



MARKET GPS

ALTERNATIVE PERSPECTIVES

March 2021

OUR DIVERSIFIED ALTERNATIVES CAPABILITIES

Welcome to the latest edition of our Market GPS: Alternative Perspectives, where we highlight some of the current thinking from across our Diversified Alternatives team.

For the past three decades, investors have benefited from what have generally been strong, supportive market environments for equities and bonds. This has guided investment behaviour. All that changed in 2020 with COVID-19, resulting in huge changes to people's lives, the global economy, how we work, and how we invest.

A key objective for Alternatives as an asset class is to be distinct, offering investors performance that is uncorrelated with both the major asset classes (equities and bonds). Producing uncorrelated returns is not a difficult objective to achieve in normal market environments but becomes markedly harder when markets are suffering high volatility and significant negative returns. Bearing this in mind, there were strategies last year that succeeded in mitigating some of the impact of the initial COVID 'shock', but there were others that did not live up to expectations. Another more recent lesson is to be wary of 'hedge' strategies that don't actually hedge. While such strategies may enjoy periods of strong performance, the recent experience of Gamestop provides a good example of where it can go wrong on the short side, and we see significant risks of such speculation on the long side as well.

In this edition of Perspectives, Aneet Chachra and I build on our recent thoughts on the current "Flow World" environment, explaining why we believe that markets have entered a regime where flows are likely to dominate fundamentals.

The US influenza pandemic of 1918 left almost no discernable mark on the US economy. Steve Cain asks if there are any lessons that can be learned from the past to help guide our expectations as we emerge from the COVID crisis. Andrew and Mathew Kaleel address the recent increase in commodity prices in the context of past cycles, and consider the value of a trend-following strategy should central banks realise their objectives of higher inflation.

Every crisis poses a unique set of challenges for investors; Suny Park and Alistair Sayer discuss the use of both explicit and implicit 'Protection' strategies alongside other uncorrelated alpha-generating strategies as part of a balanced approach to risk management.

We hope you find this publication interesting, and we would be happy to discuss any of these ideas in more detail. We publish Perspectives on a six-monthly basis and seek to continue the dialogue with timely articles in the intervening months. As always, we welcome any feedback you may have.

DAVID ELMS

Head of Diversified Alternatives

The Janus Henderson Diversified Alternatives Team is made up of 23 investment professionals situated in the UK, US and Australia. The team is responsible for US\$18 billion* in client assets and manages a range of investment solutions aimed at delivering specific outcomes tailored to meet the needs and constraints of clients. The team brings together a cross-asset class combination of alpha generation, risk management and efficient beta replication strategies, as well as the flexibility to create customised offerings. Current solutions include single and multi-strategy hedge funds, managed futures, equity and commodity enhanced index strategies and bespoke alpha solutions.



*As at 31 Dec 2020

FLOW WORLD RELOADED



ANEET CHACHRA
Portfolio Manager



DAVID ELMS
Head of Diversified
Alternatives

Can investors ride the pickup in issuance and option volumes in 2021? Aneet Chachra and David Elms consider how flexible, flow-driven strategies acting as price makers to intermediate flow mismatches can benefit.

“ We are always in a process of becoming and nothing is fixed.
Have no rigid system in you, and you’ll be flexible to change with the ever changing.
Open yourself and flow, my friend.
Bruce Lee

Key takeaways

- » Large-scale issuance is reloading the opportunity set available to flexible strategies designed to capture dislocations and benefit from flow-driven effects.
- » US Treasury issuance is likely to remain elevated in 2021 with the recent passage of another large stimulus and an infrastructure bill expected to follow. US IPOs are at a 20-year high, while option trading volumes have tripled since the start of 2020.
- » The post-COVID boom creates a favorable environment for flexible, flow-driven approaches. But harvesting price anomalies requires experience, access and infrastructure.

At the start of 2021, we published Welcome to Flow World to introduce and explain our view that markets were in a regime where flows would dominate fundamentals.

If you haven't read it - here's the two-line summary:

The influence of inflexible “price taker” market participants is expanding, just as flexible “price maker” players are losing share. This creates less signal and more noise in asset price moves.

In this sequel, we discuss how the current “Flow World” environment is broadly positive for flexible strategies that can step in as price makers to intermediate flow mismatches. We also show why we believe the opportunity set for such strategies is improving as underlying markets expand and issuance grows.

Flows impact prices

Most passive strategies have largely fixed rules to minimize tracking error. For example, net inflows to ETFs and other tracking funds result in the underlying basket being bought while outflows drive asset sales. Thematic funds that focus on a particular sector typically have much higher turnover than “vanilla” index funds. This is because their flows are usually more volatile, and they require larger rebalancing trades compared to broad market-cap weighted indices. Other popular strategies are rule-based as well; factor/smart beta exposures need to be adjusted not just for flows but also for changes in the factor basket. Similarly, volatility-target products are forced buyers when realized volatility is falling but forced sellers when volatility is rising.

Importantly, other market activities indirectly create directional flows – e.g. retail investors have been active buyers of equity call options. Market makers generally need to buy more of the underlying asset when its price is increasing, and vice-versa. In the bond market, mortgage convexity affects interest rates as hedgers need to rapidly adjust their duration exposure via swaps or futures. Finally, new financial products also create flows – e.g. when a company goes public or sells a convertible bond, a bank sells a structured note, or a government issues debt.

All of the above flows impact prices although their effect can vary from unobservable to significant. The size of this price adjustment depends on many factors including the size and urgency of the transactions, the depth of the underlying market, the level of volatility, and the availability of flexible buyers/sellers that can match with these inflexible flows.

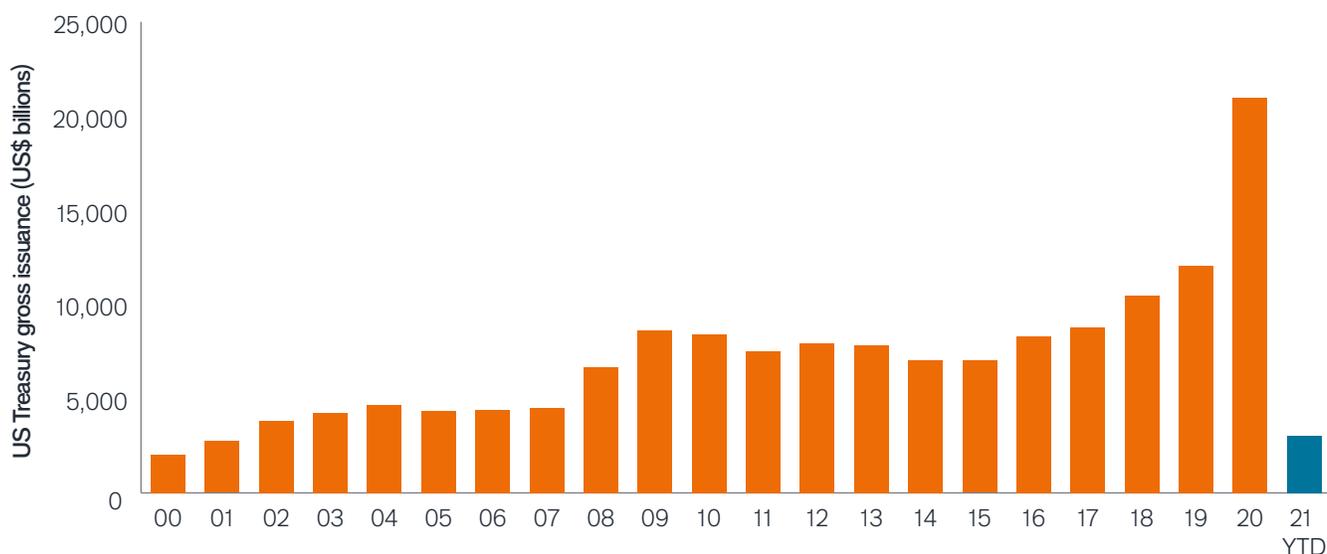
There was a substantial pickup particularly in issuance and option flows in 2020 and this momentum has continued strongly into 2021. Higher activity levels are generally a tailwind for flexible strategies that capture dislocations and benefit from flow-driven effects.

Large-scale issuance is reloading the opportunity set available to these strategies. In this article, we will show visual examples of this rapid flow growth.

US Treasuries

Exhibit 1 shows gross US Treasury issuance of all types – bills, notes and bonds. It is not adjusted for repayments of existing issues that matured or US Federal Reserve

Exhibit 1: US Treasury gross issuance has surged (2000–2021)



Source: SIFMA. 1 January 2000 to 28 February 2021.

(Fed) purchases. This is because all issuance has price impact; even when the proceeds go toward repaying prior bonds or the bond is later bought by the Fed. Moreover, the Fed's bond buying schedule also creates a separate transient impact on different maturities around the purchase windows.

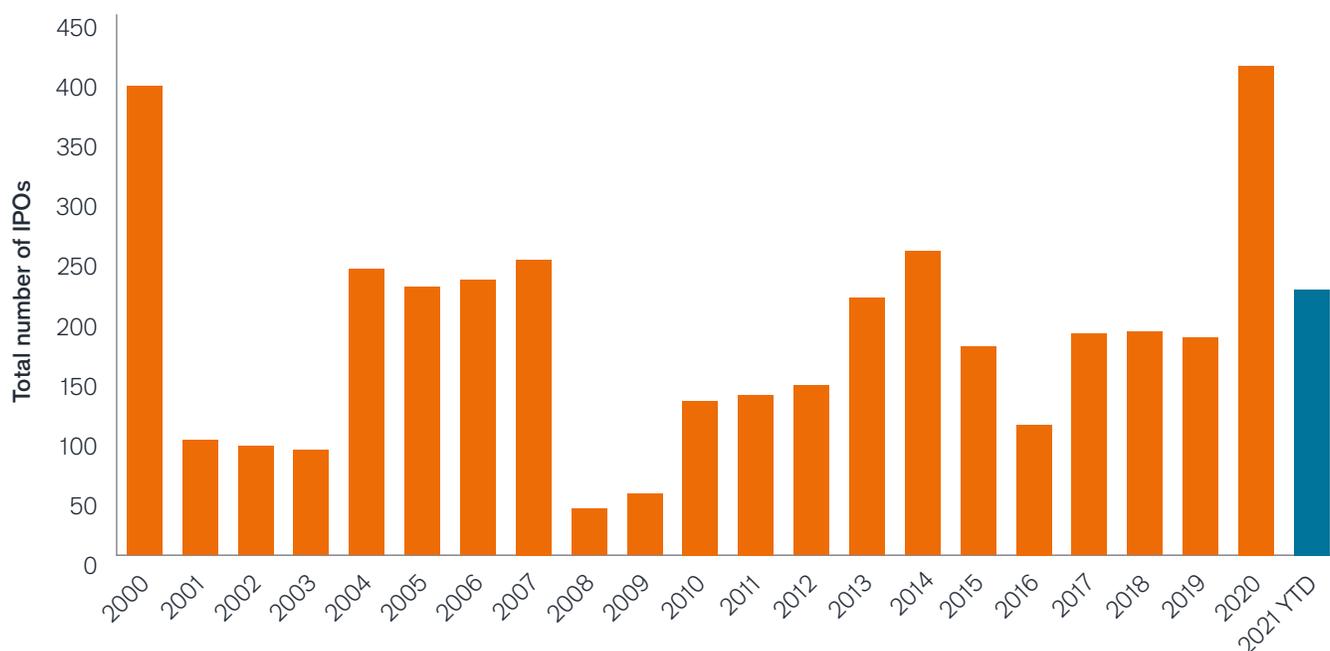
Further, Treasury issuance is likely to remain elevated in 2021 with the recent passage of another large stimulus bill and an infrastructure bill expected to follow. Finally, although the US is adding the most debt, similar dynamics are playing out across other major markets. Most countries are boosting their fiscal spending to fund COVID relief programs while taking in less revenue via taxes. This creates larger budget deficits that are being funded through a combination of higher issuance and central bank purchases.

Equity IPOs and secondary offerings

Activity in the equity market is similarly strong. Despite the interruption due to COVID, initial public offering (IPO) activity roared back in the back half of 2020 to the highest level since 1999. Well over 200 US IPOs have been issued in just the first two months of 2021, marking the quickest start to a year ever, and already surpassing the annual totals of many other years.

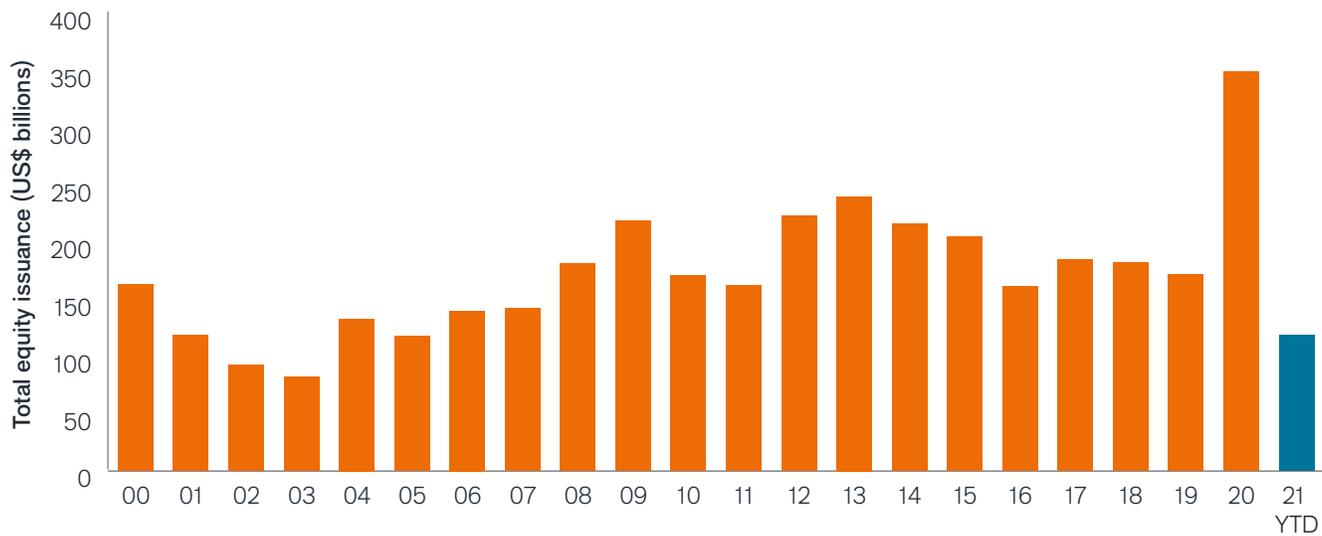
Activity begets activity. Typically, a pickup in IPO issuance (as Exhibit 2 shows) will drive subsequent flows. For example, post-IPO, options get listed and the stock is a potential addition to various ETFs and indices. Following lockup expiration, there are often block trades and secondary offerings as early holders seek to monetize their gains. Newly public firms also often do other financing transactions and are possibly an acquirer or acquisition target.

Exhibit 2: US IPOs at a 20-year high (2000–2021)



Source: Bloomberg, 1 January 2000 to 28 February 2021.

Exhibit 3: US total equity issuance (2000–2021)



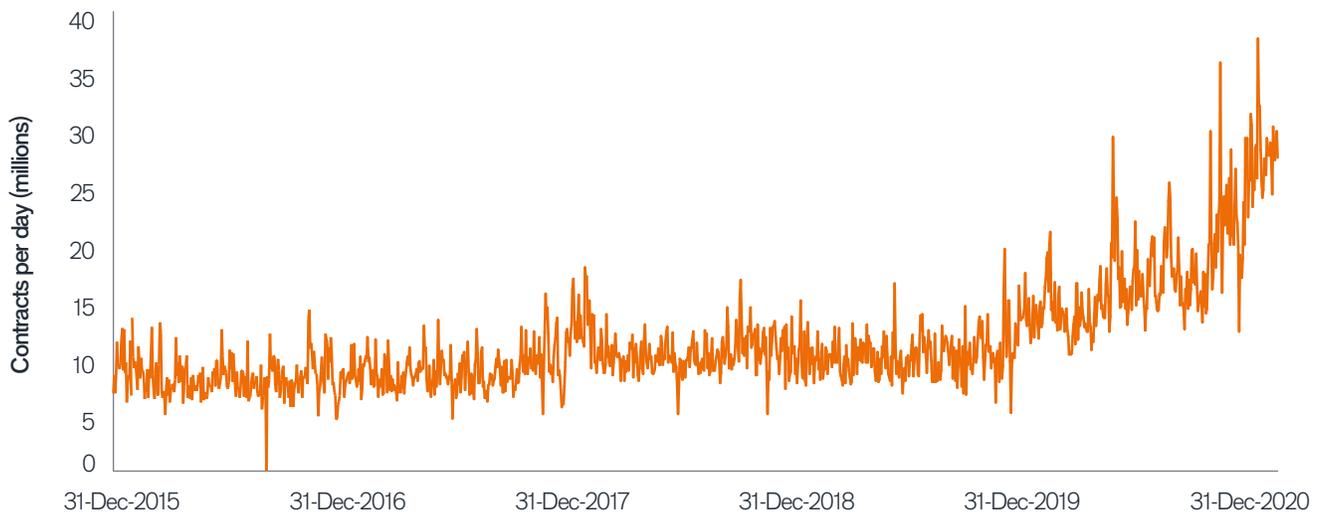
Source: Bloomberg, 1 January 2000 to 28 February 2021.

Robust flows have already extended into follow-on and other equity offerings (Exhibit 3), and this is likely to continue while investor demand is strong and deal pricing is attractive to companies.

Option trading

Option trading volumes have also exploded. For many years, about 10 million call option contracts traded per day in the US. This has tripled since the start of 2020 as retail investors pile into option trading. Exhibit 4 speaks for itself.

Exhibit 4: US total call option volumes have multiplied



Source: Bloomberg 31 December 2015 to 28 February 2021.

Convertible bonds

The combination of low interest rates and high demand for options makes it very attractive for corporates to issue convertible bonds. Consequently, issuance in 2020 surged to the highest level since 2001 (Exhibit 5). This trend has continued in 2021 as well.

Opportunities in a flow-driven market

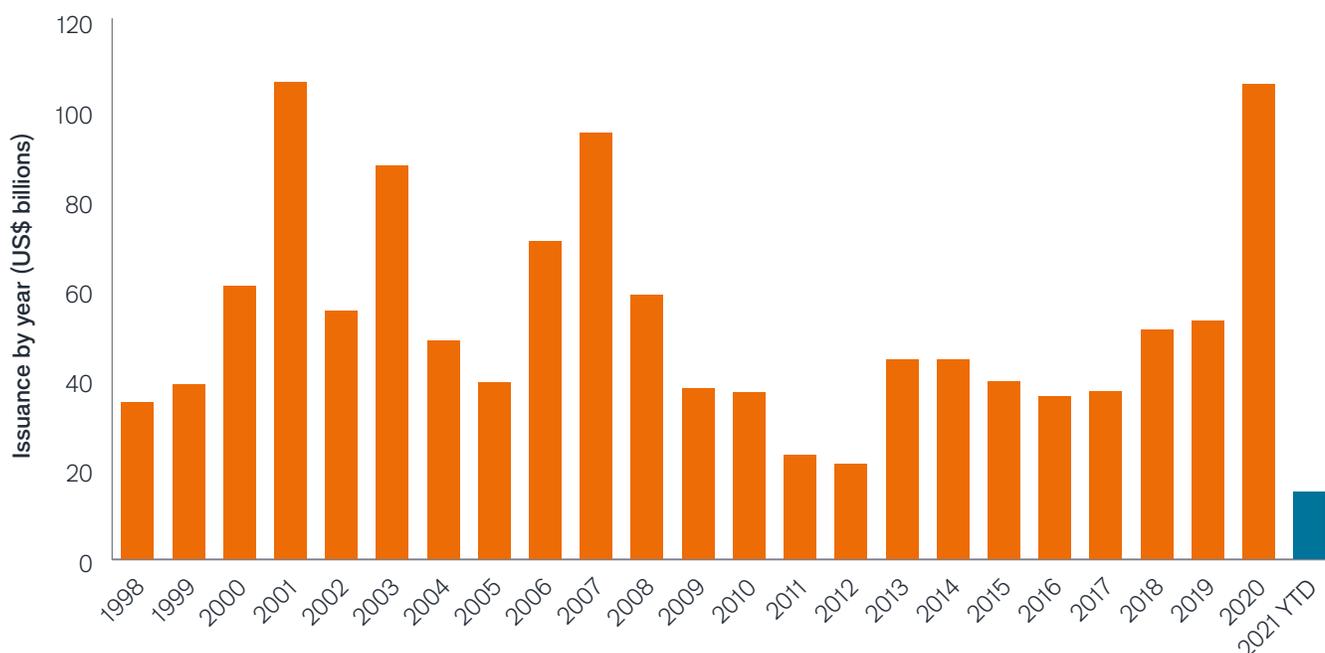
The current market regime is also driving other important flows that touch our strategies. Examples include:

- Merger announcements have picked up and this trend will likely continue as strong companies look to grow via acquisitions.
- The US structured note market is growing as wealthy investors seek products with higher yields.
- Robust demand for high yield bonds has tightened spreads, making credit default swap (CDS) protection worth consideration as a portfolio hedge.

Broadly, the post-COVID boom creates a favourable environment for flexible, flow-driven approaches to benefit from the rigidity of other strategies. But the mere presence of large flows is not enough – harvesting price anomalies requires experience, access and infrastructure. Strategies should seek to capture a statistical edge at the portfolio level even if the outcome of any single trade is quite varied. This makes sizing, diversification and risk management crucial – topics that we will cover in the next and final edition of this Flow World trilogy.

Finally, the current regime is not permanent. Eventually excesses build up, a crisis hits, and issuance slows down when volatility spikes. Then a new equilibrium is reached, and the cycle starts anew. But, for now, we are all living in Flow World.

Exhibit 5: US convertible bond issuance (1998–2021)



Source: Bank of America, 1 January 1998 to 28 February 2021.

ECHOES OF DEBT CRISES PAST



STEVE CAIN
Portfolio Manager

Can the past give some indication of how well economies can emerge from the COVID crisis? Portfolio Manager Steve Cain considers some of the lessons from the early 20th Century.

“ The belief in miracles that all men cherish is born of immoderate indulgence in hope. There are people who go on hope sprees periodically and we all know the chronic hope drunkard that is held up before us as an exemplary optimist. Tip-takers are all they really are.

Reminiscences of a Stock Operator, **Edwin LeFevre**

Key takeaways

- » The post-WWI period has parallels with our recent experiences: high national debts, heightened unemployment levels and policy uncertainty. The differentiated economic outcomes for the US and Germany/Austria then can perhaps guide our thinking now.
- » The US influenza pandemic of 1918 left almost no discernible long-term mark on the aggregate US economy, despite the New York Federal Reserve making no accommodation.
- » High debt levels and a weakening external deficit are by nature inflationary. Government and central bank policy, and the pre-eminence of different currencies, may give some guidance to the post-COVID era.

While 2020 had many characteristics unique to those living through it, like all human experience, we can find many echoes from the past. In those echoes we may find a guide to human behaviour and reactions that will help guide us through the next phase of the pandemic and its monetary and economic consequences.

In trying to home in on those echoes from the past I have narrowed my window to the early 20th Century: a period where we saw the second-largest pandemic in modern history – the 1918 influenza pandemic (also known as the ‘Spanish Flu’). The aim is not to attempt to draw a road map of the future based on the past, but to remind us that much of what we are witnessing is not new.

Can history help us anticipate what may come next? The period from 1919 to 1923 had many parallels with our recent experience. By looking at what the US and Germany/Austria endured then, the differentiated economic outcomes can perhaps guide our thinking as we look ahead.

The US post-war pandemic period

The deadly influenza variation of 1918 was the most serious epidemic in the history of the US. Hundreds of thousands of people died and millions were infected with the highly contagious variation. At the start of the outbreak, the end of World War One was approaching, and unemployment was at historical lows (about 1.4%). Fast-forward to 1920, with the US adjusting to the postwar era, with a material increase in the available labor force, and cities across the country enduring social distancing, quarantine and the shutdown of essential services. Unemployment had risen to 11.7% (by comparison, US unemployment reached 13.3% in May 2020).

Notably, however, the Spanish flu left almost no discernible long-term mark on the aggregate US economy. The timing of the influenza outbreak in the spring of 1918 was certainly a relevant factor. The Dow Jones Industrial Average (Dow) saw a decline of 21.7% in 1917; from this lower base, the stock market consequently recovered substantially into the pandemic, posting double-digit increases in 1918 and 1919. A rise of 30.5% in 1919 remains among the strongest single-year increases for the Dow since 1915 (the highest calendar-year rise was 66.7% in 1933¹).

When the pandemic unfolded, a significant share of the nation’s resources at home and abroad were devoted to

the war economy. Real government spending accounted for about 38% of gross domestic product (GDP) in 1918. The bottomless demand for coal, steel, machinery, textiles and other products needed for the war effort largely offset the effects of such a severe pandemic on aggregate economic activity.

But as troops returned from the war, and with the flu into its fourth wave, a major downturn followed. Christina Romer (UC Berkley) estimated there to have been a 14.8% decline in the price index between 1920 and 1921.

Parsing the blame between the retooling of the domestic economy and the pandemic is beyond the scope of this article. What is relevant is that the New York Federal Reserve made no accommodation during the recession, increasing rates from 4.75% to 5% in December 1919, followed by 6% in January 1920, and then 7% in June 1920. What perhaps broke the recession and reversed the path of deflation was the flight of capital from Europe, which eased the monetary contraction in the US through its link to gold.

Germany/Austro-Hungary and the ghost of hyperinflation

In Germany and the Austro-Hungarian Empire, the economic impact is even harder to apportion among the consequences of the pandemic, the end of the war and the impact of reparations. The recession in Europe was certainly far more material than in the US. But the consequences were also very different – more long-lasting, both economically and in terms of the societal impact stemming from the consequent period of hyperinflation.

These words on postwar Germany may seem eerily familiar to those who lived through 2020 in the US:

“...the large numbers of unemployed, their passions fermented by the Communists, are seething with discontent ... side by side with unprecedented want among the bulk of the population, there is a striking display of luxury among those who are benefiting from the inflation.

“Speculation on the stock exchange has spread to all ranks of the population and shares rise like air balloons to limitless heights ... everybody was out to get rich quickly, especially as speculation in currency or shares could palpably yield far greater rewards than labour.”²

¹ <https://www.macrotrends.net/2622/dow-jones-by-year-historical-annual-returns>

² Fergusson, Adam. When Money Dies: The Nightmare of Deficit Spending, Devaluation, and Hyperinflation in Weimar Germany (pp. 24-25). PublicAffairs. Kindle Edition, (originally published 2010)

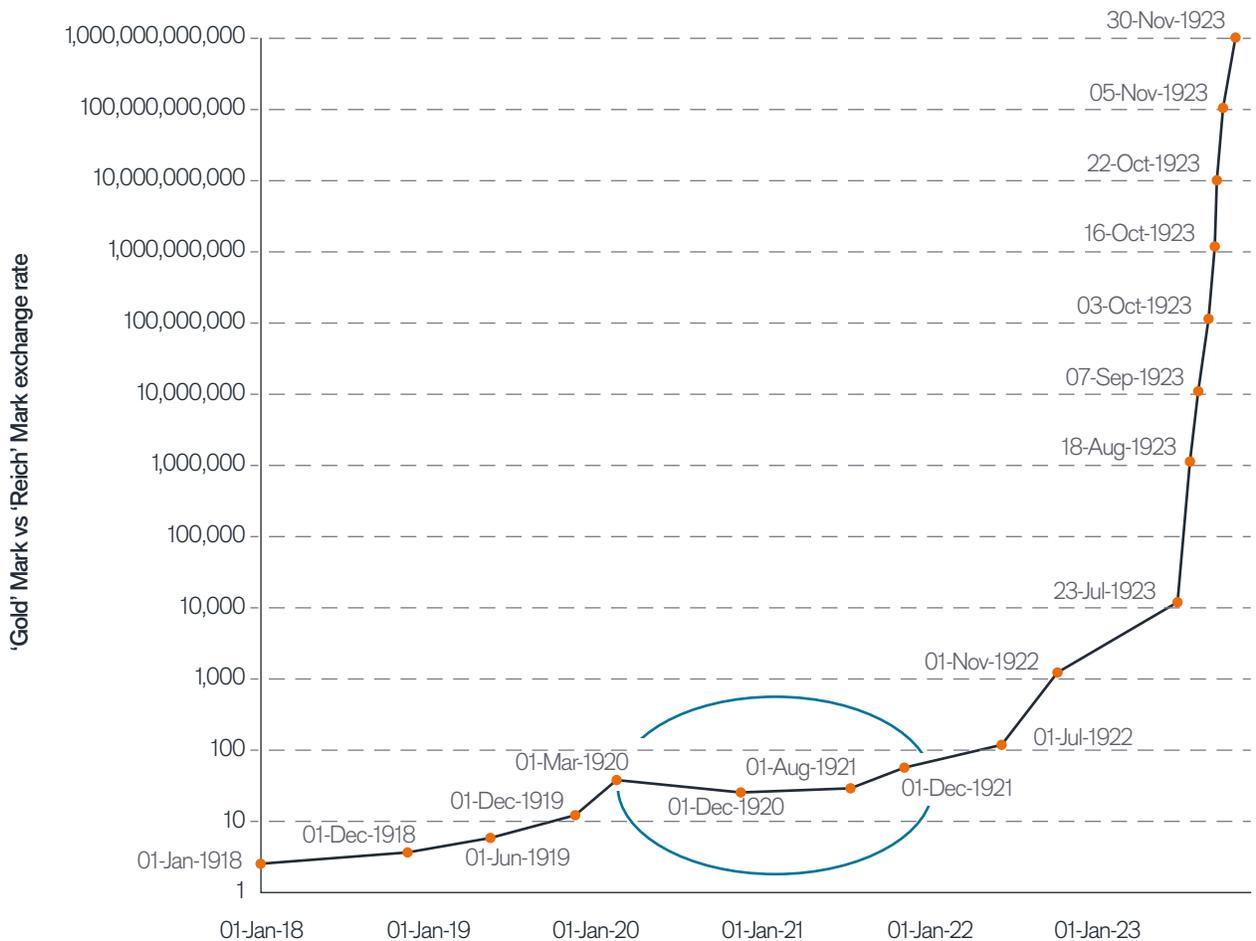
As Exhibit 1 shows (circled) there was very little change to the exchange rate in the immediate postwar period, and even during the initial payments of reparations. It was the subsequent speed of change at the inflection point around early July 1922 that is most shocking. During the period of hyperinflation in Germany in the early 1920s, the number of German marks in circulation increased by a factor of 7.32×10^9 .

Why was the outcome for the US so comparatively benign?

A recent study³ suggests that economic policy uncertainty was instrumental in pushing a subset of European countries into hyperinflation shortly after the end of the war. Germany and the collapsing Austro-Hungarian Empire suffered from frequent uncertainty shocks and correspondingly high levels of uncertainty,

³ Lopez, Jose A., Kris James Mitchener. 2018. "Uncertainty and Hyperinflation: European Inflation Dynamics after World War I," Federal Reserve Bank of San Francisco Working Paper 2018-06.

Exhibit 1: German mark devaluation in the post-war period



Logarithmic scale base 10.

Source: Law about the Revaluation of Mortgages and other Claims (Revaluation Act 1925), issued 16 July 1925 (Aufwertungsgesetz, Reichsgesetzblatt, Teil I, 1925, pages 133-135), plus author's calculations.

Note: The value of one 'Gold mark' in grammes of fine gold (1913) was 0.35842g; 'Reichs' mark currency was not tied to the gold standard from 1918 to 1924.

caused by protracted political negotiations over reparations payments, the apportionment of debt and border disputes.

The German and Austro-Hungarian economies had inevitably been more materially impacted by the cost and duration of the war (the US only joined the war in April 1917) and eventual defeat. The imposition of reparations in the form of gold meant that the external debt burden was immune to any currency devaluation. Germany had opted for the mass printing of bank notes to buy foreign currency, which was then used to pay war reparations, but this strategy contributed to devaluation of the paper mark. Default was ultimately (arguably) the only way to unburden the economy.

“ In the whole course of history, no dog has ever run after its own tail with the speed of the Reichsbank.”⁴

It is worth noting that Hungary was so materially impacted by the breakup of its empire (and the battle to apportion debt to the splintered parts) that it was deemed unable to bear the economic impact of post-war reparations.

⁴ Fergusson, Adam. *When Money Dies: The Nightmare of Deficit Spending, Devaluation, and Hyperinflation in Weimar Germany* (pp. 117). PublicAffairs. Kindle Edition, (originally published 2010).

Policy that dampens uncertainty

Despite similar debt levels and loss of productive capacity across these countries it was the heightened levels of economic uncertainty that directly affected inflation dynamics, leading to hyperinflation. Perhaps most predictively, Lopez and Mitchener conclude that a financial crisis threatening a country's ability to repay its debt may quickly become self-fulfilling.

A high debt burden and a weakening external deficit position are by nature inflationary. Debts denominated in a domestic currency, a currency widely disseminated and acting as a reserve currency, and the combination of political and central bank management of a crisis (with a clear path forward), all help to dampen uncertainty. It is perhaps that ability to dampen uncertainty that best explains the differential outcome in the 1920s, providing a yardstick for how important government and central bank policy will be to our path out of COVID 19.

THE COMMODITIES SUPER CYCLE: IS IT TIME TO FOLLOW THE TREND?



ANDREW KALEEL
Portfolio Manager



MATHEW KALEEL
Portfolio Manager

Portfolio Managers Andrew Kaleel and Mathew Kaleel consider the value of a trend-following strategy in a world where higher commodity prices lead to materially higher inflation.

“ A Time for Everything

There is a time for everything, and a season for every activity under the heavens: a time to be born and a time to die, a time to plant and a time to uproot...

Ecclesiastes 3:1-8

(New International Version)

Key takeaways

- » We characterize the recent increase in commodity markets as a longer-term reversion to what would be 'fair value' relative to global equities.
- » Should history be any guide, this current commodities cycle could persist for several years, suggesting that investors may want to consider diversifying their portfolios to protect against an outbreak of price inflation.
- » Should commodity markets continue to move up and central banks realise their objective of higher inflation, a trend-following strategy that takes positions in all asset classes may be worth consideration.

For the first time in many years, the words “commodity” and “super cycle” are being used in the same sentence. In this article, we will review the recent moves higher in commodity markets in a longer-term context, the sustainability of the tailwinds supporting this, and consider whether this is indeed the start of a longer term upcycle in commodity markets. Is it time for commodity markets to shine?

We will also look at the ramifications of a continuing breakout in commodity markets, and how the application of a time series momentum (trend-following) strategy can take advantage of changes in commodity market regimes and provide potential protection against inflation for a portfolio.

The global stock/commodity cycle

Commodity markets have well defined cycles over time, and this is particularly evident when looking at the relative returns of commodities compared to other growth assets. The measure that we have used over several years to highlight the cyclical nature of commodity markets is comparing the rolling five-year annualized returns of global stocks and commodities (Exhibit 1). The series is mean reverting and highlights the points at which

commodity markets are relatively ‘cheap’ when compared to global stocks. This is best explained by the underinvestment in commodity markets that establishes a cyclical low in downturns, and eventual oversupply at the end of a cycle.

It is also noteworthy that this measure typically leads or lags peaks and troughs in both commodity and stock markets, with commodities hitting a cyclical high in the middle of 2004 (four years before commodities peaked) and basing in December 2015, a number of years prior to the lows seen in March 2020.

While there has been a recent pickup in the calls of a new commodity super cycle, we would instead characterize the recent increase in commodity markets as a longer-term reversion to what would be ‘fair value’ relative to global equities. Whether this is the start of a super cycle or not is less relevant than the simple fact that should history be any guide, this current cycle of commodities outperforming global stocks should persist for a number of years. In our view, this provides an attractive option for investors seeking to diversify portfolios and protect against an outbreak of commodity price inflation.

Exhibit 1: The potential for mean reversion in commodity prices is significant

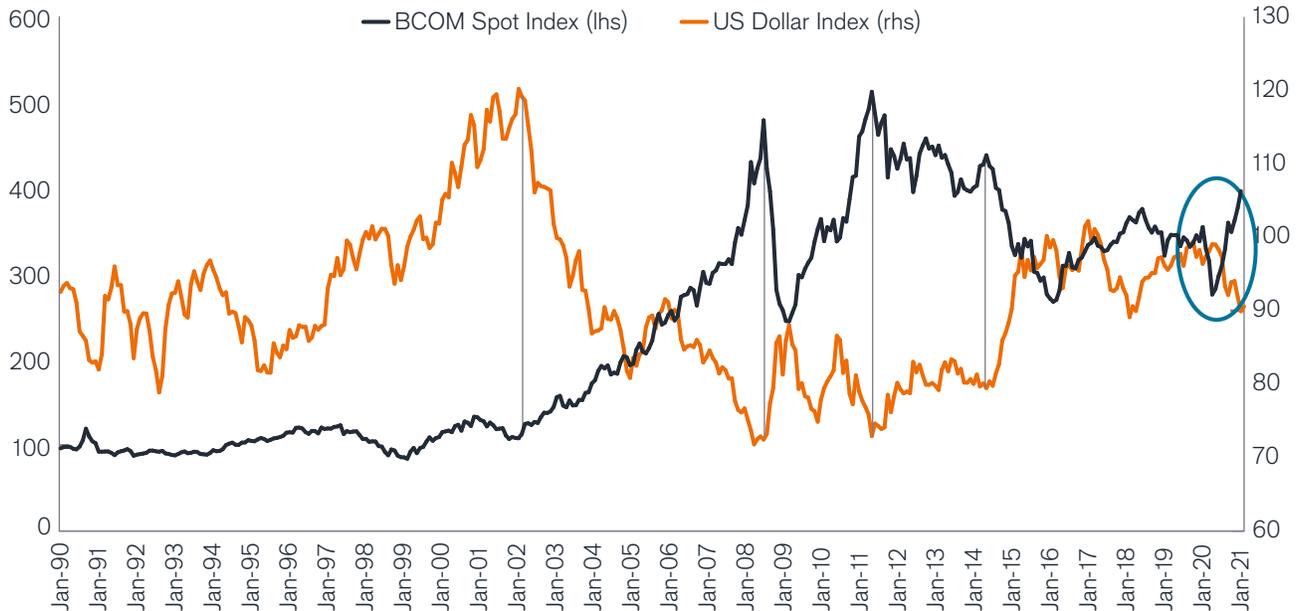
Rolling five-year annualised excess returns: commodities versus MSCI World



Source: Janus Henderson Investors, Morningstar, 1 January 1975 to 31 December 2020.

Note: Stocks are represented by the MSCI World Net Total Return USD Index, Commodities are represented by the GSCI from January 1970 to December 1990 and the BCOM Commodity Index from January 1991. Past performance is not a guide to future performance.

Exhibit 2: The US dollar/commodity cycle relationship



Source: Janus Henderson, Bloomberg as at 31 December 2020.

Note: The Bloomberg Commodity Spot Index (BCOMSP – shown on the left-hand axis) tracks prices of futures contracts on physical commodities on the commodity markets. ICE's US Dollar Index (shown on the right-hand axis) measures the value of the United States dollar relative to a basket of foreign currencies (the euro, Japanese yen, sterling, Canadian dollar, Swedish krona and Swiss franc). Past performance is not a guide to future performance.

Longer-term cycles in the US dollar

A second consideration when looking at the future path of commodity markets is longer term cycles in the US dollar, in which all major commodities are still traded. This relationship is a direct one; prices for commodities tend to rise in periods of relative weakness in the US dollar as those commodities are cheaper in local currency terms. Exhibit 2 shows this long-term relationship, with the most recent base in commodity markets occurring in March 2020. From that base, commodity markets have rallied by just under 70% (as at 24 February 2021) in conjunction with an approximate 9% correction in the US dollar.

As with commodity markets, cycles in the US dollar tend to take a number of years to play out; if the absolute base for commodity markets in this cycle was March 2020, a persistent weakening of the US dollar would provide a significant and positive tailwind for commodity markets more broadly.

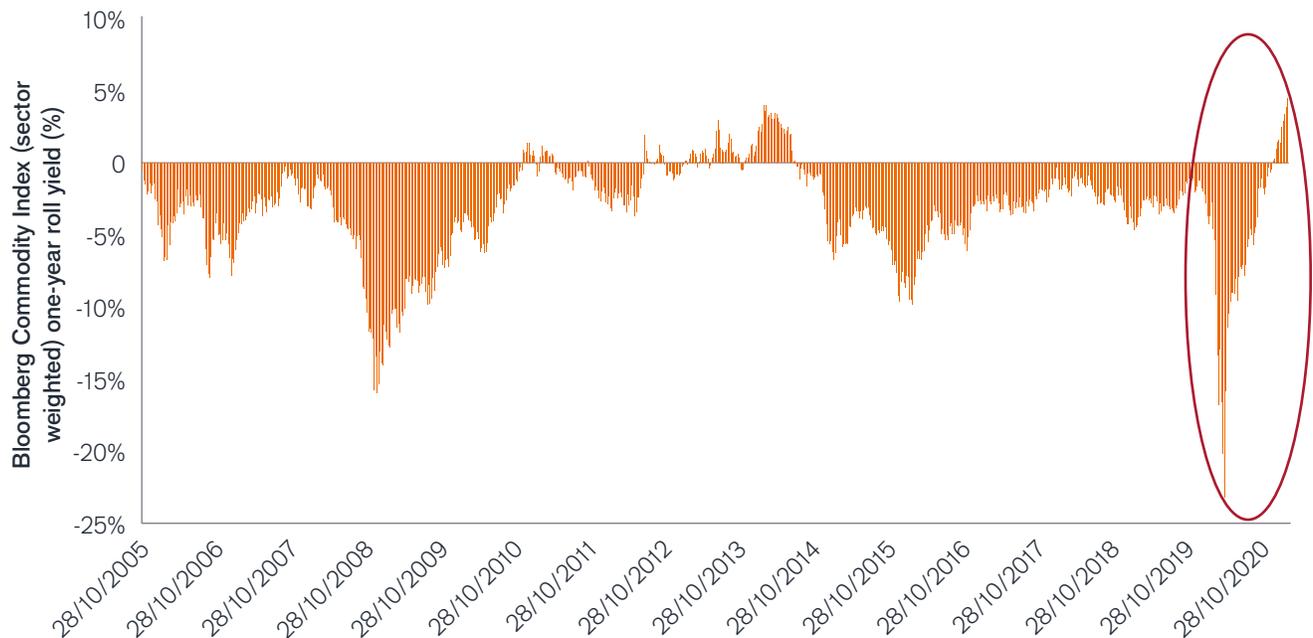
A final observation that lends support to the hypothesis that commodity markets have entered a new bull cycle is

gleaned from looking at the forward curve of each commodity market and the BCOM Index as a whole. The positive change in supply demand fundamentals across the commodity complex is illustrated by the positive roll yield now available to commodity investors (currently just under 4%).

Exhibit 3 shows the historic one-year roll yield on the index (sector weighted), currently at the highest level in over 15 years, with broad-based backwardation evident in most underlying commodities. The current level of backwardation serves as a meaningful tailwind in the absence of any market shocks. Whilst commodities bottomed on a relative basis at the end of 2015 (per Exhibit 1), the negative oil price that occurred in April 2020 was very likely the absolute base for this commodity cycle.

To misquote T.S. Eliot: *"This is the way commodity markets bottom, not with a whimper but a bang."*

Exhibit 3: BCOM has seen its lowest and highest one-year roll yields in 15 years



Source: Bloomberg, Janus Henderson, 28 October 2005 to 26 February 2021. Past performance is not a guide to future performance.

Are the catalysts for a 'super cycle' in place?

Longer-term cycles provide a broad top down view of the potential forward trajectory of commodity markets, but this does not in and of itself provide the fundamental basis for a sustained rise in broad commodity markets. A genuine, multi-year bull market cycle in commodities requires enough catalysts where a demand shock occurs during a period of inherent supply constraints. Without giving a detailed view of these factors, we believe the current environment provides the potential set up for higher prices in those key commodity markets that make up a large proportion of commodity indices.

The following drivers support a hypothesis of a multi-year bull market cycle in commodity markets:

- The impact of a sustained increase in demand for raw materials needed to electrify the power grid (demand driver) versus supply constraints in these commodities due to exploration, declining ore grades and a dearth of major discoveries

- The potential demand shock from major economies reopening post mass vaccinations
- ESG considerations potentially impacting future available inventories of key commodities
- A willingness by most major central banks to allow inflation outcomes to remain above the upper limit in order to achieve a desired inflationary outcome.

The potential for a sustained and broad-based rise in commodity prices increases the potential for higher and persistent inflation over the medium term.

In an environment of sustained increases in commodity prices and a potential breakout in inflation, is there an anti-fragile strategy that benefits from this potentially difficult market regime?

Persistent inflation and the impact upon real returns

Commodity markets are one of the primary sources of cost push inflation; the current regime of central bank accommodation and a desire to achieve a persistently higher level of inflation has the potential to erode real returns for financial assets. There have only been a handful of these environments in the last 100 years, the last of which was in the 1970s (Exhibit 4). The floor on inflation remained at 3% during this period, with two periods of breakouts coinciding with increases in commodity prices – in particular oil and gold. Whilst real returns for both stocks and bonds was negative for this period, commodity markets produced outsized returns.

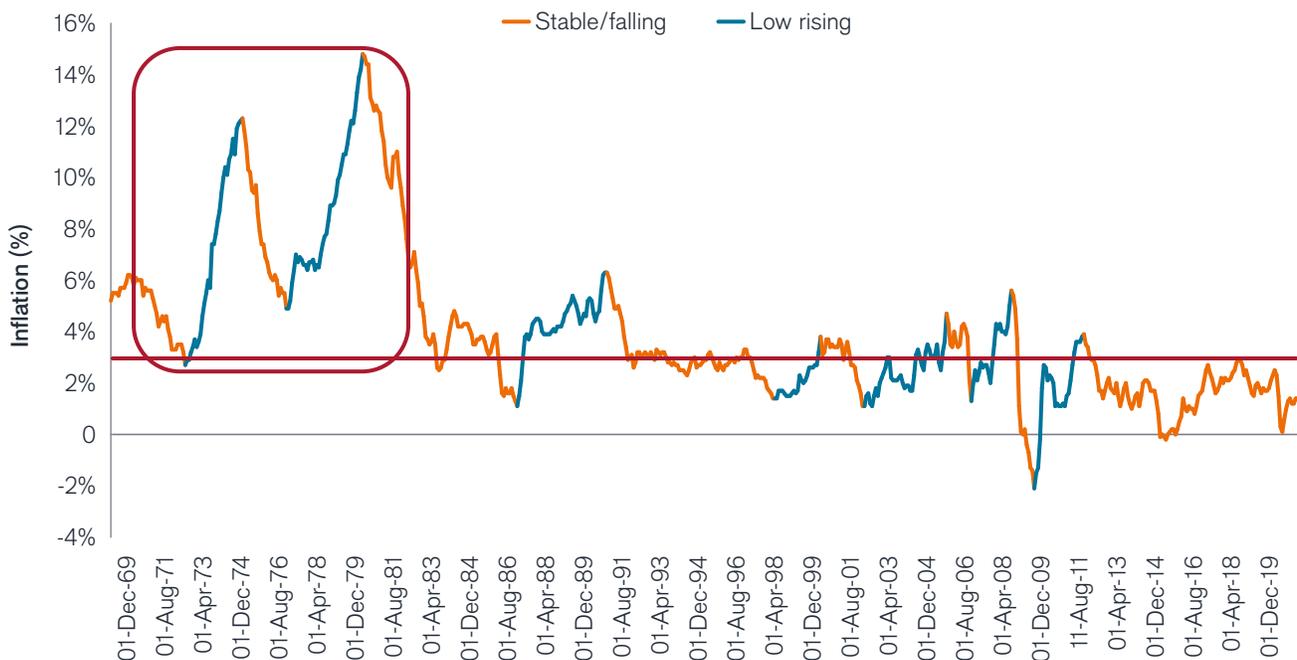
Central banks are currently adopting a strategy that is extremely accommodative to liquidity and accepting higher levels of inflation for a sustained period. Whilst there is no guarantee that central banks will achieve their objective of a gradual increase in inflation, there is potential for inflation to break out in a disorderly manner. In such an environment, is there a strategy that benefits from this regime shift and can potentially protect against the loss of real returns on financial assets over a sustained period of commodity price inflation?

Trend following: a potential solution to protect against sustained inflation

In a broad based, multi-year commodity bull market cycle, a trend-following strategy is one potential tool that can help to mitigate the erosion of real returns other asset classes. Trend following has well-documented potential to generate 'crisis alpha' in sustained market shocks across all major asset classes.

It is possible to provide some context around the potential for such a strategy to provide dynamic protection for a diversified portfolio in an environment of rising inflation. Looking at the same period of higher inflation in the 1970s, we model a simple trend-following strategy on a commodity index and include an allocation of 5% commodities with the remaining 95% allocated to a theoretical 60/40 portfolio. The strategy takes direction (long/short) positions on the commodity index, based upon 12-month price momentum, i.e. long (short) positioning where current prices are higher (lower) than those 12 months ago.

Exhibit 4: US CPI Urban Consumers (year on year) inflation (%)



Source: Bloomberg, Janus Henderson Investors, 31 March 1969 to 31 January 2021. Past performance is not a guide to future performance.

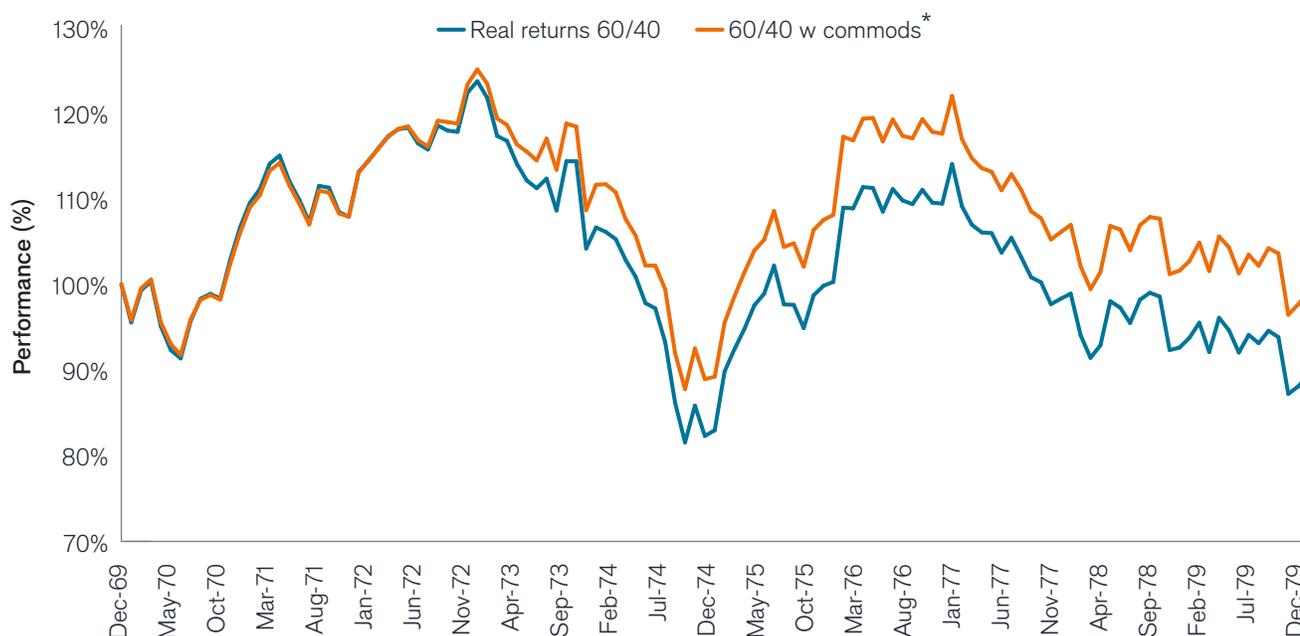
As Exhibit 5 shows, this model strategy would have offset some of the impact to performance of those periods of higher inflation.

Conclusion

In our view, the cyclical nature of commodity markets, in combination with current fundamental conditions, provide tailwinds for commodity markets to move sustainably higher over a longer time horizon. This positive backdrop,

however, brings with it the potential for a sustained increase in inflation, supported by central banks content with implementing policies that are attempting to achieve higher consumer price index (CPI) outcomes on a multi-year basis. In this environment, a trend-following strategy that takes positions in all asset classes including commodities has the potential to provide a high degree of protection to a diversified portfolio that would ordinarily be adversely affected by such an environment.

Exhibit 5: A trend-following allocation to commodities – impact on real returns



Source: Bloomberg, Janus Henderson Investors, 30 June 1972 to 29 February 1980. Rebased to 100 at start date. Past performance is not a guide to future performance.

*Note: The indices used for equities, FI and commodities are as follows:

Equities: Ibbotson SBBI US Large-Cap Stocks (Total Return)

FI: Ibbotson SBBI US Intermediate-term (5 year) Government Bonds (Total Return)

Commodities: S&P Goldman Sachs Commodity Index (Total Return)

Hypothetical performance shown in this model is for illustrative purposes only and does not represent actual performance of any client account. No accounts were managed using the portfolio composition for the periods shown and no representation is made that the hypothetical returns would be similar to actual performance.

PORTFOLIO PROTECTION – ONE SIZE FITS NONE



SUNY PARK
Head of Institutional
Client Strategy



ALISTAIR SAYER
Client Portfolio Manager

Suny Park and Alistair Sayer argue the case for utilizing both explicit and implicit Protection strategies to adapt to different market crises.

Key takeaways

- » Portfolio 'Protection' strategies are valuable, not just because they seek to protect existing plan assets during stress periods but also because they enable investors to avoid forced selling to meet ongoing spending needs, especially in sharp market falls.
- » Despite its cost, a systematic put option strategy that provides 'always on', non-timed, long convexity exposure that captures substantial positive alpha in severe left-tail sell-offs could play an important role in Protection portfolios.
- » Do plan sponsors choose explicit Protection that is expensive (but effective), or implicit Protection that is less expensive but less reliable? Why not consider Protection portfolios that combine options that address different types of crises?

The pandemic-induced sell-off in March 2020 renewed investors' interest in 'Protection' strategies, despite plenty of research papers advising investors that the approach may be too expensive. We believe this argument to be wrong. The notion that portfolio diversification is the only 'free lunch' in investing is flawed: yes, it imparts benefits when markets are functioning normally but fails miserably at times of market stress.

Keep in mind the adage: 'In times of stress correlations go to one'. We believe there is a strong argument for explicit Protection within a diversifying strategy, and at an overall plan level. Protection is valuable, not just because it protects existing plan assets during stress periods, but also because it enables plan sponsors to avoid forced selling to meet ongoing spending needs, especially when markets are in free fall.

Is Protection 'too expensive'?

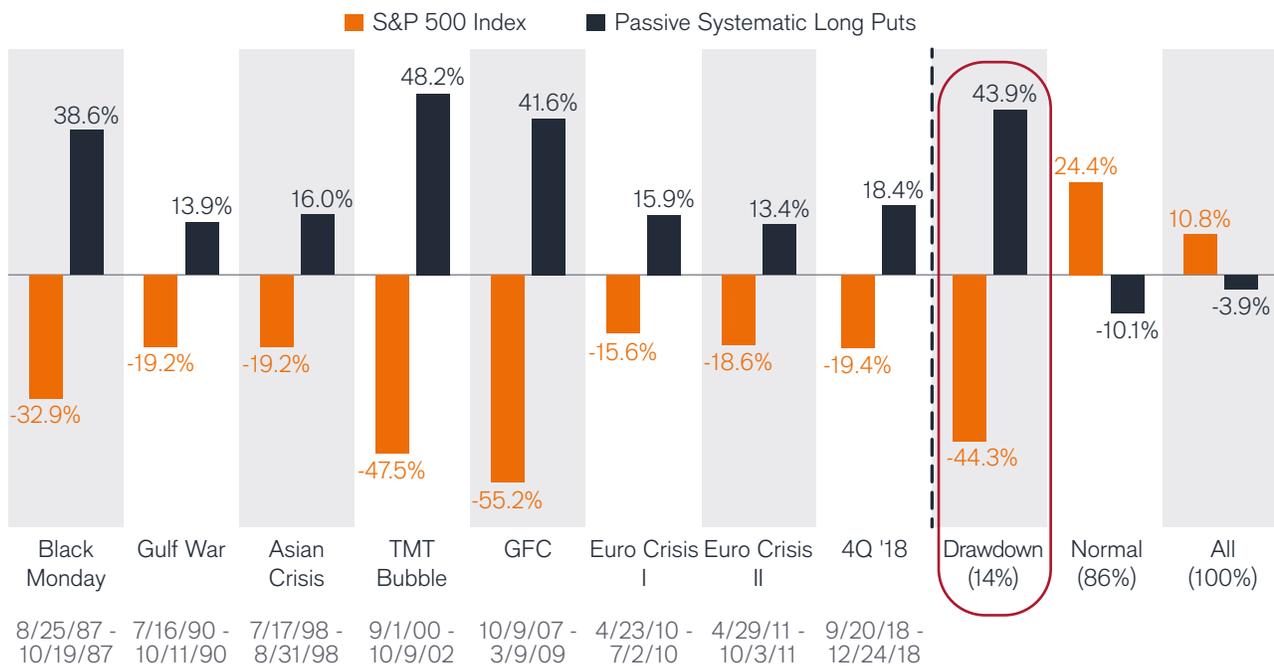
When investors remark that Protection is too expensive, what they often mean is that passive systematic buying of put options (ie. 'explicit Protection') to hedge against

equity losses is too expensive. That statement is uncontroversial. Campbell Harvey et al. estimated the cost to performance of maintaining a passive at-the-money long put program at 3.9% per year (Exhibit 1). That is a meaningful drag on performance, especially when, during the same period, the S&P 500® Index returned an annualised 10.8%.

Despite its cost, a systematic long put strategy has demonstrated a compelling track record in protecting against large equity losses during repeated crisis periods (highlighted in Exhibit 1). However, from an optics standpoint, it is extremely difficult for investment committees to always maintain exposure to a Protection strategy that may report negative returns in normal environments.

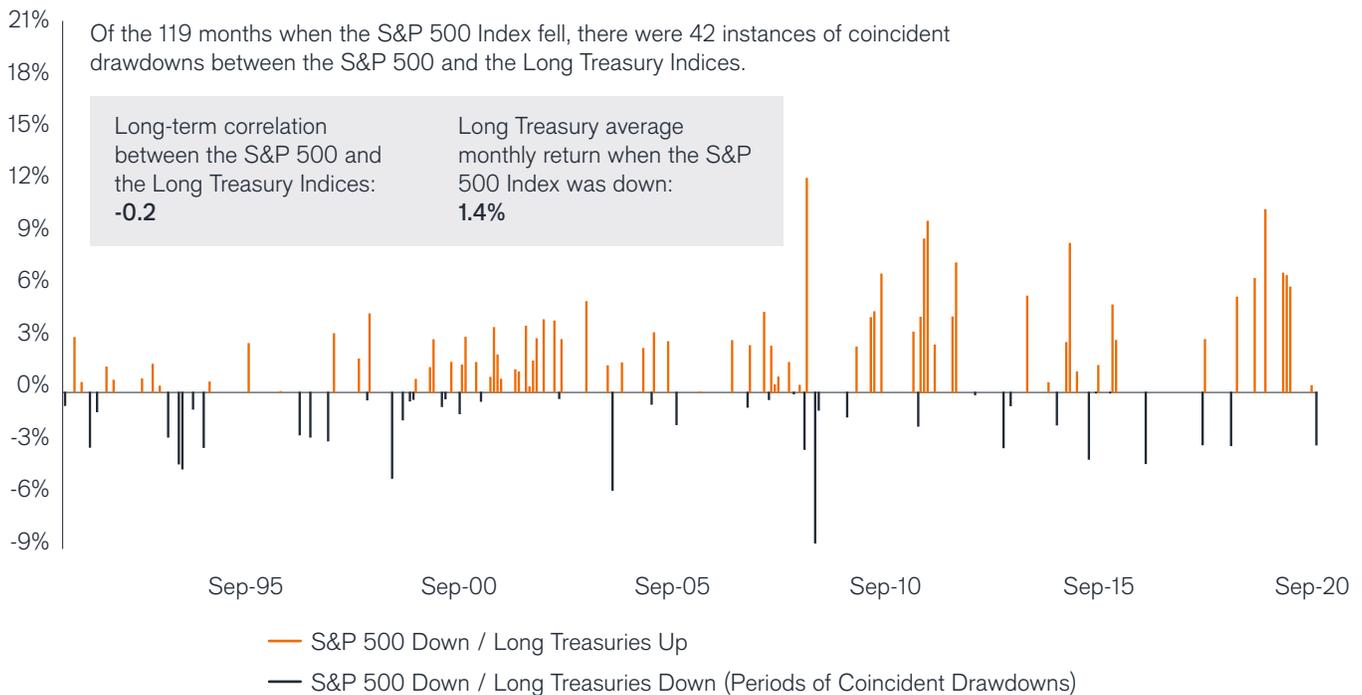
This has led many in the investment community to choose implicit Protection strategies over explicit Protection strategies, or assets perceived to be more cost-effective than systematic long put option strategies. These include Long Treasuries (see Exhibit 2), Gold and Trend-Following (or Time Series) Momentum strategies (to name a few).

Exhibit 1: Systematic long put strategy – a compelling track record in portfolio protection (1985–2018)



Source: Harvey, Campbell R., Edward Hoyler, Sandy Rattray, Matthew Sargaison, Dan Taylor and Otto Van Hemert. "The Best of Strategies for the Worst of Times: Can Portfolios be Crisis Proofed?" 17 May 2019.

Exhibit 2: Long Treasuries and the S&P 500 Index – negative correlation, with caveats



Source: Bloomberg, Janus Henderson Investors, October 1990 to September 2020.

Note: The lines show the monthly return of the Bloomberg Barclays US Treasury Long Index when the S&P 500 Index had a negative monthly return.

As proxied by the Bloomberg Barclays US Treasury Long Index, Long Treasuries have generated an average monthly return of 1.4% in all months when the S&P 500 Index registered a negative return. But this statement comes with caveats. If equities fall due to unexpected inflation or rising interest rates, then long Treasuries may not provide the necessary protection. And given that the yield on 30-year US Treasuries was 1.65% at the end of 2020, there is limited room for yields to fall, especially if the US Federal Reserve maintains a zero lower-bound target on policy rates.

Alternative 'Protection' strategies

There are adjustments which can be made to both explicit and implicit Protection strategies to improve their carry cost while still enabling them to be effective hedges in times of markets stress. Looking at explicit Protection,

the passive systematic buying of put options provides negative exposure to markets, but it also provides positive exposure to market volatility. Much of the cost associated with the carry of this type of Protection strategy is the negative exposure to rising markets. If this negative market exposure is neutralised, the remaining long volatility exposure has proven effective at delivering positive returns in times of market stress – as markets tend to trend up but gap down – but with a more attractive carry profile. There are additional modifications to further improve the “carry to payoff” ratio which were explored in a previous article: Portfolio Hedging with a Low-Cost, Long Volatility Strategy.

Looking at implicit Protection strategies, Trend-Following can arguably help to guard against persistent, trending sell-off environments. However, during periods of market rotation, when trends change, such a strategy can be

negatively positioned. One adjustment for this is to use shorter-term trends. Trend-Following strategies typically use six-month, 12-month and three-year signals, which is ideal for picking up long-term trends. However, for a more effective Protection strategy, Trend-Followings signals derived from 1-month, 3-month and 12-month periods can be more effective at reacting to changing market dynamics.

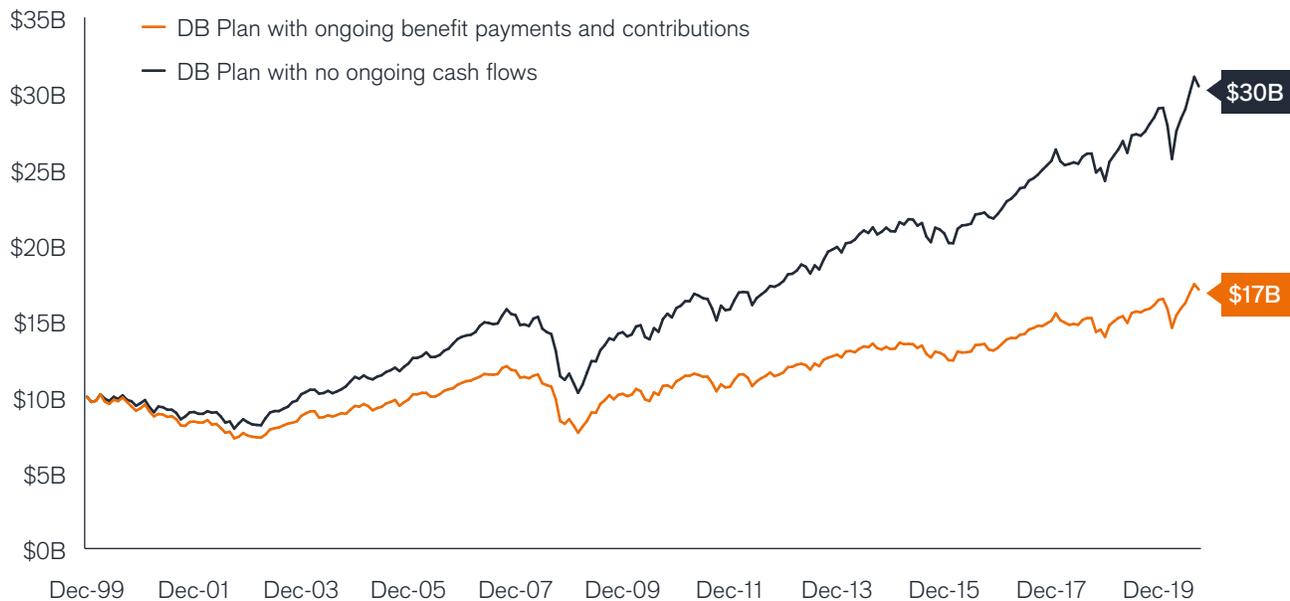
Additionally, volatility targeting can also reduce exposure for a strategy around points of market rotation, when volatility tends to rise coincident with potentially negative periods of performance. Furthermore, it is possible to create a 'one-sided' Trend-Following strategy, which in normal markets has no exposure and therefore no cost, but when signals indicate market stress, acts to initiate long exposure to implicit Protection assets such as gold and Treasuries.

The importance of Protection for plans with ongoing spending needs

Most research papers advocating for implicit, as opposed to explicit, Protection make a simplifying assumption regarding spending needs of institutional investors. Put more bluntly, they assume no spending by hypothetical institutional investors. This one simplifying assumption can have grave consequences – especially for mature defined benefit ('DB') plans that make regular and relatively constant benefit payments throughout normal and crisis environments.

Consider a mature DB plan where the cost of annual benefit payments to retirees and contributions represent 8.0% and 5.0%, respectively, of the starting plan assets on 1 January 2000. This hypothetical Plan makes equal quarterly benefit payments to its retirees and receives contributions semi-annually. In Exhibit 3, one can appreciate the material impact that ongoing benefit payments can have on the terminal value of the Plan assets.

Exhibit 3: Terminal value of defined benefit plan (with and without ongoing net benefit payments)



Source: Bloomberg, Janus Henderson Investors, as at 30 September 2020.

Note: Terminal value is calculated assuming at 60%/40% mix between the MSCI ACWI and Bloomberg Barclays US Aggregate Bond Index, annual benefit payments representing 8% of the 1 January 2000 plan assets, occurring at the end of each quarter (quarterly instalments); and contributions of 5% occurring bi-annually. Plan assets are rebalanced quarterly.

At the end of September 2020, roughly 20 years from the beginning of the period, the (more realistic) Plan with ongoing net benefit payments lagged a Plan with no ongoing benefit payments by US\$13.4bn in terminal value. Importantly, asset reconciliation shows that US\$6.35bn of this difference is due to cumulative net distributions and US\$7.03bn due to a sacrifice of returns associated with those distributions. This hypothetical DB Plan made cumulative net benefit payments of US\$1.47bn following the burst of the TMT Bubble, during the 2008 Global Financial Crisis and during the COVID-19 crisis. Returns sacrificed as a result of the sale of plan assets when equities were down approximated US\$3.17bn, as at 30 September 2020.

Retirees expect benefit payments whether the stock market is going up or going down; therefore, plan sponsors do not have the luxury of pausing benefit payments when markets are down. In a prolonged crisis many plans are forced to sell assets to meet their benefit obligations even when equities are down 20%, 30% or 40% from their peak. During such periods, benefit payments can far exceed contributions to defined benefit pension plans. As a result, many plan sponsors have historically sacrificed future returns on assets sold to meet benefit obligations to their retirees.

Protection is valuable, not just because it protects existing plan assets when financial markets are in a free fall, but also because it may provide necessary funds for benefit payments when plan sponsors can least afford to divest assets. It allows plan sponsors to remain invested in the market over the short term (when markets may be down) to capture any future positive long-term returns.

Overcoming the issue of optics

It is almost impossible, in our view, to anticipate a rapid liquidity-induced sell-off such as Black Monday in October 1987 or the most recent pandemic-related

sell-off in March 2020. Despite the negative perception of cost, we believe that a systematic put option strategy that provides 'always on', non-timed, long convexity exposure has a prominent role to play in Protection portfolios. While systematic put option hedging strategies may provide this type of exposure, our research indicates there is room for a discretionary macro strategy that owns Protection when it is needed but minimises Protection when it is not. Such a strategy would buy, but not sell, convexity; hence, when volatility is identified to be cheap on a forward basis and in relation to the risk environment, it would opportunistically add long-volatility exposure.

From an optics standpoint, it may be difficult for investment committees to maintain exposure to a Protection strategy that reports negative returns in normal environments. For this reason, Protection strategies (especially explicit Protection) should not be viewed in isolation. Rather, they should be combined with other uncorrelated alpha-generating strategies such as complex risk premia or a long-short quality strategy so that, at the aggregate level, they offer the potential to generate positive returns during normal market environments while helping to mitigate downside risk during periods of market stress.

Each crisis is unique, and the effectiveness of various Protection strategies will vary from one crisis to the next. While trend-following CTAs and low-volatility equities were highly effective following the TMT Bubble and during the Global Financial Crisis, both performed poorly as Protection strategies in the most recent COVID-19 crisis. A Protection portfolio should arguably combine both explicit and implicit Protection strategies, or assets that offer characteristics that address different types of crises. When it comes to Protection, one size fits none.

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