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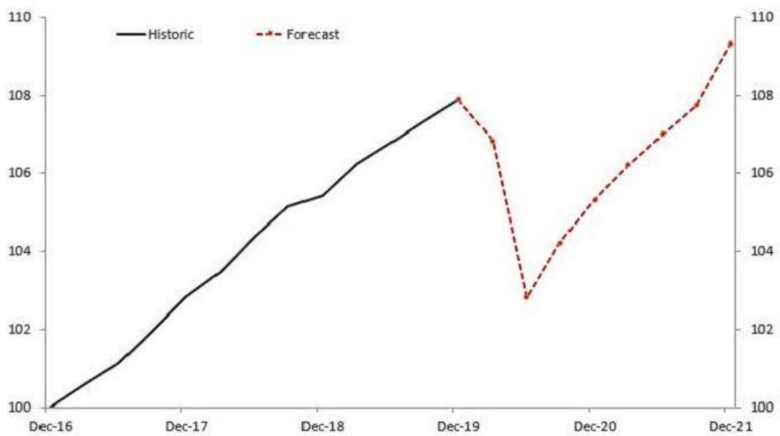
Editorial

It's well-established that the stock market usually rises well before positive data confirms a turning point. Although still volatile and fragile, there have been enough buyers for the stock market to deliver many strong days in the last month, even as 10 million Americans made jobless claims in only two weeks.

These are not just numbers, these are people losing jobs. That's an extraordinary number of consumers spending less, unable to meet rent or mortgage payments and worrying about medical bills. Moody's estimates 30% of Americans with home loans, or 15 million households, may stop repaying their loans if the economy remains locked up beyond their summer.

And yet even as everyone knows there will be a significant fall in global GDP, the 'snap back' argument gains momentum. Consider this **consensus forecast** for US GDP (and the US is about half of global equity market values). 'Consensus' is not one optimistic economist, it's an overall perspective. We have a global shut down in economic activity and although everyone is guessing, enough are wearing rose-coloured glasses.

US real GDP index (Dec 2016 = 100) forecasts



Source: Bloomberg, Janus Henderson Investors, as at 1 April 2020. Projection is based on Bloomberg weighted average of consensus forecasts.

Back in Australia, we have seen about 150 of the companies in the S&P/ASX200 withdraw or downgrade their earnings guidance since the COVID-19 outbreak, confirming the pain is not confined to smaller companies. A recent ABS survey found two-thirds of businesses report cash flow reductions due to the virus.

It should be a stock-pickers market, with some companies at a discount of 30% to 50% of prices a month ago. Even participating in some of the heavily-discounted capital raising should give a boost to outperforming markets not available to index funds. This is often at the cost to retail investors, who are offered a fraction of the new raising and end up diluted by large funds buying at cheap prices. For example IDP Education raised capital at $10.65 and the share price closed the same day at $14.71. Cochlear issued at $140 and was soon back about $200. Webjet and Kathmandu both issued at half their last-trading price.

Conflicting headlines and politics

Nobody has experienced anything like this before, but it doesn't stop strong opinions. A leading US investment newsletter, *Seeking Alpha*, led a recent edition with '*Market recovery: sooner than most expect*', then the next day, headlined, '*The worst is yet to come*'. I found the second more convincing but that reflects my conservative bias.

Even the politics is confusing. **Greg Sheridan**, predictably in the right-wing *The Australian,* wrote *"The Australian government's performance in this crisis has been staggering, proactive, of an almost unbelievable scale and, despite some obvious mistakes, strikingly effective so far."*

Then on the next page, **Steve Waterson** wrote, *"The government response to the coronavirus outbreak has been panicked, illogical, absurd and sinister."*

Where do you stand? How are your investments performing? When will 'snap back' begin? Firstlinks is a community of readers sharing their views, so please take a moment to complete our survey.

Watch for super advice

ASIC has warned real estate agents not to provide advice to tenants on release of super to pay rent, saying:

"Financial advice must only be provided by qualified and licensed financial advisers, or financial counsellors, not by real estate agents who neither hold the requisite licence. The Corporations Act imposes significant penalties for a contravention of section 911A."

Here is a sample of a form (courtesy of *The New Daily*) real estate agents were sending to tenants who were seeking rental relief. It's comprehensive and far from a simple matter for the tenant, including what looks like a requirement to access their super.

- **I have had my hours or income significantly reduced**
- I have attached confirmation letter from my employer OR
- I am a Sole Trader

My hours have reduced by: Income loss of: Role & company:
Company contact:

- I have attached copies of 3 most recent pay slips
- I have attached a copy of my bank statement/s
- I have applied for Centrelink benefits OR □ I am ineligible for Centrelink benefits

Application number: Expected start date: Rate of pay:

- I have/intend on applying for early access to Superannuation

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- **I am a Business Owner and have had my income significantly reduced**
- I have attached a copy of my business bank statement
- I have attached a copy of my personal bank statement
- I have attached a copy of my ABN
- I have applied for Centrelink benefits including Rent Assistance
- I have/intend on applying for early access to Superannuation

Nature of Business: Business name: Accountant name & contact details:
Expected for business to run commence trading once crisis has subsided: YES / NO

FINANCIAL REQUEST

• **Rental reduction request**	• **Rental payment plan request**
Current rent: Proposed reduced rent:	Pay $__________ per __________ Difference in rent total: Pay difference back by: Paying an extra $______ per _______ For a period of ________ weeks / fortnights / months

Graham Hand, Managing Editor

The three key issues in the COVID-19 outlook

Hamish Douglass

As the world battles with the COVID-19 pandemic, our assessment of the economic and investment implications depends upon three fundamental issues. These are the duration of the output gap, the policy responses to mitigate the output gap, and whether or not the crisis will result in fundamental and lasting changes in consumer behaviour.

Let's take each issue in turn.

Issue 1: The duration of the output gap

The output gap is the lost economic output a country will experience during a period in which the economy is effectively shut down. The longer the output gap, the deeper the economic damage. The duration of the output gap will largely depend on the effectiveness of the health response taken by governments.

There are two health responses that are being pursued. One is a hard suppression strategy, where authorities implement a total shutdown of the economy for, say, six to eight weeks. This is likely to be the most effective strategy to minimise the duration of the output gap. Following a period of total shutdown, growth in new cases should be near zero. Officials should be able to reopen the economy provided they have strong testing, contact tracing and monitoring to stop the spread of new cases. For many countries, this might prove to be hard to do comprehensively and effectively. External borders would have to remain closed to stop imported cases. China appears to be on this path.

The other strategy is a mitigation strategy where authorities implement a controlled social-distancing strategy and keep parts of the economy open as long as possible. This is likely to lengthen the duration of the output gap compared with a hard-suppression strategy.

Many countries are now pursuing courses in between these two bookends.

Our best guess is that the duration of the output gap ranges from two months to six months depending on the effectiveness of the various health responses. Based on the measures being pursued by various countries, we would put China at the low end of this range, the US and Australia in the middle and many emerging markets at the other end.

The one area that could shorten the output gap is an effective therapeutic being found that reduced the mortality rate in the most severe cases. This would enable countries to reopen with less fear. We would be surprised if an effective therapeutic could be found and scaled globally within six months. There is enormous work being undertaken on testing therapeutics with trials underway with little red tape. We note Johnson & Johnson has announced it will commence trialling a vaccine in September. At best, it would only be available for small-scale deployment in early 2021. This is unlikely to truncate the duration of the output gap.

Issue 2: The policy response

The policy responses cover those by central banks and governments. Central banks appear to be taking two courses. The first is to reduce interest rates as far as practicable; that is, making money effectively free. The other is to ensure the financial system has sufficient liquidity to ensure it doesn't freeze. We are seeing massive injections of liquidity by central banks via a scaling up of quantitative easing, providing liquidity-support facilities to businesses, liquidity support to other central banks (currency swaps) and liquidity to critical areas of the economy such as the repo markets and money-market funds.

We have been impressed with the actions taken by the major central banks to date; they are acting nimbly, and with scale and speed. They appear to be winning the fight to head off a liquidity crisis, and will tailor responses as issues emerge. At the same time, some difficult issues haven't yet been addressed that are likely to put further strains on the financial system. One unresolved issue is the support to be given to sub-investment-grade companies that have borrowed in the high-yield and leverage-loan markets. Another area to be resolved is what happens when many companies have their credit ratings downgraded from investment grade to sub-investment grade. Solving these issues is difficult and might require a co-ordinated response from governments and central banks.

With fiscal policy, we are seeing governments implement four possible packages of fiscal responses. One is to compensate all businesses for 100% of their lost revenue. This would keep balance sheets intact and enable businesses to pay all their employees and key suppliers; for example, landlords, lenders and so on. Businesses could furlough workers and restart when the economy reopens. In this instance, there would be a limited rise in unemployment, despite a hit to GDP, and activity would resume when the economy reopens. The output gap would be transferred to governments and to central-bank balance sheets via quantitative easing. This would be a V-shaped economic recovery. Singapore and Denmark come closest to adopting this strategy.

The second strategy is to compensate businesses for some of their revenue loss and allow them to meet permitted expenses such as wages, interest on loans, rent and utilities. Employees would be furloughed. The US has a program to lend up to US$10 million to companies employing fewer than 500 people. Under this strategy, a large part of the output gap would be transferred to governments and central-bank balance sheets and the remainder would be shared by society. This would save many businesses and enable them to restart. This combined with an effective mitigation strategy would be the best chance of a U-shaped economic recovery. Germany is following this strategy.

The third strategy is to compensate workers for 70% to 100% of lost wages (typically capped at the median wage). This strategy preserves personal balance sheets, but not businesses that have to manage fixed costs. The issue here is that, outside of wages, the remainder of the output gap would fall on businesses, landlords, utilities and banks. This is also likely to hit property prices. Even if many businesses survive, they would emerge with additional debt or balance sheets that were damaged. This would impede their ability to invest and employ as many people as before. They would cut costs to survive even when the economy restarted. This strategy would head off the most dire of economic outcomes but it is unlikely to prevent a deep and prolonged recession and a significant jump in unemployment. Many western governments are pursuing this strategy. These governments might well provide additional fiscal support to preserve businesses' balance sheets that could be expected to support a stronger economic recovery.

The last strategy is zero compensation. A country loses 17% to 50% of annual output (depending on the duration of the blow to the economy). Many businesses would not survive, particularly small businesses. The property market would crash. Banks would face severe loses. This is the depression scenario. Fortunately, almost no developed country is following this strategy. We fear many emerging markets will not have effective mitigation strategies and be unable to fill a meaningful part of the output gap. We are particularly concerned about Africa, Latin America, India and emerging countries in Southeast Asia.

Issue 3: Changes in consumer behaviour

In thinking about the economic and investment implications, investors need to assess the effect that the health and economic crisis is likely to have on consumer behaviour. This will determine the speed of any economic recovery and create winners and losers in a relative sense.

We know that significant events such as the Great Depression of the 1930s and the world wars had lasting effects on behaviour; so too will today's crisis. There are areas such as the cruise industry where there is likely to be a lasting effect on consumer behaviour. It is possible that the travel industry will experience a fundamental and lasting reduction in demand. Retirees will probably not travel overseas like they did previously. Businesses might determine much business travel is inefficient and discretionary and that meetings can be held just as effectively via video conference.

Other questions investors must ask themselves include: Will there be a fundamental shift in consumption patterns? Will people dine out in restaurants less frequently? Will there be less conspicuous consumption? Will people change their hygiene habits enough to lead to higher demand for cleaning and hygiene products? Will there be a change to how people work? Will this lead to increased demand for software like video conferencing? What will happen to the savings rate? Will people delay renovations to their homes?

The extent of change in consumer behaviour will depend upon many factors. These include the duration of the output gap, the effectiveness of the policy response and the speed and shape of the economic recovery.

Conclusion

The situation remains fluid. It is difficult to predict how the next two to 12 months will play out.

We think there is a range of outcomes for the economic recovery, from a V-shaped recovery (a fleeting recession) to a U-shaped recovery (a mild recession), a prolonged and deep recession and, at the pessimistic end, a depression.

We believe that for many major economies, a V-shaped recovery and a depression appear the least likely scenarios. Outside of a few countries, a recession (a U-shaped recovery) to a deep and prolonged recession appear the most likely outcomes at this point in time. The good news is that governments and central banks are calibrating their responses to attempt to mitigate the economic fallout.

Hamish Douglass is Co-Founder, Chairman and Chief Investment Officer of Magellan Asset Management, a sponsor of Firstlinks. This article is for general information only and does not consider the circumstances of any investor.

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Survey: the impact on you of COVID-19

Graham Hand

How is the crisis affecting you?

The impact of COVID-19 is profound for everyone, from changing the way we work, who we can visit, where we can go, how we shop and where we eat. The health threat will stay with us for a long time. Some consequences will be permanent, such as good businesses closing or companies deciding they no longer need expensive city offices. How long before we start to travel overseas again, dine in a crowded restaurant or even stay in a hotel?

Firstlinks (and previously as Cuffelinks) has always been a community of investors, and we have shared experiences and opinions in many surveys over the years. Some of our surveys have generated thousands of responses as readers express their passionate views.

So how are you coping in the current crisis? How is your portfolio performing? What are you investing in now? When do you think the crisis will end? What do you think of the Government's response? How has your own life changed?

We have 10 questions which should take about five minutes to complete, and responses will always remain anonymous. We will publish the full results by Monday given how quickly everything about the market and COVID-19 is changing.

Firstlinks poll - the impact of COVID-19

How to make up for lost time on COVID-19

Bill Gates

Bill Gates is Co-founder of Microsoft and a Co-chair of the Bill & Melinda Gates Foundation. The first few paragraphs of this opinion piece are taken from The Washington Post which has opened the full article for all to read.

*Bill Gates gave a famous TED talk in 2015 called '**The next outbreak? We're not ready.'** At the time, he said we need to put ideas into practice, from scenario planning to vaccine research to health worker training. "There's no need to panic ... but we need to get going", he said.*

He was right and we ignored him. This is what he says now.

There’s no question the United States missed the opportunity to get ahead of the novel coronavirus. But the window for making important decisions hasn’t closed. The choices we and our leaders make now will have an enormous impact on how soon case numbers start to go down, how long the economy remains shut down and how many Americans will have to bury a loved one because of covid-19.

Through my work with the Gates Foundation, I’ve spoken with experts and leaders in Washington and across the country. It’s become clear to me that we must take three steps.

First, we need a consistent nationwide approach to shutting down. Despite urging from public health experts, some states and counties haven’t shut down completely. In some states, beaches are still open; in others, restaurants still serve sit-down meals.

This is a recipe for disaster. Because people can travel freely across state lines, so can the virus. The country's leaders need to be clear: Shutdown anywhere means shutdown everywhere. Until the case numbers start to go down across America — which could take 10 weeks or more — no one can continue business as usual or relax the shutdown. Any confusion about this point will only extend the economic pain, raise the odds that the virus will return, and cause more deaths.

Second, the federal government needs to step up on testing. Far more tests should be made available. We should also aggregate the results. Read more...

The Washington Post is providing this story for free so that all readers have access to this important information about the coronavirus.

The simple mathematics of social distancing

Tony Dillon

As we continue to batten the hatches in response to the coronavirus threat, we have all become familiar with the term 'flattening the curve'. Most of us have seen illustrative curves and have a grasp of the basic concept. And in particular, we accept the need to flatten the curve to control the spread of the virus, which we are told is best achieved by 'social distancing'.

But what exactly is the curve, and what is the maths behind the social distancing theory, in layman's terms?

Let's look at some simple calculations

A key determinant of the curve is the 'basic reproduction number'. This number is usually denoted by R. It is an estimate of the average number of people who will catch the virus from a single infected person at the outbreak of an infectious disease.

It has been estimated at between 2.0 and 3.0 for COVID-19, meaning each infected person infects between two and three others in a largely-uninfected population. A figure greater than 1.0 gives rise to exponential growth in the number of infected cases, whilst a figure of 1.0 or less means the virus will quickly run out of puff.

And so to contain the virus in the absence of a vaccine, R must be significantly reduced. The corresponding figure for influenza is about 1.3, above 1.0 but not out of control, and besides, we have a vaccine to help keep it under control.

But what drives the reproduction number, R? Let's use some simple numbers to explain.

Assume someone who unknowingly has the virus, has on average, four and a half close interactions with uninfected people in a day (that is, an average nine interactions every two days). Assume also that there is a 10% probability that each interaction will pass on the virus. That means on average, the carrier of the virus will infect,
4.5 x 10% = 0.45 people per day.

Assume also that the average duration that an infected person remains infectious is five days. Then on average, 0.45 x 5 = 2.25 people will receive the virus from the carrier.

Which is within the range of where the COVID-19 R factor is estimated to be.

The value of R in turn drives the exponential growth rate, the rate at which the number of infected cases grow. The maths is complex, but under certain modelling, we can determine the growth rate approximately from the basic reproduction number R.

Now, if someone with the virus remains infectious for five days, then the inverse must be the removal rate of the population exposed to the risk of contracting the virus. What that means is that for every person who becomes infected, after five days there is one less person in the population who can become infected, or 0.2 people per day (0.2 being the inverse of 5).

We have then 0.45 infection-transmitting contacts per day, and 0.2 contacts removed per day, leaving a growth infection rate of,
0.45 - 0.2 = 0.25 per day.

That is, a growth rate of 25% per day would see case numbers double approximately every three days, which is a rampant virus. In fact, that was approximately the exponential rate of growth we were experiencing in Australia just a couple of weeks ago.

Where does 'social distancing' come in?

Without a vaccine, the 10% probability of passing on the virus with close contact, and the five-day duration of being infectious, cannot really be altered behaviourally (though quarantining high probability carriers can reduce how long people can spread the virus).

The one parameter that we can materially manipulate is the number of interactions that people have with each other.

Suppose that with social distancing restrictions put in place, the number of close daily interactions between people has been reduced by a third to three. Then a virus carrier will infect on average,
3 x 10% = 0.3 people per day.

And the R factor has reduced to,
0.3 x 5 = 1.5, implying a less rampant virus.

And significantly, the growth rate of infections has been reduced to,
0.3 - 0.2 = 0.1 per day.

That is, 10% growth in the number of infections per day, which slows the rate at which the number of cases doubles, to 7.25 days.

In this instance, the growth curve has indeed been flattened, and that may be enough to avoid an overwhelmed hospital system. At an R of 1.5, the virus continues to spread, but not at unmanageable proportions. Since social distancing restrictions were ramped up in Australia two weeks ago, we have actually seen the growth rate fall to less than 5% per day, so the early signs of enforcing distancing strategies are encouraging.

And if close people interactions could be reduced to just two, then R becomes 1.0 (= 2 x 10% x 5) and an important threshold would be reached. The growth rate would be zero (= 0.2 - 0.2), so there would be no increase in cases per day, and the virus would quickly fizzle out.

The significance therefore, of controlling the exponential growth rate cannot be underestimated, and is the key to dampening the speed of the spread of infectious diseases.

Without social distancing, the virus would not be subdued, and the hospital system would not cope. Infections would still taper off at some point, as the virus runs out of population to infect, but not before damage to the health system has been incurred.

It is so important therefore, that we adhere to the government's restrictions on socialising, with the health and economic costs of the virus already substantial, running into trillions of dollars globally.

Whoever feasted on bat pie in Wuhan several months ago probably had the most expensive meal in history.

Tony Dillon is a freelance writer and former actuary. This article is general information and does not consider the circumstances of any investor.

One trillion and counting: is government debt a problem?

Hans Kunnen

Some stories bear repeating. Back in 2013, Chris Cuffe wrote an article in Firstlinks (then Cuffelinks) entitled Until debt do us part, Act 1.

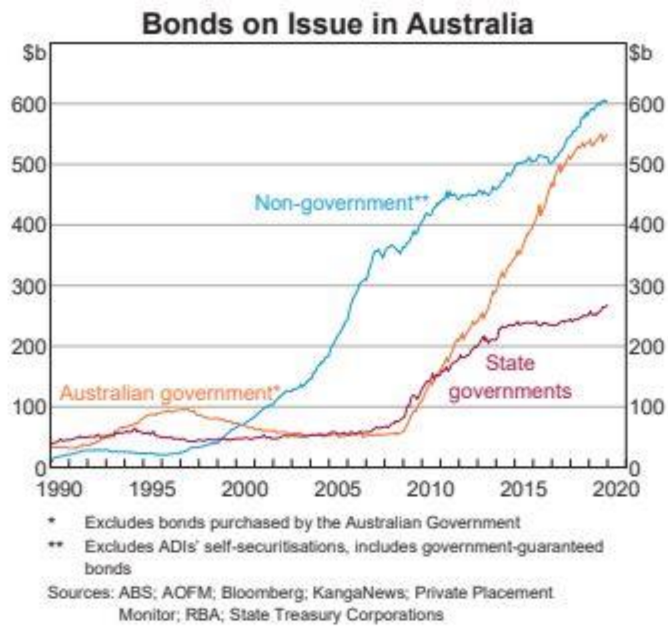
Its basic premise was that concerns and commentary about government, national and household debt were often off the mark. It pointed out, from an accountant's perspective, that 'debt to GDP' ratios were a mix of stock and flow numbers. The level of debt is a stock item while GDP or national income is a flow item.

Can we service our rapidly-rising debt?

This mix of accounting concepts distracts us from the primary issue that debt creates, namely capacity to service. The article suggests that debt servicing ratios are more helpful in determining our level of concern and should be the focus of commentary.

With Australia's household debt at record levels (see chart below), our general government debt about to reach levels not seen since WWII (due to the Covid-19 response) and foreign debt now in excess of $1 trillion, it's time to remember Chris Cuffe's basic accounting principle. Undoubtedly, we will soon start reading horror stories about debt. Be prepared.

As shown below, government bonds on issue have already risen rapidly since 2010, and will exceed $1 trillion within six months after funding the stimulus packages.



The current economic policy response to Covid-19 continues to unfold. Its economic aim is to cushion the economy from the impact of its policies to control the health crisis (lockdowns).

The scale of the economic response is lifting debt to the point where previously agreed up debt ceilings are being lifted. While in the United States, this has caused political grandstanding and generated market uncertainty, in Australia it has passed by with little comment.

Economy is still functioning

On whatever measures you chose to use (and, debt to GDP, sadly, is the most common) Australia's government debt is low by world standards. It is set to rise, but even if it were to double, it would still sit below the debt to GDP ratios of nations with comparable standards of living.

What about our ability to service this new debt? This depends primarily on two things, our income and the interest costs.

Without doubt our income will take a hit this year. It may well be subdued for a few years to come. No one really knows the endgame of Covid-19 but a vaccine does seem probable, but with considerable delay. That said, the economy has not stopped in its tracks. Income will be down but not out.

An unemployment rate of 10 or 15% is an economic and social disaster but it also says that 85-90% of the economy is still operational. There will be wages earned, profits made, and taxes paid. There will still be a flow of income to the government from which debt payments can be made.

And what about the cost? Today interest rates are at historical lows. Low borrowing costs can be locked in for a decade. Rates will rise but not soon. In the meantime, we have the capacity to rebuild our economy, reduce unemployment, rethink our ways of doing business and adjust our priorities.

I don't wish to underplay the risks associated with taking on debt. It's never a riskless exercise, but likewise, I want us to understand the metrics that matter.

What are the metrics that matter?

GDP or national income in 2019 was almost $2,000 billion. Government debt outstanding was almost $600 billion in the latest Reserve Bank chart shown above (released on 4 March 2020). According to the budget papers, government debt in 2018-19 was estimated at $373 billion with interest costs of $14.1 billion while government revenue was $485 billion.

At the time of writing the government had announced some $350 billion in new spending. The largest items are the JobKeeper, business support and JobSeeker programmes. The exact timing and magnitude is not known and further programmes may be required.

Taking the estimate of $350 billion as a base number for new debt due to spending programs, this adds $0.9 billion per year in interest costs. However, if government revenue falls by say 20% or $100 billion new debt could rise to $450 billion and total new interest costs of $1.1 billion.

The government is already paying $14.1 billion per year in interest costs. Total annual interest costs would rise to around $15.2 billion under this new scenario. Is this manageable? Yes. A resulting debt service ratio of 3.9% is well above that of recent years but is on par with levels seen during the 1980s and 1990s.

In a nutshell, the increase in debt resulting from new government spending programmes and a decline in government revenue is manageable. While we would prefer not to be in this position, from a debt financing position it is not a crisis.

We have been here before and we will come out the other side.

Hans Kunnen is the Principal at Compass Economics and was formerly an economist with Colonial First State and St George Bank.

Brace yourself for (bad) tax and super news

Dr Rodney Brown

Last week in Firstlinks, Dr Shane Oliver enlightened us on how the anticipated increase of $500 billion in public debt due to the COVID-19 crisis will be paid for. The $200 billion in spending contained in the three stimulus packages offered by the Morrison Government plus the hit to the public revenue of $300 billion through reduced taxes from the economic downturn will be funded via the issuance of government bonds and additional borrowings.

However, in his concluding comments, Oliver briefly mentioned that long-term consequences may include forgoing the next round of personal income tax cuts due in 2022 and the imposition of a deficit levy. These options and others are explored in this article.

Notwithstanding the terrible human cost of the pandemic and the impact on many people's livelihoods, we should be prepared for more financial pain once we get through the immediate threats posed by the pandemic. While this week, Scott Morrison reaffirmed that once the crisis is over, the Coalition Government will be returning to 'conservative economic policies', the sheer magnitude of the generous responses coupled with the economic downturn will leave a significant financial bill to pay.

Treasurer Josh Frydenberg has indicated the debt will be repaid over the long term. We must brace ourselves for changes in the taxation and superannuation systems as everyone will be expected to play a role in the economic recovery. However, a substantial slice of the burden will likely fall on the shoulders of high-income earners in addition to that already being borne by landlords not classified as high-income earners.

Likely tax options for repaying debt

Assuming the current bipartisan support shown to date in quickly passing stimulus packages through Parliament, two obvious reform options likely to pass relatively unchallenged would be the unwinding of the legislated personal income tax cuts and the revival of the 'Budget Repair Levy'.

First, in the 2019-20 Federal Budget, the Government stated that 'disciplined financial management' has allowed it to enhance the 'Personal Income Tax Plan', providing a further $158 billion of further tax relief to most Australians. Clearly, the underlying premise for this policy has changed quickly and dramatically. Under the current plan, in 2022-23, the 19% threshold will increase from $37,000 to $45,000 and the 32.5% threshold will increase from $90,000 to $120,000. Then, in 2024-25, the 32.5% marginal tax rate will reduce to 30% and the top threshold will increase to $200,000 and the 37% tax bracket will be abolished as outlined in the tables below.

Rates from 2017-18 to 2023-24	Thresholds in 2017-18	New thresholds from 2018-19 to 2021-22	New thresholds from 2022-23 to 2023-24
Nil	Up to $18,200	Up to $18,200	Up to $18,200
19 per cent	$18,201 - $37,000	$18,201 - $37,000	$18,201 - $45,000
32.5 per cent	$37,001 - $87,000	$37,001 - $90,000	$45,001 - $120,000
37 per cent	$87,001 - $180,000	$90,001 - $180,000	$120,001 - $180,000
45 per cent	Above $180,000	Above $180,000	Above $180,000

Rates from 2024-25	New thresholds from 2024-25
Nil	Up to $18,200
19 per cent	$18,201 – $45,000
30 per cent	$45,001 – $200,000
45 per cent	Above $200,000

Source: 2019-20 Budget documents

The result would be a simpler system comprising three tax rates and a better alignment between the middle tax bracket and the corporate tax rate of 30%. The Government claims these changes will maintain a progressive income tax system, improve incentives for working Australians and contribute to a strong economy. However, pandemic-induced budget deficits bring the affordability of these measures into question.

Second is the resurrection of the 'Temporary Budget Repair Levy' brought in to address budget deficits incurred in the wake of the Global Financial Crisis. That tax applied at an additional rate of 2% to personal taxable incomes in excess of $180,000 per annum and lasted from 1 July 2014 to 30 June 2017. The levy was expected to affect 2.3% of taxpayers with taxable incomes in excess of $180,000 (around 400,000 taxpayers) and raise $3.1 billion. This option is relatively easy to implement quickly and could apply from as early as 1 July 2020.

Superannuation also a target

Another option is to cancel the legislated increase in the superannuation guarantee charge (SGC) rate. The current 9.5% rate is legislated to increase to 12% by 2025 in a series of annual steps as outlined in the table below.

Source: ATO

Some, including the Grattan Institute, have strongly argued against this increase on the basis that it effectively comes out of employees' earnings. Putting that argument to one side, cancelling this increase would ease the financial impact on many businesses and may provide incentives for them to hire additional employees.

Another option might be to tap superannuation funds, despite the $3 trillion held in super before the crisis taking a beating due to stock and bond market declines. This could take the form of an increase in the current concessional tax rate of 15% on fund earnings or even the reintroduction of taxes on certain benefit payments.

Currently, pensions and lump sum withdrawals from the superannuation environment are tax-free to those over 60 years-of-age from funds that pay tax. An argument could be mounted on equity grounds that it is only fair this cohort shoulder some of the financial burden.

Ability to introduce unpopular measures

There is a saying in politics 'don't let a good crisis go to waste', and in times of crisis the Government may be forced to implement otherwise unpopular measures in the best interests of all Australians. These reforms may even include some of the politically unpalatable options put forward by the Labor party in the lead up to last year's federal election.

Those measures included, among others:

- limits to negative gearing
- halving of the capital gains tax discount (from the current 50% to 25%)
- eliminating the refundability of franking credits.

The Parliamentary Budget Office had costed the first two measures to raise $35 billion over the next decade while the policy regarding franking credits was estimated to save $59 billion over the decade. These reforms were discussed extensively in Firstlinks and in the wider public domain and arguably had a significant role to play in Labor's poor election result.

Nevertheless, given we are in uncharted waters, it is possible that the potential to raise large amounts of revenue from these reforms, some could be resurrected by the Coalition Government, albeit in modified form, under the guise of fiscal necessity.

It may also be possible that the most profitable companies will be expected to shoulder a slice of the burden. This should come as no surprise since the Federal Government has focused on supporting businesses during the crisis by relaxing stringent insolvency laws and through the provision of a wage subsidy. Therefore, additional options may be on the table, such as the imposition of a 'super profits tax' on the most profitable companies. This would take the form of an additional tax on top of the 30% corporate rate paid by larger companies. However, such a measure would be relatively pointless if it is not implemented in combination with a partial or full scale back of the refundability of franking credits.

Other potential reforms have not been discussed on the basis that they would simply be too politically unpalatable. These include increasing the rate of the GST to bring our system more into line with those of like nations such as NZ (15%) or the UK (20%) or eliminating some of the exemptions currently available, or the introduction of an inheritance tax similar to that in place in the UK.

Be prepared for hits

The Federal Government will face a delicate balance between raising much-needed revenue to manage the extraordinary budget deficit while providing enough incentive and stability in the economy in the post-coronavirus world. No doubt, financial planners are currently focused on assisting their clients navigate the myriad of Government financial assistance on offer, plunging portfolio values and uncertainty around income in the short term.

This is definitely the right approach for now. However, the key message for advisers in this article is that they should also keep an eye on what may eventuate in the medium term so they can be on the front foot if the tax-related darkness at the end of the COVID-19 tunnel arrives as expected.

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Hybrids throwing up opportunities … and risks

Norman Derham

Professionals working in capital markets like to think we are comfortable with the market's ups and downs, but the reality is we never really get used to the severe 'downs'. From 2 March 2020 to the close of business on 23

March, the Elstree Hybrid Index declined by a massive 15.7%. Six trading days later on 31 March, the index had managed to claw its way back such that it was down, over the month, by a relatively pedestrian 6.2%.

Let's make sense of this behaviour.

We thought the GFC was the template

No matter how much information we have at hand (perfectly informed - is there such a thing?) and how much modelling and back testing we conduct when things go awry, markets do not necessarily react in a way that we predicted or hoped they would.

The coronavirus-induced equity market collapse is a classic case in point. The GFC, while a bad event, provided asset managers with a source of behavioural data we could only dream of. There hadn't been an 'event' like it in decades, some would argue in fact, since the 1930s.

As market analysts, we learned a lot from the GFC. In the lead up to it, the banks self-regulated and because there hadn't been any serious default activity among borrowers, particularly households, the banks apportioned significantly less capital to loans they wrote than perhaps they should have. Credit ratings agencies were lulled into a false sense of security with their modelling that displayed almost zero default probability among different cohorts of loans pooled together in so-called 'structured products'.

We thought we had been blessed because the raft of default activity and the magnitude of the event that followed provided us with a template from which we able to make a meaningful assessment of how markets would likely behave when the next 'event' occurred.

We understand that no two events are the same. In 2008 we were confronted by a credit event that spread like a virus through the banking system, almost crippling it. It was only the combined actions of the central banks and the governments of the day that saved the banking system from almost certain failure.

In 2020 we are confronted by a virus of a different kind, a virus that is impacting economic growth not through a lack of credit creation but from the top down as communities and countries are isolated and locked down. The impact on economic growth is similar only the way we got here is different.

Are we paid enough for the risk?

As investors in hybrid capital instruments, we spend much of our time determining whether or not the compensation we receive over the risk-free rate compensates us sufficiently for the sum of the risks. Hybrid securities are subject to a plethora of risks including default risk, equity conversion risk, extension risk, liquidity risk and fat tail (black swan) event risk. These risks are captured and present as 'market risk'.

For some time now, we have been sanguine about default, forced equity conversion and extension risk of the majority issuers of hybrid securities, the banks. Despite the expected economic hit of Covid-19 and the potential impact of non-performing loans on lender balance sheets, our view hasn't changed. In support of our view that the banks are well positioned from both the capital and funding perspectives, the Reserve Bank moved on 19 March to secure a large percentage of all Australian ADI funding by providing a $90 billion 3-year fixed rate facility. Then APRA announced that the banks could effectively 'gear' their balance sheets by relaxing their unquestionably strong capital adequacy ratios.

While we understand that investors must have confidence that the issuer will meet all their scheduled payment obligations, changes in the market price of hybrids do occur from time to time that have nothing to do with the credit worthiness of the issuer. It is a result of the behaviour of panicked investors.

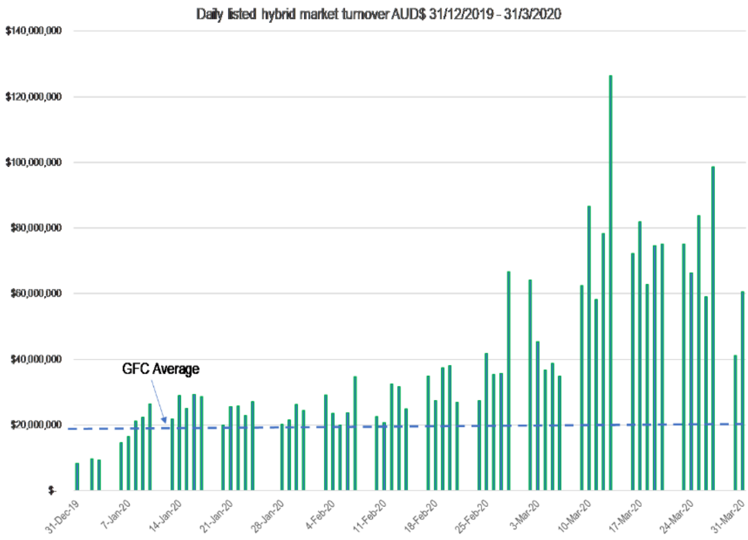
We question that it really was increased default, forced equity conversion and extension risk that caused the most rapid and sharpest decline in hybrid security prices since the GFC especially in the face of the RBA and APRA's initiatives. We believe the drawdown which ensued, while having some plausibility, was simply caused by a lack of liquidity.

We think liquidity risk is perhaps the biggest risk investors in ASX-listed hybrids face. We have just experienced a month like no other where an event shock led to severe market dislocation, panicking investors into selling large volumes of securities only for the market to recover strongly as the month drew to a close.

Selling pressure forced rapid increase in turnover

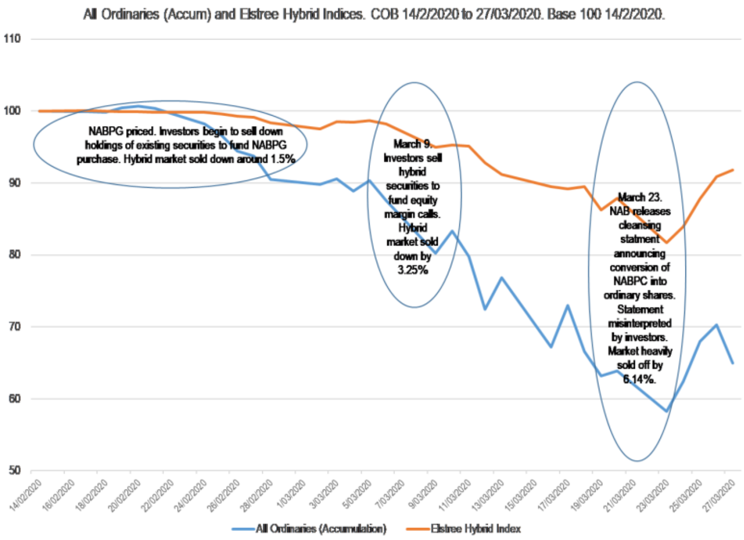
The listed hybrid market transacts on average during normal periods around $30 million a day or $150 million a week. Turnover of this magnitude is sufficient to ensure price stability where the supply of securities is met by demand. Where transacted volume exceeds $150 million a week price pressures begin to emerge. Transacted volume typically increases during periods of stress (such as now) or when a new issue is announced and priced.

In the fortnight prior to 25 March transacted volume exceeded $300 a week, or twice the long-term weekly average. On one day (13 March) it exceeded $126 million, or four times the average daily turnover. The chart below details the transacted volume on a daily basis since 31 December 2019 to the close of business on 31 March. The GFC average is highlighted (blue dotted line).



It's a given that some downwards hybrid security price pressure should be expected as a consequence of Covid-19. However, it was the addition of a number of 'other' one-off factors that triggered the dramatic transacted volume surge as supply swamped demand forcing prices materially lower. These factors included:

- The selling down of securities to fund the purchase of the 'upsized' NABPG when investors became aware of their entitlements on or around 25 February 25 (NAB sensibly withdrew the issue on 12 March however investors were well advanced in the selling of their existing securities).
- There was margin lending-based 'forced' selling of hybrid securities (to fund margin calls on equities) coinciding with the equity market falls which gathered momentum around the week beginning 9 March. Hybrids and equities both fell in price.
- On 23 March, NAB confirmed the conversion of capital notes (NABPC) into ordinary equity. A number of investors erroneously interpreted the NAB's communication (which included a general comment about how Covid- 19 might impact NAB's business) to mean that the NAB would convert their redemption proceeds (being $100 plus the last coupon payment) into ordinary shares at price of $21.34 representing a 30% premium to NAB's last traded share price. This spooked investors into selling everything 'NAB' and the market at large (including the equity market). The price behaviour that ensued was the direct result of investors not understanding the documentation or perhaps not even reading the relevant documentation. The issue of shares is commonplace where maturing hybrid securities are purchased and converted into equity by a 3rd party provider appointed by the issuer (usually an investment bank, in this case UBS). It has nothing whatsoever to do with investors receiving less than 100 cents. On 23 March, the hybrid market declined 6.1%. On the same day the All Ordinaries Accumulation Index declined by 6.0%



Expectation of performing better than during the GFC

With the GFC providing much of the data and the subsequent improved structure of hybrids, our modelling suggested that the market would perform significantly better should there be an event shock of similar magnitude. We expected any drawdown would be less, especially since the market is now represented by 95% investment grade issuers compared with 65% during the GFC period.

Typically, the hybrid market displays an equity market delta of around 0.1 (that is, if the equity market falls by 10% the hybrid market decline in value by 1%). Should the equity market fall by 20% or more than 20% the delta increases to around 0.2 – 0.3. However, the delta in the middle of March 2020 approached 0.4% which we thought was too high (of course, on 24 March the equity delta exceeded 1).

The listed Australian hybrid market is majority populated by unsophisticated and (sometimes) poorly-informed investors. The recent surge in transacted volume was panicked in nature. In two trading days two weeks apart, the listed hybrid market declined by a staggering 10%. This serves to highlight the inefficiencies and nuances that are inherent in listed hybrid market and investors are better served leaving the management of their hybrid securities exposure to a professional fund manager.

Norman Derham is Executive Director of Elstree Investment Management, a boutique fixed income fund manager. This article is general information and does not consider the circumstances of any individual investor.

Demographic change at the worst possible time

Christopher Dembik

The view of many investors is that the latest market developments related to the COVID-19 outbreak are a temporary downturn in a 10-year secular bull market, similar to those previously seen in 2016 and 2011. Their main argument is that loose monetary policy, including low interest rates alongside accommodative monetary policy such as QE, will continue to serve as the main market driver.

Governments are bailing out everything

During the bull market of the 1950s and early 1960s, the Federal Reserve followed a 'lean against the wind' monetary policy that ultimately lead to the Great Inflation. Too-loose monetary policy had a dramatic impact on the economy and the level of inflation. Policy makers at the Fed misjudged how hot the economy could run without increasing inflation pressures and when CPI started to rise, monetary response was too slow. Oil and food price rises only exacerbated the issue.

In 2020, the global economy is facing a much more difficult challenge that may lead to similar consequences if not controlled: stagflation. In the coronavirus era, state emergency and the double shock on supply and demand are likely to depress growth sharply, thus increasing risk of recession. Governments are ready to do 'whatever it takes' to mitigate the crisis. We are moving from 'bailout the banks' in 2008 to 'bailout SMEs and anything else' in 2020.

The huge fiscal stimulus that is coming is likely to increase inflationary pressures in months to come. Contrary to common thinking, at Saxo we doubt that the coronavirus is a temporary market shock. We think that the COVID-19, along with another underestimated factor, demographics, will precipitate the end of the secular bull market.

Demographics drive markets

In our view, demographics are the ultimate indicator of how the economy and the market will evolve decades in advance. In 2011, a research paper released by the Federal Reserve Bank of San Francisco entitled 'Boomer Retirement: Headwinds for U.S. Equity' pointed out the strong link between stock market performance and the US population's age distribution. Using data from 1954 through 2019, it found that booming population explained about 61% of the variation of the P/E ratio over the sample period.

In the post-war period, a phenomenal increase in the population generated record levels of income, great wealth, higher consumption and increased economic activity. At the same time, groundbreaking innovations increased productivity and created new industrial clusters. The combination of booming population and industrial innovations were key factors behind the bull market.

Now, the booming population is the missing piece that may put a definitive end to the secular bull market. The baby boomer generation — which represents more than 76 million people in the US alone — is transitioning out of the workforce and drawing down on its retirement funds. This may structurally depress equity valuations in the coming years.

There are not enough buyers in front of them to compensate when they eventually sell. The younger population, whose size is shrinking, is for the first time on record less optimistic than the oldest generation.

This will have a direct impact on money behaviour and favour saving rather than investing, despite low interest rates.

Even if they want to invest on the stock market, millennials cannot. The everyday consumer has never really recovered from the last recession and inequality is increasing, at least in the US, which does not draw a bright outlook for spending in the future. We can already observe the same exact situation in the US real estate market. Baby boomers are offloading their huge rural properties, but millennials cannot afford to buy them. Demographics will disrupt not only the stock market — they'll disrupt the financial sector as a whole.

Retirement of the baby boomers happens at the worst time ever for the stock market, when other structural factors are already affecting the macroeconomic outlook. Loose monetary policy, for example, has dramatically increased debt-to-GDP ratios — which are now at unsustainable levels globally — and diverted capital from productive investment. The amount of debt in the system, especially in the private sector, is dragging down productivity and the economy overall.

The system that prevails, which is centred on central banks providing unconditional liquidity, is inefficient and has not been able to foster the emergence of decisive disruptive innovations. We are reaching the limits of this system, with spreads on high yields reaching crisis-levels on the back of the COVID-19 outbreak.

Christopher Dembik is Head of Macro Analysis at [Saxo Bank](). This article is general information and does not consider the circumstances of any investor.

COVID-19: Is this time really different?

Michael J. LaBella

It's often said that history doesn't repeat itself, but it often rhymes. However, seeing our schools shut, offices closed, and neighbours in masks surely can make one wonder, maybe 'this time is different.' We are at a watershed moment: the level of disruption across global industries, and the speed at which markets have upended, is truly unprecedented.

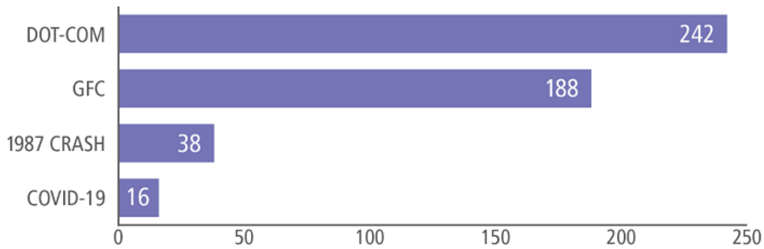
However, as different as it may seem, the response to the crisis feels all too familiar. Human behaviour is remarkably consistent over time, and one of those behaviours, panic, is just as contagious as any virus. But we can take solace in knowing that disciplined diversification and a systematic process can remove decisions rooted in panic and position investors to take advantage of potentially significant long-term opportunities.

Speed of the crisis

The speed at which the coronavirus has spread across the world has been a made-for-television moment. As the rate of contagion has accelerated, so too has the market's reaction. We have seen one of the quickest falls into a bear market (defined as a greater than 20% decline) in US history, with the market plunging from an all-time high on 19 February 2020 into a bear market only 16 days later.

In prior crises like the dot-com bubble and the GFC, the bear markets came about much more gradually, over the course of half to a full year, as shown below in Figures 1 and 2.

Figure 1: Number of days from market peak to bear market



Source: Bloomberg, S&P 500 Index.

Figure 2: Market drawdowns

Source: Bloomberg, S&P 500 Index.

The level of disruption

During the GFC, investors were worried about the unraveling of the financial system and the potential for another Great Depression. But never during the GFC did people worry about their own physical health or that of their families. In fact, we would be hard-pressed to name a similar period of fear for one's wellbeing for such a large segment of the global population since at least the second world war.

As a result of that fear we are witnessing unprecedented actions, including the complete shutdown of many industries within the global economy. Determining the full impact of this is little more than speculation, as there is no recent historical precedent and as the data points start to roll-in we will likely see numbers that would have been unthinkable a few weeks ago.

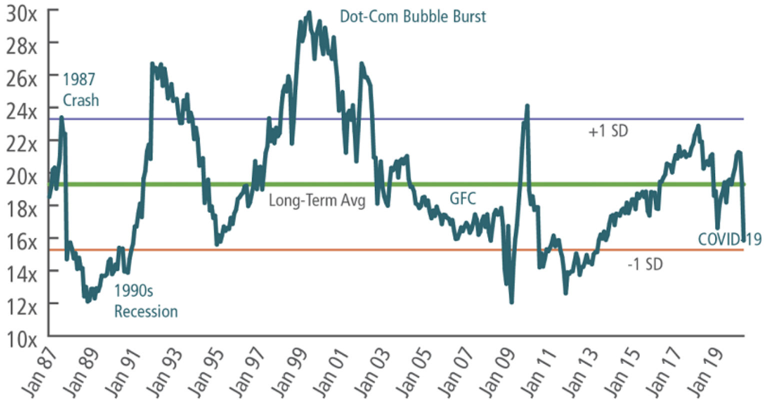
Why it's not as different as we might think

It's said that 'generals always fight the last war', and in our context it can be said that 'economists always fight the last recession', but it's said for good reason. All crises - whether they be wars, depressions, or even pandemics - are inherently different from one another. However, people's reaction to them is remarkably consistent, and there is no evidence to suggest that this has changed.

As the brain assesses a threat, it triggers a fight-or-flight response, anxiety rises, and logical processing and reasoning diminish. The infectious nature of the panic moves from individuals to crowds, which leads to herding behaviour. For example, even though grocery stores indicated no sign of supply disruptions, and governments made no threats of closures, panic buying of non-perishables and household goods soon became rampant.

The same behaviour applies to sell-offs and run-ups in financial markets. While repricing of assets is likely necessary in light of this crisis, many investors overreact as panic and indiscriminate selling spreads. This can be seen time and again throughout history as people respond out of fear, in the fog of 'now', undoubtably making mistakes that will later seem all too obvious in the clear skies of hindsight. Figure 3 shows how the market pushes valuations to excesses well above long-term averages, followed by falls to the other extremes.

Figure 3: S&P 500 Trailing Price/Earnings Ratio



Source: Bloomberg, S&P 500 Index.

Waiting for the all-clear sign

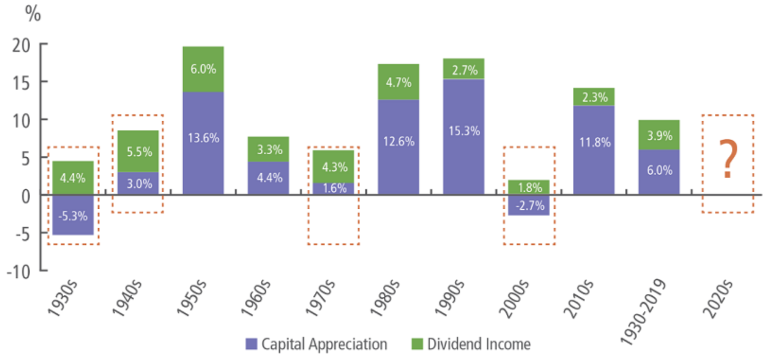
News headlines from 6 March 2009 were dominated by one of the worst monthly jobs reports in US history as 744,000 jobs were lost in a single month. On 9 March, only a few days later, the US equity market bottomed and began its recovery despite the backdrop of a recession raging on.

Historically, this is not an isolated incident. Over the last 80 years, the market has bottomed on average 107 days before the end of a recession. While we hear various estimates of time until the market bottoms, days until virus outbreaks peak and the length of the impending recession, there will not be an 'all-clear' sign for when the market starts to recover and it's 'okay' for investors to jump back in. This raises the importance of two time-tested investment pillars - diversification, and a systematic investment process.

Diversification

Diversification protects investors from overreaction as a balanced portfolio should mitigate some of the volatility and drawdowns. In good times, investors place increased value on future opportunities and earnings, as an overzealous fear of missing out drives their decisions leading to outperformance of more cyclical portions of the market. However, during more turbulent times, investors put an increased value on certainty, focusing on fundamentals such as dividend income, and earnings stability. In fact, looking back over time, one can see the importance of income versus capital appreciation in times of uncertainty and lower economic growth, as shown in Figure 4.

Figure 4: Contribution of capital appreciation and dividend income within S&P 500 returns



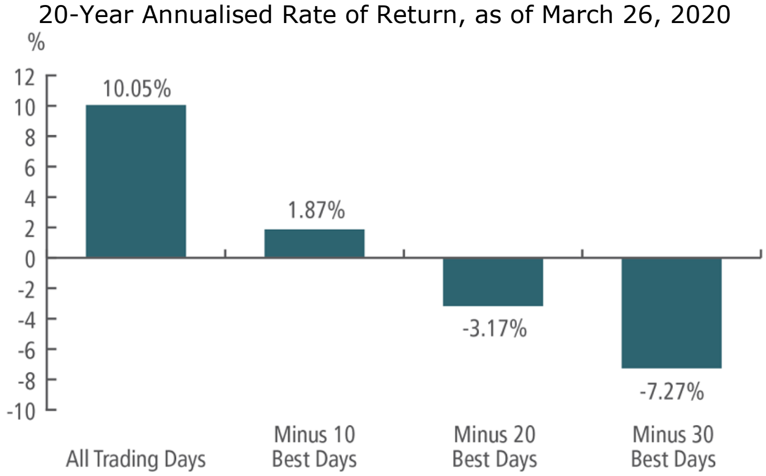
Source: Bloomberg, S&P 500 Index.

Systematic investment process

While diversification attempts to protect portfolios from overreacting during periods of crisis, a systematic process attempts to protect portfolios from underreacting during one. While we are confident that markets will eventually find a bottom, determining when will be challenging. So, as the desire to sit on the sidelines grows, missing out on a small number of days in the market could have a significant impact on long-term returns, as shown in Fig 5. In fact, some of the best days in the market have often followed the worst. Taking the emotion out of investor behaviour will ensure investors take advantage of large price swings and increased volatility.

Figure 5: The risk of missing out on a few trading days

20-Year Annualised Rate of Return, as of March 26, 2020



Source: Bloomberg, S&P 500 Returns.

Conclusion

This time feels different, and that's because, in some ways, it is. The speed and scale of this crisis is truly unprecedented. Nevertheless, investor reactions are and will be the same. Human behaviour is consistent through time, and like many crises past, people and markets will panic, leading many investors to overreact, creating enormous volatility but also significant opportunity.

We take comfort in our playbook, with diversification and a systematic process as the bedrock of our investment approach. Mitigating emotion, even in the best of times, is not easy. But our process is our guiding compass in these turbulent markets.

Michael LaBella, CFA, is Head of Global Equity Strategy at QS Investors. This document is issued by Legg Mason Asset Management Australia Limited (ABN 76 004 835 839, AFSL 204827), a sponsor of Firstlinks. The information in this article is of a general nature only. It has not been prepared to take into account the investment objectives, financial objectives or particular needs of any particular person. Forecasts are inherently limited and should not be relied upon as indicators of actual or future performance.

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