THE

Frontier Line

Thought leadership and insights from Frontier Advisors

Issue 158 April 2020

Opportunity in the Midst of Chaos

FRONTIER ADVISORS

25 years

Frontier Advisors

Frontier Advisors has been at the forefront of institutional investment advice in Australia for over two decades and provides advice over more than $410b in assets across the superannuation, charity, public sector and higher education sectors.

Frontier's purpose is to enable our clients to generate superior investment and business outcomes through knowledge sharing, customisation, client empowering technology and an alignment and focus unconstrained by product or manager conflict.

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Paul Newfield join Frontier in July 2019 and has a primary focus on driving innovation and client alignment in our research program and works closely with our Global Investment Research Alliance (GIRA) partners. Paul joins Frontier from Willis Towers Watson where he held the role of Senior Consultant for over eight years and was involved in a number of governance and strategy areas, including liability driven clients and retirement incomes. Prior to that, Paul spent twelve years at Mercer where he held a variety of senior roles in both Australia and New Zealand, including leading Mercer's retirement business in New Zealand and was Board Chair of their trustee company. Paul is a Fellow of the Institute of Actuaries and holds a CIMA certification as well as a Bachelor of Economic Science.

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Nicholas Thomas is a member of the Capital Markets and Asset Allocation Team, having joined the firm in 2019. Nicholas has over 15 years investment experience across Lonsec, Russell Investments, and MLC. His most recent role was as a Senior Consultant at Lonsec where his responsibilities included leading the review of capital market assumptions and strategic asset allocation, making dynamic asset allocation recommendations, and constructing multi-asset and sector portfolios. Nicholas holds a Bachelor of Economics from Monash University, a Bachelor of Music from the University of Melbourne, a Masters of Applied Finance from Macquarie University, and is a CFA Charterholder.

In the midst of chaos, there is also opportunity

"The Art of War" Sun Tzu wrote "in the midst of chaos, there is also opportunity". His 5th Century work on military strategy spoke, amongst other things, of how to use chaos strategically. He notes when the force of momentum is lost then disorganisation, fear, and vulnerability can strike even the most courageous.

The principle of opportunity in chaos can hopefully be applied in the current chaotic and unprecedented times that we find ourselves in. On top of the escalating human cost over the past two months, which cannot be overlooked, the economic impact of the COVID-19 virus has been felt in every country, every industry, every business and every investment.

When such extreme events occur we know their impact on returns and valuations is deleterious but what has been more acute here, and unique relative to any previous event, is the extent of synchronicity (correlation) of markets and the speed of the impact, coupled with the significant spike in inter-day and intraday volatility.

Over the past few months investors have been grappling with a range of issues and asking a lot of important questions. Liquidity, revised valuations, increasing liabilities, threats to future funding and changes to rules on capital drawdowns either to meet super fund member demands or corpus operating costs are all factors demanding decisions from investors.

Initially investors and fiduciaries need to manage their immediate challenges. But, particularly for long-term investors, now is also the time to position portfolios as markets re-shape and move forward. The key to being organised and confident is to understand what has happened and how it occurred. As always, information and insight is critical and as asset consultants, Frontier has an important role to play for its clients.

In the past month, Frontier has produced over 35 research updates – an unprecedented amount in that timeframe, and which have covered a wide range of areas we felt would be valuable in assisting our clients understand the current environment and support them in their decision making. In this issue of The Frontier Line we review some of our key observations, discuss three primary issues facing investors and point to some ideas for opportunity amidst the chaos.

What happened?

It is hard to believe now that the origins of this crisis only date back to the very end of last year. In hindsight the dangers of this disease seem so obvious that it is an interesting exercise to review the timeline of its development; how initially virtually every official health and government body, not to mention investment markets, underestimated the nature of the virus and its potential to spread and overwhelm health systems. How governments have been forced to reactively lock down much of the population across the globe, while providing enormous amounts of fiscal and monetary stimulus attempting to mitigate an economic downturn potentially of similar scale to the Great Depression.

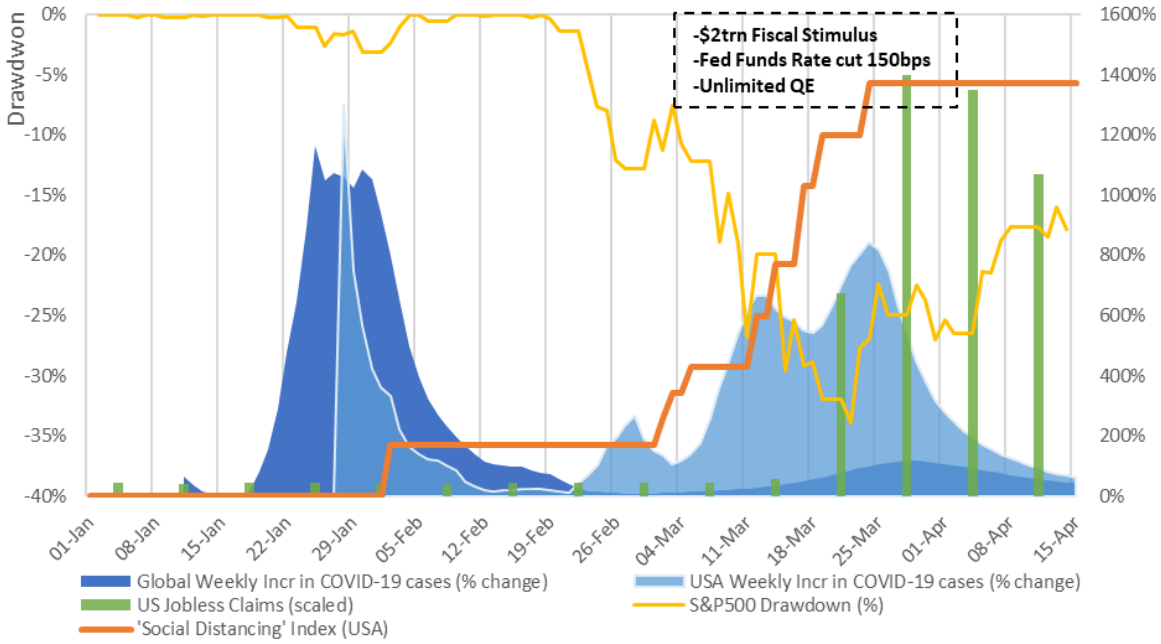
It is a difficult task to succinctly summarise all of the economic and market impacts, and equivalently large responses in fiscal and monetary support that COVID-19 has caused, not to mention the health and social impacts. But undertaking this analysis gives a sense of how these areas interacted and evolved over time, particularly in relation to performance of the market.

In Chart 1 each area is symbolised by a single data set; the blue shaded areas represent the health impact as proxied by percentage weekly change in new COVID-19 cases, the orange line the social impact proxied by a Stringency Index[1] based on the number and strictness of government COVID-19 policies, the green bars the economic impact proxied by US Weekly Jobless Claims, and the S&P500 as proxy for the market impact. We focus on the USA as the largest global market.

The timeline shows the initial spikes in COVID-19 cases in the USA were met by a muted response from the US equity market (yellow line) and in terms of social distancing policy (orange line), despite evidence of its rapid expansion globally (blue area). But when the market did react, it recorded the fastest fall from record highs into a bear market ever seen. Social distancing policy then ramped up alongside the exponential increase in US COVID-19 cases when it became evident the US health system would struggle to cope without severe lockdowns to try and slow the spread. Monetary and fiscal policy response similarly accelerated over March as the severity of social distancing on economic activity became evident, peaking in a fiscal package of $2.5 trillion, and the Fed providing credit lines to the economy worth a similar amount backed by unlimited Quantitative Easing (QE).

This occurred just as evidence of the scale of economic downturn started to materialise; the increase in US Weekly Jobless Claims in March were the worst ever recorded. However, equity markets, as they tend to do, were already looking beyond these numbers and have rallied strongly since this time on optimism around the extent of stimulus and possible re-opening of the economy.

Chart 1: Representative timeline of COVID-19 expansion, USA, 1 Jan – 15 Apr 2020



Sources: 'Social' Distancing' Index based on Stringency Index, Oxford COVID-19 Government Response Tracker, Bloomberg, US Department of Labour.

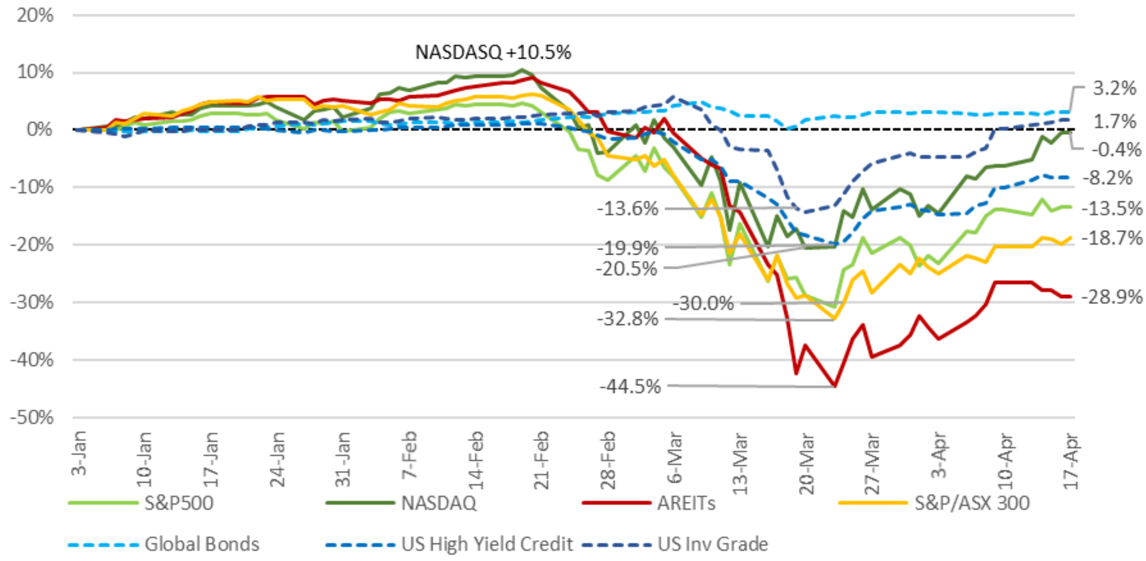
[1]Oxford COVID-19 Response Tracker calculates this index which is based on the number and strictness of government policies in relation to the COVID-19 outbreak. It is used here as a proxy for the social impact.

Market performance through the downturn

There are many remarkable aspects of equity and credit market performance over this period, but perhaps the most remarkable is how little markets reacted to the threat at the start of the year, and how far some markets, most notably US equities and high yield bonds, have recovered from the lows in mid-March, despite so much uncertainty around the depth and length of the likely recession.

It is of course the nature of markets to anticipate, and in this case the optimism appears to be a mix of positive headlines around possible treatments, belief in the inherent strength of the business model 'quality' companies, particularly in the IT sector, and the effectiveness of the massive stimulus programs designed to provide an economic bridge until economies return to a normal footing. Other markets, particularly ones with large financials, REITs or energy components have lagged.

Chart 2: Equity, Bond and REIT cumulative performance*, 3 Jan – 17 Apr 2020



*Price performance of relevant indexes. Source: Bloomberg

Active management through the downturn

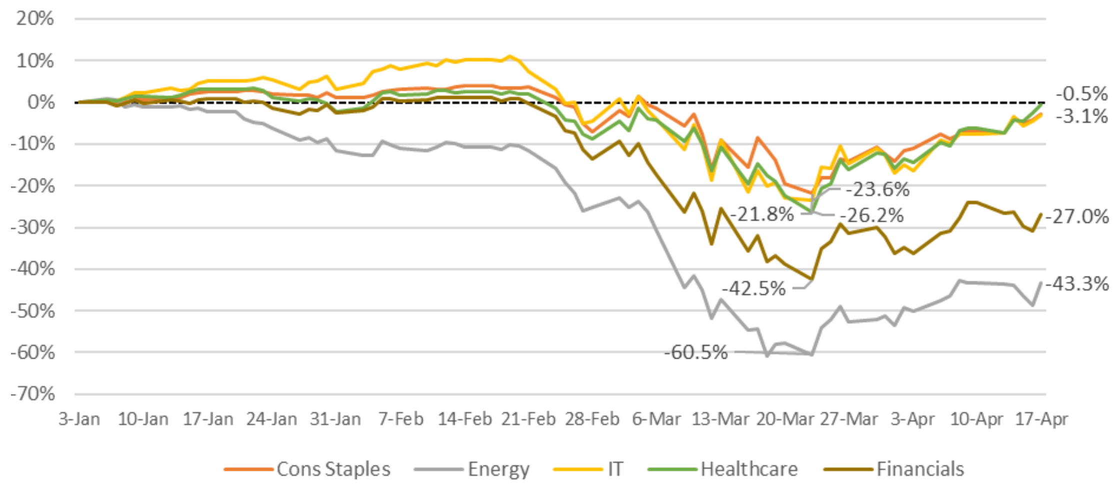
During the down and up phase over the past month the market has delineated sharply between areas it considers safer or high quality, and others considered high risk. This has manifested itself in the outperformance of stocks, sectors and regions with stronger balance sheets and more resilient/ defensive (less cyclical) business models. That such stocks outperform during a downturn would be expected. That said, many of these areas were already considered 'expensive' going into the downturn.

What is less expected is that these areas have also led the recovery. In some cases, such as the NASDAQ, all losses since the beginning of the year have been erased. In Chart 3 we have used the GICS sector performance of US equities to demonstrate this dispersion. In this case, IT, Healthcare, and Consumer Staples are proxies for 'Quality/Growth/Defensive' and Financials and Energy proxies for 'Cyclical/Value'.

We could show charts for country performance between the USA and Europe or the performance of Value versus Growth indices and it would show a similar story. However, one exception to the rule of Value underperforming Growth over the period has been defensiveness of China and the Global Emerging Markets Index during the downturn, which outperformed developed global markets, perhaps because China was relatively early in controlling the virus' spread.

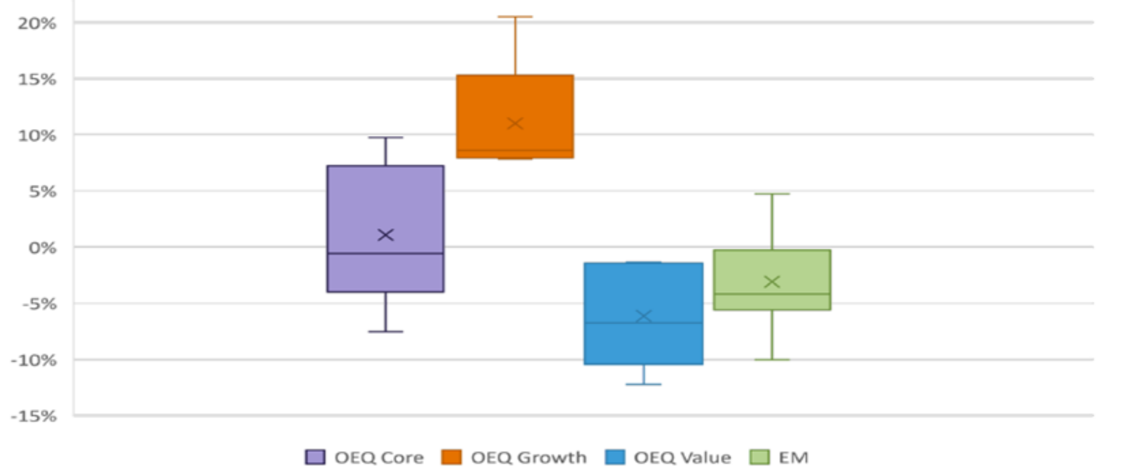
This performance pattern clearly has had implications for active returns of equity managers over the past quarter. We have been closely analysing and updating our clients on active manager performance and recommended the rebalancing of equity portfolios back to configuration weights where growth had materially outperformed.

Chart 3: GICS sector performance within S&P500, 1 Jan - 17 Apr 2020



Source: Bloomberg

Chart 4: Global equity active performance, Q1 2020 (March quarter excess returns)



Source: Frontier

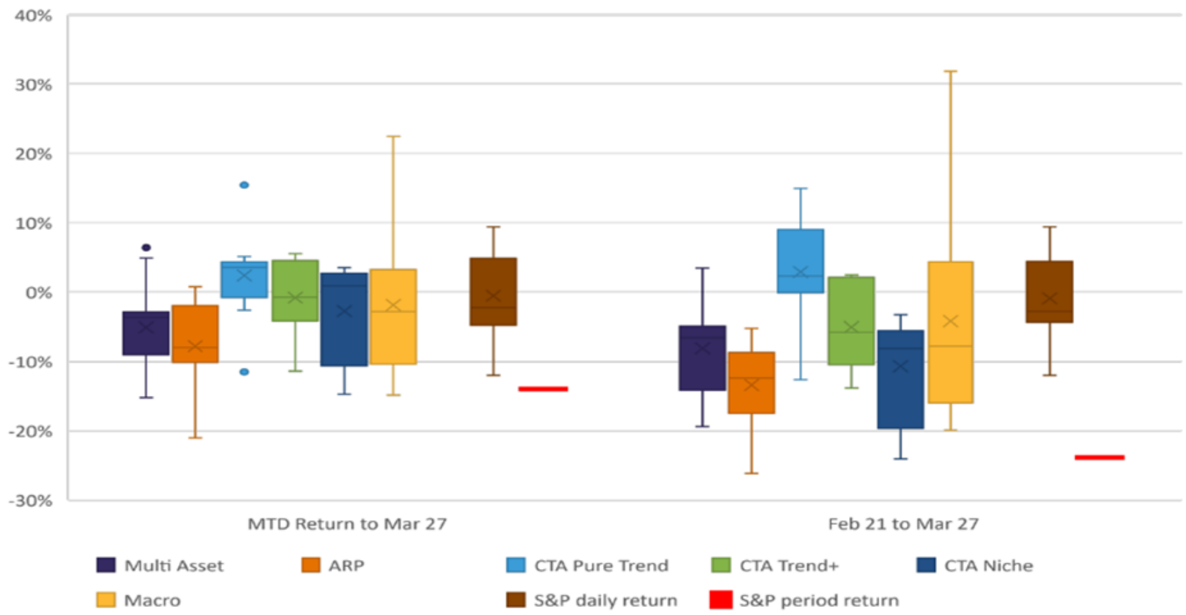
The performance of alternative strategies

There has been a high level of interest in the performance of alternative strategies through the downturn. The performance of most of these strategies are not always easily predictable when there are short and sharp market falls, but as down markets continue, we typically expect certain strategies such as CTAs to perform well. And in terms of CTAs this essentially played out over this period.

Since mid-March we have provided our clients with an evaluation of the performance of multi-asset, alternative risk premia (ARP) trend following (CTAs), macro, and long volatility strategies including specifically addressing catastrophe insurance in terms of performance and potential exposure to COVID-19 losses.

The overall message from Frontier is that alternative strategies broadly performed in line with expectations, although there were a few surprises, and the range of performance outcomes within each sub-sector was sometimes larger than expected.

Chart 5: Liquid alternative strategies relative to S&P 500
(each period's return and the spread of daily returns)

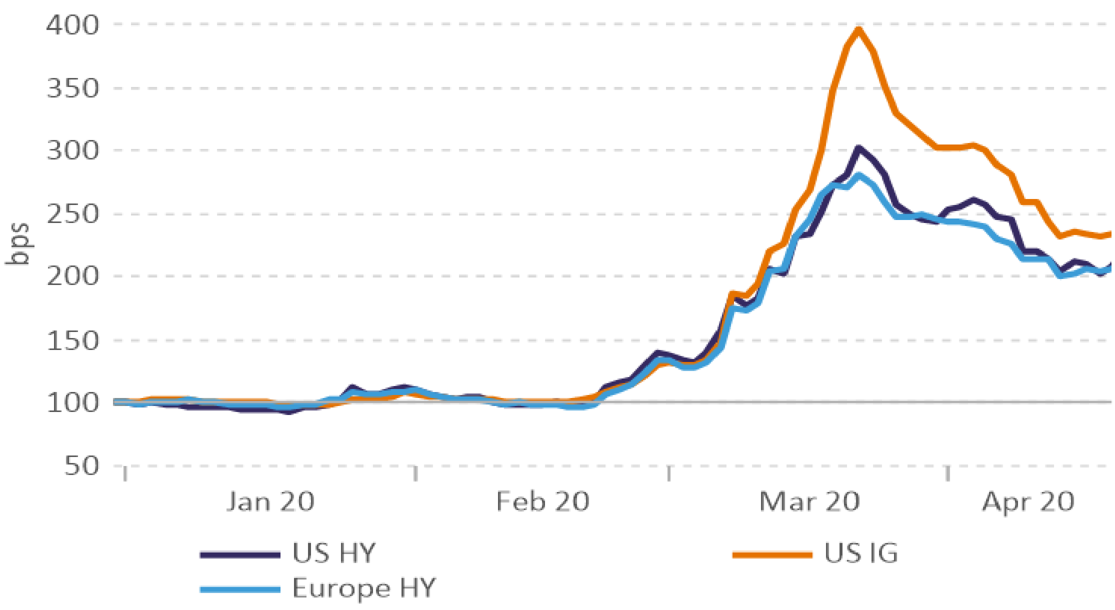


Source: Frontier

The performance of debt markets

We have been closely scrutinising areas such as emerging market debt, leveraged loans and high yield bonds. This has involved assessing asset class and manager performance, implications of the rise in spreads on valuation attractiveness, estimates of defaults based on analysis with investment managers and examining the impact on various debt markets and potential opportunities using our own default models, as well as information we have sourced pertaining to fund flows within these markets and liquidity issues.

Chart 6: Corporate bond credit spreads indexed, 1 Jan – 20 April 2020



Source: Refinitiv Datastream, BofAML, Credit Suisse

Assessing the macro environment and size of the potential downturn

We published two papers over this period summarising the fiscal and monetary policy response and providing modelling of the potential economic impacts of COVID-19 under different scenarios. Our initial economic modelling work, making use of the RBA's new MARTIN model, suggested that economic growth in Australia could decline by 6% in 2020 under a scenario where the economic effects of COVID-19 lasted 12 months.

However, since modelling the potential size of the fiscal and monetary policy response announced in Australia, we concluded that the hit to GDP post this response could be less severe, and in the order of around -2% in 2020.

Table 1: Australian GDP impacts of COVID-19 under different scenarios

Negative shock to consumption growth (deviations from the baseline)	GDP growth (without fiscal stimulus)	GDP growth (with fiscal stimulus of 5% of GDP + QE)	GDP growth (with fiscal stimulus of 10% of GDP +QE)
20%	-6.0%	-1.6%	0.4%
30%	-12.2%	-7.6%	-5.6%

Source: Frontier

Managing liquidity

Liquidity risk is perhaps the most critical aspect of managing portfolios though stressed market environments and it has been a key focus of our current efforts in working with our clients. While liquidity risk applies to all investors, it is particularly key for superannuation funds given the change in regulation allowing investors to withdraw $10,000 this and next financial year.

Our work with clients has covered the various inter-related aspects of liquidity management that contribute to total fund liquidity.

- Market liquidity within asset classes, even in normally very liquid asset classes, has shown signs of stress, which has manifested in investment managers increasing the sell spreads on many investment products across bonds, equities, credit and alternatives. A number of these have since subsided somewhat. Any forced selling of these asset classes to meet fund liquidity demands will result in greater costs for investors.
- Liquid alternatives managers have also reported increases in trading spreads of underlying securities and the asset class has been broadly used as a source of liquidity by investors, but this has not generally resulted in a material change to product sell spreads or redemption timeframes.
- The need to test liquidity within asset classes on a bottom-up basis, particularly where portfolios have substantial exposure to smaller capitalisation stocks within equity portfolios and alternative debt within fixed income.
- The need to stress test liquidity on a top down basis which combine both market and liquidity stress, in accordance with each fund's liquidity policy. Frontier has been active assisting clients with such tests. This has been particularly important for those with larger allocations to direct assets given potential calls on liquidity from member switching, potential for organisational cash demands, liability revaluations, and the Temporary Early Access to Superannuation scheme.
- Funds hedging currency through forwards have had to ensure enough liquidity to meet contract losses as the currency has fallen.
- Funds have needed to allow for the potential that illiquid investments draw down on commitments to help them with capital requirements or for investment purposes (we have already seen a number of fund managers initiate such proceedings).
- Having liquidity in reserve to be able to take advantage of investment opportunities that may arise through this period.

To date, one key difference between the current crisis and the Global Financial Crisis (GFC) has been that despite stresses, debt markets have remained open, albeit with elevated spreads, due in part to the relatively early and large quantum of government support, and the stronger capital position of the banking sector. Most interesting has been evidence of corporate investment grade bond issuance being taken up with strong levels of demand.

All of this means that listed companies and direct assets have been able to refinance debt and draw down on pre-existing lines of credit to enhance liquidity, and investors have been able to sell securities in a relatively orderly manner. This, along with the partial recovery of equity and credit markets, has helped mitigate some of the liquidity stress of investors, and allow more time to adjust portfolios to ensure adequate liquidity in case there is further deterioration in markets from here.

Performance and valuation of unlisted assets

The impact of COVID-19 has presented particular challenges for investors in unlisted property and infrastructure assets. Frontier has been extremely conscious of these challenges. We have been in constant communication with investment managers since the crisis began. Our approach has been based on a framework covering; valuation issues, capital management, liquidity management, and operational impacts. All these issues are inter-related to some extent, but it is valuation which has provided some of the biggest challenges for investment managers, third party valuers, and real asset investors.

Social lockdowns resulting from COVID-19 resulted in a very sudden, large, and unprecedented slowdown in the operating environment for many unlisted real estate and infrastructure assets. Assets whose revenue is more sensitive to changes in economic growth have been particularly effected; airports, toll roads, and both retail and office properties. Frontier has worked to understand the magnitude of these impacts in part through assessing whether assets are sufficiently capitalised and have enough liquidity to manage through this period.

It was clear from early in the crisis that valuations within the sector may need to be adjusted to reflect the sudden change in conditions so that super fund members switching or withdrawing balances could be transferred at valuations considered fair. As such, Frontier was early in advising clients to engage with managers to conduct interim valuations as frequently as required given the availability of new information.

Even with the best intentions from the managers in terms of revaluations, major challenges exist in adjusting valuations for such an extreme event particularly given uncertainty around the duration of the downturn and the extent of lasting impacts. Valuers must balance these uncertainties with the fact that these are often, in the case of infrastructure, very long-term and often critical monopoly assets.

The range of revaluation outcomes so far has depended on the characteristic of individual sectors and assets, with airport assets being the most impacted in the infrastructure space (downward revaluations up to 12%). Thus far revaluations within the unlisted market have materially lagged the falls in listed market for equivalent assets. This is a continued area of focus for us.

We have liaised with a significant number of managers in unlisted property and infrastructure to gauge valuations for each individual asset and their portfolios overall. This has been of significant value to our clients in assessing their own valuations. The charts on page 10 provide a rough illustration of the movements we have observed in certain unlisted assets . These charts show the range of outcomes as well as the median valuation reduction for each asset type (central line in each box) and the mean or average valuation reduction represented by 'X'.

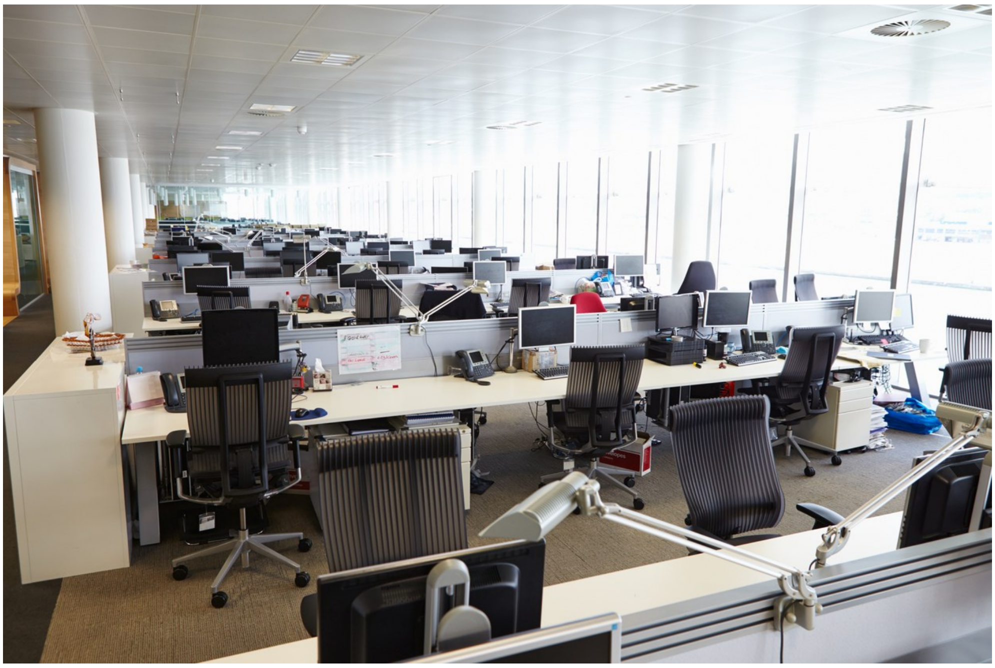
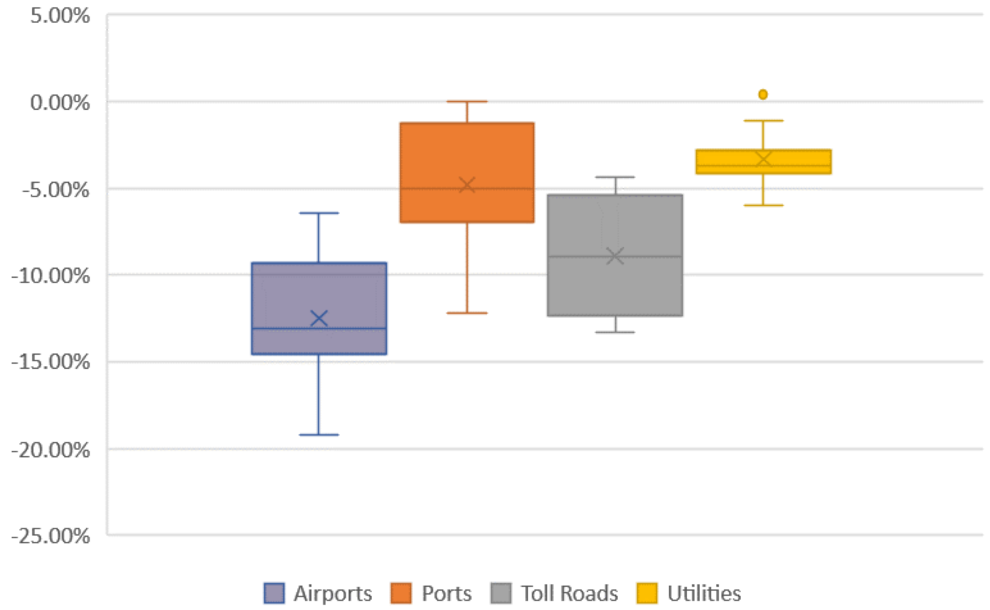
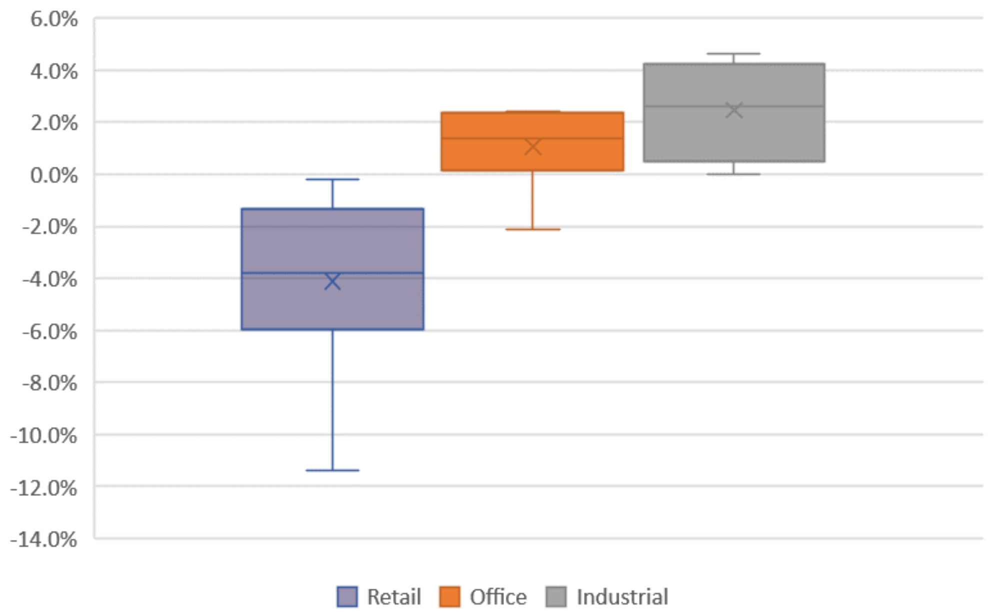


Chart 7: 31 March Valuation Movements - Global Unlisted Infrastructure Assets



Source: Frontier

Chart 8: 31 March Valuation Movements - Australian Unlisted Real Estate Portfolios



Source: Frontier

Don’t overlook governance

The current environment is not just presenting a challenge for institutional investors in terms of decision making around portfolio management, but it also presents a catalyst for fiduciaries responsible for the (often long-term) needs of their beneficiaries to consider, and test, their governance arrangements.

Our observation working with a wide range of institutional investors is that well-structured governance arrangements and supporting policies are vital to manage across a range of different environments. These arrangements and policy settings are most needed in a significant stress environment to ensure appropriate risk management takes place and can be tested. In our view, an active approach is required in many instances to manage fast-moving events and evolving risks.

There has arguably never been a period of greater stress than the one we are currently experiencing. To help our clients navigate this environment Frontier has prepared an investment governance focussed checklist/action plan for Boards and Investment Committees. We have worked with our clients in focussing not just on the issues of liquidity and valuations, as discussed earlier, but also on investment governance policies and processes.

Now is the perfect time for fiduciaries to ensure all policies, procedures and decision-making structures are robust and up-to-date. This will support the rationale for actions and decision making and to help articulate processes and steps taken. It is also a time to ensure delegation models are followed or if amendments are required to deal with the extreme and rapidly evolving current circumstances that any changes to delegation models are formally approved by the Board (or other decision-making body if appropriate).

In addition to managing the immediate challenges of liquidity and valuations, fiduciaries need to consider the organisation’s liquidity policy requirements and whether they are being met. Existing internal valuation policies should be the primary reference point for decision making. And, if the investor is a regulated entity, consider any additional regulatory requirements in these areas. It is critical to ensure appropriate governance processes are in place to sufficiently respond to high market volatility.

Identifying investment opportunities

The market downturn that has occurred over the past two months has been extremely disruptive, but, as Sun Tzu would note, it is also an environment in which great investment opportunities arise. Some examples of investment recommendations and opportunities which we have discussed with clients include:

Dynamic Asset Allocation

We have been updating our dynamic asset allocation recommendations frequently as market conditions have rapidly changed including updated recommendations on equities, sovereign bond, credit and currency positioning.

Post the market rebound we have had an increased focus on assessing whether the valuations of equities and credit really reflect the risks and uncertainty of the unfolding economic downturn. That said, we believe it highly likely there will be opportunities through this period to move over-weight asset classes with compelling trade-off between risk and prospective return.

Distressed credit

COVID-19 will severely impact global economies leading to an increase in distressed corporates. The sell-off in March involved market participants trying to seek liquidity to meet redemptions or to rotate into safer rating bands. This led to forced indiscriminate selling resulting in "good" credits being sold off alongside "weak" credits. This indiscriminate selling creates short-term trading opportunities in stressed credits which are expected to recover. In addition, there is expected to be a medium-term opportunity as the economic downturn continues and the universe of distressed credits expands and evolves.

Frontier is in discussion with a number of highly rated investment managers on the best way for clients to access the shorter term and/or medium-term opportunities in the sector and will work with clients to customise an appropriate strategy for their circumstances.

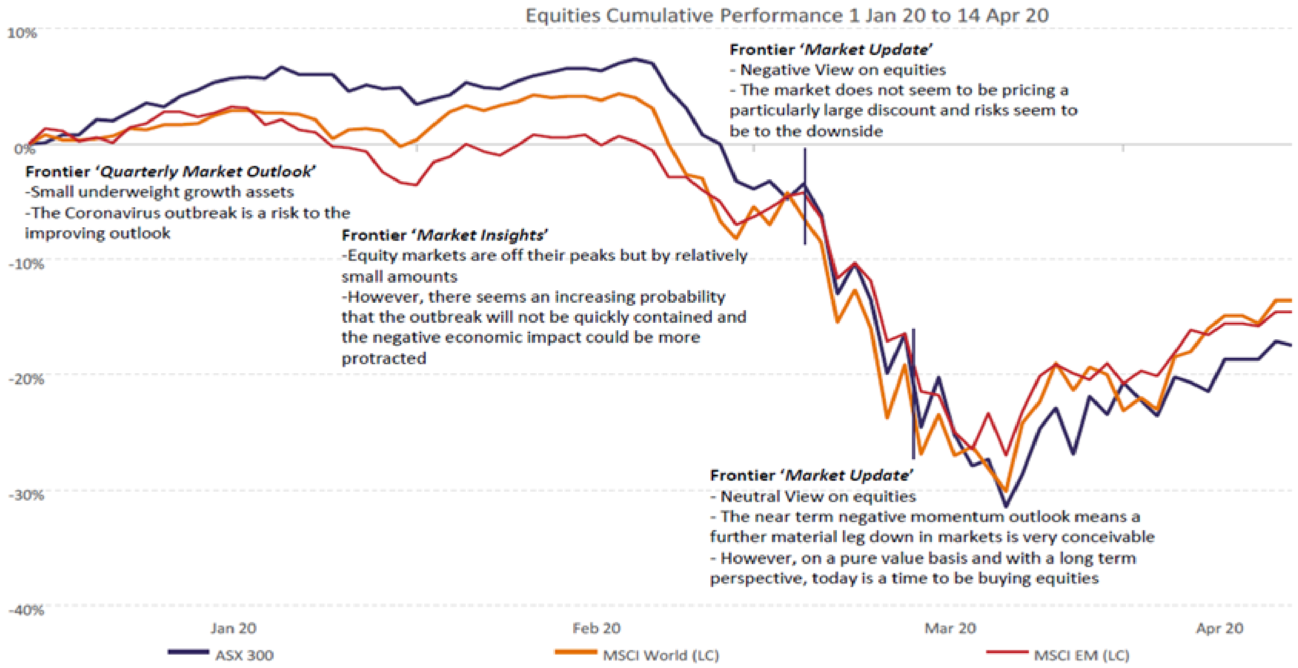
Volatility

Frontier has a specialist derivative team which works closely with our consulting teams and often directly with clients to construct a variety of derivative programs tailored for each client's needs. A number of these engagements involve protection strategies against equity market shocks.

A potential short-term opportunity has arisen as extreme market conditions created dislocations in some markets. The VIX spiked to extreme levels in mid-March and remains at relatively extreme levels. Other measures of forward-looking market volatility (referred to as implied volatilities) have also reached extreme levels.

Frontier has investigated options for our clients to potentially take advantage of the likelihood for the VIX and implied volatilities to reduce in the near term. We have developed four implementation methods each one with a different payoff and risk profile. The methods have included; selling VIX futures contracts, purchasing an ETF whose values move in the opposite direction to the VIX (called a short VIX ETF), selling call and put options, or entering into a swap with an investment bank to profit whenever VIX or implied volatility falls. In working with our clients to deliver this advice we explain the structure, advantages and potential risks of each method and tailor them for each client.

Chart 9: Frontier DAA updates, equities, 31 Mar 2020



Source: Frontier

The final word..

Dealing with the enormous global human cost has rightly been paramount. However, for investors the subsequent COVID-19 challenges have been unprecedented in their lifetimes. Frontier is working closely and intensely with our clients and has produced a significant volume of research and analysis to support the people, and their stakeholders, that we work for. Asset consultants are in a unique position to see across the market, to observe and understand trends and momentum that builds within the investment sector and in individual markets. Frontier has access to, and completes regular due diligence on, many hundreds of managers from around the globe – more than any individual investor. We are fortunate and consider ourselves privileged to be a trusted advisor to a wide variety of institutional clients (super funds, liability driven funds, endowments and foundations). As a result, we are well positioned to understand and anticipate the risks and concerns that a wide variety of small and large institutional investors face at this time.

Economies, capital markets and the needs of institutional investors are changing as their context and their conditions change. To navigate the current challenges and position portfolios for the long-term it is crucial to understand the total investment environment by researching broadly and analysing deeply to develop insight that provides a strong foundation for decision making.

Frontier continues to support our clients at this time with insightful and useful information and to explore investment opportunities in the current chaotic environment. If you would like any further detail on the material covered in this paper, please contact Frontier.

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