

**CAPITAL
EDITION**

MARKETS IN THE AGE OF (MIS) INFORMATION

Never before have we known the impact of decentralised masses of data. The age of information is starting to show us now, in markets, what we've been sleepwalking into.

LEARNINGS FROM A LIFE OF RISK AND CONVICTION

Not much more could teach you the power of humanity, risk and resource management like fleeing your homeland in search of a bigger destiny.

THE QUIET CHASER

The curiosity and confidence which drove Dermot Ryan to work, live and study around the world drives his day-to-day fixation and fascination of markets and investing.

POWER TO THE PEOPLE

COVID-19 shows nothing – including modern medicine, all-powerful economies and an abundance of resources – can eclipse the force of human behaviour.

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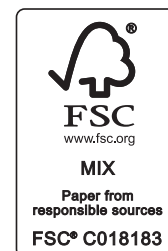
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Letter from the Managing Editor

As you read this, I hope you are safe and well. At this time, nothing is more important than human health, no matter what is flashing red around us.

I am finding comfort and motivation in the one sure thing out of all these unknowns – this too, shall pass. The pandemic we are living through will end, economies will re-open, there will be a recovery. For now, Capital Edition's April issue is focusing on words of strategy and strength to help, as best we can, push through this period together, aiming to come out stronger at the other end.

We start with our cover feature on misinformation – a topic our analysts and economists have, for some time, been passionate about communicating. Emotion drives markets, and more than ever, that emotion can be powered by the fear and panic induced by falsifications and half-truths from unverified sources online. With input from our chief economist Dr Shane Oliver, head of dynamic markets Nader Naeimi and portfolio analyst Brad Creighton, we present some assessments of how to separate the true from the false.

This month we also profile some of our people who are charged with assessing and reacting to the market freefalls we are currently experiencing. Nader makes an appearance again this month in one of those profiles. I've always been struck by his steady hand and absolute focus on recovery during disruptions and now, a crisis. Reading his story, it's clear that living as a refugee after fleeing his homeland has prepared him for a life and career of focusing on what's important – security, perspective and acting with conviction.

Sailing and racing on rough seas, working through the Global Financial Crisis and leaving your home country for work and travel overseas also forms part of Dermot Ryan's strength and confidence in navigating the current market crash. Dermot, who is co-portfolio manager in the Australian equities team, is ruthless in keeping his eyes on the prize: a recovery.

At the moment, nothing is as powerful as our behaviour. Modern medicine hasn't caught up with COVID-19, governments are scrambling and a cure can't be bought in time to slow the spread. We, with our consciousness and actions, are making a difference. In distress innovation is often born, and we are also finding new ways to remain connected and comforted – through video calls, voice calls and sharing our experiences. This, out of all the dire reports, is a poignant silver lining, which we also explore in this issue.



We hope the life experiences and lessons of some of our people and leaders are helpful for you during this time. I'm certainly encouraged by the wisdom and perspective of people who have endured human hardship, major market disruptions and periods of extreme panic.

I'm also encouraged by the teams at AMP Capital, who are in full swing managing and monitoring assets and investments on behalf of our clients. I share the same comfort and confidence in our people as our CEO, Adam Tindall.

"We believe the defensive characteristics of our strategy mean our assets are well positioned to retain value during this testing period. Investors can have confidence in our fund management teams who buy quality assets, understand their intrinsic value, and manage their portfolios well," Adam said, in a recent note to clients and investors.

As always, and especially during this time, I'd love to hear from you.

Keep well, and many thanks. □

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6

Markets in the age of (mis) information

Power has always known the potential of propaganda, but never before have we known the impact of decentralised masses of data. The age of information is starting to show us now, in markets, what we've been sleepwalking into.



12

Learnings from a life of risk and conviction

Not much more could teach you the power of humanity, risk and resource management like fleeing your homeland in search of a bigger destiny.



22

The quiet chaser

The curiosity and confidence which drove Dermot Ryan to work, live and study around the world drives his day-to-day fixation and fascination of markets and investing.



26

Power to the people

COVID-19 shows nothing – including modern medicine and all-powerful economies – can eclipse the force of human behaviour.



28

The crucial transition

An all-encompassing change to the fuel of some of the world's largest investments needs to be understood to be both acted and capitalised on.



Markets in the age of (mis) information

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Story by SIMON ANDERSON

Charles de Berenger burst into Dover's Ship Inn just after midnight on 21 February, 1814, wearing a grey military coat and a medal around his neck¹.

He had just arrived from Paris with glorious news, he said.

Napoleon was dead. The brutal war in Europe was over. The allies had taken Paris.

As the news spread, prices of UK government bonds and government-related stocks soared – and de Berenger and his partners sold theirs at a handsome profit.

His story was fake.

A new era of manipulating markets with misinformation had begun.

More than 200 years later, misinformation is rife and fake news scandals regularly hit markets.

In 2013, a hoax AP tweet said two explosions at the White House had injured President Barack Obama. The Dow Jones Industrial Average briefly plunged 100 points².

In 2015, Avon Products received an \$8.2 billion takeover offer valuing it at three times its market price. It was a hoax³. The same fraudster had made an identical move three years earlier on the Rocky Mountain Chocolate Factory.

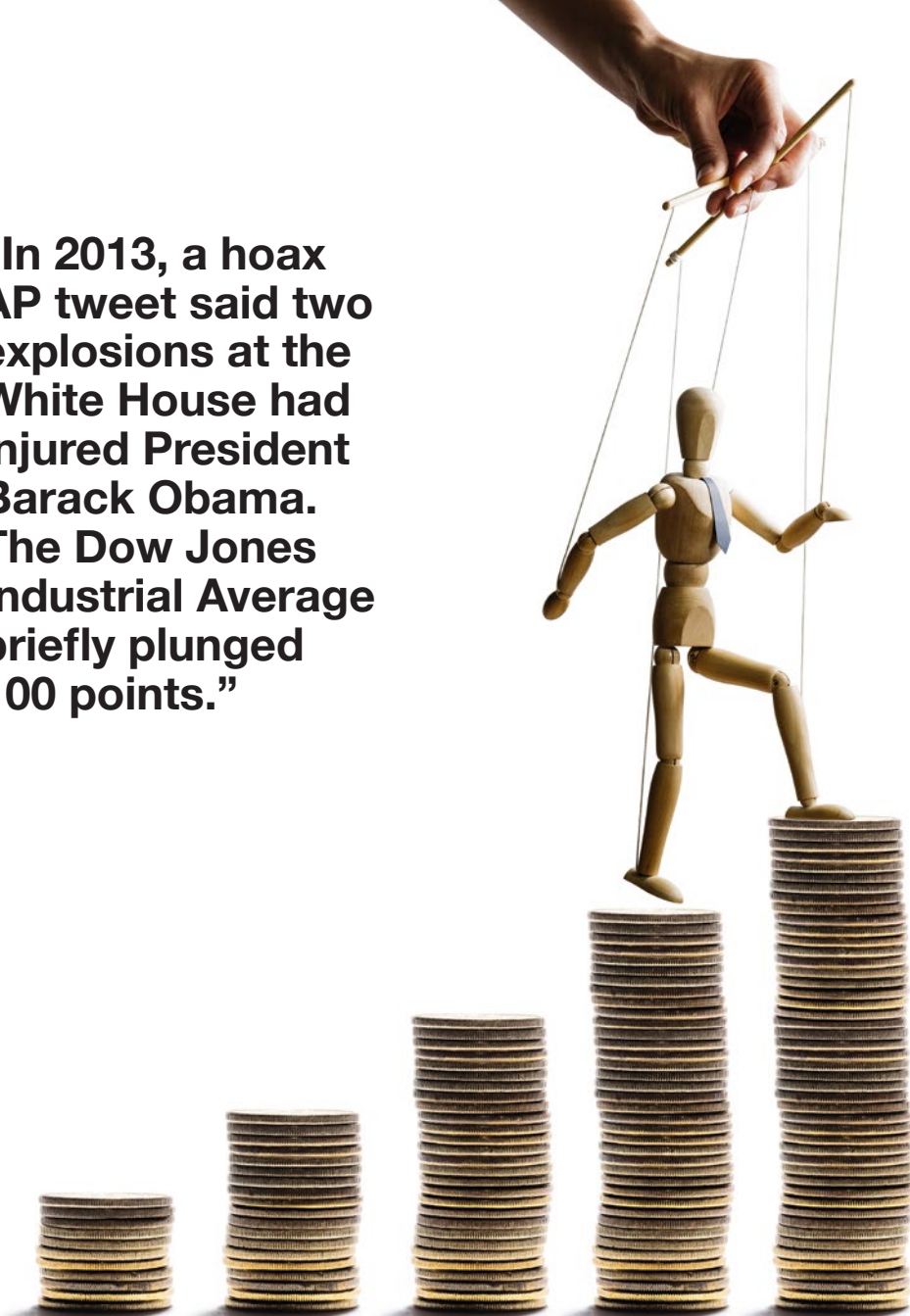
In 2019, a fake shareholder letter from Blackrock CEO Larry Fink claimed a new dedication to environmental causes and was followed quickly by a fake press release – debunking the hoax but containing further misinformation⁴.

Deliberate manipulation is not the only misinformation that moves markets.

These days, misinformation emerges daily from the maelstrom of social media and is fuelled by traditional media's hunger for a headline.

"Everyone becomes an expert. But there's an increasing gap between what we know and what we think we know," says Nader Naeimi, AMP Capital's head of dynamic markets.

"In 2013, a hoax AP tweet said two explosions at the White House had injured President Barack Obama. The Dow Jones Industrial Average briefly plunged 100 points."



The 2020 outbreak of COVID-19 has been accompanied by waves of misinformation that investors have been forced to wade through. The flurry of information – both right and wrong – has sent markets spinning⁵.

The World Health Organisation itself claimed 'trolls and conspiracy theories'

had made it difficult to disseminate accurate information⁶.

In the earlier months of the COVID-19 outbreak, one theory claimed the virus was a biological warfare experiment gone wrong and the passing of the doctor that discovered the virus was a cover up. Another claimed the

virus was part-HIV. Some stories spread fake cures. Others spread misinformation about the origin of the virus, linking it to bats and snakes⁷.

Many of these stories seem absurd, especially in hindsight.

But the rapidity with which new stories are fabricated and the sheer velocity of their dissemination makes it difficult to tell real from false. This can impact an investor's mindset. Worse, it can undermine the level of trust in official reporting.

Separating the signal from the noise becomes crucial.

Unfortunately, that's not something at which humans are naturally skilled.

Timothy Levine has been studying deception at the University of Alabama for more than 20 years⁸. His finding from repeated experiments is that people are only slightly better than chance at detecting a lie⁹.

"Day in and day out ... [w]e uncritically accept virtually all of the communication messages we receive as 'honest'," he writes in his 2019 book *Dupez*¹⁰.

"We all are perceptually blind to deception. We are hardwired to be duped."

This 'truth-bias' is an evolutionary feature that allows us to function socially and, because most of us do actually tell the truth to each other most of the time, it's actually mostly accurate, he says. >

"Everyone becomes an expert. But there's an increasing gap between what we know and what we think we know."

**– Nader Naeimi,
AMP Capital**



AMP Capital's rules for dealing with misinformation

With Nader Naeimi, head of dynamic markets.

"A much wider gap between what we know and what we think we know makes us far more error prone and reactive in decision making," says Naeimi.

To narrow that gap, Naeimi uses the following principles in managing client's portfolios:

- Do not invest based on precise forecasts.
- Do not sacrifice 'information processing' for 'information gathering' (a wealth of information without the appropriate processing power creates a poverty of attention).
- Stick to the facts and the indicator weight of evidence.
- Play the game we set out to play. If we start taking cues from people playing a different game than we are, we are bound to be fooled and eventually become lost.
- Few things matter more with money than understanding your own time horizon and not being persuaded by the actions and behaviours of others.

1. <http://www.gutenberg.org/files/21027/21027-h/21027-h.htm>

2. https://www.washingtonpost.com/business/economy/market-quavers-after-fake-ap-tweet-says-obama-was-hurt-in-white-house-explosions/2013/04/23/d96d2dc6-ac4d-11e2-a8b9-2a63d75b5459_story.html

3. <https://www.justice.gov/usao-sdny/pr/bulgarian-man-arrested-and-charged-manhattan-federal-court-400-million-market>

4. <https://www.cnbc.com/2019/01/16/fake-blackrock-communications-are-a-master-class-in-spoofing.html>

5. <https://www.cnbc.com/2020/02/24/us-futures-coronavirus-outbreak.html>

6. <https://www.bbc.com/news/world-51429400>

7. <https://www.theguardian.com/commentisfree/2020/feb/08/misinformation-coronavirus-contagious-infections>

8. <http://timothy-levine.squarespace.com/deception>

9. <https://www.amazon.com/Dupez-Truth-Default-Theory-Science-Deception/dp/0817320415>

10. https://books.google.com.au/books?id=W_uwDwAAQBAJ&printsec=frontcover&dq=duped+levine&hl=en&sa=X&ved=0ahUKEwjh85zRz-nnAhUMT30KHVg4C6EQ6AEIKDAA#v=onepage&q&f=false

But it leaves us vulnerable to deception and makes it tricky to distinguish facts from misinformation.

Not only can't we tell when people are lying, we're also remarkably good at spreading the lies ourselves.

A 2018 study¹¹ of social media found false news reaches more people than the truth.

"Falsehood diffused significantly farther, faster, deeper, and more broadly than the truth in all categories of information," the study's authors wrote.

"We found that false news was more novel than true news, which suggests that people were more likely to share novel information."

So, what can an investor do about it?

In a world of misinformation – both deliberate and inadvertent – how can a sensible investor separate truth from fiction and market manipulation from genuine trading opportunities?

"As fund managers, we need to know what is worth reacting to and what is a product of the 24-hour news cycle," says Brad Creighton, dynamic markets portfolio strategist at AMP Capital.

"In the age of information, it can be easy for investors and advisers alike to be swayed or distracted by articles, statements and opinions which lack evidence, rigour and analysis. Certain headlines can be frightening and foster an air of anxiety."

Creighton says AMP Capital applies filters to assess incoming information and guide investment decisions.

"We have models to help us separate signal from noise during the regular flow of economic data," he says.

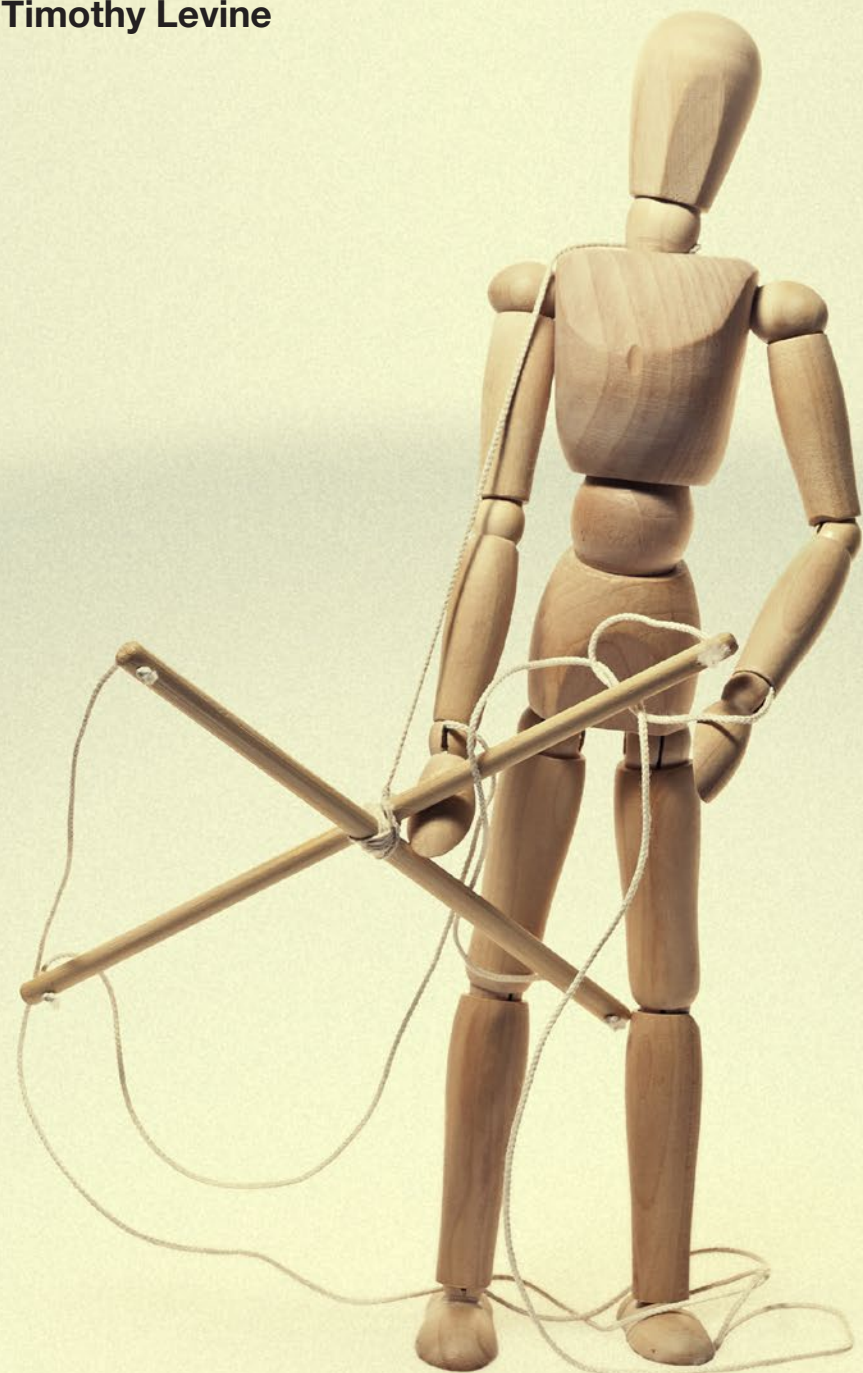
However, navigating ad hoc events for which there may not be a ready-made model becomes trickier – and requires human judgment and a steady hand.

Shane Oliver, AMP Capital's chief economist and head of investment strategy, reminds that investment markets constantly go through cycles of good times and bad¹².

"These cycles in markets get magnified by bouts of investor irrationality that take them well away from fundamentally justified levels," he says.

"Day in and day out ... we uncritically accept virtually all of the communication messages we receive as 'honest.' We all are perceptually blind to deception. We are hardwired to be duped."

– Timothy Levine



11. <https://science.sciencemag.org/content/359/6380/1146.full>

12. <https://www.ampcapital.com/au/en/insights-hub/articles/2020/february/from-bushfires-to-coronavirus-five-ways-to-turn-down-the-noise>

Amicus Certus

Little is known about the life of Quintus Ennius, a poet and writer who lived during the Roman Republic. Although he is considered the father of Roman poetry, only fragments of his work survive.

However, the great philosopher Cicero¹⁶ read his work and quotes him in his famous treatise on friendship:

Amicus certus in re incerta cernitur – a true friend is seen in uncertain times

That line lives on at AMP Capital, embodied in a sculpture at the entrance to its iconic skyscraper home in Sydney's Circular Quay.

In a time of severe disruption to life, livelihoods and the societies we know – this noble and clear purpose powers our people to be a source of truth amid the chaos.



His advice: turn down the noise¹³.

"We are now exposed to more information in relation to everything including our investments," he says.

"But often we have no way of weighing such information and no time to do so. If we can't filter it, it becomes information overload and noise.

"The problem is being compounded by an explosion in media outlets all competing for your attention. We are now bombarded with economic, financial news and opinions with 24/7 coverage.

"And in competing for your attention, bad news and gloom trumps good news and balanced commentary."

Oliver says the noise is making us worse investors: fearful, jittery and short term.

This is compounded by our innate preference for avoiding losses over acquiring gains.

The term 'loss aversion' was first coined by psychologists Amos Tversky and Daniel Kahneman in a 1979 paper¹⁴. It refers to the finding in experiments that people who lose \$100 lose more satisfaction than the satisfaction they gain from a \$100 windfall.

"This probably reflects the evolution of the human brain in the Pleistocene age when the trick was to avoid being eaten by a sabre-toothed tiger or squashed by a woolly mammoth," says Oliver.

"This makes us biased to be more risk averse and on the lookout for threats which leaves us more predisposed to bad news stories as opposed to good news stories.

"So bad news and gloom find a more ready market than good news or balanced commentary as it appeals to our instinct to look for threats."

"This can be bad for investors as when faced with more (and often bad) news we can freeze up and make the wrong decisions with our investment as our natural 'loss aversion' combines with what is called the 'recency bias'. That sees people give more weight to recent events which can see investors project

recent bad news into the future and so sell after a fall."

Creighton uses the coronavirus or COVID-19 as an example of dealing with information and misinformation.

"The scale of an epidemic is an important factor in analysing market impact, but you first need to determine what to measure," he says.

"In the case of an epidemic, mortality rates hit our fear impulse hardest. However, for financial markets, the significance of an event like this boils down to the level of disruption caused to regular flow of goods and people."

He points out that 11,000 people died from the Ebola outbreak in West Africa in 2014. However, the disruption caused to the global economy was much less than with COVID-19, even in its early stages, because of the differences in population density and the impact to global supply chains.

Creighton also counsels to consider the full economic context of a piece of news to judge how harshly markets will be impacted.

In the 2003 outbreak of the SARS virus, GDP in China fell by more than 2 per cent in the June quarter¹⁵.

But that came at a time when the economic backdrop was already weak, recovering from the early 2000s recession which saw the collapse of Enron, bursting of the tech bubble and the September 11 terrorist attacks.

"A little situational awareness and rational thought can provide a timely filter," he says. "This is critically important when making investment decisions and analysis."

Who can you trust?

AMP Capital focuses on monitoring known credible sources. For viral outbreaks, sources like the World Health Organization and credible institutions such as the London School of Hygiene and Tropical Medicine and the Imperial College London represent trusted outlets.

"With the benefit of a tried and true investment process and an ability to identify the facts that matter, we can get on with doing what we do best: growing and guarding our client's capital," says Creighton. □

13. <https://www.livewiremarkets.com/wires/5-ways-to-turn-down-the-noise-around-investing>

14. <https://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.407.1910>

15. <https://www.ampcapital.com/au/en/insights-hub/articles/2020/february/protecting-wealth-through-an-epidemi-a-coronavirus-case-study>

16. http://penelope.uchicago.edu/Thayer/E/Roman/Texts/Cicero/Laelius_de_Amicitia/text*.html

Learnings from a life of risk and conviction

Not much more could teach you the power of humanity,
risk and resource management like fleeing your
homeland in search of a bigger destiny.

Story by SEAN AYLMER
Pictures by NIC WALKER



When Nader Naeimi was 17 years of age, he hatched a plan to escape from his home in Isfahan, Iran, cross the border into Turkey and head towards the United States.

He was one of six friends making the dash, all keen to escape being drafted into the national service by the Iranian government, which at that time was warring with Iraq.

One night in April 1988 just after dusk, the six friends jumped into the back of a utility vehicle and hid as the driver headed towards the Turkish border, more than 700 kilometres away. Iraq was closer but that wasn't an option. Pakistan, Afghanistan and Turkmenistan weren't enticing. Turkey seemed the best chance of success.

When they reached the border area, and approached the first of several border crossings, the six friends jumped out of the back of the car a few hundred metres before the check point and headed into the bush.

"The crossings were quite frightening," Naeimi says. "It was like being in a movie. We could see all the lights and the dogs barking. We were in camouflage. We had to be careful."

A few hundred metres down the road, the group jumped back into the vehicle and drove to the next check point. They got out again, skirted civilisation, and returned to the vehicle a kilometre down the road. Naeimi and his friends didn't have passports. They didn't have much food, though they had been given some money.

The night of the border crossing was cold. It was spring, but that region of the globe is mountainous. The snows had melted from the fierceness of winter, but warmth was an issue. They made it to Turkey just before dawn, cold, thirsty and hungry and without much of a plan.

Naeimi and his friends were still only moving at night. On the second night, they climbed a mountain on the Turkish border, hoping to head towards Istanbul

which was 1,000 kilometres west, and then on to northern Europe.

"We had someone showing us the way over the mountain. I remember that we kept asking him 'how much longer?' He always said 'two hours'. It was a very hard walk."

"By the time we made it to the top it was 6am. We were thirsty because we had no water. One of the guys had food poisoning and we had to carry him."

The friends bunkered down for the day, ready to resume their trek at nightfall.

"As soon as we started walking again, all these Turkish soldiers appeared. I have no idea where they came from, but they were everywhere. They radioed through to their base and were told to just send us back."

Naeimi didn't speak Turkish so didn't understand the command. One of the friends, the only woman, understood the order over the radio and started screaming.

"When the superiors heard a woman was in the group, they said: 'OK, send them down'." And that's what happened," Naeimi says. They entered Turkey on a two-year refugee visa, under the United Nations HCR program.

He wanted to go to the United States, but as an Iranian that wasn't possible. He had a friend in Australia, who sponsored him to come to Sydney in 1990.

"I turned up, stayed with my friend for two days and then I was on my own."

The first year he worked in factories and studied English. In his second year, 1991, he did combined years 11 and 12 at high school, doing the Higher School Certificate at the end of that year. >

Nader's favourite lessons

Nader shares his favourite quotes, learnings and insights about work, life and investing.

- You won't learn if you don't fail. Learn from failures. Observe the patterns of mistakes to see if they are products of weakness.
- "Good judgement comes from experience and experience comes from bad judgement" – Fred Brooks.
- Take calculated risks, but make sure you don't put survival at risk. Remember, risk's greatest fuels are overconfidence, ego, and impatience. Its greatest enemies are having options, humility, and other people's trust.
- "You can never leave footprints that last if you are always walking on tiptoe" – Leymah Gbowee.
- Stay calm under pressure. First remember everything looks bigger up close. So put problems into perspective and deal with it logically, not emotionally. Facts first, decisions later. First learnings, then deciding. Remember the words of Publilius Syrus: "Anyone can hold the helm when the sea is calm".
- You can turn your weakness into your strength only if you have an open mind, growth mindset and determination.
- You can do anything, but you can't do everything.
- "Winners compare their achievements with their goals, while losers compare their achievements with those of other people" – Nido Qubein.

"The crossings were quite frightening. It was like being in a movie. We could see all the lights and the dogs barking. We were in camouflage. We had to be careful."





“When it comes to investing, I’m high conviction. I don’t like to sit on the fence. In a world where there are a lot of ETFs and market indices, a fund manager is only valuable if they have conviction.”

His maths teacher suggested he do actuarial studies and that’s what Naeimi did. “The starting salaries looked pretty attractive, and I was pretty good at maths.”

He studied at Macquarie University and eventually did a Masters, meanwhile getting a junior job at former investment bank, Bankers Trust. He moved onto GIO Asset Management, as an investment strategist. That group was bought by AMP a year later.

Naeimi is now 50 years old, married with two children and head of dynamic markets at AMP Capital. He is well dressed, speaks eloquently and is passionate about what he believes in.

“My experience allows me to step back and put things into perspective,” he concedes without a hint of understatement. “And I am a risk taker. Though I’m also very patient and happy to spend time absorbing information until I feel confident about things.”

Investing, he says, is an exercise in objectivity. “You have to look through the noise and find the right signals. You have to think differently to other investors because you can’t just do what they do.”

“I’m cynical to conventional wisdom. When I see markets become one-way traffic and everyone thinks the

same way, I become a bit cynical. It’s my nature. I’m a bit contrarian.”

“When it comes to investing, I’m high conviction. I don’t like to sit on the fence. In a world where there are a lot of ETFs and market indices, a fund manager is only valuable if they have conviction. But you need to be given the time horizon for that conviction to play out,” he says.

Naeimi says he is always thinking about markets, even when he is relaxing.

“In terms of data, there is so much data around now. But people confuse having a lot of insights with having foresight. It’s important investors don’t miss the forest for the trees.”

“It is about believing in an investment philosophy, following a process and being patient. Just because there is short-term volatility doesn’t mean you should move away from your philosophy,” Naeimi explains, not sounding at all like the 18-year old refugee who risked it all.

Looking back on his life’s journey, Naeimi, who has returned to Iran a few times, says that fleeing to Turkey was a conviction play, just like when he invests.

“The irony is that three months after we got to Turkey, the war in Iran ended. I’m not even sure we needed to leave. But it all worked out.” □



The big differences between The Great Depression and COVID-19

Global economic activity has grounded to a halt, prompting fears the world is in for a re-run of The Great Depression. While there might be similar scenes, the parallels are not as strong as you may think.

Story by KATARINA TAURIAN
SENIOR EDITOR, AMP CAPITAL

Without a doubt, countries worldwide are in for sharp, deep recessions as they rightly sacrifice economic growth in the name of healthcare. This includes the world's largest economy, the United States.

Huge as the gravity of this situation is, and as devastating as it is for people and economies the world over, there are things missing from the social and economic setting which were pivotal in the makings of the Great Depression. >

1. This is not the roaring '20s

The run up to the Great Depression was characterised by a massive boom, where a surging economy in the United States made way for excess and mass consumerism. A boom often leads to a bust, where excesses – like debt – are unwound.

“We haven’t had a boom, we’ve been talking about slow growth for years,” said AMP Capital’s chief economist and head of investment strategy, Dr Shane Oliver.

“The concern has been lack of growth, not excessive growth,” he said.

“We’ve had no inflation problem, and haven’t had the central banks hitting the brakes. Yes, there are pockets of excess. But nothing like what we saw prior to the Great Depression.”

2. 2020s economics is different to 1920s economics

The post-war period has served as an important lesson in precisely what not to do, and what to do, in avoiding a depression.

“In the Great Depression, countries did exactly the wrong thing. Since then, we all know what to when a recession or depression is threatened. That is – monetary and fiscal stimulus,” Oliver said.

“We haven’t had a boom, we’ve been talking about slow growth for years. We’ve had no inflation problem, and haven’t had the central banks hitting the brakes. Yes, there are pockets of excess. But nothing like what we saw prior to the Great Depression.”



“Prior to the Great Depression in the 1920s, we saw a massive trade war globally, tariff hikes in the US and other countries did the same thing. We saw monetary and fiscal tightening in various countries across the world going into it, which made things worse,” Oliver said.

“There was some weird view that the way to fix up a budget deficit was to just raise taxes and cut spending, which is not so good when you’re going into a slump, that made the whole thing worse,” he said.

“This time around you’re seeing the exact opposite. You’re seeing monetary easing on a massive scale, and of course massive fiscal stimulus,” he said.

“This is very different to what we saw at the time of the Great Depression.”

3. The disruption is huge, but it should be temporary

The coronavirus has been a sudden, severe disruption to economic activity and regular social functioning. It’s clear with the Great Depression, with the benefit of hindsight, that there was a long lead up of factors which led to the eventual and devastating slump. The trajectories for the two events are quite different.

No doubt, COVID-19 can move to a point of out of control – we’ve seen that in Italy, and there are worrying patterns forming in the US. But, there is nothing to suggest it’s a situation that can’t be controlled, using known methods of success that governments worldwide are replicating.

“The bottom line is that while we may see the biggest hit to global GDP since the 1930s thanks to the shutdowns, there are big differences compared to the Great Depression, suggesting that a long and drawn-out global downturn is not inevitable,” Oliver said.

“Basically, it’s a disruption to normal activity caused by the need to stay at home. In fact, growth could rebound quickly once the virus is under control and policy stimulus impacts.”

“Of course, at this point we are still waiting for convincing evidence that markets have bottomed. And the key is that the number of new cases of the coronavirus starts to slow and that collateral damage from the shutdowns are kept to a minimum.” □

The quiet chaser

The curiosity and confidence which drove Dermot Ryan to work, live and study around the world drives his day-to-day fixation and fascination on markets and investing.

Story by SEAN AYLMEER
Portraits by NIC WALKER

In Ireland, it's a ritual that's been going on for centuries. If you lie face up, and stretch your neck to, literally, kiss a chunk of limestone built into Blarney Castle in southern Ireland, you will be blessed with the ability to speak eloquently, and persuasively. Or at least that's what the mythology claims.

Dermot Ryan grew up a little more than an hour's drive north of Blarney Castle. And he has a touch of the Blarney about him. He is a journalist's friend, able to speak confidently and intelligently about stocks, fixed income markets, macroeconomics and all things that affect financial markets.

Ryan isn't loud but sounds confident, and determined, aided in no small part by his strong Irish accent.

"I'm really fascinated by markets," he explains about his job as co-portfolio manager. "I like to invest where I see opportunities. I think there's a very interesting confluence of forces

coming through in Australia at the moment given the very long period of economic expansion. I think Australian equities are one of the few asset classes in the market that still provide a strong income that's comparable to their history.

"For the rest of this cycle there's a big opportunity in equities as (fixed income) yields compress. There's an opportunity to get some good defensive yield from Australian equities," he says.

Ryan was born in Australia but moved to Ireland when he was three. He went to school and university in the Emerald Isle, played lots of rugby, and ended up graduating with a degree in actuarial finance from University College, Dublin.

"I came back to Australia when I was 21 in 2004, more as a curiosity and just kind of fell in love with Sydney," he says at an outdoor café with views onto the famous Harbour.

"I wanted to do a post grad degree so I went to Sydney University and did economics and finance."

He found a job at wealth manager Colonial First State in the global resources team and was an analyst in mining and energy stocks.

"I saw a big transition coming through energy markets. I thought there'd be a lot of disruption in that space because at the time, carbon pricing was coming in and was expected to be global. And it was the start of renewables, which at the time were very expensive."

Like all financial market workers of his era – Ryan is 37 years old – the global financial crisis played a role in his development. At the time he was working with the Colonial First State global equities team.

"At the very bottom of the GFC I got to work in the global fixed income team. I got to see some amazing things about what >

happens when liquidity dries up in markets, interest rate expectations change and trust in the system is tested. I got to see how the system can seize up and what to look for, and how quickly problems can develop from areas that people take for granted.”

And thanks to his relative youthfulness, Ryan has never lived through a recession. When Australia last went into recession in 1991, Ryan was living in a more buoyant Ireland.

He is worried, however, that Australia is in a more precarious position than Ireland was pre GFC. In 2008-09 Ireland went into a severe economic downturn.

“In terms of household debt and price to income ratios things are worse in Australia now than they were in Ireland,” he says.

Ryan’s job entails judging companies’ performance and potential. We are speaking at 9am on a Wednesday in the middle of earnings season, and Ryan has already been at a breakfast, and will be heading to a lunch later in the day, to speak to company executives.

“You are talking to serious people, who know their company and sector inside out. You’ve got to be prepared for the meetings and have good questions and get the most out of your time with these executives.

“You’re constantly trying to test and retest your theses about different sectors and companies. Right now, we are trying to get to grips with how deep the problems with coronavirus are and whether they will escalate”.

Ryan believes good management is important, but not necessarily the most important thing in a company.

“Good companies start off with having a scalable business that’s got something defensible about what it does, and an ability to manage margins and pricing. They have the ability to withstand someone trying to move into that market.

“You are talking to serious people, who know their company and sector inside out. You’ve got to be prepared for the meetings and have good questions and get the most out of your time with these executives.”

Dermot’s lessons from the GFC

1. Balance sheets and cashflow are important.
2. Position ahead of change and get more bullish as prices fall.
3. Buy to the sound of cannons! Be brave when others are fearful.



Dermot and his team won the Australian Yachting Championships PHS division in 2017.

“Having that is crucially important, probably more important than management. I believe you have to be able to prepare for a time when another manager arrives. All managers are smart, but they aren’t all enlightened!” he adds.

“I believe you also need to look at what kind of assets a company has behind it. One of the things we see at the moment is that the market is really keen to value easy cashflows, or longer duration cashflows. Things like property and infrastructure are trading on pretty lofty valuations.

“Decisions coming from the top are still important. My starting point is what assets has a business got. There’s plenty of M&A [mergers and acquisitions] going on at the moment and we think a lot of people are putting their balance sheets at risk.”

He goes home to Ireland once a year but is committed to Australia.

“I just love the lifestyle. It’s a good attitude. It’s very similar to Ireland. I love the outdoors.”

Ryan enjoys sailing, racing offshore and onshore. He has completed two Sydney to Hobart yacht races, a 650 nautical mile journey considered one of the most challenging in the sport.

Last year he was competing in the great ocean race when they hit a storm off the New South Wales coast. They sought shelter in the port of Eden, amid the worst bushfire season in Australia on record.

“We were seeking shelter as the navy evacuated the town. We radioed into marine rescue and were notified they too had been evacuated. The whole coast was up in flames and it really bought home the horror of the fires and the resilience of our community under pressure.”

He loves the adventure involved in offshore racing. “It’s a good test of endurance. In a world where things can be very prescribed. It’s something that’s really free form and interesting and testing.”

The interview ends. Ryan had given more of his time than he had. Conversation and eloquence comes easily. The last question: have you kissed the Blarney Stone?

“No but it doesn’t surprise me that people speculate that I have.” □

“We were seeking shelter as the navy evacuated the town. We radioed into marine rescue and were notified they too had been evacuated. The whole coast was up in flames and it really bought home the horror of the fires and the resilience of the community under pressure.”





Lessons for the ages in the great COVID-19 crisis

COVID-19 is producing the rarest of events: right now, humanity is fighting a common enemy with the same weapons. There is hardly a point in history where the priorities of governments worldwide have been so in sync. This great crisis serves as a reminder that there's more power in human behaviour and common resolve than anything else.

Story by KATARINA TAURIAN
SENIOR EDITOR, AMP CAPITAL

A medieval learning

Machines, money and medicine are some of the markers of a society's progress. We accumulate, and flaunt, these feats on the road to riches and development. It stands true that proper use of resources will aid in COVID-19 healthcare and economic recovery, but it's the very basics available to all of us which are proving most effective in the initial fight.

Social distancing en masse is the frontline defence of governments worldwide, and this is not the first time we've been reminded of the resourcefulness in our behaviours. In the 1300s, Asia and Europe were struck by the Bubonic Plague¹, at a time where understanding of viruses and communicable illnesses was in its very infancy. But physicians came to understand that person-to-person contact and touching the same surfaces through trade created a petrie dish for disease².

It was also during the Bubonic Plague epidemic about 700 years ago, often referred to as The Black Death, that we saw the first known quarantine orders. This is regarded by some as one of the greatest achievements in early medical practices, as it was testament to the effectiveness of social separation during an incubation period, when infection may be present but symptoms are not.

Much like the spread of COVID-19, this was a time when humans united in the absence of medicine to fight an invisible foe. It was these measures that saved lives until the outbreak ran its course³. It's these measures which are now, credited with slowing the spread of COVID-19 worldwide⁴, and reminding us again our behaviours are powerful enough to stop a pandemic.

Learnings from the lucky country

Australia has had its share of existential threats this year. The COVID-19 outbreak clashed with the devastating bushfires which ravaged the east coast for months, claiming lives, homes and a share of GDP.

Two of the biggest efforts in the bushfire crisis – the frontline firefighting and the relief work – were powered by people simply wanting to save land, lives and livelihoods. It was another potent example of the power of people with a common goal.

Volunteers were out in force fighting flames, the NSW Rural Fire Service alone is the world's largest volunteer fire service⁵ and it recorded a massive influx of people wanting to join in early 2020⁶. Corporations, celebrities and individuals also took part in what was a high-profile, crowd-sourced fundraising effort. The result was The Australian Red Cross reporting⁷ \$180 million in funds raised.

AMP Capital's Pete Burnett, who is a strategic accounts manager in Melbourne, volunteers for the Country Fire Authority in Victoria. He was struck by the force of the blazes, and the forces of kindness and community support in their wake.

"This fire reason, the sheer scale of it, it felt like you were at war. The country was under siege, and the enemy was fire," he said.

"Without volunteer firefighters, tens of thousands of homes would've been lost. So many people in my life said to me then 'I understand now why you do what you do'."

"On our way back from one of the first days fighting, we stopped in a small town which had been devastated by the fires. There was about out half a dozen of us. We just wanted some food and some coffee. The place we stopped wouldn't let us pay – they said boys, it's on the house."

"On the last night for me, I was sitting in a dark tent, using some of the products that were put in a care package by the locals. I used those products and wanted to say thank you to the community. I posted that thanks to Facebook, and it got one of the biggest reactions I've ever had."

"The sense of community was strong; the sense of the greater good."

This too, shall pass

This is, understandably, a worrying and untested time for investors. AMP Capital CEO, Adam Tindall, takes a long-term view amid the panic – in the knowledge that this will pass, and a recovery will come.

"We believe the defensive characteristics of our strategy means our assets are well positioned to retain value during this testing period. Investors can have confidence in our fund management teams who buy quality assets, understand their intrinsic value, and manage their portfolios well," he said, in a recent note to clients and investors.

The human health side of this crisis is also overwhelming in scale and ferocity. Its devastation knows no borders, and its growth rate, if left untreated, is exponential. In that context, there is an understandable panic sweeping the globe, for fear that infection cannot be stopped or controlled.

However, there is nothing to suggest the virus cannot be contained, and that the pandemic won't settle. History tells us, and current rates of success in countries like South Korea and Singapore, that human responses create the critical turning points.

"One of the things that panics people is not being able to see the finish line. Inevitably, that finish line comes into sight when there's a human response, and we are seeing that again here," said Brad Creighton, portfolio strategist in the dynamic markets team at AMP Capital.

"Our economic and financial system is designed around the idea of rising living standards; health and prosperity, and the people in charge are working with those objectives in mind, as they've always done," he said.

'Unprecedented' is an overused term, but it's appropriate in the case of COVID-19. The world is facing a host of unknowns at a time when we've never been more mobile and more able to spread diseases among each other. There is one sure thing among it all though: this will end. The virus will run its course, economies will re-open, and both those things will be powered by human intervention. □

1. <https://www.history.com/topics/middle-ages/black-death>
 2. <https://www.history.com/news/quarantine-black-death-medieval>
 3. https://www.history.com/topics/middle-ages/black-death#section_8
 4. <https://www.weforum.org/agenda/2020/03/social-distancing-measures-coronavirus-covid19/>
 5. <https://www.rfs.nsw.gov.au/about-us/fast-facts>
 6. <https://www.sbs.com.au/news/exclusive-tens-of-thousands-rush-to-become-volunteer-firefighters-amid-bushfires>
 7. <https://www.redcross.org.au/news-and-media/news/australian-bushfires-how-we-are-using-funds>

The crucial transition

An all-encompassing change to the fuel of some of the world's largest investments needs to be understood to be both acted and capitalised on.

Story by SIMON ANDERSON

The world is undergoing a crucial transition. The shift towards environmentally-friendly energy and away from fossil fuels is coinciding with ever-growing energy consumption from a growing global population.

The 2015 Paris Agreement on climate change, which aims to limit temperature increases to less than 2 degrees above pre-industrial levels, we believe has more work to do.

And while we are seeing energy demand continuing to grow and supply is transitioning towards environmentally-friendly sources, substantial carbon reductions will depend on government policies and new technology.

But some of the largest oil and gas companies are already starting to make the switch to become energy companies that supply a diverse range of fuels, electricity and other energy services to consumers¹. >

1. <https://www.iea.org/reports/the-oil-and-gas-industry-in-energy-transitions>

While as a whole, the big oil and gas companies are spending less than 1 per cent of their total capital expenditure outside their core business areas, some leading individual companies are spending as much as 5 per cent of their capex on projects outside core oil and gas supply.

The largest outlays are in solar and wind. Others are buying non-core businesses in electricity distribution, electric vehicle charging and batteries.

“Big oil, we believe, is becoming big energy,” says AMP Capital portfolio manager Antonio Barbera.

The gradual transition to a decarbonised world is happening alongside a shift in the way energy is supplied and consumed, according to a new whitepaper² from Barbera and the AMP Capital infrastructure team.

In developed economies, we believe centralised generation and vertically integrated monopolies are going to eventually coexist with smaller decentralised sources.

These can be supported by micro grids, digitalisation and various storage options.

Meanwhile, we forecast emerging economies will progressively reduce their dependence on coal and satisfy their growing demands for energy with natural gas and renewables.

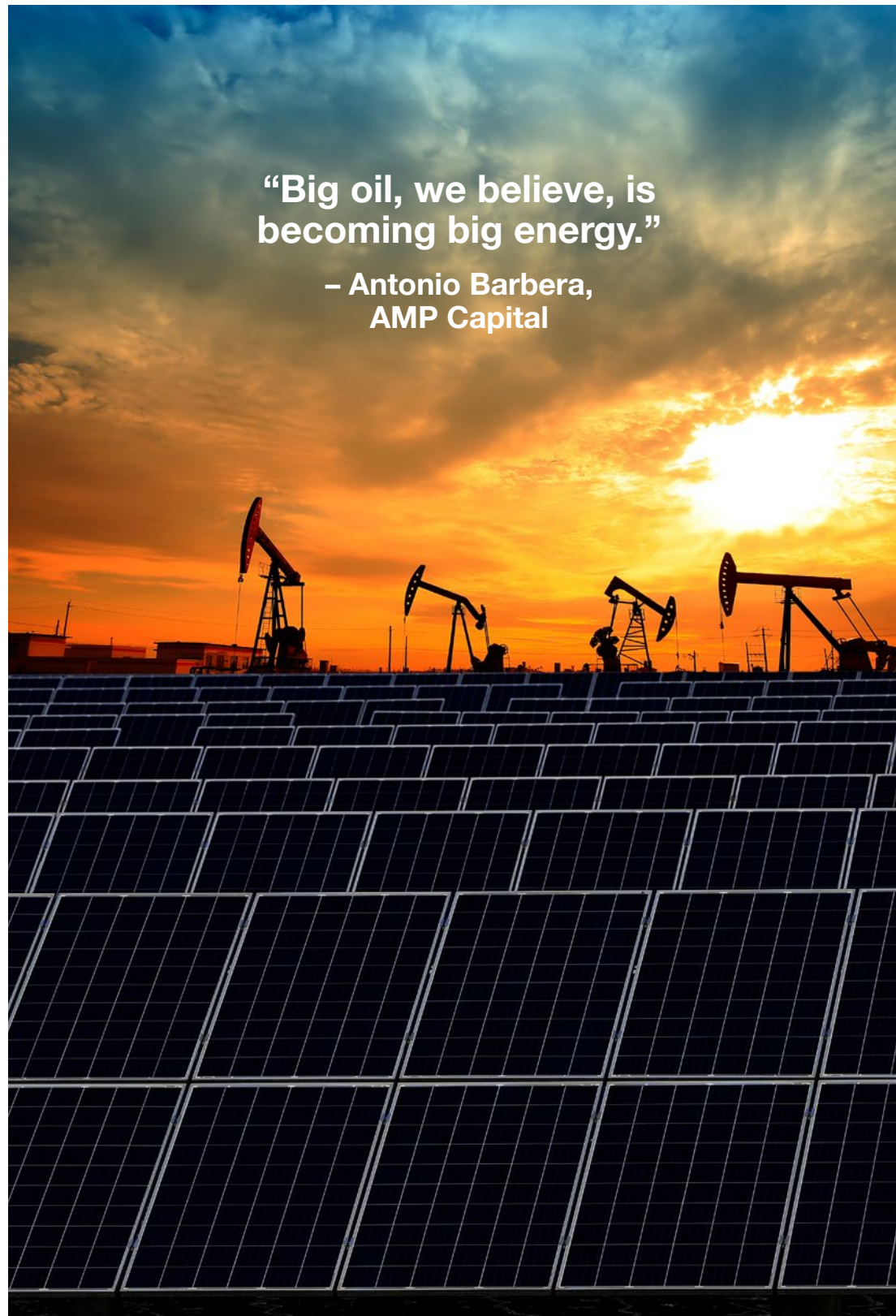
“Climate change is a global issue,” say the report’s authors. “Carbon dioxide does not respect human-made borders. A reduction of carbon emissions requires either the developed world asking the developing world to stall their trajectory of development, or to find some technological breakthrough that will be affordable and rapidly scalable.

“Without addressing the ‘demand’ side of the equation, we are unlikely to be able to safeguard the planet for future generations.”

Carbon emissions have tripled worldwide since 1965 and emerging markets have driven the bulk of the increase.

China’s per capita emissions are up 154 per cent since 2000, while India experienced an increase of 101 per cent.

That’s in contrast to the situation in the west where North America and Europe have actually been reducing emissions since 2000, with emissions per capita falling 22 per cent in North America and 15 per cent in Europe.



“Big oil, we believe, is becoming big energy.”

**– Antonio Barbera,
AMP Capital**

2. https://www.ampcapital.com/content/dam/capital/04-articles/insto-edition/2019/012020%20Energy%20Infra%20Whitepaper_Spreads.pdf

Fundamentally, growth in energy demand is driven by two factors – population and economic growth.

The world population reached 7.7 billion in 2019 and is expected to grow 1 per cent a year over the next two decades, reaching 9.2 billion by 2040.

China will be overtaken by India as the largest country in the world by population, but most of the growth over the next 20 years will come from African countries. Pakistan and the United States will also drive growth.

The second reason for growing energy demand is that as people get wealthier their behaviour changes. They buy refrigerators, television and mobile phones – all of which require electricity.

Interestingly, the link between growth and energy demand is slowly weakening.

Population growth and economic growth will still drive energy demand, but not at the rate that historically has been true.

Energy intensity measures how inefficiently an economy uses energy relative to its output. Intensity tends to decline as GDP increases³, mainly because more advanced economies tend to have smaller manufacturing sectors than developing economies. Instead, they rely more on service industries that are less energy intensive.

Technology also helps. Energy-efficient light bulbs use up to 80 per cent less energy than traditional incandescent bulbs⁴. A new fridge-freezer uses 73 per cent less energy than its equivalent 20 years ago⁵.

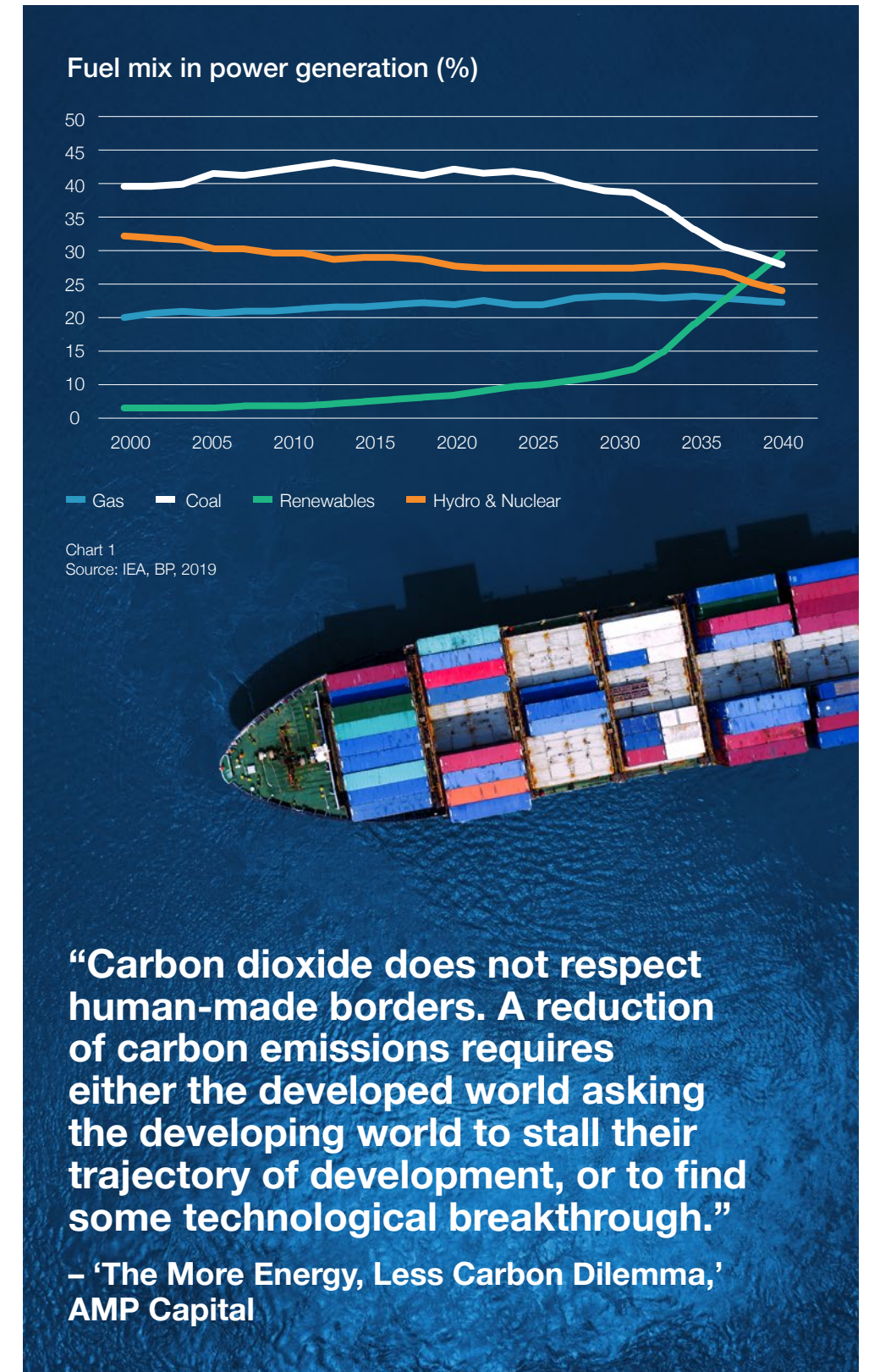
As you can read about in more detail in our January 2020 whitepaper, *The More Energy, Less Carbon Dilemma*, this decline in ‘energy intensity’ means world energy consumption will grow at an annual rate of 1 per cent, compared to a 3 per cent rise in global GDP.

Meanwhile, the mix of energy supply is changing.

It is broadly understood that fossil fuels represent 83 per cent of today’s energy mix, but that headline figure disguises changes in underlying composition.

Oil’s share of consumption is falling over the last two decades, mostly because China has preferred coal for its electricity generation.

And renewables are seeing remarkable growth. Renewable energy sources – led by



“Carbon dioxide does not respect human-made borders. A reduction of carbon emissions requires either the developed world asking the developing world to stall their trajectory of development, or to find some technological breakthrough.”

**– ‘The More Energy, Less Carbon Dilemma,’
AMP Capital**

3. <https://geographical.co.uk/nature/energy/item/1834-global-energy-intensity-levels-on-the-decline>
 4. <https://www.energy.gov/energysaver/save-electricity-and-fuel/lighting-choices-save-you-money/how-energy-efficient-light>
 5. <https://geographical.co.uk/nature/energy/item/1834-global-energy-intensity-levels-on-the-decline>

World energy consumption by region (Gtoe)

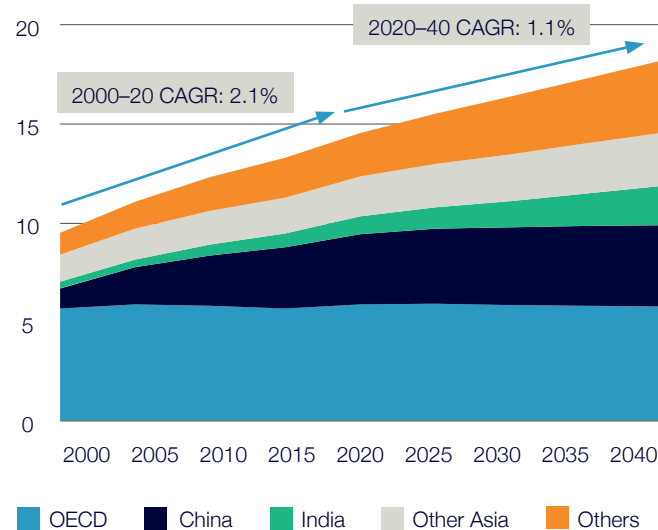
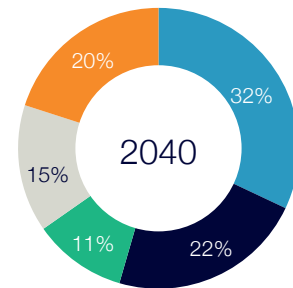
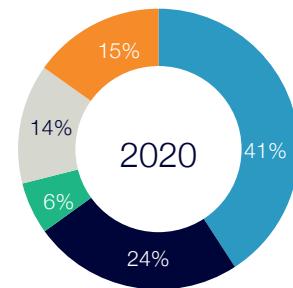


Chart 2
Source: BP, 2019



wind and solar – have increased their share of global energy consumption from 1 per cent to 6 per cent over the same time period.

This trend will continue. Fossil fuels will remain the main source of energy in the global economy, but their share of the global energy mix is expected to decline materially, to 73 per cent in 2040.

Natural gas will grow from 24 per cent of the global energy mix to 26 per cent in 2040, driven by North America's vast shale gas resource base. But oil and coal will continue to lose market share.

Renewables will take up the running, playing an increasingly important role with their share of the world's energy mix rising to 15 per cent by 2040.

The biggest change will come in power generation. Renewables will become the largest source of power generation energy in 2040, almost tripling their share to approach a third of the fuel mix.

Improving affordability of electric vehicles is required for that performance to be matched in transport, and significant changes to industrial and real estate energy may require regulation.

In fact, direct policy actions from governments will only accelerate the changes. Potential regulatory changes could involve banning new coal generation plants or implementing a global carbon tax.

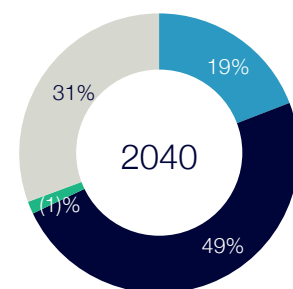
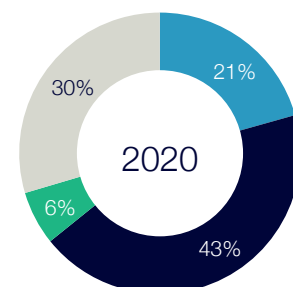
A technological breakthrough – possibly carbon capture and storage, clean nuclear or transmission grids that are able to run fully on renewables – could also contribute to further reduction in carbon intensity.

These changes are critical for infrastructure investors. One of the most dramatic illustrations of the infrastructure impacts of the shift to a decarbonised economy is in offshore wind power.

Offshore wind power provided just 0.3 per cent of global electricity supply in 2018 but the market has been growing by almost 30 per cent a year since 2010, second only to solar energy⁶.

There are now more than 100 offshore wind farms in 12 European countries⁷.

Within two decades, the International Energy Agency predicts offshore wind will be a USD \$1 trillion industry⁸.



World energy consumption by sector (Gtoe)

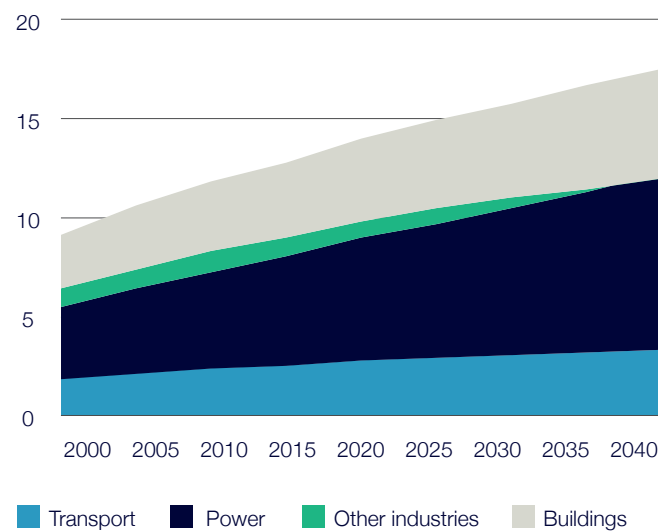


Chart 3
Source: BP, 2019



“Societies are simultaneously demanding energy services and also reductions in emissions. Oil and gas companies have been proficient at delivering the fuels that form the bedrock of today’s energy system; the question that they now face is whether they can help deliver climate solutions.”

– International Energy Agency

9. <https://windeurope.org/wp-content/uploads/files/about-wind/statistics/WindEurope-Annual-Offshore-Statistics-2019.pdf>
 10. <https://www.iea.org/reports/offshore-wind-outlook-2019>
 11. <https://www.iea.org/reports/the-oil-and-gas-industry-in-energy-transitions>
 12. https://www.ampcapital.com/content/dam/capital/04-articles/insto-edition/2019/012020%20Energy%20Infra%20Whitepaper_Spreads.pdf

The growth is being driven by advances in technology. The shallow, windy waters of the North Sea have provided an ideal environment to perfect offshore wind technology. Larger turbines are being developed, improving power capacity and delivering performance and cost improvements. On average, turbine capacity has increased by 16 per cent every year since 2014⁹.

The result is a capacity factor that matches many gas and coal-fired power plants and can be better than onshore wind and solar¹⁰.

The other enormous infrastructure change we believe is coming is the oil and gas companies themselves shifting capital expenditure into renewables.

A 2020 report from the International Energy Agency¹¹ contemplates the change the energy industry is undergoing from being part of the problem of rising carbon emissions to a crucial part of the solution.

“The oil and gas industry faces the strategic challenge of balancing short-term returns with its long-term licence to operate,” the report says.

“Societies are simultaneously demanding energy services and also reductions in emissions. Oil and gas companies have been proficient at delivering the fuels that form the bedrock of today’s energy system; the question that they now face is whether they can help deliver climate solutions.”

The impacts coming in the power sector – which represents almost 40 per cent of global emissions¹² – will be accompanied by changes coming to transport and real estate.

Transport represents almost 25 per cent of global emissions globally. Real estate figures are harder to come by but as a reference, buildings contribute 26 per cent of emissions in the UK.

The affordability of electric vehicles will help decarbonise transport, but the slow turnover of building stock means decarbonising real estate will be an ambitious goal to achieve.

Regardless, all-encompassing change is upon us and investors will need to carefully evaluate the impact of these trends.

You can read more in the global listed infrastructure team’s whitepaper: *The More Energy, Less Carbon Dilemma*. □

6. <https://iea.blob.core.windows.net/assets/2e7ec2d6-7cf1-4636-b92c-046ae16f4448/OffshoreWind-Launch-Presentation1.pdf>
 7. <https://windeurope.org/wp-content/uploads/files/about-wind/statistics/WindEurope-Annual-Offshore-Statistics-2019.pdf>
 8. <https://iea.blob.core.windows.net/assets/2e7ec2d6-7cf1-4636-b92c-046ae16f4448/OffshoreWind-Launch-Presentation1.pdf>

About AMP Capital

AMP Capital is a global investment manager offering private market and public market solutions to clients, with a strong focus on ESG.

Our home strength in Australia and New Zealand has enabled us to grow internationally, and today we have operations in Dubai, China, Hong Kong, India, Ireland, Japan, Luxembourg, the United Kingdom and the United States. With over 250 investment professionals working in 17 locations around the world, we're able to deliver the capabilities and investment solutions that help our clients achieve their financial goals. We also collaborate with a network of global investment partners, leveraging our shared capabilities to provide greater access to new investment opportunities.

We are entrusted to manage A\$200 billion¹ in assets under management on behalf of our clients, across a range of single sector and diversified funds. We work with more than 300 international clients and manage almost A\$19 billion in assets on their behalf¹.

Direct real estate

With a heritage spanning over 50 years, we actively manage real estate across all stages of the cycle. We realise true value for clients through the investment management, property management and development of a portfolio of some of the most iconic shopping centres, industrial estates and office buildings, from Australia's first skyscraper to the transformational Quay Quarter Sydney development.

Direct infrastructure

Backed by a truly global infrastructure platform, we're able to capture what we consider to be the best investment opportunities from around the world. It's earned us a name on a global stage, and a place as one of the top 10 infrastructure managers worldwide².

With 30 years' experience, we bring a breadth of insight that spans energy, power, transport, utilities, airports, seaports, communications infrastructure, social infrastructure, aged care and more. The combined expertise of close to 100 infrastructure investment specialists also allows us to cover all aspects of capital structure giving our clients more investment options for their future.

Public markets

Our well-established public markets business, including fixed income, listed equities and multi-asset solutions, requires shifting from traditional actively managed products to a specialist active offering of targeted solutions which meet specific client needs. Our public markets team remains focused on delivering investments that match our client's needs as we manage A\$203.1 billion³ across our global fixed income, multi-asset solutions, Australian equities, global listed real estate, global listed infrastructure and global equities solutions.

ESG and responsible investment

We believe considering ESG factors provides greater insight into areas of risk and opportunity that impact the value, performance and reputation of investments we make on behalf of our clients.

We recognise that all investments we make have a purpose and a wider impact and it's up to us to help make it a positive one for our clients and the global markets and communities in which we invest.

By looking at what we do as part of a bigger picture, we've developed a portfolio of responsible investment options for our clients. We are one of the first investment managers globally to sign the UN-backed Principles for Responsible Investment (PRI)⁴. Many of our funds have been recognised for their ESG performance. We continue to challenge and evolve our thinking, our processes and product offerings to meet our clients' growing expectations, partnering with them as they too look to fulfil their own goals and commitments to responsible investing. □

1. As of 31 December 2019. Represents draw down amount on a fully funded basis

2. Willis Towers Watson Global Alternatives Survey 2017

3. Data as at 31 December 2019. Note: AMP Capital AUM includes a 15% share of CLAMP AUM (AUD \$7.3b).

4. www.unpri.org

CAPITAL EDITION