AUSTRALIA'S NEW HORIZON:
CLIMATE CHANGE CHALLENGES AND PRUDENTIAL RISK

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Introduction

Thank you for welcoming me again to your conference.

I spoke here, around this time last year, on 'culture, rugby and regulation'. This time around we're still in the cricket season – but I've promised my team that I'll be keeping the sporting analogies to a bare minimum.

My focus today will be climate change and climate risk. Following my remarks here last year, I fielded a question from the floor on climate change and associated prudential risks, and noted some of the implications for financial sector entities. The questions moved on, but I have continued to reflect on these issues with my colleagues over the past 12 months.

At the same time, developments in Australia and abroad placed climate-related financial risks firmly in sight. Bank of England Governor, Mark Carney, said last year that the entry into force of the Paris Climate Agreement 'brings the horizon forward' for action on climate change. It heightens transition risks and opportunities, makes them more immediate, and 'puts a premium on the ability of private markets to adjust'. [1]Australia's ratification of the Paris Agreement last November ensures we have a new horizon too.

Today I want to reflect on these and other developments. I want to offer some observations about why climate-related risks are likely to be relevant and important, not only for insurers but for all APRA-regulated entities. I will also talk about how we see 'climate risks' as part of our broader approach to prudential risk management and supervision.

To begin with a generalisation, while climate risks have been broadly recognised, they have often been seen as a future problem or a non-financial problem.

The key point I want to make today, and that APRA wants to be explicit about, is that this is no longer the case. Some climate risks are distinctly 'financial' in nature. Many of these risks are foreseeable, material and actionable now. Climate risks also have potential system-wide implications that APRA and other regulators here and abroad are paying much closer attention to.

Climate change – setting the scene

Before returning to the relevance of climate risks for APRA and APRA-regulated entities, I want to offer some reflections on how public understanding of climate change has evolved.

I think the days of viewing climate change within a purely ethical, environmental or long-term frame have passed. More and more, the conversations we are having are about the practical realities and consequences of a changing climate. One reason for this is that we now have a much more sophisticated, granular, quantifiable understanding of the impacts, risks and probability distributions around climate change. This is true on the planetary scale. For example, it is estimated that in order to have a two-in-three chance of keeping global warming below 2 degrees, we need to restrict future global emissions to around 800 gigatons of CO_2.[2] (That's equivalent to around 25 years or so of current annual global emissions). We

[1] Mark Carney, 'Resolving the climate paradox', 22 September 2016.
Available here: http://www.fsb.org/wp-content/uploads/Resolving-the-climate-paradox.pdf

[2] Based on Global Carbon project, 2016. The remaining quotas are indicative and vary depending on definition and methodology.

also have a much keener idea of impacts at a local level, and the implications for countries, regions, cities and, yes, companies.

Piecing together this understanding has taken a long time and a lot of hard work. 58 years ago today, NASA launched the first ever cloud-cover satellite, the Vanguard 2. At the time there had only been a handful of successful satellite launches. Today there are a few thousand satellites in orbit. Over the intervening decades, this remarkable array of technology has vastly improved our understanding of weather – from cloud cover to snow packs and cyclones. Over time, it also allowed us to document, diagnose and understand the impacts of changes in climate. Measuring changes in Arctic sea ice is just one example.

This has been buttressed by decades of work on the ground by scientists across a whole range of disciplines to understand the causes and implications of climate change. One of the hallmarks of this research is that today, climate change is not just the realm of scientists – but of planners, policymakers, businesspeople and economists, too.

Addressing climate change is still a lofty goal. But we no longer talk about it with the starry-eyed ambition of, say, building a space program from scratch or challenging NASA to put a man on the moon in the face of unbelievable uncertainty. We're now at the stage of the collective effort, calibration and creativity to turn ambition into reality. What happens next isn't just a matter for rocket scientists – but also humble prudential regulators.

Three key recent developments

1. Paris agreement

A vital part of this is the Paris Climate Agreement – which is the first of the important recent developments I want to recap. The Paris Agreement entered into force globally last November. It has now been ratified by 131 countries, representing over 80 per cent of global emissions. Importantly for our purposes, this includes Australia.

The agreement establishes a binding global commitment to limit warming to between 1.5 and two degrees Celsius, and provides a pathway for more ambitious emissions reductions efforts if current policies are falling short of that goal. The host of new policies and commitments is significant. Even more significant is the framework the agreement provides for monitoring and ratcheting up these commitments and contributions over time.

The agreement provides an unmistakable signal about the future direction of policy and the adjustments that companies, markets and economies will need to make. This global agreement is being complimented by initiatives at national, state and city level.

2. FSB Taskforce on Climate-related Financial Disclosures

The second development I want to mention is vital to this adjustment, because it relates to financial markets and investors need to assess risk and make investment decisions. This is the release of an influential new report in December by the Financial Stability Board's "Taskforce on Climate-related Financial Disclosures".[3] Several years ago, G20 Finance Ministers and Central Bank Governors perceived that a lack of company transparency on climate risks was impeding investment, credit and underwriting decisions and obscuring potentially systemic climate-related risks. This is the response – a business-led report

[3] The TCFD report is available here: https://www.fsb-tcfd.org/publications/recommendations-report/. A joint opinion piece by FSB Chair Mark Carney and TCFD Chair Michael Bloomberg is available here: https://www.theguardian.com/commentisfree/2016/dec/14/bloomberg-carney-profit-from-climate-change-right-information-investors-deliver-solutions

recommending a voluntary, practical, global framework for improving a wide spectrum of climate-related disclosures. It aims to improve information for investors, lenders and insurance underwriters - and to ensure these financial entities are doing a better job on disclosure, too. The last consultation phase on the recommendations has just wrapped up and the framework, which we expect to be influential, will be finalised toward the middle of this year.

3. Legal opinion on directors' duties

The third development is timely analysis of how Australian corporate law applies to climate and sustainability risks. In November, the Centre for Policy Development and the Future Business Council released an influential legal opinion on company directors' legal obligations to consider the impacts of climate change. The opinion was authored by barrister Noel Hutley SC. [4]

The opinion found that company directors who fail to properly consider and disclose foreseeable climate-related risks to their business could be held personally liable for breaching their statutory duty of due care and diligence under the Corporations Act. The author warned it is "only a matter of time" before we see this sort of litigation against a director. I participated in an important roundtable to discuss the implications of the opinion and was struck by how constructively senior company directors, investors and fellow regulators are engaging with these challenges.[4] In this and other discussions, I have detected a broad appetite for regulators and firms to get much better at this now that the horizon for Australia is in sharp focus. The series of papers published in December by the Australian Institute of Company Directors on the subject reinforced this view.[5]

Importance and immediacy of transition risks

So twelve months after taking that question at this same conference, much has changed. Our thinking has evolved accordingly. This time last year I distinguished between primary climate risks and secondary risks. The terminology I would like to adopt now, consistent with the FSB Taskforce, is physical and transition risks[6]. I won't bore you with definitions, but for the sake of clarity:

(1) physical risks stem from the direct impact of climate change on our physical environment – through, for example, resource availability, supply chain disruptions or damage to assets from severe weather.

(2) transition risks stem from the much wider set of changes in policy, law, markets, technology and prices that are part of the now agreed transition to a low-carbon economy.

Much of the early focus on these risks has been on insurance firms and their exposure to losses from increasingly frequent and severe natural disasters. There are a variety of other potential issues. These include the potential exposure of bank's and insurers' balance sheets

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[4] The legal opinion is available in full here: http://cpd.org.au/wp-content/uploads/2016/10/Legal-Opinion-on-Climate-Change-and-Directors-Duties.pdf

For further information on the CPD-FBC roundtable, see http://cpd.org.au/2016/10/directorsduties/

[5] AICD Governance Leadership Centre, December 2016 Update. http://aicd.companydirectors.com.au/advocacy/governance-leadership-centre

[6] 'Liability risks' stemming from potential legal action related to climate-related damages and losses are sometimes considered a separate third channel of risk. The FSB Taskforce groups these risks as a subset of 'transition risks'.

to real estate impacted by climate change and to re-pricing (or even 'stranding') of carbon-intensive assets in other parts of their loan books. They also include exposure of asset owners and managers – an important consideration given the size of Australia's superannuation sector and its heavy weighting towards carbon-intensive equities and a relatively resource-intensive domestic economy.

I will leave a more detailed exploration of these risks for another day. The general point is that the transition now in train could potentially lead to significant repricing of carbon-intensive resources and activities and reallocation of capital. This process will be highly sensitive to changes in regulation, technology, the physical environment and behaviour by investors and institutions – and interrelated perceptions and sentiment about all of the above. Inevitably, even under a sanguine view of how smoothly this transition happens, there will be systemic impacts and implications that have to be carefully monitored.

From a regulatory perspective, one key to getting a better handle on potential system-wide exposures is better information on risk and strategy at the firm level. We are keenly aware of potential systemic implications. But in simple terms, a comprehensive understanding that will help to identify and avert potential vulnerabilities is not possible unless entities and regulators are systematically monitoring, disclosing and talking about these risks. This is the key rationale for the FSB's focus on disclosure practices in the first instance.

There are two related, broader points I want to make here. First, while physical risks are obviously a very serious matter, it is transition risks that are likely to be especially important for financial entities. The developments I have spoken about today are bringing these transition risks forward. The Paris Agreement provides a very reliable signal that policy and regulatory efforts will intensify. Better disclosure standards mean that investors and markets will have more information on climate exposure and risk management and will respond accordingly. The possibility of legal liability heightens risks for companies that aren't responding – one of the many ways, including damage to valuation and reputation, that failure to be on top of this issue might manifest. As the recent legal opinion on directors duties makes clear, these are risks for corporate boards.

Second, the transition risks that stem from existing and anticipated policy and regulatory changes may not be averted or minimised even if these policy changes are delayed or do not eventuate in some jurisdictions. It may be that the latter scenario could make risks greater and more abrupt. This is because there could be either sharper, more significant policy changes and market adjustments down the track, or the physical impacts of climate change could become more severe, more likely and more unpredictable.

Now, to avoid any doubt, I am not making any comment about the appropriateness of one particular policy or mechanism. Clearly governments here and globally have a wide range of policy approaches available to meet their emissions reductions commitments. My point is that it's unsafe for entities or regulators to ignore risks just because there is uncertainty, or even controversy, about the policy outlook. Like all risks, it is better they are explicitly considered and managed as appropriate, rather than simply ignored or neglected.

Scenario analysis as the new normal

A critical implication of what I have just recounted is the importance of considering, and modelling, the potential impact of climate-related risks under different scenarios and over different time horizons. The most important scenario, in my opinion, is the sub-2 degree Celsius transition scenario that the Paris Agreement is anchored around, since that will guide much of government policy around the world.

Practice and expectations are moving beyond mere documentation of static metrics. Robust, scenario-based thinking about risks should be the new standard for risk management. Markets and investors expect to see evidence of more sophisticated analysis to identify risks and strategy for managing them. The questions investors (and regulators) will want answered are not just about "what" but "how". How do you model and identify relevant trends, opportunities and risks? How robust are your strategies given different scenarios and contingencies?

This applies to climate just as it does to a range of other emerging and established issues and risks. Or to put it another way, the same risk management disciplines apply as the do to more traditional financial and operational risks. But climate might be particularly important. Some major institutional investors have identified management of climate-related risks one of the key indicators for the quality of board-level risk management and effective long-term value creation.

I would not necessary go that far. But to be blunt, given all the developments I've flagged today, if entities' internal risk management processes are not starting to include climate risk as something that has to be considered – even if risks are ultimately judged to be minimal or manageable – that seems a pretty reasonable indicator there might be something wrong with the process. Similarly, if you're an investor and you're not already asking questions about how the companies you invest in approach these issues – perhaps you should be.

Of course, at this stage we do not expect to see uniformity of approaches or strategies. As APRA's Risk Management Review found late last year, risk culture varies substantially across entities. Our role isn't to prescribe a particular approach to risk management or regulate certain practices into existence. But we do have a responsibility to provide clear expectations, and encourage improvement where it is necessary.

Conclusion

So climate risks will become an important and explicit part of our thinking. This is absolutely consistent with the approach that is being taken by regulators overseas. I hope the remarks I've made today show that we are very much alive to this issue too.

In a sense these are unusual times for regulators. In my first 12 months as an Executive Board Member of APRA I spent lots of time talking and thinking through the social licence of regulated entities. More recently, as I've said, we've been thinking and talking more about climate risk. Providing some foresight and guidance on these sorts of emerging risks – whether they relate to climate, cyber, fintech or cross-cutting themes like social license and risk culture – and testing untested assumptions, is an important part of what we do.

So what can you expect to see from us? Firstly, something you would already be aware of is a greater emphasis on stress testing for organisational and systemic resilience in the face of adverse shocks. It could be the case that, just as we would expect to see more sophisticated scenario-based analysis of climate risks at the firm level, we look at these risks as part of our system-wide stress testing.

To be clear, this does not mean suddenly elevating climate-related issues to the top of our priority list. But it does mean joining the wider conversation that is already going on around this issue – and being explicit that climate change is likely to have material, financial implications that should be carefully considered.

Now, it is absolutely the case that entities we regulate have many risks and regulatory issues to manage. We understand the challenges this poses for capabilities and skills, especially on unconventional or emerging issues. Frankly, it is a challenge for us, just as it is for regulated entities, to manage a long list of issues, often in areas where expectations are rising, test traditional thinking and require diverse expertise.

However, we make no apologies for expecting regulated entities to rise to this challenge with us. These are shared responsibilities. When things go wrong, it reflects badly on all of us – regulators, entities, governments, and the entire financial ecosystem. For our part, we know that when regulators are slow-moving, or equivocal, it makes problems even worse.

So, if you will allow me to finish with a sporting metaphor, you can expect to see us on the front foot on climate risks, so as to make the challenges on the horizon a little clearer.