

Speech

# A Matter of Diversity



RESERVE BANK OF AUSTRALIA

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In many dimensions of our lives, there is increasing recognition of the importance of diversity. In addition to the social inclusion it fosters, diversity enriches the quality of inquiry, problem solving and decision-making by bringing more views to the table. Consequently, we now expect to see diversity in our workplaces, on our boards and among decision-makers more generally. When it is not evident, we ask why.

The economics profession is increasingly asking why it is not more diverse. We can start looking for answers by examining a person's formal introduction to economics – their initial enrolment in economics as a subject. In Australia, economics was once widely offered and widely chosen but is now much less so. Consequently, over the course of a generation, there has been a dramatic fall in the size and diversity of the economics student population – both at school and university.

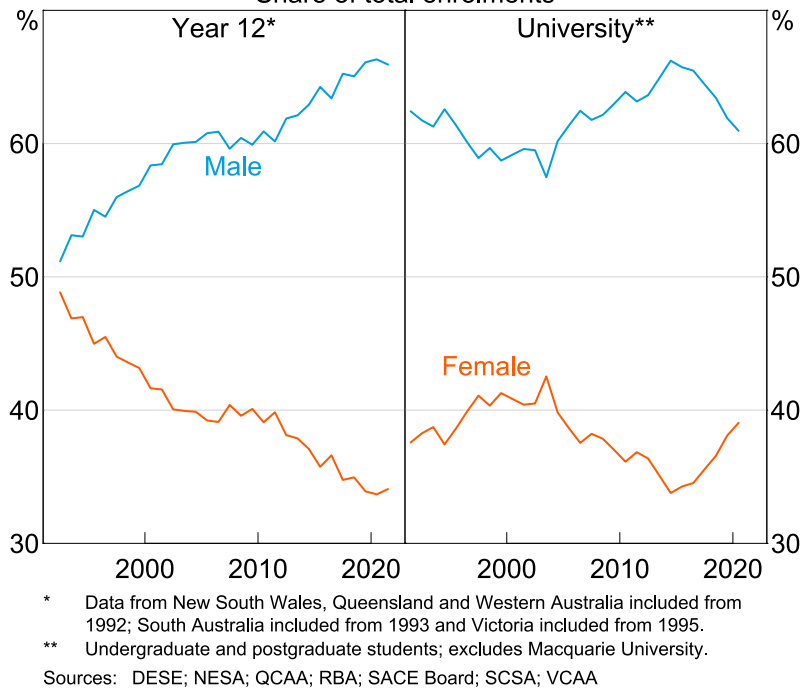
The Bank has previously documented these trends in economics enrolments and sought to explain their key drivers.<sup>[1]</sup> But what are their implications? One way to think about this is to reflect on the prominent figures in Australian economics who have shaped our profession and contributed to important public policies but who today would have much less access to economics education. We contemplate the loss of such voices and outline the Bank's approach to encouraging broad-based participation by students in economics. But first, let's look at the current landscape of economic enrolments.

## Falling diversity

Since the early 1990s, the study of economics has been falling from favour. Enrolments in Year 12 economics in Australia have fallen by around 70 per cent over the past three decades, and enrolments at university have largely flat-lined – despite substantial growth in the total student population.<sup>[2]</sup>

The change is stark by sex (Graph 1). On the left hand panel, we can see that Economics was once studied in roughly equal numbers by males and females at school, whereas now males outnumber females by around two to one. A big gap always existed at university, on the right. While our latest data point to a pick-up in female participation, it has only returned to its original imbalance, with nearly twice as many males studying economics as females at university.

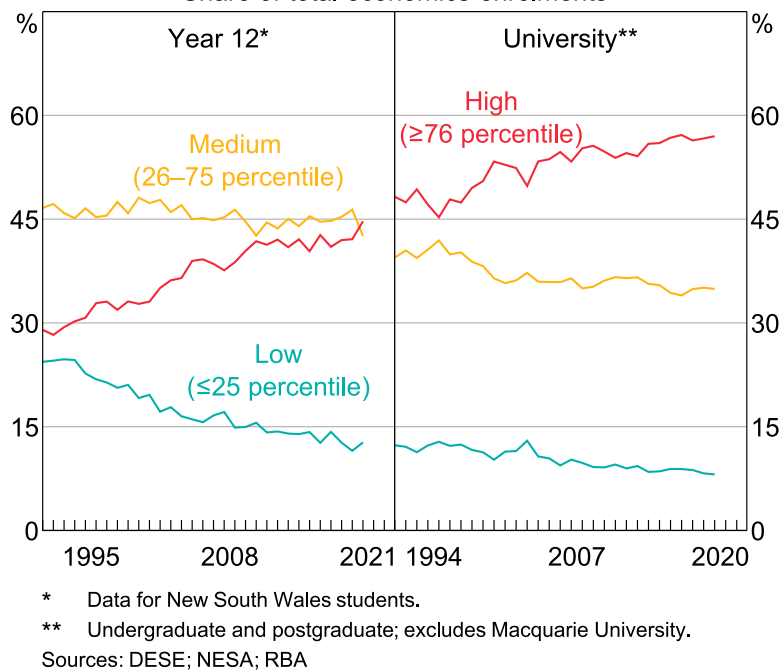
**Graph 1**  
**Economics Enrolments by Sex**  
 Share of total enrolments



Also stark is the fact that students from high socio-economic backgrounds make up a growing share of Economics enrolments at school, while those from low socio-economic backgrounds make up a steadily falling share (Graph 2). Some of the trends observed at high school become even more pronounced at university, with tertiary economics courses having among the largest shares of students from high socio-economic backgrounds while rival fields have become more inclusive. Furthermore, there has been an increased geographic concentration of both the schools and universities that offer economics.<sup>[3]</sup>

Those who have reached influence in the economics discipline and public policymaking still reflect, in part, the diversity of enrolments evident in their student life. However, of concern is whether the current profile of enrolments – with its significantly reduced diversity – will diminish the health of the discipline and the quality of future public policymaking.

**Graph 2**  
**Economics by Socio-economic Status**  
 Share of total economics enrolments



## Why does diversity matter?

As a discipline, economics is ultimately about the maximisation of welfare – finding the optimal allocation of scarce resources to meet our needs and wants. If economics provides the conceptual frameworks to optimise our allocation of resources, why should diversity among economists matter?<sup>[4]</sup> Because economics is a social science, not an exact one. As we move from the abstract notion of welfare maximisation to practical policymaking, there are many questions to be asked and many ways of answering them. What are our needs and wants? What precisely is to be optimised? And over what time horizon? What particular economic frameworks are to be chosen? It is in the asking and answering of questions where diversity matters. The most skilled and well-intentioned economists may have difficulty asking the questions or choosing the frameworks from which all intended social groups derive maximum benefits. However, greater diversity among economists will diminish this risk, with the process of enquiry, problem solving and decision-making being enriched by an increased range of perspectives and techniques.

The most commonly examined dimension of diversity is sex, because statistics about it are usually readily available. Also important are age and cultural heritage, along with experiences associated with socio-economic status, access to education, and where someone has lived.<sup>[5]</sup> Some characteristics, such as sexual orientation, might well be important but are less often collected. And there will be cognitive diversity that comes from the different thought processes and personalities that make us all unique – though this too is harder to identify.

Let's first consider some of the key dimensions of diversity that have bearing on how individuals participate in economics. We will then take a closer look at some economists who display different aspects of diversity and examine the contributions they have made to the economics profession and our public life.<sup>[6]</sup>

## Women in economics

The falling share of female students enrolled in economics is one of the most striking aspects of the decline in diversity in the discipline. It will also affect the composition of the economics profession for years to come. And

yet women in economics have some distinctly different perspectives to their male counterparts from which the discipline and public policy can benefit.

For instance, in society at large, women perform the majority of unpaid work, child rearing and the management of households. This shapes their insights into the economic value of this work – and the barriers to participation in economic activities when systems are not designed to encourage female entry.

Women have been in the vanguard of those who argue that the economic value of unpaid work should be measured. Phyllis Deane first raised this issue in the 1940s while working with Richard Stone, the founder of the national accounts system we use to obtain today's measures of gross domestic product (GDP). More recently, Marilyn Waring and Mariana Mazzucato have challenged us to think about how economic value is defined, who decides what it means and who measures it. Many female economists have argued that not accounting for unpaid work biases public policy because the 'invisibility' of this work reduces the perceived importance of actions that support those who provide it. Julie Smith is among the female economists in Australia currently adding to the measurement debate about unpaid work and the limitations of published GDP.<sup>[7]</sup>

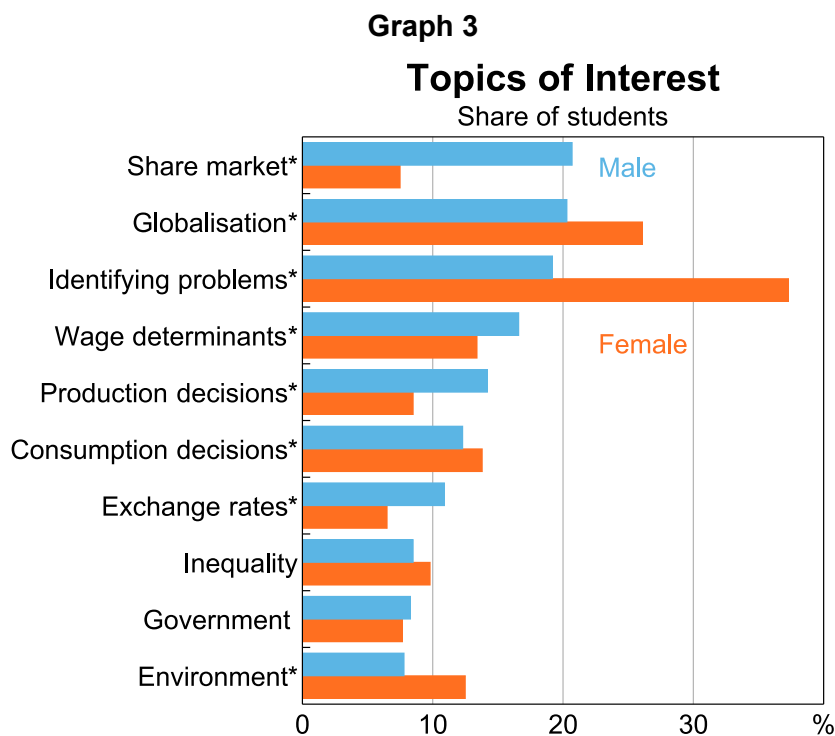
Female economists have also taken a leading role in understanding the choices faced by those who do unpaid work (with or without paid work), along with equitable and efficient means of supporting them. In this regard, Meredith Edwards has influenced many aspects of our daily lives through her design and implementation of social policies.<sup>[8]</sup> In fact, in this area she has been described by one leading academic as 'arguably the most important woman in post-war economics in Australia.'<sup>[9]</sup>

As a mother it was clear to Edwards that the choices faced by many women, including herself, were less about the standard assumption of a trade-off between 'work and leisure' than between 'paid and unpaid activities.'<sup>[10]</sup> She also questioned the assumption that families necessarily share their income or that payments would be appropriately distributed to them within a family unit. She influenced payments that we now take for granted and have helped alleviate poverty, particularly for women and children. These include payments made to the carer (who is typically female), rather than to the head of a family unit (who is typically male). Specifically, in the 1980s, Edwards designed Australia's child support payments, where the non-custodial parent pays the custodial parent child support according to their taxable income. This scheme was ground breaking in raising the economic welfare of single-parent households – most often headed by women who had less earnings capacity than men and faced more barriers to labour force participation. This form of income-contingent payment paved the way for her work with Bruce Chapman on HECS (the Higher Education Contribution Scheme), with Chapman designing the scheme and Edwards on the HECS Committee that advised the Minister.<sup>[11]</sup> Without this foundational work, arguably the government would not have been equipped to activate other income-contingent measures so quickly – for example, the JobKeeper Payment during the COVID-19 pandemic.<sup>[12]</sup>

Female economists have also been in the forefront of research into the economics of gender, family structures, discrimination, education and childcare – often with an assessment of economic consequences over the course of a life or between generations. The body of female economists in this area is large, but mention must be made of Alison Booth who is Australia's most widely cited female economist,<sup>[13]</sup> both on these issues and a range of others (including labour market dynamics and the economics of trade unions).

A recurring theme in the research by female economists has been barriers to participation in the labour force, including the finding that the cost to government of subsidies for high-quality childcare can be more than compensated for by the economic benefits of more women being able to work. Danielle Wood has been among the leaders of this debate in Australia and has argued for simple subsidies for high-quality childcare that overcome disincentives to work. She played a key role in this being part of our government's early response to the economic impact of COVID-19 – with female-dominated industries being central to the economy's ability to cope with the public health crisis.<sup>[14]</sup>

While female economists have taken the lead in the analysis of many issues that directly affect women, their influence is much broader. Importantly, male and female economists are often interested in different economic issues – with differences evident early in their study of economics. In a Bank-led survey of Australian high school students, Livermore and Major show how females are more interested in economic topics related to identifying problems, globalisation, inequality and the environment (Graph 3).<sup>[15]</sup> These differences are evident elsewhere with prominent surveys of economists in Europe and the United States finding that females report a stronger interest in environmental protection and equality of labour market outcomes, along with more support for empirical evidence over theoretical principles.<sup>[16]</sup>



\* Statistically significant difference at the 5 per cent level after controlling for school type, socio-economic status and language.

Source: RBA

These differences in the economic priorities and interests of females demonstrate how addressing the decline in female participation in economics could have a material impact on the discipline and the policy questions it seeks to address. In fact, looking at the differences in topics of interest to young females (particularly problem solving, globalisation and the environment), does falling female participation in economics put us at risk of losing the next Kerry Schott? She has led the identification of problems in Australia’s utilities markets and contributed to solutions that provide greater energy security and better outcomes for both consumers and the environment. Or the next Sue Richardson? She has had a significant practical influence on the determination of fair work conditions and minimum wages in Australia and sustainable development. And are we losing the next Mardi Dungey? She was another great problem solver, focused on how to model an economy and the international influences on it. (The late Mardi Dungey, a member of the Bank’s Educators Advisory Panel, is also remembered for her commitment to economics education.)

While differences in male and female participation in economics have received a lot of attention, other areas of diversity are important too.

## Diversity in socio-economic status

Interest in economics issues can be expected to vary across the spectrum of socio-economic status (SES). Certainly, through the Bank’s public education program and our survey of high school students, we observe that

students from high schools with lower SES are, unsurprisingly, more interested than other students in inequality. But like female students, they are also more interested in problem identification and the environment.<sup>[17]</sup> Exclusion of these voices would diminish the collective effort of the economics profession in seeking to understand and address these and other socially important issues.

The measured SES of schools is based on four key factors associated with educational advantage: parental occupation; parental education; school remoteness; and share of Indigenous enrolments. There are many additional factors that influence an individual's socio-economic status and their access to economic resources or social position. Those who have experienced disadvantage, or witnessed its effect on their families and communities, can bring new insight and energy into how it can be addressed. This is so for some leading labour market economists and has motivated investigations into labour market theory, measurement and policy.

Bob Gregory is one of Australia's most influential economists with particular expertise in labour markets.<sup>[18]</sup> He was raised in Coburg in Melbourne by parents who had moved there from the poorer working-class suburbs of inner Melbourne where they retained strong connections. His upbringing was shaped by the Great Depression, which had robbed his parent's cohort of economic opportunities and reduced their expectations of educational attainment. This made completion of high school a rarity for students of Gregory's circumstance.<sup>[19]</sup> To this was added the challenge of polio he contracted as a teenager and which greatly disrupted his schooling. Nevertheless, he was motivated to complete school and go to university (even though none in his family had attended school beyond 14 years of age). While studying macroeconomics at university he was 'blown away' by frameworks that could explain his family's economic experience and the policy failures of the Great Depression, something he could not understand that politicians had 'allowed to happen'. Consequently, much of Gregory's work has been to inform how we think about work and welfare – how we measure labour market variables and how we analyse labour market outcomes. He has been a leader in the analysis of persistent unemployment, underemployment, youth unemployment, neighbourhood effects on labour market success, wage bargaining, wage differentials, and the value of disability support pensions. His work has contributed to the quality of labour market statistics that we use today and public policies that have directly affected our opportunities to work or receive welfare. (Economics is no longer taught at Coburg High School.)

Martin Parkinson's story also contains themes of disadvantage and the desire to address it. He rose to public prominence as a Secretary to The Treasury and later the Department of Prime Minister and Cabinet. He has described himself as a 'working class kid', born in Stawell and raised in country towns around Victoria. In his era, Parkinson explained, if you were working class 'your meals could be variable, relationships insecure and entertainments sparse', similar to the way many chronically disadvantaged people live today.<sup>[20]</sup> He didn't initially go to a high school, but to a technical school that prepared students for unskilled, semi-skilled or trade-related roles – a path that typically reduced opportunity and aspiration for university studies. However, his parents moved to Salisbury in Adelaide where he attended the nearby public high school and, with a lack of pre-requisites for other subjects, was required to study economics – a subject he had never heard of before. He said that economics revealed to him why some people were poor and how poverty could be endemic through generations – and a greater understanding of the tools to address such disadvantage. Parkinson played an important role in setting the fiscal incentives that build human capital, enhance economic welfare, repair budgets and address climate change. He served 10 Australian Prime Ministers. (Economics is no longer taught at Salisbury East High School; in fact, it is now taught at only a handful of public schools in South Australia.)

## Displaced peoples

There is an additional and very particular form of social disadvantage that matters for diversity: displacement from one's country of origin. It is something that we see concentrated in lower SES schools. In these schools economics is not widely offered. But where it is offered, we find some vibrant high-performing classes, including

ones that have overcome the challenges of the pandemic to achieve significant improvements in their academic attainment.

In the Australian economics profession some of our greatest contributions have been made by people who have been displaced. The collapse of Afghanistan and the invasion of Ukraine remind us of the great displacement that occurred during the Second World War. It is worth recalling that as a result of this war, a group of Jewish emigres to Australia had a profound influence on the economics discipline here – on economic ideas, the standard of economics education and research, and in public policy. They would become esteemed professors of economics: Heinz Arndt, Helen Hughes, Geoff Harcourt, Fred Gruen and Max Corden. Today I will speak of Max Corden, who is still alive, and his closest friend, Fred Gruen.

During the 1930s, Corden's family had foreseen the crisis to come for Jews in Germany and secured an Australian visa; after the release of Corden's father from detention in 1937 they sailed to Australia. Meanwhile, Gruen had benefited from the opportunity to go to boarding school in England, but with the onset of the Second World War it was not feasible for him to return to his homeland of Austria. By 1940 he was interned. He was later bound for Australia with other internees on the ship *Dunera* before being interned again at Hay in New South Wales in a camp that would become renowned for its great 'intellectual atmosphere.'<sup>[21]</sup> Both men would have a major influence on Australia's trade policy (though their interests in economic policy were wide-ranging). Corden describes his two direct contributions to trade policy as the change in measurement from nominal to effective protection in Australia, and the case for tariff reform with an accompanying exchange rate adjustment.<sup>[22]</sup> Gruen was also focused on the benefits of free trade and the design of policies to support it. He played the key role in securing the 25 per cent reduction in tariffs applied to Australian imports in 1973. Together, Corden and Gruen did much to dismantle trade barriers, open Australia's economy and drive reforms that would substantially increase the nation's economic prosperity.

## Geographic diversity

There is a final dimension of diversity I want to talk about that receives little attention but is important in an Australian context. It is geographic diversity. Compared with the early 1990s, the subject of economics is offered in far fewer locations than before – both at school and at university – with this geographic concentration presenting a physical barrier to participation that can be difficult to overcome.

The lived experience of a physical place can shape an economist's perspectives. Former Secretary to the Treasury, Ken Henry, speaks of his life in Taree, on the mid-north coast of New South Wales, as the son of a timber worker for a state-owned forest.<sup>[23]</sup> He describes his profound realisation, at 13 years of age, that much of the old hardwood cut by his father – which takes hundreds of years to replace – was being felled unnecessarily and left on the forest floor, while selected timber was sold for a trifling sum. Henry's exposure to the enduring damage of deforestation near Taree focused his mind on the role of government in setting frameworks and incentives for the pricing of assets that are valued by current and future generations – something we can recognise through his extensive work on taxation reform, his commitment to a resource rent tax and his proposal for a national emissions trading scheme.

Happily, Taree High School still offers economics. However, high school teachers in New South Wales have a saying that economics is not taught 'west of the Dividing Range'. We looked at this proposition and it's not too far from the truth. When we examine the geolocations of schools that offer economics in the state, and their enrolments, we find that only around 1 per cent of enrolments in Year 12 Economics are clearly west of the Dividing Range, and only around 4 per cent when we include some western slopes. At the same time, geographic concentration has been occurring at university; of the diminishing number of economics courses in the country, over half of them are now only available at universities in New South Wales or the ACT.

Over the years, Reserve Bank staff have come from across the country. It is well known that our Governor, Phil Lowe, comes from Wagga Wagga and our Deputy Governor, Michele Bullock, from Armidale – major regional centres where economics is still taught. Other staff have come from further afield. However, regional connections are much less likely in future, given the declining participation in economics in non-metropolitan Australia.

Former Governor Bernie Fraser comes from Junee in the Riverina. He describes his upbringing there, in a hardworking family of limited means and six children, as one that ‘exposed him to scarcity’, but also to a ‘seemingly benevolent welfare system’ that provided support to his family through a child endowment payment.<sup>[24]</sup> His jobs on a variety of local farms during his school years also exposed him to the impact of seasonal variations in economic activity as well as global developments on the prices of commodities. This fostered his interest in economics, particularly macroeconomics, with its relationships between different sectors of an economy and the transmission of economic shocks. With an economics teacher temporarily unavailable at his school, he studied economics by correspondence (at another regional school in the Blue Mountains). Fraser said that his great interest in economics was ‘its utility in contributing to raising living standards’ – something that he would pursue in his later life as both Secretary to The Treasury and Governor of the Reserve Bank. (Junee High School, and many like it in regional Australia, have long stopped offering economics.)

## Addressing the issue

Since introducing the public education program, the Bank has observed that there are distinct demand-side and supply-side factors that weigh on a student’s decision to choose economics and thereby inhibit diversity. Both factors need to be addressed.

On the demand side, there is much to be done to shift perceptions about economics. Too many students don’t know what it is and how it might be useful to them. In particular, students often think that economics relates to a relatively narrow range of topics when the discipline is, in fact, broad. At least at high school, we know that the topics most commonly associated with economics are of greater interest to male students. Some of the topics of greater interest to female students, and those from less-advantaged backgrounds, are not always recognised by them as being in the field of economics. So these students don’t realise that economics is for them – and could empower them to contribute to debate, even policy, about issues of interest or concern. This creates an important role for advocacy of economics as a broad discipline, one that provides tools for analysing many issues. In fact, we need to emphasise these tools, because the analytical skills acquired in the study of economics are rewarded in the labour market and equip the student well for the future of work.<sup>[25]</sup>

We also need to think about when students are exposed to economics and must make a decision about choosing to study it, whether that is initially at high school or at university. Each of these decision points is a door that we don’t want them to close. At the moment, students are turning away from economics – including those with high ability and even many with initial curiosity about the subject. Keeping these doors open matters as students move from their middle years of high school to choosing economics at senior high school, and again as they enrol at university and navigate their path to graduation. We want students to be engaged with economics, understand its relevance and be confident in their ability to study it. And we want students to see people like them as economists, and to hear their stories.

On the supply side, we need to do more to ensure that economics can be a choice for students because it is widely offered and well taught – at school and university. Educators need to be equipped to teach it, particularly at high school where so many are now teaching out-of-field or have limited access to timely economic resources with an Australian context. Education authorities need to think about the economics curriculum – making sure that economics can be grasped by students as something that explains the world around them, enlivening it with relevance and clear application. And educational institutions need to be more aware of the role that economics plays in contributing to economic literacy in society, a more effective citizenry and the design of good public policy.



Addressing both these demand- and supply-side issues requires relentless advocacy and targeted interventions. There is perhaps much to be learned from other disciplines that have already confronted a decline in engagement and are reversing it. Supporting economics students and educators is among the strategic priorities for the Bank. We look forward to continuing to work with you in our shared aim of building a robust and diverse body of economics students.

Thank you.

## Endnotes

- [\*] I would like to thank those who have shared their experiences and insights, in particular Professor Bob Gregory of the Australian National University, Professor Meredith Edwards of the University of Canberra, Professor Deborah Cobb-Clark of the University of Sydney, David Gruen of the Australian Bureau of Statistics, Martin Parkinson (Chancellor) of Macquarie University, former Governor Bernie Fraser and Leonora Risse of RMIT. I also want to thank Luci Ellis, Tanya Livermore, Richard Evans and Ryan Couston for assistance with the preparation of this talk.
- [1] For more on trends in enrolments, see Dwyer J (2018), *'What Happened to the Study of Economics?'*, Address to the Business Educators Australasia Annual Meeting, Sydney, 26 May. For detailed analysis of students' perceptions, see Livermore T and M Major (2020), *'Why Study (or Not Study) Economics? A Survey of High School Students'*, *RBA Bulletin*, June; Livermore T and M Major (2021), *'What Is Driving Participation and Diversity Trends in Economics? A Survey of High School Students'*, RBA Research Discussion Paper No 21-06.
- [2] As measured by the sum of undergraduate and postgraduate students, but excluding enrolments at Macquarie University, which changed its criteria for classifying a course as economics.
- [3] For a discussion of developments in economics enrolments at university and factors influencing course availability, see Dwyer J (2017), *'Studying Economics: The Decline in Enrolments and Why it Matters'*, Address to the Business Educators Australasia Annual Council Meeting, Sydney, 29 July.
- [4] This section has benefited from a conversation with Professor Gigi Foster.
- [5] For more on categorising dimensions of identity, see Haldane A (2016), *'The Sneetches'*, Speech at the Scottish Business Friends Dinner in Aid of BBC Children in Need, Edinburgh, 12 May.
- [6] In doing so, I am inspired by Lael Brainard (Vice Chair, US Federal Reserve), who has motivated graduates with examples of path-breaking economists from diverse backgrounds who overcame barriers to influence debate and decisions about economic issues.
- [7] Smith applies accepted international guidelines for calculating national income and production to value a uniquely female form of unpaid work – breastfeeding – and finds it to be non-trivial. Her work is often used to explain the conceptual and practical limitations of published GDP and in advice to international health organisations.
- [8] For case studies of Edward's social policy work and how she went from 'problems to actions', see Edwards M, C Howard and R Miller (2001), *Social Policy, Public Policy: From Problem to Practice*, Allen & Unwin.
- [9] According to Professor Bob Gregory, who also notes that much of the influential work of Edwards was done while at the Department of Prime Minister and Cabinet, with public servants typically having limited visibility.
- [10] This paragraph is based on conversations with Meredith Edwards and Bob Gregory.
- [11] Edwards also developed AUSTUDY payments to students – again, focusing on their financial status as individuals and reducing the age of independence so that more students experiencing financial hardship could be eligible for support.
- [12] An observation made by Bob Gregory.
- [13] As recorded in RePEc.
- [14] For more details, see proposals for economic recovery from the pandemic in Grattan Institute (2020), *'Cheaper Childcare: A Practical Plan to Boost Female Workforce Participation'*, Report, August.
- [15] Livermore and Major (2020), n 1.
- [16] For two comprehensive surveys, see May AM, MG McGarvey and R Whaples (2014), *'Are Disagreements Among Male and Female Economists Marginal at Best? A Survey of AEA Members and their Views on Economics and Economic Policy'*, *Contemporary Economic Policy*, 32, pp 111-132 and May AM, MG McGarvey and D Kucera (2018), *'Gender and European Economic Policy: A Survey of the Views of European Economists on Contemporary Economic Policy'*, *Kyklos*, 71(1), pp 162-183.

- [17] In fact, across the Bank's research program we find broadly similar themes in engagement and confidence in economics between female students and students from less-advantaged backgrounds.
- [18] This paragraph is based on conversations and personal correspondence with Bob Gregory: Gregory B (2022), 'Diversity in Economics – RBA Query', Email to J Dwyer.
- [19] Gregory explains that his parents were required to sign an agreement committing that he would remain at school until he was 16 years of age because the school did not want to provide for those who might 'drop out'.
- [20] Parkinson M (2019), 'Valedictory Speech – The Past is a Foreign Country', National Gallery of Australia, 26 August.
- [21] This situation arose because interns on the *Dunera* included refugees once employed by Cambridge University and those once employed by the London School of Economics who had been evacuated to Cambridge earlier.
- [22] As described by Max Corden in his autobiography: Corden M (2017), *Lucky Boy in the Lucky Country*, Palgrave Macmillan, pp 167–177.
- [23] Henry K (2001), 'The Memory of That Afternoon Has Troubled Me for All of the Last 30 Years', Address to the Master of Economics 30 Year Reunion, ANU – 2001, Australian National University, 21 September.
- [24] This paragraph is based on personal correspondence with Bernie Fraser: Fraser B (2022), 'Diversity in Economics – RBA Query', Email to J Dwyer.
- [25] Heath A (2017), 'Skills for the Modern Workforce', Remarks to the Career Education Association of Victoria Conference, Melbourne, 1 December.