CAPITAL EDITION

WHY A GLOBAL FUND MANAGER HIRED A GAMER

A team with expertise in software engineering, data science, philosophy and gaming are using technology to revolutionise how returns are delivered to clients, and they're flying in the face of tradition to get it done

RE-IMAGINING A STAPLE OF THE DIGITAL AGE

Modern corporations couldn't exist as we know them without data centres backing their operations, their power and potential is revolutionary

LIVING LIFE ON YOUR PHONE? CHANGE IS COMING

The power of data to make or break a person – and a corporation – has not escaped the attention of governments worldwide

AUSTRALIAN BLAZES

Shane Oliver's take on what the devastating bushfires in Australia mean for investors worldwide

ASSET SHOWCASE

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Letter from the Managing Editor

Welcome to the latest issue of Capital Edition.

Chances are, your smartphone is almost always within your reach. Most of us have assumed it's a private space, and we regularly and willingly commit our words, photos and sensitive information into the ether. That attitude to data often extends to laptops, desktops and apps. It's no wonder that this fodder for criminals and competitors has captured the attention of legislators and regulators worldwide. This month, we take a look at the landmark changes that have occurred globally so far, making way for a vastly different online world for private citizens and corporations alike.

When data is used for good, its power is beyond the realms of our understanding. Our cover story this month is an in-depth interview with Dr Alistair Rew, head of alpha strategies at AMP Capital, who explains why he has an eclectic team of creative, technical and philosophical people working on how to enhance client outcomes with powerful, technology-driven strategies. Dr Rew dismisses the fearmongering associated with automation and artificial intelligence, and is charging forward with a cutting-edge strategy and team to boost the power and expertise of AMP Capital's investment managers.

Following on from our outlooks coverage last month, Diana Mousina, senior economist, is back with her views on the state of the global economy as we look into 2020. Mousina questions whether the global economy is going to be able to compete with economic events such as Brexit, a possible Trump re-election, and the US-China trade deal, or whether further stimulus will be required in order to prevent any potential downturns.

At this time, you've no doubt seen Australia is also still dealing with bushfires down its east coast. On some days during the worst of the fires so far, Sydney's air quality was among the most hazardous in the world – an unprecedented occurrence for a developed, international city. Our chief economist, Dr Shane Oliver, considers the economic impact in the short and long term of this fire season, and what it could mean for investors in an age of drier, hotter conditions in some parts of the world.

As always, I'd love to hear your feedback. □

Many thanks.

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Features

Why a global fund manager hired a gamer

Within AMP Capital sits a team with expertise in software engineering, data science, philosophy and gaming. As a collective of raw skills, they are charged with using technology to revolutionise how returns are delivered to clients, and they're flying in the face of tradition to get it done.

Story by SEAN AYLMER

A little over three years ago, Alistair Rew, PhD in econometrics in his pocket, was asked to develop an integrated analytical capability that could be used to help investment portfolio managers. It was not quite experimental, but definitely a test-and-learn approach.

Rew convinced a couple of colleagues to join him and he started working with two equity teams at AMP Capital. It was slow progress to begin with, but now he runs a team of 11.

"We had really good engagement with those initial two teams and they became strong supporters of what we were doing. They were happy to go through the journey of change. I'm not sure anyone thought we'd come this far," he said.

Data analytics, in a very short period of time, has become a critical part of investing, and not just at AMP Capital. While algorithms and computer scientists are now part of the lexicon, Rew says the human side of the data equation is just as important as the computing and analytics. He talks about the talent in the team as though it's a portfolio; some members have a "feel for the data", some are highly technical, while others are strong in communication – with each skillset playing a deliberate, important role.

It jars slightly with common-held beliefs around the sector.

Data analysis, artificial intelligence and machine learning are all terms bandied around to describe a rules-based system, based on 'if-then' scenarios. In effect, the systems allow investors to codify logical decisions, making information processing more efficient and consistent. Logical decision making isn't supposed to involve sensory perceptions.

"There's a heavy need within the industry for behavioural psychology," Rew explains. "We need to know how people make decisions so we can analyse how things are done. We can do all this great work, but it doesn't mean much if people aren't then using it to refine what they do." >

So what's more important? The data or the behaviours?

"We could have wonderful behavioural change, but if we haven't changed in the right direction, then that's not going to help," Rew says. "We can have wonderful data, technology, analytics and visualisation. But if we're not seeing behavioural change, then it's not going to help. I'm a big believer in both the analytical and human sides, in combination, not in competition."

"Behaviour versus data, humans versus machines, are part of an ongoing battle that we're seeing across the industry. But to me this battle isn't very relevant. Using the buzzwords and phrases – artificial intelligence, machine learning, and how robots and things are going to replace people – just isn't a helpful or value-creating discussion. What we should be talking about is using data, technology and analytics alongside the power and expertise of people to deliver better collective outcomes. There are areas where technology is better and areas where humans are better. The mix will vary from team to team, strategy to strategy, but we should take advantage of that and build a better overall, integrated team."

"For example. computers are much better at cleansing data and doing large calculations at speed and high frequency. They can free up analysts to analyse output rather than spending hours cleaning the data. However, as we go through this evolution, we need to make sure we don't disempower or undermine people and keep them engaged, focusing on where they can add their highest value."

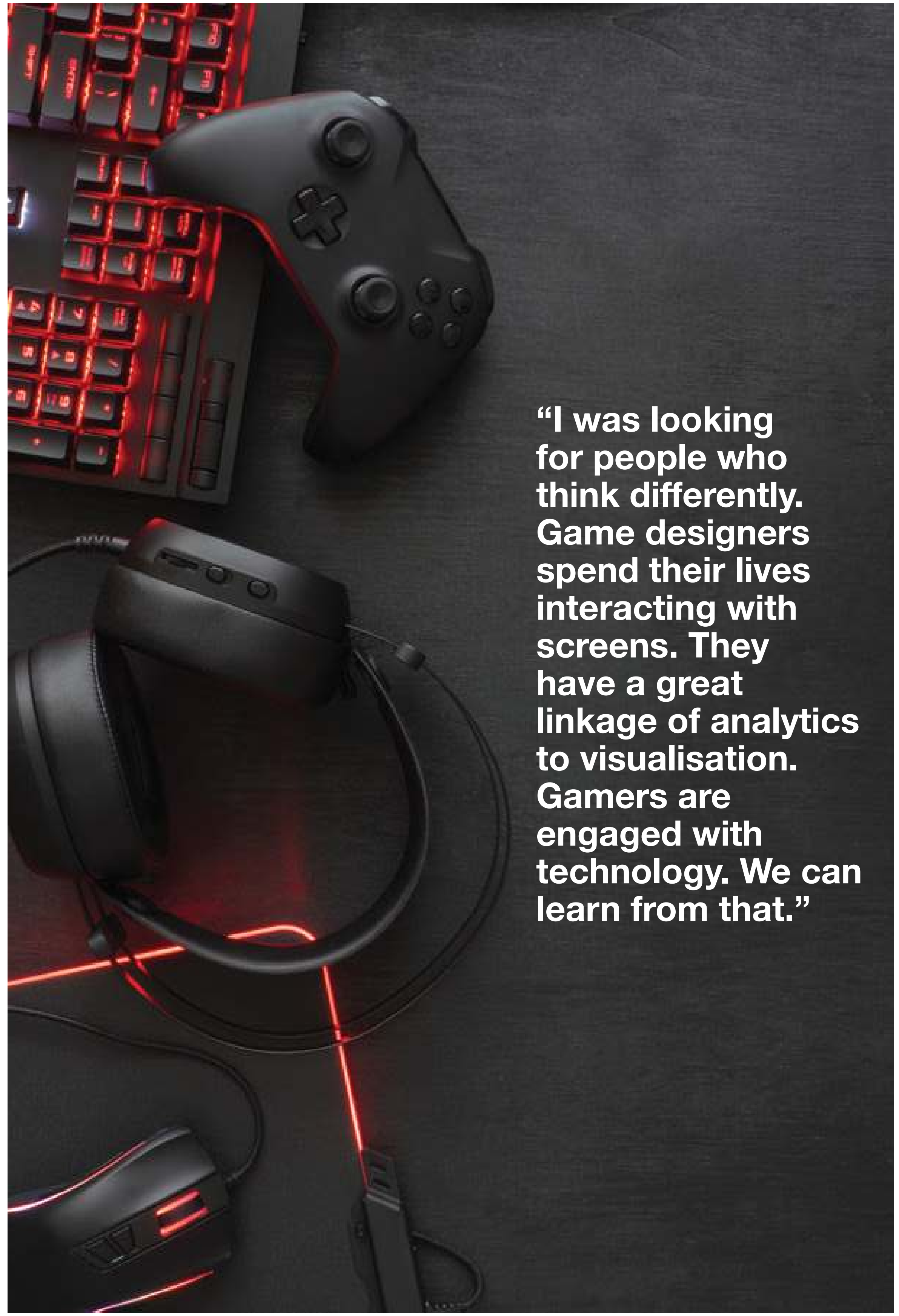
Rew has a PhD in econometrics from the University of Reading in the United Kingdom. His doctorate work involved the theory of random numbers and how they relate to one another. He then applied that to the behaviour of interest rates.

"I was applying certain theoretical tests to euro currency interest rates. I was looking at more data than researchers had previously used and found that much of what people thought didn't exist, in fact, did exist," he says. "It demonstrated that you've got to make sure you've got the right data and that you're applying the right tools. Otherwise you'll conclude the wrong stuff and you'll make the wrong decisions."

"I've always had a scientific approach to solving problems. The idea of using data, which underpins so much of financial markets, along with advances in technology, to do analytics and calculations to help investors make better decisions feels very natural and powerful to me."

"I've always had a scientific approach to solving problems. The idea of using data which underpins so much of financial markets, along with advances in technology to do analytics and calculations, means I can help investors make better decisions."

Dr Alistair Rew, AMP Capital



"I was looking for people who think differently. Game designers spend their lives interacting with screens. They have a great linkage of analytics to visualisation. Gamers are engaged with technology. We can learn from that."

Not everyone in global funds management is a convert to the data analytics cause. And good data analysis takes skills not traditional in many organisations. Rew caused a few raised eyebrows when he hired a game designer and gamer for his team at AMP Capital.

"I was looking for people who think differently. Game designers and gamers spend their lives interacting with screens. They have a great linkage of analytics to visualisation. Gamers are engaged with technology. We can learn from that."

Rew believes in hiring people unlike himself, and unlike each other.

"We needed somebody who really was passionate around visualisation. Matt (the game designer) has an understanding of how to make things more engaging. He just sees the world differently to other people, and fortunately has the skills and passion to implement his craft."

This philosophy means he needs to create a workplace that welcomes all types.

"I don't want anybody coming to work and not being themselves. Sadly, across the industry there's lots of people who aren't able to take themselves to work each day and be themselves. Fortunately for us this is an area that AMP Capital is highly focused on and supportive of."

"We look for people who may not realise they have the skills we need. The gamer was an example."

Unlike many other workplaces, particularly in financial services, Rew does not set people up to compete against each other.

"Humans love competing with each other, but that can undermine a team because they are always trying to get one step ahead. I've witnessed highly capable individuals and teams be destroyed by trying to be better and beat their team colleagues, so we hire smart people, who are very good at what they do and we actively try and minimise the skills overlap across each team member to minimise that negative competitive edge."

"The other thing we focus on when hiring is the personality type. We like people who recognise that no matter how good they are, they may not have the entire answer. Maybe 70 per cent or 80 per cent is all we need. We have skills in our team which can get the rest."

Leveraging the potential of fully integrated portfolio risk management data analytics isn't easy for the uninitiated. Rew says it involves a number of critical steps.

1. Risk appetite

"Risk appetite in our lingo is called risk wallet. Exactly how much risk should be taken to generate the targeted return? How do you really define what the risks are and what risks a client should be taking, and what risks they should be avoiding?" he says.

"We link those questions and find an 'identity' of an investment team. If a team is collectively very thoughtful and thinks in the long term, and perhaps is collectively a little bit introverted, I would expect them to take longer term risks versus a team who's more hyper, looking for quick rewards."

"It's all about an investor's identity. You need to draw that out within asset classes, and within each individual investment team."

"You need all this to help the investment teams understand how they are going to allocate risk. We try and come up with a numerical value for risk. How much of my risk wallet am I putting into a single security? Are we any good at selecting single securities? Are we any good at timing the market?"

2. Working with portfolio managers

Rew is clear that there needs to be a delineation between what he does and what portfolio managers do. The portfolio managers work with clients, they think about asset classes and analyse specific securities. They manage the portfolio and are responsible for the risks that they take.

On the other hand Rew is clear on his team's responsibilities: delivering a cutting edge and aligned data, technology, analytics and visualisation strategy that enhances what the investment teams do.

"For us, the first stage is just measuring what people are doing and finding what they're good at. From there you start working with the team to refine what they're doing. We help find somebody's edge and prove that up and that allows investors to increase risk, and return, over time."

"There is a difference between what people think they're doing, what they're actually doing, and what they're really good at. In some cases there may not be a big void but in other cases it might be. Once you can >

How we make it happen

Insight from Thomas Sturmann, strategy operations lead

No two days are the same when you're building a brand-new capability, and there's plenty of work to keep us out of trouble. Being flexible, and able to manage competing priorities, is an absolute must. They say variety is the spice of life, and there is certainly no shortage of that working with a talented, multi-disciplinary team to tackle some really cool and really important problems.

It is the persistent and dominant disruption of technology and data which is really driving a shift towards a new investment management paradigm.

It had always been a goal of mine to work in an investment team. As I was working towards this goal, I couldn't help but notice the pipeline of technologies that had disrupted other industries from retail, to transport, even dating. It occurred to me just how ripe for disruption the investment management industry seemed, given it's such a data-oriented business.

The Cortex team are thinking about these same challenges, and the opportunities they present. They are set on re-imagining a technology and data enabled approach to investment risk management and the development of high performance investment teams.

So when offered that, I jumped at the opportunity to help build a capability that was fit for purpose in this new investment paradigm.

measure decisions, people move away from guesstimates or feelings and their behaviours can change."

Rew uses the analogy of going to a gym.

"I decide to go to the gym. I'm trying to get fitter. I think I know what to do to lose weight – what areas to focus on. If I then have a good trainer, everything is measured, I would turn up and be asked what have I done this week? The trainer would look at what I've eaten, how I've slept, what exercises I've done. Then the trainer would reduce what I shouldn't be doing and increase what I should be doing."

"But it all starts with capturing the data and knowing what you want to achieve. It's the whole risk wallet piece," he says.

3. Capturing the right data

"The data bit is incredibly hard. If you have the wrong data and analyse it, I guarantee you will find the right wrong answer," Rew says.

"You can't set up the team until you know what questions you want to answer. And once you've got the questions and the team, you need to work out how to find the data. And to find this data the first question then becomes, does the available data actually capture and reflect the investment framework, the investment decisions, and the world view of the individual investment teams and managers? Our experience shows that most of the data our strategy and investment teams demand needs to be created by us, as it wasn't previously available."

"Tagging" as the name suggests is used on websites to capture data about users and how they interact with content. Similarly, in investment management 'tagging' securities is used to define and differentiate between each security they may be invested in. A perennial issue, in both cases, is accurately and appropriately tagging information and data. Rew says part of the problem with tagging is that there is no one way to tag, and the traditional tags, such as sectors, countries, are misleading at best.

"We all tag things based on how we see things. You're a portfolio manager and you're looking at a specific security or company. You will see it a certain way, because of your investment style, your investment approach, your risk wallet. You see it differently to how I would see it. So using a one size fits all, standardised tagging approach is just not the way to go. What we have to provide is a platform to see things through the portfolio manager's lens."

"And many of the teams tag the same things differently because of their different perspectives. So how do we work with that? How do we pull that into what we do, use those tags, and push back our information, and data and analytics to the portfolio manager in a way that's useful?"

"The behavioural and analytical challenge we face is that 'tagging' has too frequently been used across the industry to simplify the way we describe individual securities, or a total portfolio or investment strategy. But this simplification risks over-simplifying a complex challenge, and focusing investors on the wrong things, especially from a portfolio construction and position sizing perspective, resulting in inferior investment outcomes."

"I decide to go to the gym. I'm trying to get fitter. I think I know what to do to lose weight – what areas to focus on. If I then have a good trainer, everything is measured, I would turn up and be asked what have I done this week?"

4. Visualisation

Visualisation is critical in delivering successful analytics and insights, Rew says. "It is all fine generating loads and loads of numbers, but most people aren't able to take millions of pieces of data and picture them in their heads. By using visualisation, you can interpret the data and analytics better and get more out of them.

"Let's say we're doing some analysis on a portfolio and there are 100,000 data points, I could give you those hundred thousand data points in a spreadsheet, just as a list of numbers. It would be very difficult for you to see what the trends are."

"Put a chart around it and the data starts to get a perspective. Then embellish the chart and let the user change things on it. The user becomes more engaged. Then if they put their mouse over a number, something pops up. Now you've got an engaged user. That's how many apps are designed, to make you engage so you start using them. Visualisation is about interpretation and human engagement, making the interaction between us and the screen more real so that we take more away from the visuals than we otherwise would."

5. People

Historically the chain of data, technology and analytics specialists within organisations has not been seamless, often not working together. But it needs to if data analytics are to make a difference.

"For it to work you need to do it end-to-end from data through technology, through the analytical layer, and through visualisations. It's information, knowledge and coaching development. Through conversations with the investment teams, we want to find something that is actually insightful and actionable," Rew says.

"Ultimately everything we do is about behavioural change. How do you get people to do more of the stuff they are good at and achieve a better outcome for clients?"

So, does data analytics in a global fund manager like AMP Capital have much more to contribute? "It's limitless," Rew says.

"We can continue to expand across the business, getting deeper into different layers of data technology, analytics, visualisation, as well as the discussions with the investment teams. So, you get deeper and broader and you start crossing the entire business."

"Many of the challenges fund managers deal with can use the same building blocks and approaches we've created for other areas of the business. For example, how can we partner with our client teams and leverage all we do to enhance client engagement and the client experience? Or, take accounting data on hundreds of spreadsheets. How can we think about that and the analytics that we can perform on all that data to enhance the way we run the business? Whatever it is, we know even small enhancements can have dramatic impacts on outcomes."

"It's interesting. The maths that we deal with hasn't really changed. The data sets are starting to change, with new niche data sets becoming more mainstream. But the real game changers are the computing power we have today, the skill-sets that we are bringing in, and the way we are going about creating end-to-end solutions with our investment teams, and across the business. Breaking down the traditional solutions, linking data to technology, to analytics, leveraging the power of visualisation are all helping to enhance the decisions our investment teams make and the outcomes they are delivering to our clients." ☐

Fast forward to the future of data storage

Corporations couldn't exist as we know them without data centres backing their operations. Knowing where technology and infrastructure is heading, we imagine the future for data centres to be revolutionary.

Image is an artist's illustration

In 2002, online retailer Amazon began quietly rolling out a suite of online services for web developers, giving them access first to data storage and then to computing power that they could access over the internet.

The idea at the time was to help free developers from worrying about whether their data was safe, secure and available, and allow them to focus on innovating with data, rather than figuring out how to store it.

Nearly two decades later and 'cloud computing' has changed the technology and business landscape forever, playing a key role in most companies' IT operations. The term cloud computing refers to computer servers that are accessed over the internet. Every time you watch Netflix, access your iCloud photos or collaborate on a document with a colleague, you are using cloud computing.

Those cloud computing servers run in data centres, which are physical buildings home to vast arrays of computers and networking equipment. Many companies also access data centres directly, hosting their hardware in these purpose-built facilities with professional management.

AMP Capital last year made its first data centre acquisition on behalf of investors in its global infrastructure equity funds, buying US-based Expedient which runs data centre and cloud computing for 1,200 customers. □

Living life on your phone? Change is coming

It’s a reasonable assumption that most personal smartphones contain photos, screenshots and text messages that their owners wouldn’t willingly publicise or share. The power of data to make or break a person – and a corporation – is a factor of the digital age governments are aggressively factoring into their legislation.

TED BOWLER
Chief technology officer, AMP Capital

Just 12 years since the launch of the iPhone, billions of people across the world now carry the internet, quite literally, in the palm of their hand.

Their digital interactions have created a vast footprint of data which businesses have scrambled to monetise in the quest for consumer insights, product personalisation and tailored marketing outreach. Over the coming decades, as the Internet of Things permeates every aspect of our lives and autonomous vehicles transform the way we move, this torrent will turn into a deluge, with the size of the global datasphere predicted to more than triple[2] over the next five years.

As technology providers collect and process an ever-increasing trove of information reflecting who we are and how we live our lives, growing concern around how that data is used – heightened dramatically by the Cambridge Analytica scandal of early 2018 – has driven governments across the globe to re-evaluate their privacy regimes.

Governments have generally accepted the premise that the balance of power has shifted too far away from consumers to the collectors of data, and across jurisdictions a number of common features are recognisable in those comprehensive reform packages introduced over the past five years. They include greatly increased requirements for notification and consent, the consumer's right to opt-out, the right of an individual to access their own personal data and the right to be forgotten.

By taking a look at the rapid pace of change in both technology and regulation, in a relatively short period of time and on a global scale, it's clear that this is merely the beginning of a new world order in life and work online.

Europe: The General Data Protection Regulation

With Europe's previous privacy regime dating back to 1995, and implementation varying between each member state, the European Commission embarked upon the process of data protection reform back in 2012, seeking to make regulation in the space 'fit for the digital age'[3].

The principal outcome of the reform was the General Data Protection Regulation (GDPR), which entered force on 25 May 2018, following years of consultation and negotiation between member states. Described as a 'loaded gun' in the hands of regulators by Vera Jourova, European Justice Commissioner[1], the new regulation marked a turning point in the evolution of a right to privacy in the online era.

However, for many, the advent of GDPR will primarily be remembered for the flood of emails announcing updated privacy policies that overwhelmed inboxes across the world on the eve of its introduction.

That this flood of communication was also experienced by users outside of the European Union underscores how influential GDPR has been. In an online world, only partially delineated by national borders, many companies adopted GDPR compliance as the standard for their global operations[5], and the EU model has been used as a benchmark for subsequent reform in other jurisdictions. >

"Described as a 'loaded gun' in the hands of regulators by Vera Jourova, European Justice Commissioner[1], the GDPR marked a turning point in the evolution of a right to privacy in the online era."

1. Gordon S. & Ram A. (2018), *Information wars: How Europe became the world's data police*, Financial Times, 20 May 2018
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5. https://www.wsj.com/articles/techs-pickup-of-new-data-privacy-rules-reflects-eus-growing-influence-1525685400

Did you know?

66% of businesses attacked by hackers aren't confident they can recover.

Source: Fortune

Exploring the GDPR's impact

Using a cross-section of consumers and organisations across 11 countries inside and outside the EU, Deloitte conducted a survey to gain insights into attitudes towards privacy six months on from the GDPR being enforced. Some observations included:

- Privacy is a global concern: Results indicate attitudes align with the GDPR's position that privacy is a cross-border issue.
- Trust is key: Individuals will share data more openly with organisations they trust. They are also less likely to leave, challenge or exercise their rights against an organisation they trust in the event of a breach.
- Talent matters: Many organisations have recruited or trained people to increase their capabilities in managing privacy compliance, with challenges in headcount and capacity contributing to a shortage.

Source: A New Era for Privacy, Deloitte, 2018

The ‘eight rights’ – key elements of the GDPR

Fundamental to the consumer protection elements of the GDPR, are eight rights, many of which had not been formally established under previous regimes:

1. The right to be informed
2. The right of access
3. The right to rectification
4. The right to be forgotten
5. The right to restrict processing
6. The right to data portability
7. The right to object
8. The right to request that significant data-based decisions that affect the consumer be made by a person, rather than automated.

Companies are required to limit data collection and processing to those uses for which they have a legal basis. Users of websites belonging to GDPR-compliant businesses are likely to have noticed significantly elongated and more detailed consent pages introduced in the wake of the regulation.

The final element of the reforms were vastly increased penalties for non-compliance – up to 4% of global revenues or €20 million,[6] whichever is higher. Prominent global businesses have already been issued fines[7] running into the hundreds of millions of euros.

The United States: The California Consumer Privacy Act

Following the withdrawal of a ballot initiative[8] that would have yielded much stricter protections, the California Consumer Privacy Act (CCPA) was passed by the state legislature in 2018, coming into force on 1 January 2020.

As with the GDPR, the CCPA was a dramatic step forward for consumer privacy not only within its own territory, but in adjacent jurisdictions, with many companies extending measures taken to comply with the CCPA across all their US operations.[9]

CCPA does not grant consumers the right to correct erroneous data, object to or restrict processing, nor prevent automated decision-making. It also does not insist that firms have a ‘legal basis’ for collecting and using personal data or restrict the processing of held data in other countries, whereas GDPR places strict requirements around the conditions under which the data of EU nationals can be stored or processed offshore.

California was the first US state to institute such sweeping reform to privacy laws, and a number of others are now following suit. This has led to calls for overarching Federal legislation[10] to minimise the cost of compliance to US businesses, although a number of companies, including Microsoft and Apple, are instituting CCPA compliance across the country.[11]

“As with the GDPR, the CCPA was a dramatic step forward for consumer privacy not only within its own territory, but in adjacent jurisdictions, with many companies extending measures taken to comply with the CCPA across all their US operations.”

Did you know?

Hackers steal 75 records every second.

Source: Breach Level Index

Other initiatives to consider

A number of other jurisdictions are undertaking reform in the area of privacy and data protection.

Following the report of the recent Digital Platforms Inquiry, the Australian Government has committed to a review of the country’s Privacy Act,[12] intended to strengthen requirements around notification and consent, increase penalties for breaches, and allow a right of direct action for consumers whose privacy has been breached.

Brazil’s own version of the GDPR also comes into effect in 2020. The legislation largely mirrors its EU counterpart,[13] with further exemptions carved out for credit assessment and a somewhat less punitive schedule of penalties.

India also has a new Personal Data Protection Bill before Parliament, which is notable for mandating storage of information on local severs and raising concerns about the considerable latitude given to government agencies[14] under the pretext of national security and public order.

Ongoing complications

Despite the progress made over recent years to empower consumers in relation to the use of their personal information, it is likely that these reforms will be an ongoing process. Not every aspect of these measures has been straightforward to implement; data portability, in particular, is a work in progress for many jurisdictions.

In addition, despite the additional requirements around notification and consent, it is difficult to imagine that, given the volume and complexity of such information served at consumers on a daily basis, consent is truly informed and freely given. It is more likely that very few of us are reading each of these statements in detail, and that the average data subject is not significantly more informed about the ways in which their personal information is being used than was the case before these reforms were implemented.

Solutions to these issues may be more likely to come from the private sector than for government, and many tech companies are already staking out positions on privacy as part of their USP.[15] Under this paradigm, users place their trust in a brand to protect their right to privacy rather than understanding every detail as to how their data is used.

Regardless of whether the answer lies in regulation or in reputation, the ‘wild west’ era of unfettered use of online data is well and truly over, and as our lives become ever-increasingly connected it will be essential that consumers can be more confident of their rights in this space and the measures being taken to uphold them. People in their various capacities – as private citizens, company directors, business owners – and the like – will not escape the far-reaching net of change. ☐

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Powering the future

Macarthur Wind Farm is the largest wind farm in the southern hemisphere. It is located in south-western Victoria, comprises 140 wind turbines capable of generating 420 MW of energy – enough to power the equivalent of 181,000 Australian homes every year. The site spans approximately 5,500 hectares of agricultural land outside the Macarthur township.

In October 2019, AMP Capital agreed to acquire a 50 per cent interest in Macarthur Wind Farm on behalf of its investors.

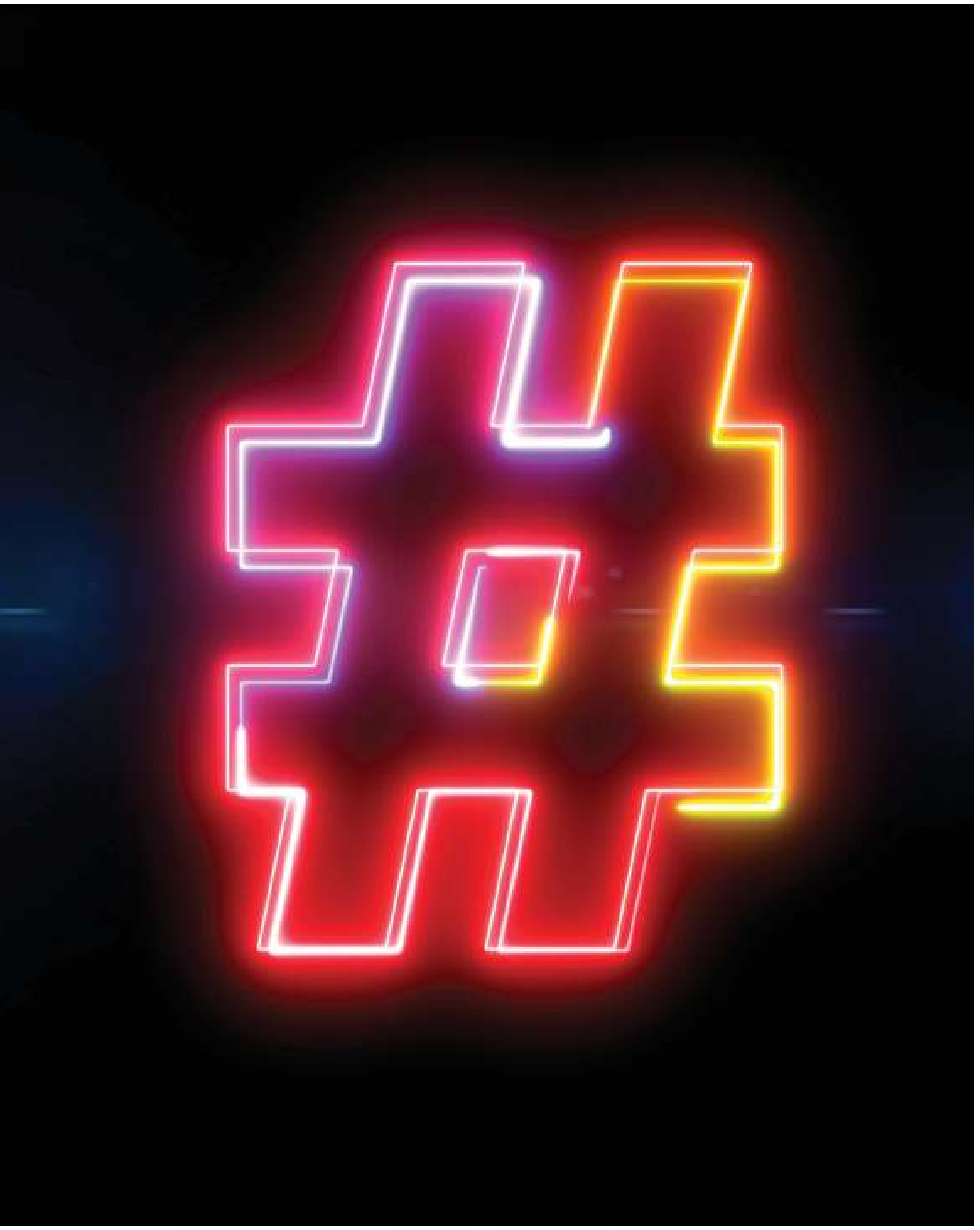
Fast fact

"Generating electricity from Macarthur Wind Farm displaces electricity that may otherwise need to be sourced from the grid at a higher emissions intensity."

– AGL

Image supplied by AGL, which operates the wind farm.

Darkness and light: our watch list for 2020



If 2019 is anything to go by, the global shift in awareness and action with ESG-focused investing is set to pick up pace in 2020. Some inclusions on this list may be playing a big part in your life right now – like your tap water, your clothes, and your social media account.

EMILY WOODLAND
Head of sustainable investment

Interest in sustainable investment continued to grow throughout 2019 as several topical issues unfolded. We've been pleased to see our clients become increasingly engaged with the broader impacts of their investments, beyond their immediate financial returns, and worked to take meaningful action in response to several issues that were prominent throughout the year.

Some of those prominent issues are closer to home than most of us would care to think, and can be as personal as our social media profiles and newsfeeds.

Some key considerations for 2020

The use of social media

Social media remained in the spotlight following 2018's Cambridge Analytica scandal, where the broader population became aware of the potential misuse of personal information by global technology giants.

The dark possibilities of social media platforms further shook the world in March when a series of shootings in Christchurch, which killed 51 people and injured many others, were live-streamed online by the shooter. This tragic event horrified the public across the globe, and sparked widespread calls for social media companies to strengthen controls and prevent the streaming and distribution of objectionable content. AMP Capital joined one such collaboration of global investors seeking to engage these companies and achieve these changes, holding the likes of some social media giants accountable for what appears on their platforms.

New Zealand's subsequent ban on semiautomatic weapons also put guns back in the spotlight, causing many Environmental, Social and Governance investors to revisit and tighten their ethical screens on civilian firearms.

Climate change

Climate change was undoubtedly the most significant sustainability topic of 2019. In September, the World Meteorological Organisation released its latest report on the global climate, showing the recent five-year period to be the warmest of any equivalent period on record. The report also identified a long list of concerning environmental changes associated with this finding, including continued increases in carbon emissions, rising ocean acidity, and an abrupt decrease in Antarctic sea ice to name just a few.

We have seen record-breaking wildfires in the Arctic, widespread fires in the Amazon, and catastrophic bushfires in Australia. Parts of Australia are also experiencing some of the most severe droughts on record.

Investors are becoming more aware that climate change presents a material risk to portfolios. Events such as the UN Climate Change Summit, COP25 in Madrid, the 'Greta effect' and global climate change demonstrations have drawn attention to this risk. As a result, the number of shareholder resolutions concerning climate change has risen significantly this year, challenging companies to do more with their disclosures, commitments and real actions.

> **"While it is saddening to reflect on each of these events, we can find hope in the positive actions that arose from them and work towards increasing the accountability of companies operating around the world."**

At AMP Capital, we've worked closely with companies and other large investors to improve reporting and disclosures, set emissions targets and develop strategies to achieve them, align capex and divestment planning with the Paris Agreement, plan for climate adaptation and resilience, and lobby governments for climate-friendly business settings. We've made good progress to date through direct engagement work and collaboration with global investor initiative Climate Action 100+, but there is still a long way to go and we will continue to drive more change in 2020 and beyond.

Tailing dams

Concerns also grew around tailings dams, which are built to contain toxic mining waste and prevent environmental contamination. Unfortunately, in recent years a number have proven to be vulnerable to failure, and in January at least 250 people were killed and the local ecosystem severely affected when a one such structure collapsed in Brazil. We've been probing mining companies about the safety of their dams for several years now, and with the UN PRI leading a global engagement agenda on industry safety standards and transparent records of tailings dams, we're seeing steps in the right direction.

Modern slavery

The Commonwealth Modern Slavery Act will come into full force next year, making human rights and the manufacturing supply chain another hot topic in Australia. The fashion industry is a prime example: consumers are demanding cheaper products, sooner, but as the retail price of clothing continues to fall, the human and environmental costs have increased dramatically. Suppliers have been known to cut corners by skipping the necessary social and environmental checks, putting vulnerable people at risk of exploitation.

Earlier this year we received another reminder of the risks in this sector after the media exposed a mass internment camp in the Chinese province of Xinjiang, and the forcible detainment of over one million Uyghur Muslims in what the government calls a vocational training camp. Women in the camp had been forced to work in factories which supplied some of the world's largest clothing brands.

At AMP Capital, we've been asking companies to consider the Modern Slavery Act, dig deep into their supply chains, and be open and transparent about any concerning findings. Ideally, we'd like to see this type of reporting used to disclose a wide range of social and environmental risks that could still be occurring in supply chains, in order to put a definitive end to these unethical and dangerous practices.

A final thought

While it is saddening to reflect on each of these events, we can find hope in the positive actions that arose from them and work towards increasing the accountability of companies operating around the world. We will continue to take a stand on these issues and make an impact where we can, as we work with our clients to support a better future. □

Is there more stimulus on the cards for global markets in 2020?

The theatrics of global politics, devastation of cross-border attacks and far-reaching impacts of the US-China trade stalemate beg the question: will global growth need a helping hand in 2020?

Story by SEAN AYLMER

Can global share markets keep trending upwards after a stellar 2019? Is there any end to US-China trade wars? Will President Donald Trump be re-elected? What about Brexit?

Will the world's biggest central banks – the US Federal Reserve, the European Central bank, the Bank of England and the Bank of Japan – remain generous in their monetary policy settings?

Is corporate debt a time bomb waiting to go off, as suggested by the International Monetary Fund a couple of months ago when it said up to 40 per cent of corporate debt in leading economies would be unserviceable in the event of a recession? The World Bank has similar concerns about the level of debt in developing economies.

Seldom has a year begun with so many uncertainties. Yet AMP Capital senior economist Diana Mousina thinks 2020 will be a good year for global economic growth.

"Our general thematic for 2020 is for stronger growth compared to last year," she says. "If you compare where we are now to 12 months ago, the global economy is in a much stronger position."

"We've had some steps towards an agreement around trade although we don't think there will be any broad resolution before the US election. There's still this hawkishness towards China from both political parties in the US."

At the beginning of 2019, the global outlook was problematic. Global securities markets were expected to lag, not reach new highs. Brexit and trade wars were foremost in people's minds. While growth across the globe was only moderate, the strength in the US economy in 2019 proved a boon for many investors.

"Any progress on the US-China trade deal is critical to investor returns during the next year," Mousina says. >

From the vault

"The four most dangerous words in investing are: this time it's different."

– John Templeton

"I think we might get some more good news on that. There's some good news on phase one around tariffs. We expect there will be something in phase two as well, maybe around intellectual property issues and access for US firms into China."

"And then you have some signs that the global manufacturing cycle is starting to at least stabilise, particularly in the auto sector which is important."

The United States remains the world's biggest economy and drives many other economies.

"I don't really see any major changes the US over the next year," Mousina says. "It remains in a pretty good position with a low unemployment rate and growth in wages. There probably won't be another rate cut from the Fed and if there is, it will just be one just to get just to get inflation a bit higher."

"Interest rates are unlikely to be hiked in the US in 2020. I think that the Federal Reserve will remain on hold, which would be positive for the economy there. The budget was agreed to and there was some rollback of expiring tax breaks. From the fiscal side, the US isn't going backwards either. In fact you are probably getting a bit of fiscal stimulus there," Mousina says.

"Interest rates are unlikely to be hiked in the US in 2020. I think that the Federal Reserve will remain on hold, which would be positive for the economy there. The budget was agreed to and there was some rollback of expiring tax breaks. From the fiscal side, the US isn't going backwards either. In fact you are probably getting a bit of fiscal stimulus there."

"China will be stronger in 2020, and that should also be good for the Eurozone economy which relies on Chinese demand. Normally Eurozone exports and Chinese growth a very closely correlated so a stronger China is good for Europe. But manufacturing in the Eurozone remains weakened."

"The Eurozone is getting a bit of a boost from the fiscal side. Eurozone budgets showed a positive fiscal impulse into 2020. Not huge, but still the contribution to growth is positive. While there's weakness in Eurozone growth, its more likely we will get something out of Germany in 2020. And maybe even from some of the other Eurozone economies, like France."

Two of the biggest news stories for the US in 2020 are the impeachment of President Trump and US election. For Mousina, the impeachment will be a non-issue but the election is important. A Democratic President will probably mean higher taxes and regulation which would hit sharemarkets.

"Normally in the election years you tend to see business investment struggle a bit. Also, with the trade dispute, if you are running a business and thinking of where you are going to build your next production facility you don't really know what to do."

"I think that capital expenditure will struggle in the US, which was an issue last year. But on the other hand, the consumer is still very strong and bond yields had been falling. They are still very low."

"And the housing market in the US is starting to recover so the housing construction story will be positive," Mousina says. "The US can grow at two per cent growth this year, which is probably in line with their potential, even with the election coming up."

"In China, we've seen the government doing stimulus and it will probably do more in 2020. It should expand at around six per cent and that will lead to better Asian growth."

"In Japan, they've got fiscal stimulus, probably worth about one and a half per cent of GDP, however this will be spread out over a couple of years. It's more government spending, probably some infrastructure spending, to offset the negatives to the economy from the increase in the consumption tax last October."

"I'm just seeing a lot of positive little things out of China and Japan that will be a positive for Asian trade in general."

"The UK is still really difficult to analyse because they have to create a longer run free trade agreement or some kind of agreement with the Eurozone. While they have agreed to an interim transition period, it's hard to see them being able to agree to a trade deal with the eurozone within a year and I don't know if the Eurozone would want to extend that deadline."

"The monetary policy question is critical to the outlook for the year. While US monetary policy will be broadly stable, Chinese authorities are likely to cut rates," Mousina says.

"They may not cut specific consumer interest rates, but probably things like their reserve requirement ratios helps liquidity in China."

"Easing trade tensions, the key factor in the global downturn, will reduce business uncertainty and make policy stimulus more effective."

– Morgan Stanley

"The Eurozone will still be doing quantitative easing though they probably won't add to the program. Any stimulus is more likely on the fiscal side. Japan will be keeping rates at very low levels for a long time. So, I don't see any major cuts to interest rates by central banks globally, although maybe there's another cut from the US."

Inflation remains dormant, notwithstanding some wage pressures in the US, Mousina believes.

"Commodity prices are likely to have a better year, given the US dollar has probably peaked for now. With the rest of the world improving. US growth won't be the standout performer which normally tends to be negative for the US dollar. And normally when the US dollar falls, we tend to see commodity prices do better," she says.

The manufacturing sector is a strong driver of the global economy, in part because of the jobs produced when the sector is booming.

"I'm probably more optimistic than the consensus on manufacturing. It would be good to see PMIs (purchasing manufacturing index which measure the health of the sector) improving. It's important to keep an eye on them."

"I think that in 2020 the outlook for the equity markets is still positive. But then after 2020 is when things will get a bit more muddled, because you kind of expect we've had this huge increase in stock prices because central banks have been cutting rates over the past year. How much further can it go in 2021? Twenty twenty-one is when I start getting a bit more worried about signs of a recession." □

A trusty barometer

The automobile industry has long been a benchmark of major economies, from Germany, to the United States, Japan and more recently China. Apart from creating jobs, it has a significant flow on to other parts of an economy and provides a beacon for economies as a whole.

"In every single major country or developed economy we're seeing a huge collapse in auto sales," says Mousina. "And it's happening in economies where you have low unemployment rates and strong consumers like in the US."

"It has big implications for manufacturing-intensive economies like Germany, where it's close to 30 per cent of GDP. And then other industries are linked to it, like all the service industries and parts."

But there is good news, Mousina says.

"The forward-looking indicators are starting to look a little bit more positive. Demand for auto loans is now positive rather than negative, where it has been for the past six months. Inventory levels have been drawn down to such a large extent that sales and production levels are now starting to stabilise. On these kinds of indicators, I'm a bit more optimistic."

ECONOMIC INSIGHTS

The impact of the Australian bushfires on investors worldwide

The scale and breadth of damage to businesses and industries as a result of the Australian bushfires should prompt investors – personal and institutional – to be aware of whether parts of their portfolio are vulnerable to climate change risks.

SHANE OLIVER
Chief economist, AMP Capital

The Australian bushfire season that began in September 2019 has been horrific. At the time of writing (January 2020), more than 10 million hectares of bushland has been destroyed. There have been human casualties, deaths, and significant loss of livestock. There are also estimates of more than a billion wildlife animals killed and over 2,000 homes destroyed.

The fires intensified over the Christmas and new year period. Residents of NSW on Australia's east coast were issued warnings from health authorities to stay indoors, with hazardous air impacting people movement and outdoor workplaces. On one particularly smoky day, fire alarms in office buildings in the Sydney CBD were triggered. In those instances, ash had made it into high rise towers. >

Key take-aways

1. The Australian bushfires are expected to result in around a 0.4% hit to GDP mainly in the March quarter followed by a rebuilding boost.
2. The hit to consumer spending and tourism is likely to linger longer.
3. The drag on Australian economic activity has increased the pressure for more monetary and fiscal stimulus.
4. The Australian bushfires will likely increase the pressure for more action on climate change and highlight the need for investors worldwide to be aware of industries and businesses that are vulnerable to climate change risk.

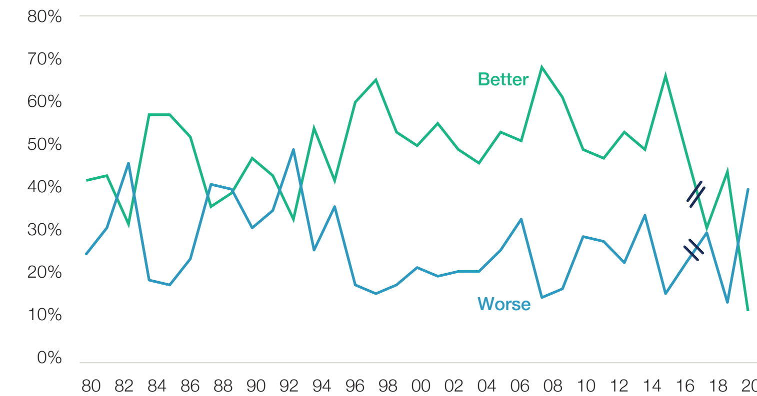
Collectively, this shows us the impacts of climate-related disasters are not contained to the land. They impact business, people, infrastructure and the economy. This piece examines what we know so far about the economic impact of the Australian bushfires, and how investors should consider the ongoing risks to their portfolios. It's important to note that as this is an unfolding situation, Australian data is being rapidly updated. However, the high-level lessons for investors remain similar as the numbers evolve.

"This shows us the impacts of climate-related disasters are not contained to the land. They impact business, people, infrastructure and the economy."

GDP and wealth: the short-term impact

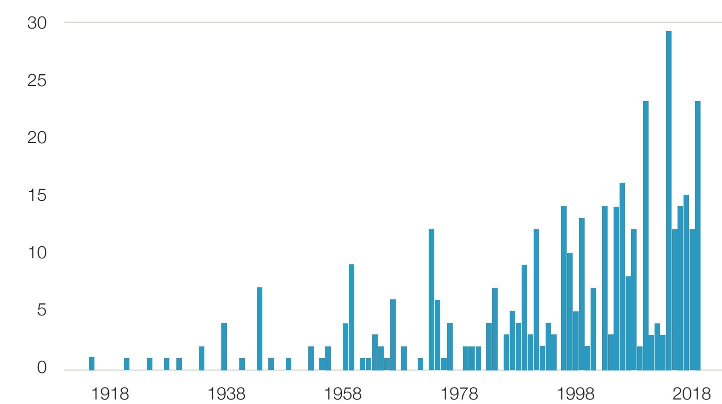
- Activity related to farming, manufacturing, transport, tourism and business generally in the affected areas will be disrupted – this will involve around 2-3% of the population and will be concentrated around the March quarter. It will also be partly offset as affected people have to undertake spending that they otherwise wouldn't have had to.
- A bigger impact on economic activity is likely to come via a hit to consumer spending as the constant news of the fires and the smoke haze in several capital cities weighs on confidence. Australians were already very hesitant about the economic outlook after the slowdown in growth seen last year and continuing weak wages growth and high underemployment. A range of surveys also show that consumers are uncertain and depressed, and this looks to have intensified since Christmas. The constant terrible news since October about the bushfires along with the smoke in cities is likely weighing further on the national psyche, adding to a weakness in consumer spending as Australians feel less motivated to spend when their fellow Australians are suffering. The hit to household spending power from higher prices for food and a likely rise in insurance premiums flowing from the fires will only accentuate this.
- Inbound tourism is also likely to be impacted by the heavy coverage of the bushfires globally – with doctored maps showing much of Australia on fire (including where I am right now) – likely to adversely affect perceptions of Australia. This may be short lived (just as the positive boost from the Sydney 2000 Olympics was) but it could still last a year or so. >

Australians answer: will the next year be better or worse?



Source: Roy Morgan; AMP Capital

Number of extreme heat days in Australia



Source: Bureau of Meteorology, RBA

The collective result

Taken together, we expect a detraction from GDP due to the bushfires of around 0.4% starting in the December quarter but mainly impacting the March quarter before a rebuilding boost kicks in from the June quarter. Given the uncertainty, the range around this negative impact is -0.25% up to a worse case of -1% of GDP should the fires continue on a widespread basis throughout the rest of summer. The rebuilding boost should reverse much of this drag later in the year, but there is considerable uncertainty around this as the impact on tourism and consumer spending may linger longer.

A big proximate contributor to the severity of the bushfires is the severe drought gripping much of Australia. This has already driven a decline in agricultural production, which has been directly detracting around 0.2 percentage points from GDP growth for the last two years. Unfortunately, the Southern Oscillation Index is still in El Nino territory pointing to ongoing relatively dry conditions in eastern and top-end Australia.

The case for stimulus

The fires have only added to the pressure for more policy stimulus. We remain of the view that the Reserve Bank of Australia (RBA) will continue to cut the cash rate. The bushfires will push up food prices and insurance premiums but the RBA's focus on underlying inflation will mean that it should look through this. In fact, increases in such prices will act as a tax on consumer spending power and are negative for spending and so could depress underlying inflation.

The pressure for further fiscal stimulus has also intensified. The Federal Government has already committed an additional AUD$2bn for bushfire recovery to be spent this year and next (which is relatively small at 0.05% of GDP per year) and the NSW Government has committed another AUD$1bn. However, the total hit to government budgets from the bushfires is likely to be much greater than this given assistance under existing disaster programs, extra expenses associated with fighting the fires and the impact of slower growth in the short-term on revenue flows.

More broadly, given the hit to confidence a circuit breaker is arguably needed to help boost economic growth. Monetary policy alone is unlikely to be enough. So there is a need for a broader fiscal stimulus – maybe in the form of a bring forward of the personal tax cuts, an increase in Newstart (an income support payment for the unemployed) and broad-based investment allowances. To have an impact it needs to be at least 0.5% of GDP (or around AUD$10bn).

Rightly, in the face of the pain caused by the bushfires the Federal Government has relaxed the focus on achieving a budget surplus and it is now questionable as to whether it will be achieved this year and next. This is not a major problem in the relative scheme of things given the relatively good state of Australia's public finances.

Four long-term challenges

1. Increased pressure to adopt a tougher stance in reducing carbon emissions. While Australia has always had droughts and bushfires, we have been warned for more than a decade now that the world and Australia is getting warmer. Increasing global greenhouse gas emissions are likely contributing to this and that in the absence of actions to reduce emissions, the world will get significantly warmer with the outcome being rising sea levels and more extreme weather events – including storms, floods and droughts – with more severe bushfires an outcome of the latter.

"The damage inflicted by the extreme bushfires highlights the need for investors to be aware of industries and businesses that are vulnerable to climate change risk – whether it comes from the physical impact from climate change or via measures to reduce emissions."

2. The damage inflicted by the extreme bushfires highlights the need for investors to be aware of industries and businesses that are vulnerable to climate change risk – whether it comes from the physical impact from climate change or via measures to reduce emissions.
3. The severity of the bushfires and the risk that this is the new normal will necessitate better strategies for reducing the risk to property posed by future bushfires.
4. In the absence of policy action, the bushfires risk is accentuating the decline of some regional communities particularly where key industries have been destroyed by the fires – with some taking their insurance and rebuilding elsewhere. This will only further centralise Australia in its big cities, adding to all the costs that entails – notably congestion and expensive housing.

A note to investors, for now

The likelihood of more RBA monetary easing and continuing weak economic growth in the short-term will likely keep Australian bond yields down relative to global bond yields, possibly pushing them lower. This will also keep the Australian dollar relatively soft.

At time of writing, the Australian share market appears to be looking through the short-term hit to economic growth focusing more on the rebuilding boost, but the negative impact of the bushfires risks is seeing it remain a relative underperformer versus global shares. ☐

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 billion[1] 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 behalf[1].

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 worldwide[2].

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$140.7 billion[3] 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 30 June 2019. Represents draw down amount on a fully funded basis
2. Willis Towers Watson Global Alternatives Survey 2017
3. As of 30 June 2019
4. www.unpri.org

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