has risen over two percentage points since September 2021 (from 5.4% to 7.5% in January). This rise has been attributed to the unprecedented amount of stimulus injected by the Federal Reserve since 2008, which has sent the US long bond falling to roughly 2%. As the Fed gradually removes its stimulus over the coming years, the risk of an inflation driven regime shift is rising and with it another risk to the relative performance of the S&P 500.

Over the past year, the relative return of the S&P 500 versus the Stratified LargeCap index has been consistent with the rise and fall of the US long bond yield. A 20bps rise in the US long bond yield has been consistent with 2% outperformance of the Syntax Stratified LargeCap index over the S&P 500 (Exhibit 4). The US 30 year yields roughly 2.35% at the time of writing, which is significantly lower than its average over the last ten years of 2.7% and twenty year average of 3.6%, leaving significant scope for it to normalize and with it Value to outperform Growth.

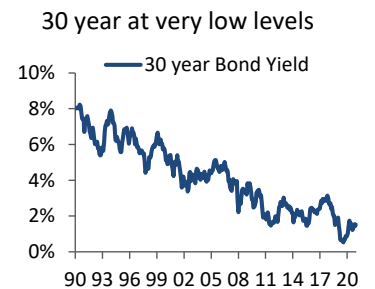
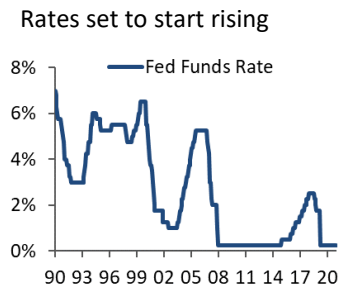
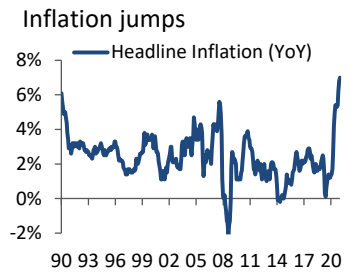
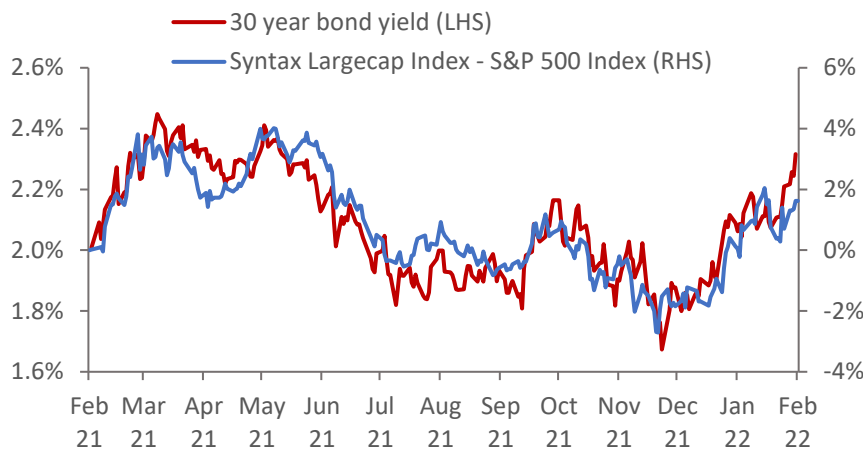


Exhibit 4: S&P 500 underperformed as long-term rates rose



Cumulative total return, 9.12.2008-3.9.2009 and 3.9.2009-3.9.2011. Performance does not reflect fees or implementation costs as an investor cannot directly invest in an index.

For additional information, please visit www.syntaxindices.com

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Conclusion

Since 2016, the S&P 500 has performed very strongly, supported by a favorable interest rate environment and the widespread adoption of technology. The S&P 500 index is now more concentrated in mega-cap technology stocks than it was at the height of the DotCom Bubble, leaving it highly exposed to changes in the long-term investment regime.

In 2022, it's likely that the Fed will attempt to tread the tightrope of raising interest rates to combat high inflation, without damaging economic growth. If inflation continues to rise and breaches 8% (a level not seen since the 70s), then it is highly likely that the Fed will have to raise rates faster than anticipated and technology will underperform. Furthermore, with valuations at historical highs, disappointing quarterly earnings, could manifest as a crowded exit out of technology into some of the underserved sectors in the S&P 500, such as Energy, the Consumer or Food.

This shift would see the S&P 500 significantly underperform alternatively weighted products such as the Syntax Stratified LargeCap index, which reweights the same stocks as the S&P 500, but with diversified exposures that allocate equally across all major sectors and is therefore not overweight in technology or any other business risk.

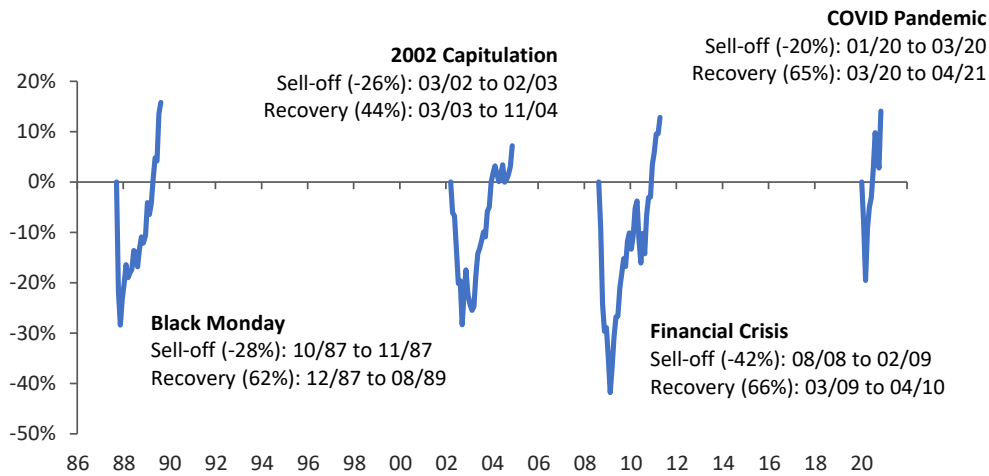
Appendix

S&P 500 was the best performing major market indices over the past 3, 5 and 10 years

	1 year	3 years	5 years	10 years
S&P 500	13.44%	19.04%	15.57%	15.41%
S&P 400	4.93%	13.41%	10.50%	12.62%
Russell 2000	-10.85%	10.72%	9.05%	11.32%
MSCI EAFE	1.19%	9.48%	7.85%	6.93%
MSCI Europe	5.65%	10.55%	8.41%	7.18%
MSCI UK	14.25%	6.94%	6.10%	4.79%
MSCI Asia ex Japan	-17.53%	8.42%	9.00%	6.58%
MSCI Japan	-8.74%	8.01%	6.59%	7.30%
MSCI EM	-13.32%	7.92%	7.93%	4.16%

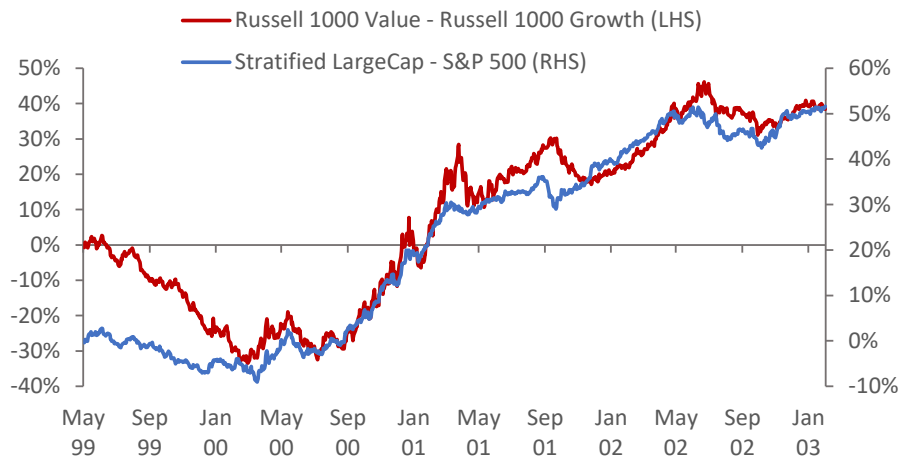
Source: Syntax, Bloomberg. Total return index performance annualized on 2.14.2022.

S&P 500 sell-off and reversal periods



Source: Syntax, Bloomberg. Chart shows the cumulative index performance during sell-off and reversal periods.

Growth and Value rotation 1999-2003 with Stratified LargeCap relative to S&P 500



Source: Syntax, Bloomberg. Cumulative total relative return, 5.1.1999 - 2.1.2003. Performance does not reflect fees or implementation costs as an investor cannot directly invest in an index.



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Past performance is no guarantee of future results. The inception date of the Syntax Stratified LargeCap was December 27, 2016. Charts and graphs are provided for illustrative purposes only. The S&P 500® Index is an unmanaged index considered representative of the US mid- and large-cap stock market. Benchmark data for the S&P 500 is provided by S&P Dow Jones through FactSet®.

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