Introduction

First and last – all that matters is your health, and the health of your family, friends, colleagues and community. Stay safe, be kind and compassionate, and if anyone's ever done you a favour in life – now is the time to pay it forward.

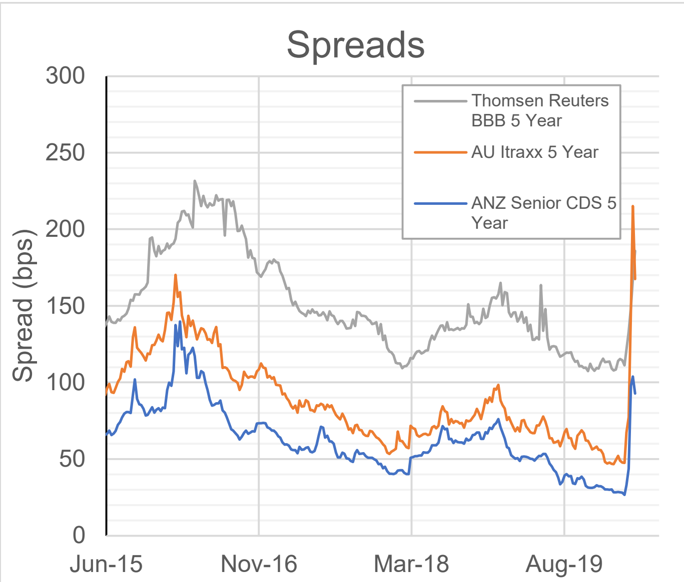
On markets, there's no point sugar coating it, this quarter was one for the record books, and it was brutal. Volatility has been off the charts, no asset class (unless you were long volatility) got through completely unscathed. For those who have been defensively positioning – and suffering the relative performance consequences – the next period will be when that caution pays off.

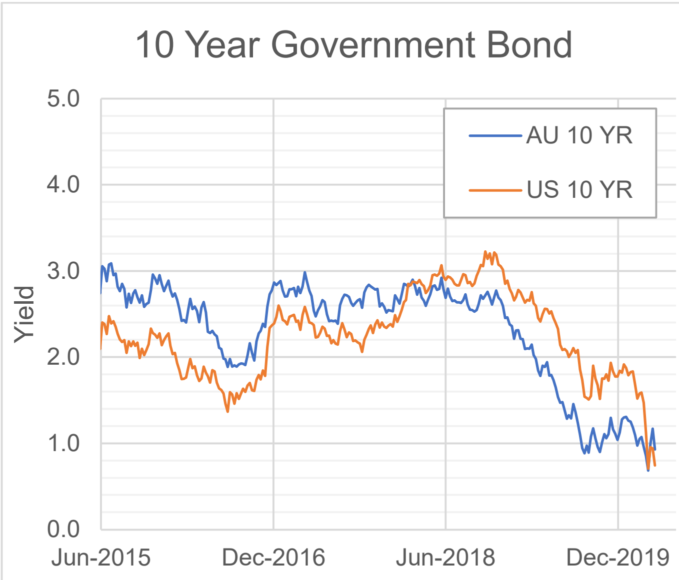
For the vast majority of this readership group, the Government's announced early access to the super will be causing headaches (together with the member investment choice switching activity already in play), but there's already a lot of analysis on this and so we have left it to others to write about. However, we do ask what it means for infrastructure and other illiquid/unlisted assets longer term? This quarter, within the context of infrastructure investing, we take a broader look at where we are now, and how we progress from here. The first article takes a look at why this crisis is different from the GFC, the second article identifies the key sector risks for infrastructure assets, and finally in the third article we identify signposts of what we'll be looking at through this unfolding event.

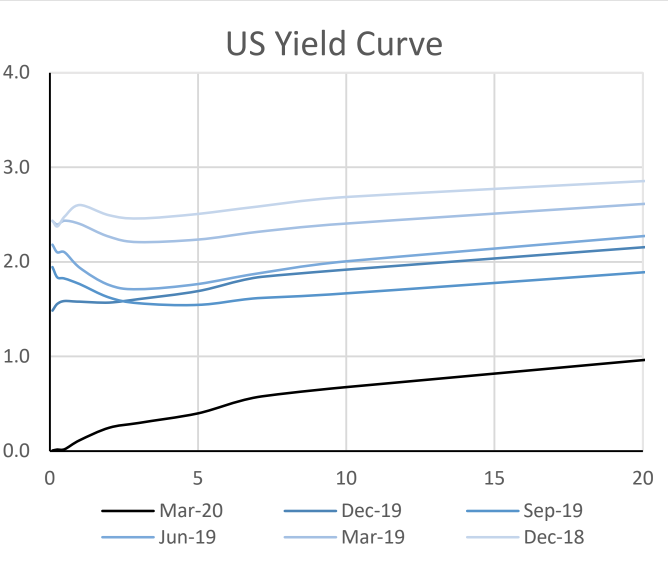
Lastly, having been through previous periods of asset price collapse, we know that most people managing portfolios or individual assets will now be working harder than they ever have, and unfortunately there will be little thanks at the end. This will go on for some time. Everyone's an expert in hindsight, but you're the one who has to manage the hand that has been dealt you – we're thinking of you.

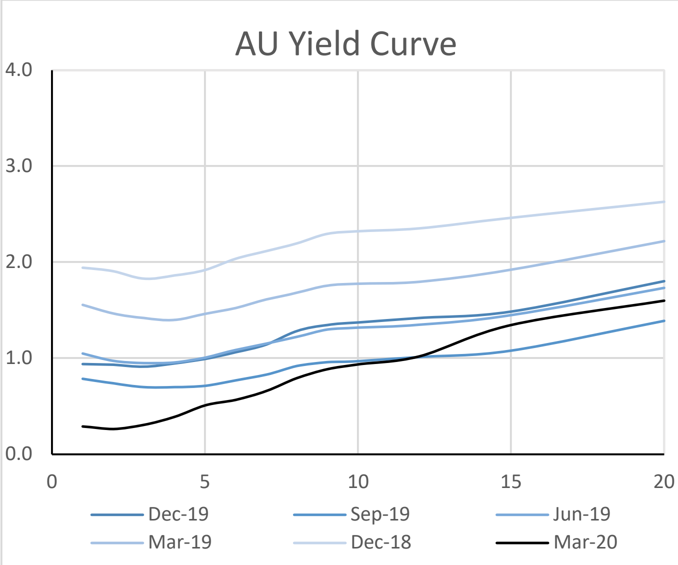
Markets update

Fixed income went on a wild ride this month.









New issuance and refinancing

Not a lot of transaction activity this quarter which is not unexpected given the turmoil in markets.

Date	Borrower	Instrument	Size (m)	Term (Yrs)	Curr.	Pricing/Notes
Jan 20	AquaSure Finance Pty Ltd	Loan	350	10	AUD	
Jan 20	Hornsdale Battery Expansion	Loan	58	Not listed	AUD	
Jan 20	Hornsdale Wind Farm	Loan	658	15/17/18/ 20/22	AUD	
Feb 20	Nexus Infrastructure Finance Pty Ltd	Loan	400	5	AUD	
Feb 20	Spark Infrastructure	Loan	400	3/5	AUD	
Feb 20	Hills Motorway Management Ltd	Loan	815	10/15	AUD	BBSY + 160 / BBSY +185

Equity and other news

- Squadron Energy and Federation Asset Management have finalised the purchase of **Windlab** (WND.AX) at $1 per share (compared to a prior trading price of around $0.70). The proposal still needs to be voted on by shareholders (which seems likely).
- Kuwait's Wren Infrastructure is looking to sell its 19.9% stake in **Transgrid** – having trigger the pre-emptive rights regime with other shareholders. Newspaper reports are that Canadian pension fund OMERS has been lined up to purchase the stake (assuming other shareholders pass on their pre-emptive rights). Transgrid was purchased at an aggressive 1.6x RAB and the sale price may exceed that!

- The NSW Government launched a scoping study for sale of its residual 49**% West Connex holding** (the first 51% was purchased by a Transurban led consortium). It is not clear if the sales process will go ahead in light of the COVID19 situation.
- **Decmil** has been in trading halt since 24 February amid disputes re the construction of modular prisons in New Zealand and the **Sunraysia** solar farm (one of the five solar/wind farms in NSW and Victoria that are currently constrained by AEMO for system strength reasons).
- While on the topic of constraints, AEMO has imposed new constraints for three Queensland renewables projects (**Mount Emerald wind farm**, **Haughton solar farm** and the **Sun Metals Solar Farm**), echoing the constraints applied to five projects in the "Rhombus of Regret" in NSW/Victoria.
- **Wiggins Island Coal Terminal** was back in the news with one of the senior lenders – MUFG – allegedly selling out at between 50 and 55 cents in the dollar. The project has been in extended financial stress – with debt effectively owning the project – for a number of years.
- Sticking with coal terminals, **Brookfield** announced the potential sale of its **Dalrymple Bay Coal Terminal** in February before abandoning the sale process in March. It would have been an interesting sale process as it would have tested institutional appetites for coal assets (which aren't too popular from an ESG perspective).
- The HRL Morrison managed UTA has purchased a 15% stake in the **Sydney Desal PPP** from TIF. Following the transaction, Sydney Desal will be owned 60% by Ontario Teachers and 40% by UTA. Pricing of the sale wasn't disclosed.
- The winner of the Queensland 400 renewable energy auction has been announced. Acciona was awarded the entire 400MW of capacity contract. The underlying project – the **MacIntyre Wind Project** will be a whopping 1029MW of capacity. No announcement has been made as to who equity is, or PPA pricing, but it said to be very aggressive.

This time is different

The saying goes that "This time is different" are the four most expensive words in finance! Well ignoring that – here goes – this is how we think the COVID19 crisis (the Great Pandemic perhaps) will be different from the Global Financial Crisis:

- <u>Much more synchronised globally</u>. China locked down in late January 2020. The rest of the world has started locking down in March. This has provided for an incredibly synchronised global slowdown. By contrast, in the GFC we had asset backed security markets seize up in the US in Q1/Q2 2007, broader credit markets started to fail in 2nd half of 2007, Bear Sterns collapse in Feb 2008 and Lehman fail in September 2008 and then the eventual trough in markets in 2009. While it didn't feel like it at the time, this was a gradual and evolving process of cascading contagion. Unemployment drifted steadily up over this period. By contrast, in this crisis unemployment is exploding (for example, three million new unemployment claims in the US last week). The good news, if there is any, is that as lock down conditions ease, this should provide for a spurt to growth as more of the economy is able to function.
- <u>Crisis starts with policy interest rates near zero</u>. By definition this limits the effectiveness of monetary policy. While some regions (Europe and Japan) have gone down the route of negative rates, this has come at a huge cost to their banking systems. I think that the US (and also Australia) will be very keen to avoid resorting to negative rates if at all possible. Instead, if the crisis deepens, we should expect ever greater quantitative easing (that is, central banks buying government bonds). In fact, we shouldn't be too surprised if central banks take QE well beyond government bonds into purchases and deep into corporate credit (way beyond high rated Investment Grade) and even equities (Japan is already there).
- <u>Supply shock as well as a demand shock</u>. The GFC was effectively a pure demand shock as the seizing up of credit markets and enforced deleveraging drove a rapid fall in demand. By contrast, the COVID19 lockdowns imply supply constraints as well as demand destruction. Supply chains are being disrupted. The Trump Trade Wars triggered a reversal of globalisation. COVID19 will sharply accelerate this trend. There will be a sharp divergence in inflation. Some sectors will see sharp price rises because demand remains steady (or increases)

and supply is constrained (and higher prices are needed to bring online new local higher cost sources of supply). Contrasting against this, some sectors will see massive deflation, as demand collapses (and supply is unconstrained). For example, consider the contrasting fortunes of face masks/food basics vs hotel rooms. Whether this crisis is inflationary or deflationary will depend on timing (it is deflationary at the start, but perhaps inflationary once the fiscal and monetary response arrives) and sector.

- Many governments start the crisis in a very weak fiscal position. The US was running a $1 trillion deficit before the crisis. They have just passed a $2 trillion plus stimulus package. The US enjoys the privilege of being the world's reserve currency and perhaps this means they can run whatever deficit they like. Time will tell. However, for countries other than the US, if they go into this crisis with unsustainable government debt and deficits, then their capacity to provide fiscal stimulus is constrained or the currency/interest consequences if they do is something to watch out for.
- Fiscal policy will dominate monetary policy. Without doubling up on the points above, the GFC was about the dominance of monetary policy. This rewarded asset prices more than GDP growth – marking a sharp increase in inequality (which has in turn underpinned the rise of populism). I believe fiscal policy will dominate monetary policy in this crisis. As investors (aka asset owners) we need to keep in mind that this is likely to be fundamentally redistributive. Over the last decade asset prices outperformed GDP by a multiple, we need to contemplate the scenario that asset prices underperform GDP on the way down, as fiscal spending props up income and GDP growth, but not asset prices.
- Investors more sensitive to illiquidity/credit risks. The old saying is that generals are always fighting the last war. One element of this is that super fund members and investors are going to instinctively assume that some of the patterns of the GFC will be repeated this time. For super funds, who saw a lot of member switching (ie members switching out of the balanced member investment choice into a cash or very conservative investment choice), it will happen again and in my view it will happen larger and faster. The newly announced early release of super provisions are likely to cause substantial additional liquidity problems for individual superannuation funds (those with low average balances and young members). Similarly, having witnessed credit contagion in the GFC and how a sufficiently large problem in one sector (US sub-prime) can spread out and infect the whole system, will be quick to jump to the same conclusions again. During the GFC it was the freezing of enhanced cash funds that was the surprise. This time around, watch out for "liquid" credit funds. Many funds have offered the promise of much higher liquidity to their investors than really exists in the underlying assets (particularly in a crisis). It wouldn't be a surprise if some open-ended funds were forced to impose a freeze on redemptions.

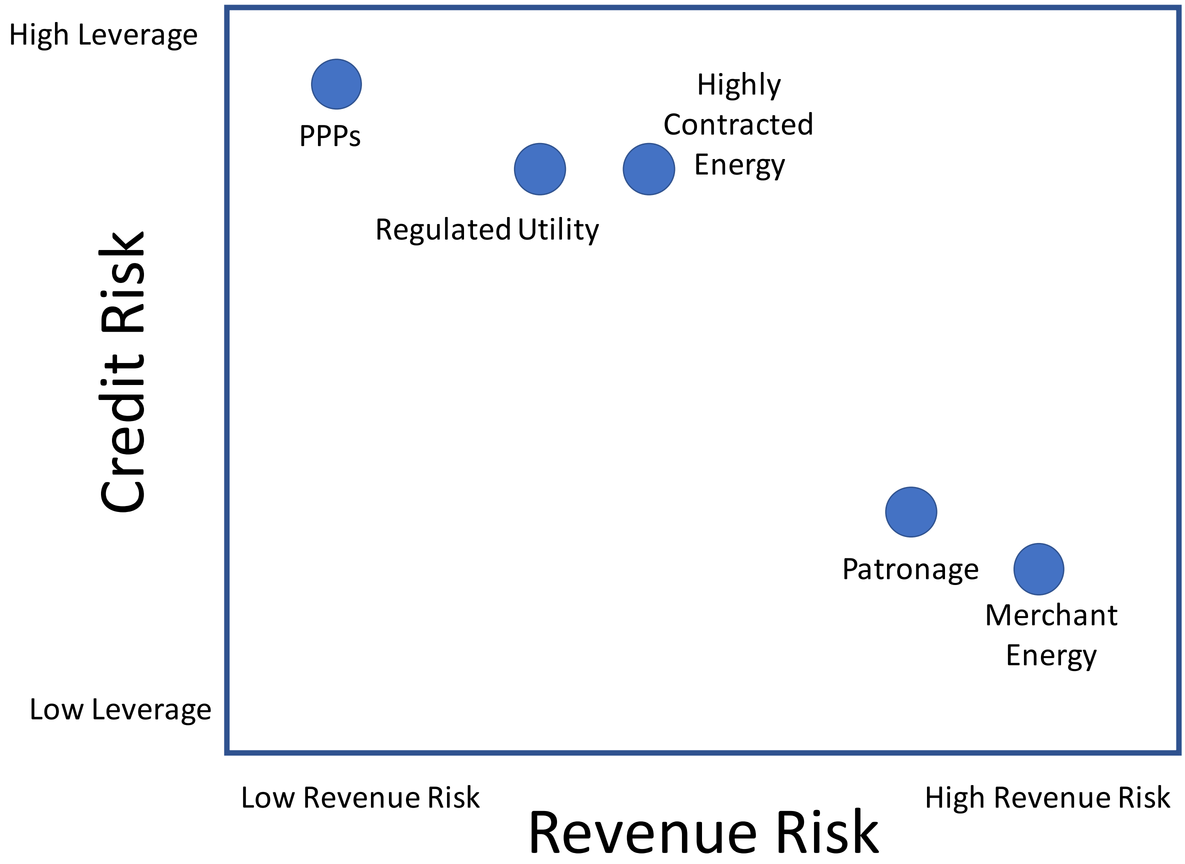
These are some of the key differences from our perspective. What else should investors be looking out for? Please get in contact with us by email to share your thoughts, if you like, we're happy to share with the broader readership group (there will be no IP theft at Infradebt!)

Key risks – an infrastructure sectoral view

The COVID19 crisis and ensuing credit crunch will hit different assets in different ways. The intention of this article is to provide a quick ready reckoner on what we see being the key risks for each of the traditional infrastructure sectors. In our view, there are two shocks in play:

- A revenue/volume shock – as COVID19 shutdowns (and the associated economic downturn) hit volumes/revenues. The most classic example of this would be the hit to passenger volumes from the virtual shutdown of the airline industry.
- A credit shock as lending conditions for all assets (not just infrastructure) tighten resulting higher credit margins and lower leverage levels.

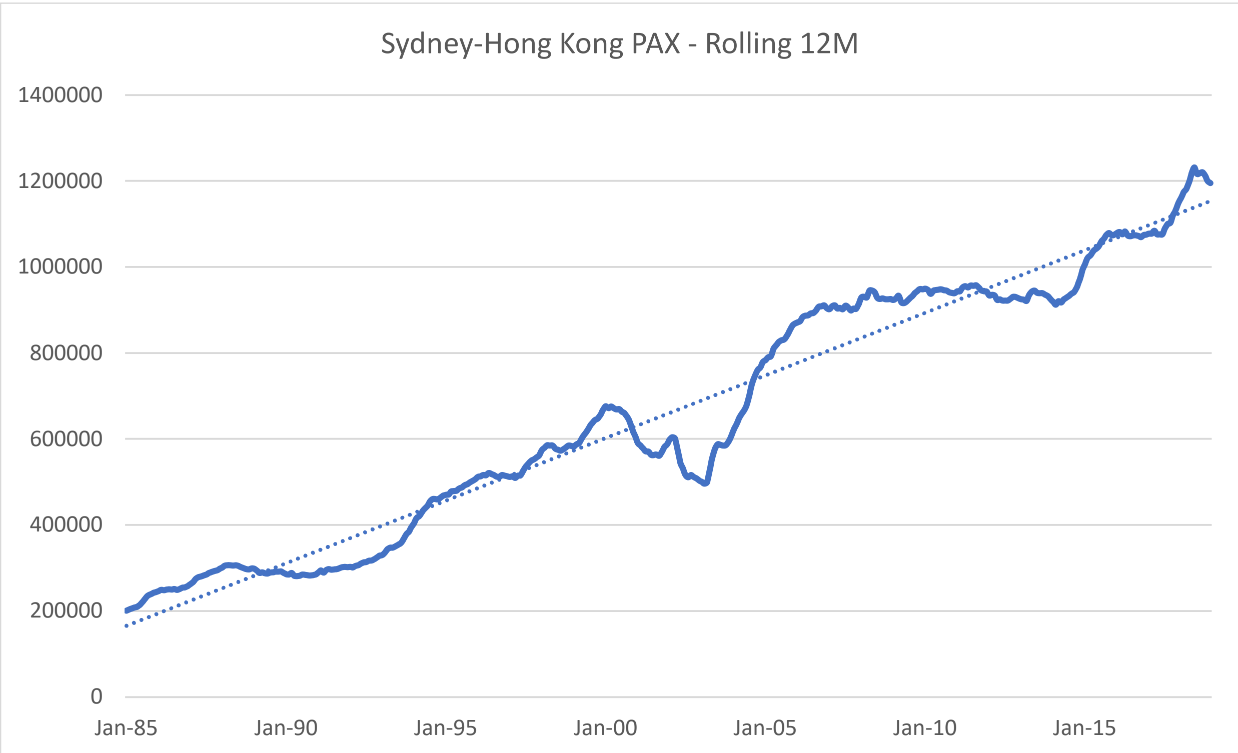
Two Dimensions of Risk



The following sections briefly outline our views for each sector.

Patronage assets – that is, airports, toll roads, ports, etc. For these assets the risk is the short-term collapse in volumes. While this will be painful – particularly where the reduction is particularly severe (eg airports) – it is likely to be temporary. In fact, the hallmark of a quality infrastructure asset (and proof of its underlying monopoly) is its capacity to bounce back and return to the previous trend. The following charts illustrate this behaviour for ports (taking Longbeach CA as example) and airports (taking the Hong Kong Sydney city pair).

Cargo volumes rebounded after each period of economic slowdown and passenger numbers recovered after the SARs outbreak in 2003.



Regulated assets – that is, electricity and gas transmission and distribution networks. These assets should enjoy good revenue stability through a crisis. Their key risk is on the credit shock side.

A typical regulated asset often has substantial capex programs that need to be debt funded (i.e. it is not uncommon for half of operating cash flow to need to be invested in regulatory capex). In good times, this capex is easily debt funded. However, in the face of the current credit shock, utilities face the risk of a double whammy. That is the combined effects of a forced deleveraging on their existing debt level as well as challenges in financing their ongoing capex.

In theory, under building block based regulatory regimes, utilities should benefit from a higher allowable rate of return when credit spreads widen. However, the reality is that the regulatory WACC will only respond to sharp increase in risk premia with a lag. Furthermore, most utilities have higher actual gearing than that assumed by regulators. This means the rise in WACC is unlikely to fully compensate for the higher cost of debt.

As a final risk factor on this front, the experience in the GFC in the UK was one of political/regulatory interference to stop higher risk premia feeding through the regulatory framework to higher regulated revenues. This left regulated utilities squeezed between fixed revenues and a higher cost of capital.

PPPs. For most PPPs the revenue side should be fine. The key risk is refinance risk. Post GFC most new PPPS have been financed with five year mini perm structures, with the project left exposed to credit margins post year five. That is a debt structure where the debt of a 30 year PPP is financed through a sequence of six consecutive five year debt facilities.

For these projects, equity returns will be squeezed between higher refinance costs compared with fixed revenues.

It is Important to recognise this dynamic will be quite slow moving. The impact will be felt at the next refinance date – which could be up to five years away. Credit markets may recover by then. If they don't, PPP projects are very highly levered, and so even a modest increase in refinance costs will necessitate a substantial equity injection to de-lever.

In the near-term, valuers will adopt more conservative refinance assumptions and this will hit valuations. In a world of lower base rates, the credit margin is a much bigger share of the overall cost of debt and so sensitivity to credit margins has increased as base rates have fallen. (for example, see newsletter article Not All DSCRs are Created Equal from Q2 2017 which explores this issue in depth).

It is also important to note that equity stakes in PPPs are being valued at extremely aggressive discount rates (6-8% equity IRR). While base rates are likely to stay low, in a distressed environment these equity IRRs could gap higher. As with all very long duration assets, changes in discount rates can have a big impact on equity valuations.

Energy assets. Electricity prices are likely to fall in the short term on the back of lower demand and lower oil/gas prices (and gas prices are a key driver of bidding behaviour by generators). The impact on energy assets will depend on the level of electricity price exposure (i.e. how much PPA contracting is in place) as well as debt exposure (and, hence, refinance risk and cost of debt exposure). It is likely that highly contracted projects will have higher debt, and hence this will be the key return driver. That is, a fully contracted will behave more like a PPP, while a more merchant project would perform more like a patronage asset.

Signposts

On the 23rd of January, while most of us didn't know it, China locked down the entire province of Wuhan, and the world fundamentally changed. This was the point where it was clear that COVID19 (which didn't even have its official name until 11 February) was a massive problem and was going to have global human and economic consequences. To quote Lenin "there are decades where nothing happens, and there are weeks when decades happen".

We live in these times. The implications for social cohesion and geopolitics in the years to come will be profound. The world will get through this, but it will take time. It will take longer than you think. But one thing, as investors, we should be clear about is that the investment world on the other side of this crisis will be fundamentally different to the world we have lived in for the last decade. Rules that used to work, wont. Fundamental beliefs will be upended. For almost every asset in the world, the valuation that applied on 31 December 2019 will no longer apply. It will be lower, we just don't know how much lower.

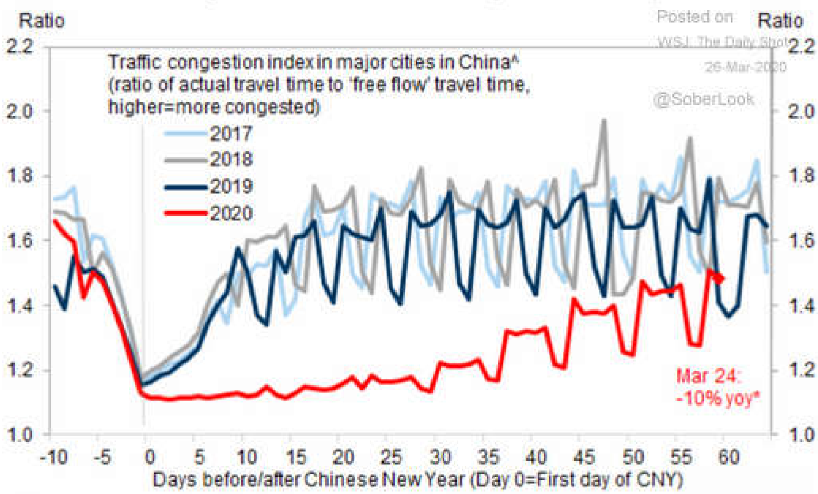
I don't know whether we are heading for a V shaped recovery or a L shaped recovery (or any other letter). I don't think anyone knows. On the most basic questions, I don't know whether the outcome of this shock, with its combination of demand and supply side elements, with the policy responses both monetary and fiscal, leads to inflation or deflation (or somehow both). I don't know whether this leads to a period of high real interest rates, or low real interest rates.

Accepting this fundamental ignorance, it is three months to our next newsletter and the team at Infradebt wanted to share some of the key indicators we will be monitoring over the period ahead that might provide some basic signposts of the direction the world is heading.

- **Credit spreads**. Don't just watch equity markets as an indicator of the mood of risk assets. Watch credit spreads – they can provide a more reliable indicator of the health of the financial system. For those without access to a Bloomberg/Eikon terminal watch some of the credit exposed ETFs such as JNK or SNRL or AGG. The St Louis FRED provides some excellent real time resources - e.g. https://fred.stlouisfed.org/series/BAMLC0A4CBBB/ - whilst these are US measures they are good proxies for overall financial system health. For those with Bloomberg, watch credit default swaps – both broad indices as well as those of the big four banks (as a proxy for financial market stress).

- **Bank Shares.** This will give an insight into the size and duration of the credit shock.
- **REITs/Listed Infra.** Listed property trusts or REITs provide a window on how the market is perceiving the value of illiquid cash flow generating fixed assets. The listed infrastructure stocks are also worth watching closely. In both cases, by backing out leverage, the listed market can give insights into real time movements in unlevered asset values. This is important for infrastructure, because many recently purchased infrastructure assets will have much higher leverage than the small number of listed infrastructure plays in Australia.
- **Inflation** – look under the hood at sub-components – not just at the headline number. Look at what is happening to implied inflation in inflation linked bond yields.
- **Currencies** – in a world filled with intervention in traditional capital markets, currency movements become an outlet valve for imbalances.
- **Copper** (and other industrial commodities). Gives an insight into length and depth of economic downturn. If we are truly in a V then these should bottom or start to recover first.
- **Japan**. Japan is 30 years ahead of the rest of the world on radical monetary experiments (and demographic challenges). Watch what they do next and how markets react.
- **Real time traffic/subway ridership/electricity volumes**. One of the challenges over the period ahead is that economic statistics will be terribly lagging. There are some interesting new information sources (for example, traffic congestion indices) that will help us see the speed and extent of lockdown conditions easing (see below).

Exhibit 5: Traffic congestion has seen a mild rising trend over the past few weeks



*Percentage change relative to the same day after CNY in 2017-19