Climate Change Dec 2021

Moderator (00:13)

Welcome to another podcast from the Reserve Bank of Australia. Today, we are taking a look at the work the Bank and other financial regulators are undertaking as the world moves to net zero emissions. The Bank has responsibility for implementing monetary policy to support the economy as well as maintain financial stability and climate change is impacting both. Persistent changes in the weather, as well as a growing number of severe weather events impact the value of assets, levels of employment and the structure of the economy, so it's important we factor them into our assessments and policies.

The Bank is not alone in analysing the economic and financial impacts of climate change. Globally, central banks and financial regulators are working on this issue. In Australia, the Council of Financial Regulators, which consists of the RBA as Chair, APRA, the prudential regulator of financial institutions, ASIC, the regulator of securities and investments in Australia and the Australian Treasury are working together to better understand, coordinate and collaborate, not only on climate change related financial risks, but also the opportunities that will be presented by the transition to a low emissions economy.

In this podcast, you'll hear from a number of people from the Reserve Bank directly involved in this work: Deputy Governor Guy Debelle, Head of Financial Stability Department, Jonathan Kearns, Head of International Department, Alexandra Heath, and senior bank managers and analysts. There's no doubt that changes in the climate as well as a response to these changes will affect the macroeconomy and climate change will also affect the value of certain assets and income streams and therefore poses a risk to financial institutions and financial stability.

In October, the Reserve Bank published its Financial Stability Report, which provides an in-depth look at the financial risks associated with climate change. Head of Financial Stability Department, Jonathan Kearns, oversaw the writing of the report and joins us now. Jonathan, could you tell us more about the nature of climate related risks from the perspective of the Bank?

Jonathan Kearns (2:15)

Sure. The risks from climate change mostly fall into two categories. We've got physical risks and transition risks. Physical risks are the potential effects from more frequent and intense weather events. So things like fires, floods, droughts, and these are what we know as acute physical risks. There are also the effects from gradually emerging increases in temperature and sea level or changes in rainfall. This is what we know as being chronic physical risks. Extreme weather can be seen as a negative supply shock to the economy because it disrupts economic activity. It has an immediate impact reducing GDP and increasing prices. In contrast, chronic risks take longer to play out. The gradual warming and more volatile temperatures and rainfall could lower output and affect employment over a longer run.

The second category of risks is transition risks. These arise from shifts in policy, technology and behaviour, as we all move to a lower emissions economy. It's important to note that in Australia, we can be impacted even when these changes occur in other countries, whether this transition happens quickly and in a disruptive manner or more predictably and smoothly over time, will have a significant impact on structural change in the Australian economy.

Moderator: Jonathan, how would you rate the certainty of these risks?

Uncertainty about these risks is high because impacts of climate change emerge over a long period and we don't really know how policies, technology and behaviour could change over that long period.

Moderator (3:59)

Thanks Jonathan. We'll now illustrate the physical and transition risks to the economy and financial system. Let's take a look at two recent studies published by the Reserve Bank. The first examines how climate change affects banks. Reserve Bank, Senior Analyst, Kellie Bellrose, co-author of the study, Climate Change Risks to Australian Banks, explains. Kellie?

Kellie Bellrose (4:17)

Kellie climate change affects banks because of the impact it has on the value of assets used as collateral for loans, as well as the incomes borrowers use to repay their loans. This could result in unexpected credit losses for banks, increased claims on insurers and write-downs to the value of financial investments. Our analysis provides preliminary estimates of the possible scale risks climate change poses to banks, housing and business exposures. This approach suggests that a small share of housing in regions most exposed to extreme weather could experience price falls, which might subsequently result in credit losses. But in saying that, the overall losses for the financial system are likely manageable. Banks are also exposed to transition risks from their lending to emission intensive industries, but their portfolios appear to be less emission intensive than the economy as a whole.

Moderator (5:19)

The second study is on the impact on Australia of the transitions of our trading partners, Senior Analyst, Faye Wang, co-wrote a paper titled Towards Net Zero: Implications for Australia of Energy Policies in East Asia. Faye, could you take us through your team's findings?

Faye Wang (5:35)

So China, Japan and South Korea have also targets to achieve net zero carbon emissions around the middle of this century and those three countries account for around two thirds of Australia's fossil fuel exports. So based on emission scenarios, consistent with these commitments, we find that Australia's coal exports could decline significantly by 2050 or the more modest effect likely for liquified natural gas exports. However, both may be offset to some degree by increases in green energy exports. So the macroeconomic effect in any given year is expected to be quite small. Although the effects are likely to be concentrated in particular communities. This highlights importance to be using policy, to actively manage the transition. Of course, significant uncertainty surrounds the speed and manner in which those countries will work to achieve net zero emissions, as well as the technological developments that could change the efficiency and carbon intensity of fossil fuels.

Moderator (6:38)

Given the myriad of ways climate change stands to affect our financial system, it's not surprising that this is a key focus area for regulators. Alex Heath, Head of the Bank's International Department joins us now. Alex, can you tell us about the outcomes financial regulators are currently looking to achieve?

Alexandra Heath (6:55)

Thanks, Judy. Financial regulators are really looking at ways that they can help make sure that financial markets and participants in financial markets have the right data that they need to be able to assess climate risks that they face and to be able to value investment opportunities for the climate risks and opportunities they present. So in particular, we want to make sure that financial market participants have information that's consistent over time and across firms. This is a particular challenge in the climate sustainability space partly because our understanding of those risks and opportunities are evolving quite rapidly. And another factor is that there's a lot of uncertainty about what the future holds because we're looking at time horizons that are much longer than what we typically think about, certainly from the perspective of monetary policy. So instead of two or three years into the future, we're talking about decades into the future.

Moderator: So, Alex, what public policy options do the regulators have to assist with price discovery and the pricing of risk?

I think the first thing that we can do is establish standards. So we can issue guidance on what good risk management looks like when it comes to climate risk, for example. And we can also do things to make sure that people have the same sort of definitions on what is an activity that's going to be consistent with the transition to net zero or inconsistent: what's a green activity versus a not green activity. And that's particularly important because our understanding of these ideas is evolving and it's also true that there's quite a lot of complexity in this space because you've got to understand the science, you've got to understand the economics and getting a common understanding of those things is a bit of a tricky exercise.I think the thing that's really important here is that guidance from us is really valuable. But it's really important for us to be actively engaged with what's going on internationally with other international regulators, investors and also domestically with what pressures domestic firms feel like they're facing when they're trying to have these conversations with international investors. And again, it's ultimately about what do we need to do so that domestic firms are able to price and manage climate risks and take advantage of the opportunities that arise in a way that's understood by the international investor community. So we're all learning by doing and we're working together really successfully to that end, I think.

Moderator (9:52)

Thanks Alex. In Australia agencies on the Council of Financial Regulators, or the CFR for short, are working closely with Australian financial institutions to help manage these climate related risks and to promote informative disclosures. Deputy Governor Guy Debelle, chairs the working group within the CFR that is looking to the financial implications of climate change. So Guy, can you tell us a little bit more about this work?

Guy Debelle (10:13)

So that the work that the working group is doing in this space has a number of elements, but one of the main elements of our work to date has been the Climate Vulnerability Assessment that APRA is leading with assistance from the RBA, and also from Treasury.

The CVA focuses on the climate risk on the lending books of Australia's five largest banks and between them, they pretty much encompass all parts of the Australian economy. And because of the breadth for this scenario analysis work, our expectation is that this exercise will provide useful data and methodology for other Australian financial institutions and particularly asset managers. It should also help Australian companies with their disclosures of climate risks. The scenarios that we’re using in the CVA are based on global scenarios that has been developed by the NGFS, the Network on Greening the Financial System, so they're useful and able to be comparable across different parts of the world.

One particular element that we need to add to those scenarios though, is that there's a macroeconomic overlay that captures the effect of climate change from aggregating up the direct effects on particular parts of the economy, and that's been an area where we at the Reserve Bank have particular input. So the information provided in those disclosures is a key input into risk assessments conducted by financial institutions.

Moderator: I understand that the Task Force on Climate-related Financial Disclosures, or the TCFD, is looking to improve these disclosures. Can you tell us what is important here, in particular?

To be usable and to be effective these disclosures need to be comparable and consistent across companies, both within Australia, but also globally. And we are making sure that these disclosures are based on the disclosures put out by the TCFD which provide a guide as to what sort of information companies should be putting in those disclosures. And the TCFD provides a global framework for companies to disclose on that, and they've recently just updated and provided a lot more granular information as to what sort of information should be included there. And very recently, the TCFD disclosures are looking to be adopted by one of the main global accounting bodies to be incorporated into global financial reporting over the course of the next year.

Moderator (12:24)

Related to this is work on taxonomies and standards. Taxonomies are the words we use to accurately and consistently describe an activity or financial product. Are these products truly green? This has implications for the pricing of climate risk and investment in Australia. Turning to Guy again, what questions do the development of taxonomies raise for Australian regulators?

Guy Debelle (12:46)

There are a number of taxonomies have been developed around the world or are in the process of being developed around the world. So taxonomies help define what are sustainable projects and provide a guide as to where investment may be directed into particular sectors, particular projects, to achieve sustainable outcomes. Because these taxonomies are developed around the world, we need to make sure that those taxonomies are relevant for the Australian circumstance, because they will be used by international investors in funding projects in Australia and not all of those taxonomies are necessarily suited for the Australian circumstance.

So we are working with the financial sector within Australia to build off those global taxonomies, which are relevant for the Australian circumstance and are going to direct investment appropriately in the Australian context. And the problem with some of those taxonomies, which are out there at the moment is that they don't necessarily take full account of the need to fund a transition to a net zero economy. They often look at whether a project is either unambiguously good or bad for the environment, but actually there's a lot more nuance to it than that. But as we move through this transition, that's going to require funding for projects with varying degrees of emissions intensity. We can't be in a world where we simply shut down different parts of the economy before alternative activities or alternative sources of production are available. That's not going to achieve the best outcome.

Moderator (14:19)

As Guy alluded to, working with overseas groups, is an important part of these Australian initiatives. Anna Park, is the Senior Manager for the International Policy and Engagement Team at the RBA. The team has responsibility for working with the IMF, the G20, and East Asian and South Pacific Central Banks. It supports the CFR’s Climate Change Working Group and acts as internal coordinator for the RBA’s work on climate change. Anna, can you tell us a little bit more about the international engagement involved?

Anna Park (14:52)

Sure. Well, there's been a major step up in the focus on climate change and sustainability issues more broadly in international groups in the last couple of years. APRA and the RBA have become members of the Network of Central Banks and Supervisors for Greening the Financial System and are contributing to its work on the development of common climate change scenarios used for stress testing or scenario analysis. CFR agencies are also using their involvement in international groups, like the G20 Sustainable Finance Working Group, as a way to learn about and where needed, influence the development of emerging frameworks like taxonomies. It's important to have Australian voices as part of these conversations and to ensure that the emerging standards meet Australian needs.

Moderator (15:33)

There's obviously a lot going on to try to understand and manage the risks associated with climate change. But as Faye mentioned earlier, there are positive stories in the mix such as rising green energy exports potentially helping to offset falling demand for Australia's fossil fuel exports. Now we throw back to Guy to highlight some of the opportunities that climate change presents for the economy.

Guy Debelle (15:58)

So climate change is often presented as a risk or as a cost, but there are plenty of opportunities for Australia. So we have been an energy exporter for many decades, but energy generally in the fossil fuel intensive space or emissions intensive fossil fuels. But there is an opportunity for us to be an energy exporter in the clean energy space too. And it's an opportunity that has actually been realised today in places like Port Augusta or in the Northern Territory. And so there is an undeniable negative impact on some regions and communities as the transition to a cleaner economy occurs in Australia, but as Port Augusta shows or as the projects in the Northern Territory show, the opportunities are there for the very same communities which are potentially the most affected to avail themselves of the capacity to be a clean energy exporter.

Moderator: And what about governments?

The New South Wales government, for example, has also articulated its strategy in its Net Zero Plan to transform the energy composition of the state while providing opportunities for those regions currently most dependent on fossil fuels. A number of other states have similar plans in train. Likewise, a number of Australian companies are seeing the opportunities provided by the changing climate and are currently investing in them. So there definitely are challenges ahead in managing the transition and in managing the financial risks, but with those risks comes a great potential for opportunity and reward.

Moderator (17:24)

So there we have it. Climate change is a first order risk for the financial system that will only grow over time if not addressed. There is much work currently underway by Australia's financial regulators, to understand the situation and provide a framework to support action by companies and governments. And while there are many risks and uncertainties in a highly complex and evolving situation, there are also opportunities on that note. We end the podcast. Thank you for listening and to all who made this possible.