

‘WHY RESEARCH MATTERS’ PODCAST – TRANSCRIPT

Moderator (00:04)

Research runs deep into the heart of any central bank. It is an essential part of who we are and what we do. It informs the monetary policy process, deepens our understanding of the operation of financial markets, helps us understand the life of banknotes and more. But more than that, the way we do research matters.

Our people are encouraged to publish the findings of their research in Research Discussion Papers, on a wide range of issues to stimulate comment and discussion. We also run annual workshops and conferences, have a program of internal seminars and host visitors to foster interaction between academics, central bankers and other economic practitioners on topical policy issues.

In this podcast we are going to find out more about why research is so important, what our researchers are focusing on and how they go about it.

Our guests today are Luci Ellis, who is the Assistant Governor responsible for economics here at the Bank, Head of Economic Research John Simon, Senior Research Manager Anthony Brassil and Senior Analyst Nalini Agarwal.

To set the scene I have a question for you Nalini, why pursue economic research at a central bank? It’s a big question, but taking a step back what drew you to do research at the Reserve Bank?

Nalini Agarwal (01:19)

I think it’s the opportunity to do policy relevant research. So, we use a lot of novel and exciting data and we use cutting edge techniques to answer really important questions. So why does the economy function this way? And why does monetary policy impact businesses and households? All of this is exciting to me because I get to think about these questions and ideas in a really deep and meaningful way. I combine data and theory and it allows us to contribute to the knowledge and generate new ideas.

Moderator (01:50)

Thanks Nalini. I want to build on this and dig under the hood to really look at this from first principles. So Luci, why is research such a fundamental activity at a central bank?

Luci Ellis (02:00)

Because neither we nor anybody else knows all there is to know about how the economy works. There’s always something new to learn, and particularly so in recent times where we’ve been face with a 100-year event such as the pandemic, where we’ve been faced with a policy response that had never been tried before, such as lock downs. But even outside those extraordinary times, there is always evolution in the way the economy works, there’s always structural change, and so we need to keep learning about how the economy works.

And in order to do that, some of the things we do are more shorter term analysis, but some of the ways we need to learn about the economy take in-depth, long term inquiry and they take in-depth, long term acquisition of new analytical techniques. Some of that work can be done as part of the more regular, day-to-day monthly cycle of briefing the Board and engaging with the public, but often it needs clear space to complete that longer term deep work.

Moderator (03:08)

What, to you, makes for good research?

Luci Ellis (03:11)

I'm looking for research that's salient to our mandate. I'm looking for research that is easy to apply and explain. And I'm looking for something that tells me something we didn't already know. And that's where the ability to bring in different techniques and more in-depth work can be particularly valuable.

Moderator (03:35)

So Luci, perhaps you could tell us exactly how research helps support the Bank's mandate?

Luci Ellis (03:40)

It happens in a number of ways, but in particular I think deeper research helps us derive a better understanding of how our tools work, our various policy tools, and how those tools affect the economy and how they affect different sectors. It gives us clear space to do analysis of how different approaches to policy and different policy options might work. This is particularly relevant also for our financial stability mandate. And of course we have many other mandates too. We're the issuer of banknotes and so some of the research we've published in recent years includes work on the life cycle and longevity of banknotes and that's not something you can, kind of, whip up in day or two. You need to do a serious research project on it.

Another thing that is really important is to actually be able to keep tabs on what other researchers in our field are doing. Whether that's our colleagues in other central banks, in international organisations or in academia. And so it's really important for us to engage with and learn from those other researchers.

Moderator (04:47)

So clearly research is a really necessary part of the work of a central bank, but I'd like to understand more about how the research happens. John, you head up the department where much of this deep thinking occurs. Could you perhaps explain more about what your team does?

John Simon (05:02)

From the outside you might think that all the research department does is publish research papers, but we're very much like an iceberg; what you see on the surface is only a very small fraction of what we're actually doing.

So to give you some examples of the kind of stuff we do, we organise an annual conference, we host academic roundtables, we have seminar series where we get presenters from outside to present to staff at the Bank, we also go out and present our work to universities and other forums. We also do a lot of work internally, which is where we are writing notes that don't necessarily get publishing and we're also providing comments on the work of others within the Bank.

We are also trying to provide a model for how you can do research well in order to promote that culture of analytical excellence within the Reserve Bank. So, for example, we can provide commentary on the way people do their analysis. We also try to live that and demonstrate that ourselves.

And perhaps even more importantly, what we're really trying to do is get a diversity of ideas flowing through the Bank so we organise conferences and seminars as a way of getting people from outside the institution to come in and share those ideas and hopefully that can lead to an ongoing really rich conversation about the ideas, what's going on in the world, and the way different people are approaching that.

Moderator (06:27)

Building on this a bit, Anthony, what would you say is a typical day for a research economist?

Anthony Brassil (06:32)

I guess there really is no typical day for a research economist at the Bank. Working on our long term research projects is obviously a key output for a research economist and takes up most of our time. But there are often days or even weeks when all our time is taken up by other priorities. So we host seminars where we get academics to come and present their cutting-edge research to us and we attend academic conferences all over the world to both present our own research and receive external feedback and to learn from the research of others.

We then use what we've learnt to help the work of others inside the Bank. So we hold work in progress seminars and brainstorming sessions to ensure that people across the Bank are using the most appropriate methods and data to answer all of our important policy questions. And it's expected that all staff within the Bank circulate their work to others for comment before it's all finalised.

And actually a big part of my job in particular is just ensuring we are answering the right questions in the right way, which means I am regularly in contact with the Human Resources and Information Technology areas of the Bank to ensure we have the right people and the right technology to keep up with the cutting edge of research.

Moderator (07:49)

So, it's not just about monetary policy, though, is it? It's actually broader than that. Is that the case?

John Simon (07:54)

You might think, yes, we're at the central bank, all we're doing is monetary policy, but I guess there's two aspects to that: one, we're a public institution and so we have a responsibility to contribute to general knowledge about the Australian economy, but the other aspect is that monetary policy, in order to do that well, you really do need to understand everything else that is going on.

So, for example, there are interactions between monetary policy and fiscal policy. So when we raise interest rates this has consequences for interest rates on government bonds, government spending, and monetary and fiscal policy very much are working together and so we need to be able to anticipate that and understand that we are not operating in a vacuum.

Moderator (08:38)

You actually have a number of research priorities and obviously monetary policy is one of them. But perhaps if you could talk to some of the others?

John Simon (08:45)

So at these times post-COVID, one of them is monitoring the effects of COVID on the economy. Now this is more than just looking at what's happening today, looking at what's going on with shutdowns or growth today. It's very much thinking about what are the longer term consequences of COVID.

When you have an event like the COVID pandemic, it's inevitable that many things will change as a consequence. I mean, we are doing many things today that we never thought we'd be doing perhaps two, three years ago. Zoom conversations, meetings, are all over the place and people were thinking it would take 10 years before video conferencing would take off. It took off in two weeks perhaps. And the

consequences of that for productivity, for remote working, were really large. And so that is going to have an ongoing effect on, perhaps, the way we do work, what people's preferences are over where they live, so we changes in the housing market as lots of people move to regional areas. We see some people managing to work from anywhere in organisations.

But we also have other effects, which is, for example, the experience of lockdowns affected what people could do. They couldn't consume services anymore, they couldn't go out to restaurants, they were buying all their food in and that could well have long term effects on what people consume and how they do it.

Moderator (10:09)

And I think one of the other priorities is the household sector and financial stability, a topic of, ongoing interest in Australia. Could you talk to that one?

John Simon (10:18)

Obviously, an Australian obsession is housing and house prices and indeed the commentary about monetary policy changes is always about what is going to happen to mortgage payments, what's going to happen to house prices, and so it's very important that we understand that. But I perhaps want to emphasise that that's not the only channel through which we have an effect on the economy. Obviously we need to understand that and it's a very important effect and one of the reasons for that is it has consequences for financial stability. So this isn't really what's happening to the average, this is really what's happening to the tails, what's happening to people who might have borrowed perhaps just a little bit too much rather than what's happening to the average.

Moderator (10:59)

Coming back to Anthony and Nalini to hear about some of the specific research projects that are happening in some detail. I understand that you recently completed some extensive research that focused on adding a banking sector to MARTIN, the RBA's macroeconomic model. I believe effectively it adds a feedback loop between the banking sector and the rest of the economy to see how they influence each other during a downturn. Why did you feel, in particular, that this research was important?

Anthony Brassil (11:26)

At a very high level, I guess the lack of financial sectors in macroeconomic models prior to the global financial crisis was actually a kind of source of embarrassment for the profession. I guess on one hand it's kind of understandable. Most of our macroeconomic models are designed to understand what happens in the economy most of the time and thankfully financial crises just don't happen that often. But given how costly they are when they do happen, I think the profession realised it is worth devoting more resources than we historically have to understanding how these crises manifest and how both monetary and, more recently, macroprudential policies can reduce the frequency of them happening and the damage that they do when they do happen. And that's exactly what this research project tries to do.

So, the existing MARTIN model already has a rich understanding of how the economy develops over time in response to all the unexpected stuff that happens in the economy and so what we really wanted to do was just to understand was how much the Australian banking sector might amplify sufficiently large shocks to the economy by reducing their supply of credit to the economy precisely when the economy is already in a really bad state.

Moderator (12:40)

And Nalini, you're currently working on some rather topical research looking at wages microdata from the ATO's single touch payroll. Can you tell us more about this research?

Nalini Agarwal (12:50)

Yeah, absolutely. So an important new source of data that we have now access to is single touch payroll data, or STP. So what STP is, it's a new reporting system in Australia that captures data on payslips of virtually every employee in Australia. So whenever a firm runs its payroll, the data on how much each of its staff were paid, including wages, overtime, bonuses, superannuation, are all sent to the Australian Taxation Office. The ATO, they collect this data but we get access to it in a de-identified and confidential way and we access it remotely through the Australian Bureau of Statistics.

Just to give you an idea of how large this dataset is, we get access to about more than 1 billion data points since 2020 and what's really epic about this data source is that it's available in close to real-time. So using this new data source my colleague James Bishop and I have developed an experimental model of labour cost growth, or what we refer to as compositionally adjust average earnings from STP, which is actually quite a mouthful.

Moderator (13:52)

But very useful by the sounds of it. So what are we actually hoping to learn from this research?

Nalini Agarwal (13:58)

So as the name suggests, what James and I are hoping to learn is how average earnings in Australia have tracked over time in a timely measure. So this reflects our broader research priority of monitoring the effects of COVID-19 on the economy.

Moderator (14:12)

What have you actually discovered based on the research?

Nalini Agarwal (14:15)

It's experimental, but what we've tentatively concluded is that average earnings per job is rising by around or slightly above pre-pandemic rates and we're hoping that it provides a reasonable signal that allows us to add to the suite of resources used by the Bank to assess labour cost pressures in the economy.

Moderator (14:35)

The Research Department provides a very important function in supporting the rest of the Bank. John, could you perhaps talk to that point a bit?

John Simon (14:43)

Yeah, I suppose this is, going back to the iceberg analogy, a lot of what we do is, even more than the direct stuff we do – that is doing research or helping people with their notes, providing commentary on their research – is as much about the culture and the way we do things. Because I think when you're doing research it's very hard to know 'have I got this right' but you can have confidence if you've gone through the right process. If you've established a robust process whereby you make sure you get comments on it, you expose it to scrutiny, you engage in discussions with people outside and inside the Bank, that way you make sure you've got the widest range of views, you can find flaws in your initial draft research and you can make it better. And a lot of what we're trying to do is establish a pattern for how you do research so that you can have confidence in the results.

And this is really part of the Bank's core values of intelligent inquiry and analytical excellence; the way we do it is just as important as what we're doing.

Moderator (15:52)

And that's internally working with the rest of the Bank, but also collaboration outside of the Bank is important for research. Can you talk to that?

John Simon (16:00)

Absolutely. I think we are a conduit, or we are a channel between the academic community, mostly, outside the Bank, and the researchers inside the Bank. And if we were just talking within the Bank there's a danger that we would just be talking to ourselves and there's a danger that you might end up with a bit of group think. But by going out and talking to the wider academic community we can get those perspectives and make sure that there isn't something we've missed. By getting those diversity of views it also means that we can keep up with what is happening in the general economics community because there's only so many papers you can read and if you're talking to other people, they can give you a summary, they can expose you to those ideas.

Anthony Brassil (16:50)

The work wouldn't happen without collaboration. As I mentioned before, we thankfully hadn't had a banking crisis in Australia in decades because they thankfully don't happen that often. But with no recent experience on which to base our understanding we had to rely on the work of others and the knowledge of others to actually try and understand how the banking system might amplify downturns in Australia.

And so our approach is actually based off the banking sector models that are constructed by our Domestic Markets Department and Financial Stability Department, and they use things like liaison information and data collected from APRA, which is collected from the banks themselves, to kind of construct a best guess of how large downturns could lead to loan losses and how banks might respond to that.

Yeah, I'm also involved in another project to understand how people form expectations for the future and what this means for how we should set monetary policy. And for that project I and another RBA colleague have teamed up with Chris Gibbs who's an expert in understanding expectation formation in macroeconomic models and is a senior lecturer at the University of Sydney. So collaboration is pivotal to ensuring we utilise both all the expertise we have across the Bank and the expertise of our colleagues in academia.

I guess this kind of direct collaboration is really only the tip of the collaboration iceberg, so to speak. It's the whole reason we present our work at universities and conferences, why we circulate our work for external comment before it becomes an RDP and why we publish our code with RDPs so people who aren't directly part of the work can test our ideas. So, for example, with our project with the MARTIN model, we really want people to run the MARTIN model with our banking sector in it and we want them to see how it works, we want them to run their own scenarios, we want them to test their own theories, and if anything we have done doesn't pass muster we want them to let us know.

Moderator (18:59)

So that sounds very interesting and an exciting time to do research. Would that be the case?

John Simon (19:04)

Yeah, I mean, I think, it's ... what is the Chinese proverb or curse? 'May you live in interesting times.' [Moderator: Yes]. These are really interesting times and I think you can kind of get a bit stale when everything is moving along smoothly and there's no real shocks happening to the economy. What we've got now is nothing like that and that means there are just so many questions that we don't have the answers to. So I think this is a really exciting time if you happen to be a researcher because there's no shortage of questions, what we need is more people doing that research to give us the answers.

Moderator (19:40)

So there we have it. It's pretty clear why research is not just something we do as a central bank, but a core part of who we are as an organisation. It supports all facets of the Bank's mandate and our responsibility to support the public good.

Thank you for listening.