

# **Lifting diversity and inclusion in economics: How the Australian Women in Economics Network put the evidence into action**

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## **Abstract**

Women comprise around one-third of the economics profession in Australia. This figure has not budged for several decades and there are indications that females' share of students in the education pipeline is shrinking. Women's under-representation in economics is evident across the public, private and academic sectors, and is most acute among senior levels.

In response to the persistent under-representation of women in the economics profession in Australia, the Women in Economics Network (WEN) was created in 2017 as a nationwide, multi-sectoral association for female economists in Australia, as part of the Economic Society of Australia. Though still in its infancy, WEN's impact is evidenced by an increase in females' share of ESA membership from 25 per cent to 40 per cent within a year of WEN's creation. Female memberships with the ESA rose by 90 per cent.

To support broader global efforts to improve diversity and inclusion in the economics profession, this paper provides a statistical picture of women's representation in economics in Australia and the evidence-based steps taken to establish WEN and to design its initiatives. WEN's impact is evaluated across a range of quantitative and qualitative metrics. The evaluation includes a case study of WEN's mentorship program for university students that was delivered as a behavioural intervention and evaluated as a randomised control trial. Drawing on practical experiences in combination with research insights, the paper also identifies some of the challenges encountered and the lessons that can be shared with similar organisations globally that are pursuing diversity and inclusion goals.

**Keywords:** gender equality; economics; diversity and inclusion

**JEL Codes:** A11; J16; J71

# **Lifting diversity and inclusion in economics: How the Australian Women in Economics Network put the evidence into action**

## **1. Introduction**

The global observation that women are under-represented in the economics profession is starkly evident in Australia.

Women comprise around one-third of the economics profession in Australia. Women's under-representation in economics is evident across all sectors and stages of career progression, yet is most acute at senior ranks including university professorships and heads of government agencies. It has been observed that:

“Australia has never had a female Treasurer. Or a female Reserve Bank Governor. Or Deputy Governor. Or female chair of the ACCC. Or APRA. Or ASIC. Or the Future Fund. Or the Productivity Commission.”<sup>1</sup>

This is despite numerous female economists demonstrating their capabilities in deputy roles in these various agencies.

Women economists receive lower coverage in the media and fewer high level speaking engagements. This has implications for the women economists' potential for public influence, as well as the next generations' exposure to relatable role models.

Looking ahead at the pipeline of future economists, female students constitute around 37 per cent of university domestic enrolments in economics in Australia, although females' share of secondary school enrolments in economics is closer to one-third. However, economics enrolments in Australia's schools and universities display some concerning trends. Not only has the absolute number of school students enrolled in economics been declining for several decades, but females' proportion of student enrolments has also been shrinking (Dwyer, 2017,

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<sup>1</sup> Quote by Shadow Treasurer Chris Bowen, *The Case for Gender Equality*, Speech to the NSW Women in Economics Network, 26 June 2017, Sydney. The quote refers to Australia's key public economic, financial and regulatory agencies: RBA refers to the Australia's central bank, the Reserve Bank of Australia; ACCC refers to the Australian Consumer and Competition Commission; APRA refers to the Australian Prudential Regulation Authority; ASIC refers to the Australian Securities and Investment Commission; the Future Fund refers to Australia's Sovereign Wealth Fund; and the Productivity Commission refers to the Australian Government's key microeconomics advisory agency.

2018; Livermore and Major, 2020; Lovicu, 2021). A similar decline in representation within economics has been observed among students from low socioeconomic backgrounds, which also has implications for the diversity of the profession (Dwyer, 2018; Livermore and Major, 2020).

Women's ongoing under-representation in the traditionally male-dominated field of economics and positions of economic leadership reflect, in part, the influence of broader gender biases and norms that prevail across many dimensions of society. However, the observation that several other traditionally-male dominated fields have succeeded in appointing more women to leadership roles in traditionally male domains – even including the appointment of a female Prime Minister, Premiers, and Chief Scientist – points towards the persistence of exclusionary biases and barriers in the economics profession.<sup>2</sup> The marginalisation of women in the profession is a cost that is not just borne by the under-represented cohort: it jeopardises the capacity for economic policymakers to deliver robust and responsive outcomes that adequately identify and address the needs of diverse population it is charged to serve.

It is against this backdrop that the Women in Economics Network was established in 2017 in Australia with the broad mission of improving the representation and recognition of women in economics, and achieving a more gender balanced, equitable and inclusive profession.

This paper contributes to support broader global efforts to lift the representation of women and other minority cohorts in the economics profession. We firstly offer a statistical picture of the composition of the economics profession in Australia and the background context in which the network was formed (Section 2). We share the practical steps taken to create WEN (Section 3). The paper then outlines the broad research insights that informed the design of WEN's various initiatives (Section 4) and presents an evaluation of WEN's impact to date (Section 5). We close the paper with reflections on lessons learnt, challenges and limitations faced, and future opportunities for the network (Section 6).

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<sup>2</sup> For example, although there is still much progress to be made, Australia has had several female appointments in political governance roles including as Governor-General, Prime Minister, and State Premiers <[https://www.aph.gov.au/About\\_Parliament/Parliamentary\\_Departments/Parliamentary\\_Library/pubs/rp/rp1314/QG/FemalePolLeaders](https://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/rp/rp1314/QG/FemalePolLeaders)>. In the field of science, Dr Cathy Foley is currently appointed as Australia's Chief Scientist <<https://www.chiefscientist.gov.au/>>

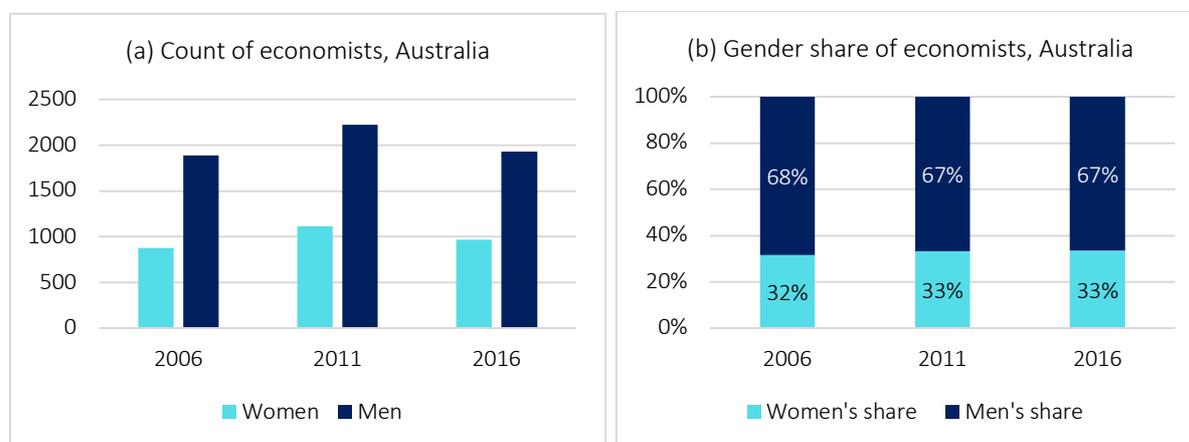
## 2. Motivation for the creation of WEN

### 2.1 A statistical picture of the gender composition of economics profession in Australia

We use several metrics to compute the representation of women in economics in Australia and how this has shifted over time. Data is reported according to the binary definition of gender, owing to the way that the data was collected: we acknowledge individuals who identify beyond the binary classification of gender and highlight this as an avenue for improvement in future data collection and analysis.

A count of economists can be derived from Australia’s Census data collections which are available for 2006, 2011 and 2016, and made available by the Australian Bureau of Statistics (ABS). Based on occupation information, women constitute around 33 per cent of all economists in Australia. This one-third share has been stable across all years of Census data available (Figure 1). Women comprise a slightly higher share of economists working in the public sector at national government level, relative to their representation within state and local government s and in the private sector, although women’s share of private sector economists has risen over time (Figure 2).

Figure 1: Gender composition of economists in Australia, 2006 to 2016



Source: Authors’ calculations using ABS Census of Population and Housing, Table Builder (2006, 2011, 2016).

Table 1: Gender composition of economists in Australia, by sector of employment, 2006 to 2016

Sector	2006		2011		2016	
	Women	Men	Women	Men	Women	Men
National Government	34%	66%	35%	65%	36%	64%
State or Local Government	34%	66%	35%	65%	32%	68%
Private sector	30%	70%	32%	68%	33%	67%

Source: Authors’ calculations using ABS Census of Population and Housing, Table Builder (2006, 2011, 2016).

Looking at industry of employment, the industry that is the largest employer of economists in Australia is Public Administration and Safety, where women constitute around 34 per cent of economists, on par with their one-third share across the workforce more widely (Table 2). Relative to this one-third benchmark, women are slightly over-represented in the Education and Training sector at 42 per cent, although a still the minority share. Women are relatively under-represented in Professional, Scientific and Technical Services, Financial and Insurance Services, and Electricity, Gas, Water and Waste Services, which make up the largest five industries of employment for economists in Australia.

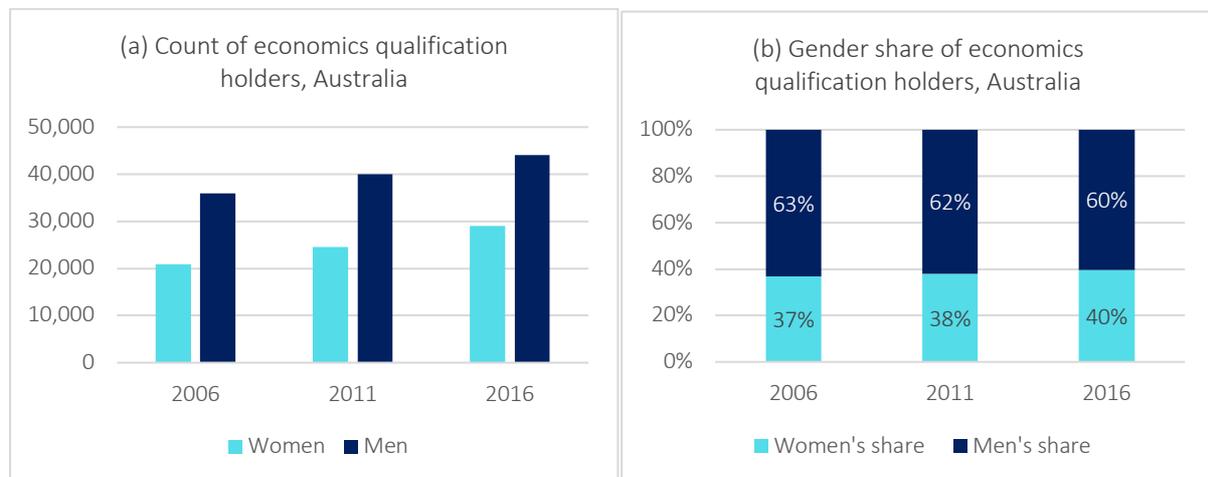
Table 2: Gender composition of economists in Australia, by industry of employment, 2016

Industry	Total economists in industry	Women	Men
Public Administration and Safety	985	34%	66%
Professional, Scientific and Technical Services	814	29%	71%
Financial and Insurance Services	407	30%	70%
Education and Training	162	42%	58%
Electricity, Gas, Water and Waste Services	83	25%	75%

Source: Authors' calculations using ABS Census of Population and Housing, Table Builder (2016). Only the five largest industries of total employment for economists are listed.

Because it is also possible that people may be working in an economics or economics-related role, but not in an occupation that is described as an economist (for example, as a university lecturer, research officer, analyst or manager), we also look at the number of people who hold a post-school economics or econometrics qualification. Based on this field of study information, women constitute around two out of every five people with an economics qualification. This has risen slightly from 2006 through to 2016.

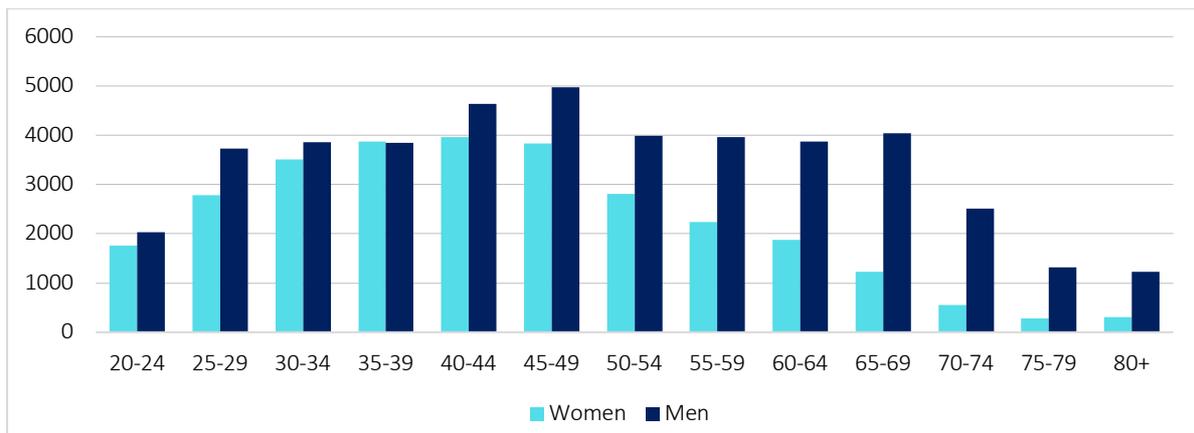
Figure 2: Gender composition of economics qualification holders in Australia, 2006 to 2016



Source: Authors' calculations using ABS Census of Population and Housing, Table Builder (2006, 2011, 2016). Post-school educational qualifications include qualifications in the field of economics or econometrics.

Disaggregating economics qualification-holders according to age shows that the gender disparity in economics qualifications is starkest among older age group (Figure 3). In part this is reflective of older generations of women having less opportunity to study at tertiary education level in general. The gender disparity generally narrows progressively among younger cohorts, but also displays an exception in one age cohort. The gender gap in economics qualification holders narrows completely to reach parity within the cohort aged 35 to 39 years in 2016 (that is, those who were born between 1977 to 1981).

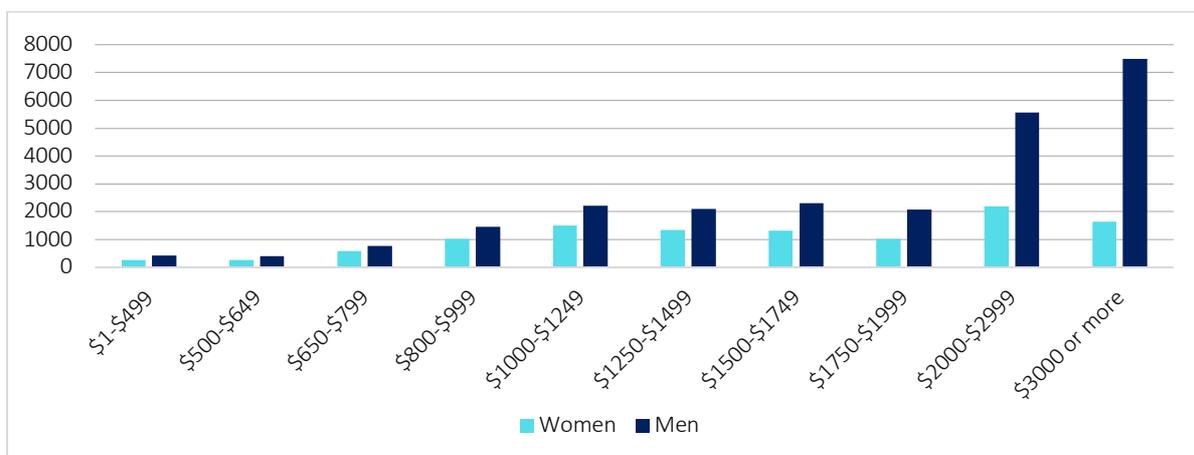
Figure 3: Count of economics qualification-holders by age and gender, Australia, 2016



Source: Authors' calculations using ABS Census of Population and Housing, Table Builder (2016).

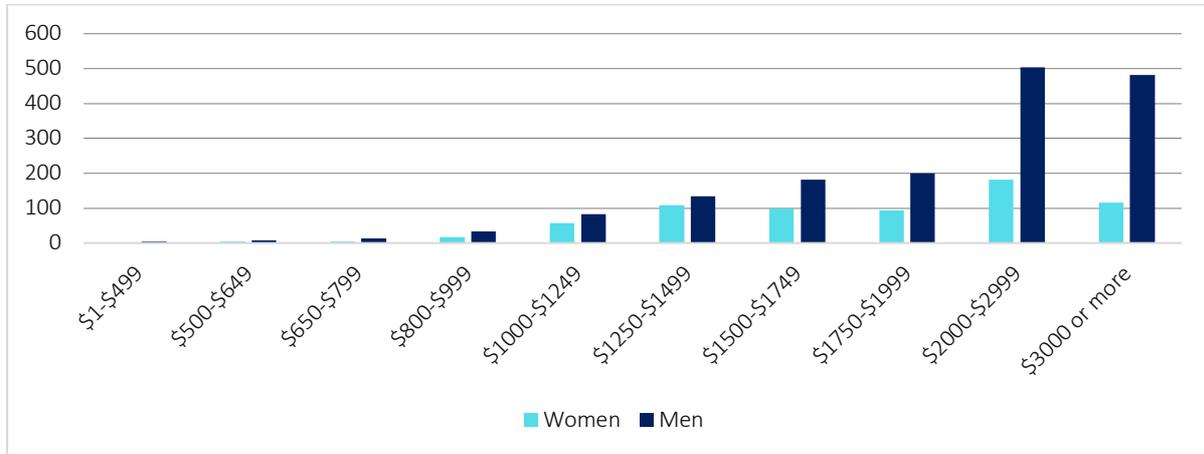
An inspection of the full-time weekly labour market earning of economics qualification-holders shows strong gender differentials, with men over-represented in the highest earning brackets (Figure 4). A similar gender pattern exists when we analyse the data according to all full-time workers employed as economists (Figure 5).

Figure 4: Count of full-time employed economics qualification-holders, by weekly income and gender, Australia, 2016



Source: Authors' calculations using ABS Census of Population and Housing, Table Builder (2016). Post-school educational qualifications include qualifications in the field of economics or econometrics. Weekly income reported for full-time employed only.

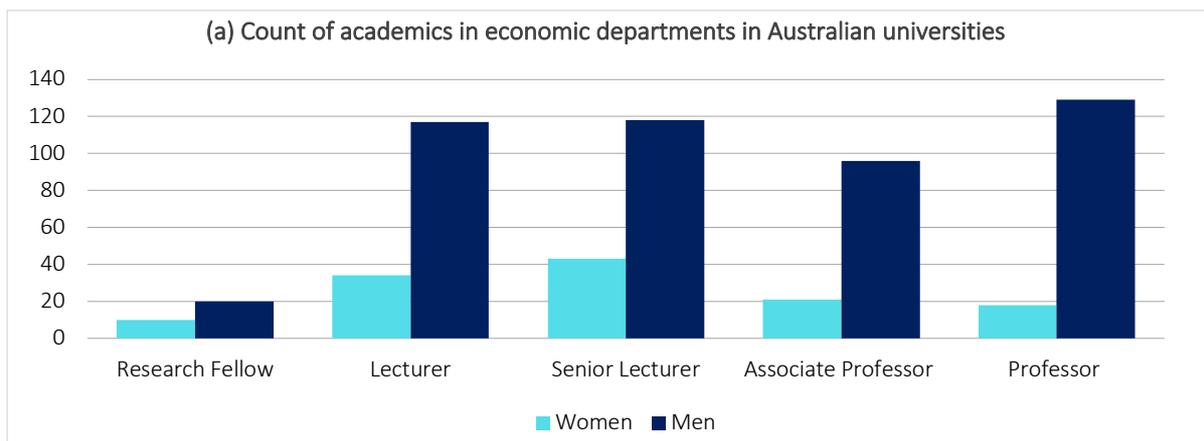
Figure 5: Count of full-time employed economists, by weekly income and gender, Australia, 2016

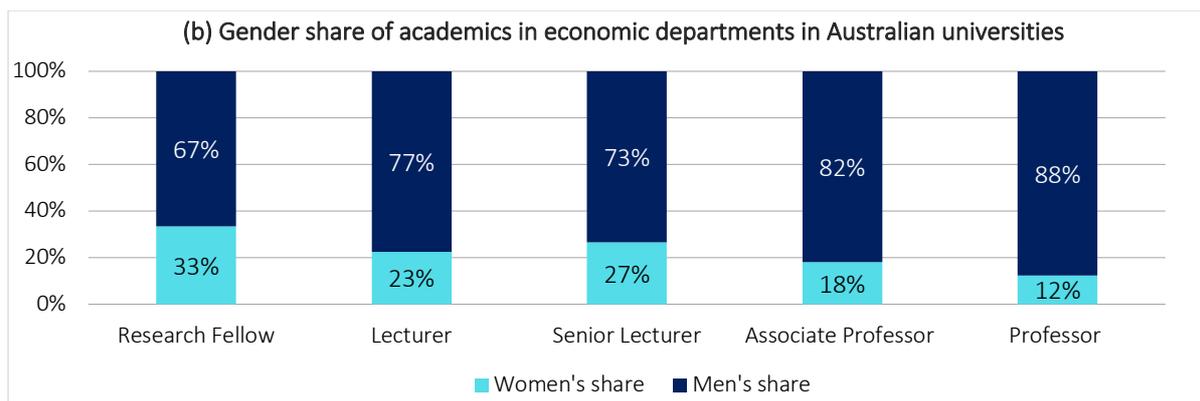


Source: Authors' calculations using ABS Census of Population and Housing, Table Builder (2016). Weekly income reported for full-time employed only.

Analysis of economic academics within Australia's universities is of particular interest, as this is the cohort with responsibility for, and influence over, the design and delivery of economics courses within the tertiary education sector. The composition of academic appointments in Australian universities in 2016 shows that men are over-represented among senior ranks, while women are more heavily concentrated among the early-career and mid-career ranks (Figure 6).

Figure 6: Gender composition of university economics departments, Australia, 2016





Source: Economic Society of Australia. Data compiled in 2016 from a survey of 41 Australian university economics departments. 18 economics departments responded to the survey, comprised of 4 departments from the Group of 8 (Go8) and 14 from non-Go8 universities. Data for the remaining Go8 were added from the university websites.

Feeding into the low proportion of women in the economics profession is the under-representation of female students in the education pathways that lead to economics careers. Data on school student enrolments reveals that female students are in the minority in economics classrooms and that this share has generally been shrinking over time (see Appendix A which reports the data for four of New South Wales, Victoria, Queensland and South Australia). However, data extending back to 1990s reveals that it has not always been this way. In Queensland schools during the 1990s, female economics students outnumbered their male counterparts (Appendix A, Figure A4).

There are multiple possible reasons to explain the decline of school students enrolments in economics over time. The period of decline in economics coincides with a noticeable rise in the offering in business studies, presenting a competitive substitute choice of subject for prospective students. It is likely that business, finance and commerce disciplines have been more effective, compared to economics, in reaching prospective students, in terms of communicating the job opportunities that these fields can lead to, the usefulness of studying these subjects, and the relatability and relevance of these fields to the issues that students care about and the goals they aspire to achieve. The general expectation that business studies is associated with strong and secure job prospects is also likely to be a factor for students, as well as for parents who have influence over their children's vocational choices.

In a similar vein, recent decades have seen a concerted efforts by governments, industry and education bodies to lift the representation of women in the STEM (Science, Technology, Engineering and Mathematics) fields. This includes dedicated investments from innovation and science government departments who have been focused on increasing skill acquisition in these

fields, and funding for gender equality initiatives in these disciplines, such as Athena Swan accreditation.<sup>3</sup> While these efforts are to be applauded for seeking to improve women's representation in these similarly male-dominated fields, the rising appeal of STEM to female students also presents a competitive substitute for prospective economics students. This particularly students with strong mathematical aptitudes and a motivation to solve real world problems, given that these are distinctive characteristics across both STEM and economics fields. There are also observations that the number of schools offering economics as a subject has been declining in recent years, and that a proportion of teachers with responsibility for economics are teaching out-of-field without specific qualification in the subjects. The observed decline in economics enrolments is therefore likely to reflect a combination of these demand-side and supply-side pressures.

At university level, we look at enrolments of commencing domestic students in economics degrees or in courses with a major in economics (Figure 7). Overall numbers of university enrolments in economics at undergraduate level fell throughout the 2000s among both male and female students, though have risen in recent years. Postgraduate numbers have been more volatile. The gender disparity is apparent across undergraduate and postgraduate level.

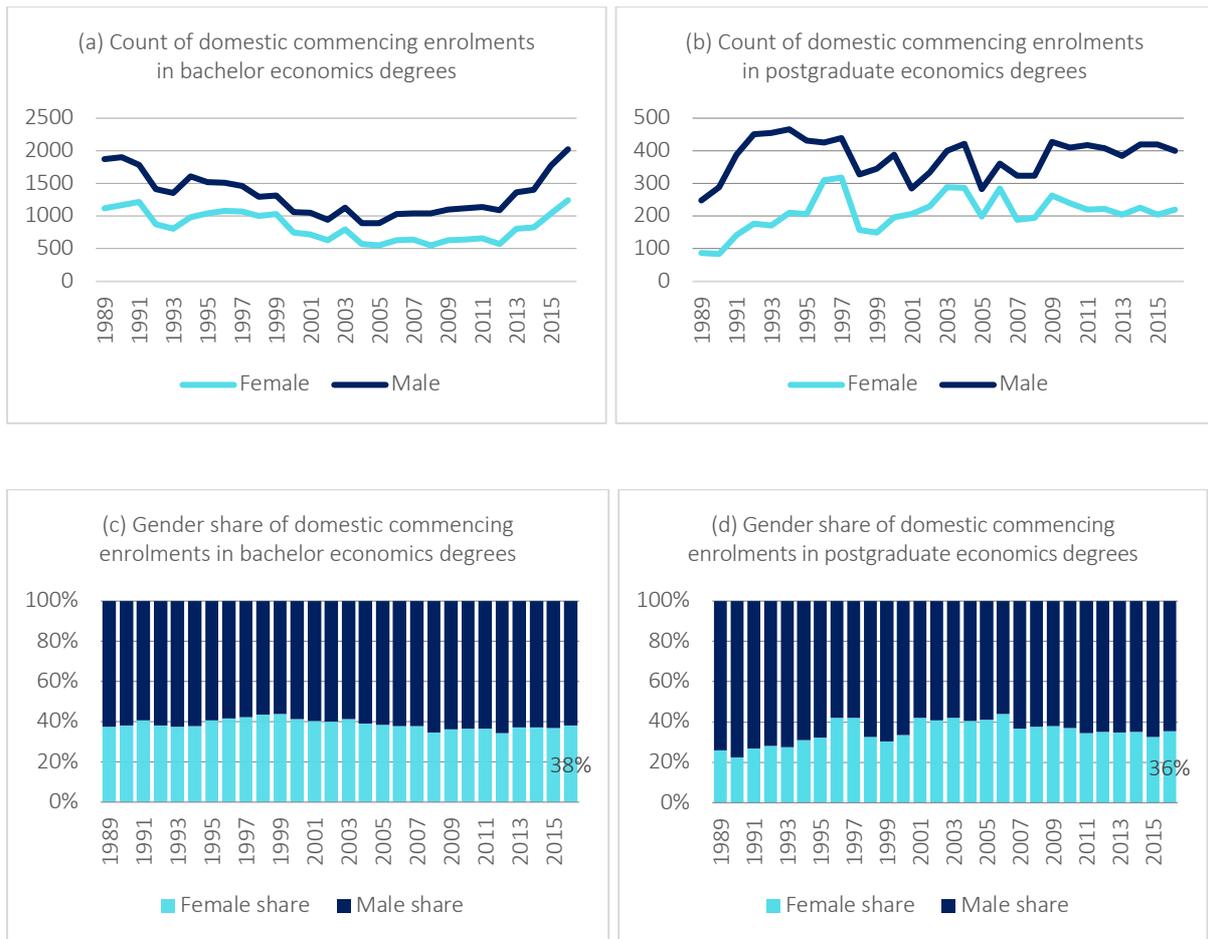
Expressed as shares, women comprised around 38 per cent of undergraduate students enrolled in economics for the most recent year of data available in 2016, but has generally been declining on average over the past three decades. Women's share averaged 37 per cent during the 2010s, a drop from 39 per cent during the 2000s, and from 40 per cent during the 1990s. Women's share reached as high as 44 per cent during the late 1990s, which corresponds with the period in which overall enrolments were relatively low. Overall enrolments climbed during the 2000s, but the rate of increase among male students has outpaced that of female students.

Women's share of postgraduate enrolments in economics has been smaller than their undergraduate share, although it has been more volatile over time. It averaged 35 per cent during the 2010s, 40 per cent during the 2000s, and 32 per cent during the 1990s.

Figure 7: Gender share of university economics enrolments, Australia, 1989 to 2016

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<sup>3</sup> For example, see <https://www.sciencegenderequity.org.au/the-athena-swan-accreditation-framework/>



Source: Grattan Institute, collected from Department of Education (1989-2016) and reported in Mackey, W. (2019) ‘The gender divides at university’, Grattan Institute <<https://grattan.edu.au/news/the-gender-divides-at-university/>> Figures show first-year commencing enrolments in bachelor or postgraduate degrees classified as ‘economics or econometrics’ using the Australian Standard Classification of Education (ASCED). Postgraduate includes graduate diploma, masters and PhD courses. Excludes economics degrees or degrees majoring in economics that are classified by universities as general commerce degrees. Excludes international students.

In the media, a 2018 gender analysis of mainstream Australian media quantified an under-representation of women’s voices in areas of the media where economists are expected to feature. Women constituted a mere 18 per cent of direct sources in business and finance stories and 32 per cent of direct sources on government and politics (Price and Payne, 2019). Female journalists constituted are also under-represented in these field of reporting, constituting 40 per cent of the journalists working in these areas.

Overall this statistical picture of the current women’s under-representation in Australia’s economic profession is largely consistent with the international picture that has been well documented by others (American Economic Association Committee on Equity, Diversity and Professional Conduct, 2019; Bayer and Rouse, 2016; Boustan and Langan, 2019; Gamage, Sevilla and Smith, 2020; Ginther and Kahn 2014; Liu, Song and Yang, 2020; Lundberg and Stearns, 2018; Megalokonomou, Vidal-Fernández and Yengin, 2021; Tenreyro, 2017).

## **2.2 Why women's under-representation in economics matters**

The persistent under-representation of women in the economics field is not just a matter of inequity. It also has implications for the effectiveness of the profession. There are multiple channels through which greater diversity can enhance the effectiveness of a profession. These benefits reflect evidence of the positive impacts of broader improvements that have been observed more broadly in workplaces via increases in women's participation in economic activity and decision-making. Firstly, the gains of expanding women's participant in a field can be productivity-based, acquired through a more resourceful deployment and matching of labour and human capital in the production process. Secondly, the gains can be cognitively-based, derived from the broader diversity of thought, knowledge, innovations and ideas that greater gender balance offers, generated through differences in men and women's experiences in society. Thirdly, gains may be representation-based, where women's involvement in decision-making processes and the design of products, services, policies and legislation, serves as a conduit through which women's specific needs can be more effectively heard and acted on (Risse, 2019). All of these channels have relevance to the field of economics, across research, policy, industry and educational outputs.

Research attests that combining people who bring a diversity of skills, ideas, perspectives, and cognitive approaches can give rise to broader pool of knowledge, more innovative ideas, a more robust scrutiny of different proposals, and more creative approaches to problem-solving (Díaz-García, González-Moreno and Sáez-Martínez, 2013; Page, 2019; Turban, Wu and Zhang, 2019).

Through diversifying its people, economics can draw upon a broader scope of perspectives, values, and life experiences, which in turn has the potential to enhance the processes and outputs that the profession is responsible for generating. A more diverse profession can make a difference to: the profession's interrogation of the evidence; the robustness of debates; the comprehensiveness of issues on the research agenda; the responsiveness of policy to the needs of the population; the weighting assigned to the importance of competing topics in research, editorial, publication, grant, and funding decisions, as well as the profession's capacity to deliver teaching, learning, and academic supervision to a demographically diverse body of students. As current WEN National Chair has observed, "investing in diversity can be considered an investment in the profession's cognitive infrastructure" (Risse, 2019, p. 22).

While male and female economists can be trained to acquire the same theoretical knowledge, analytical capabilities and practical skillsets, differences in male and female economists' life experiences matter for the profession's outputs. As a knowledge-based industry, the generation of economic research, policy analysis and evaluation requires cognitive skills, but also involves observing human behaviour, processing and interpreting information through existing bodies of knowledge, and making decisions about which issues to focus on, which methodologies to adopt, and which policy interventions to test. The work of economists ultimately involves subjective decisions.

Providing some indication of the extent to which differences in men and women's life experiences matter for economics, research shows that economists' positions on various issues are found to systematically differ on the basis of gender. In surveys of economists in the U.S. and Europe, statistically significant differences have been detected between male and female economists' perspectives across a range of economic and policy issues (May, McGarvey and Whaples, 2014; May, Kucera, and McGarvey, 2018). Male economists are found, on average, to express stronger support for austerity measures, limited redistribution, and the superiority of market solutions over government intervention. Female economists generally express stronger support for the need for environmental protection policies and a view that gender inequalities exist in the labour market. While there will be individual variation in these opinions, these broad gender-patterned findings imply that a profession that is unbalanced in gender is likely to steer its focus and policy prescriptions towards one end of the thought spectrum. Diversity on the basis of gender helps protect the profession against the fallibility of homogenous thinking (Keck and Tang, 2017).

Lifting women's representation in the economics profession has the potential to moderate the risks associated with economists' overconfidence in their policy forecasts and recommendations. Research has linked overconfidence to poor decision-making, and detected that men in general have a higher tendency towards overconfidence, or at least a stronger level of confidence and conviction than women, in their judgements and predictions (Barber and Odean, 2001; Invernizzi, 2016; Moore and Healy 2008; Sarsons and Xu, 2015). Given that economics is a profession that is called upon to provide important policy recommendations on the basis of forecasts and predictions, the liabilities associated with overconfidence matter.

Beyond the role of the economics profession in society, women's lower and falling engagement in the study of economics has implications for women's levels of financial literacy within the broader population. This has potential repercussions for gender equality, in terms of widening

gender gaps in economic security and lifetime earnings. Concerns about Australia's financial literacy rates and the shrinking diversity of economics profession has also contributed towards the Reserve Bank of Australia's investment in its public education program and motivated its efforts to better understand that factors that influence students' engagement with the subject (Dwyer, 2018; Livermore and Major, 2021),

### **2.3 A wider reckoning**

WEN's efforts to spotlight and address the under-representation, under-recognition and marginalisation of women in economics in Australia has taken place in the context of a wider cultural changes in the gender equality space.

In recent years, focus has been intensifying internationally on the prevalence of gender inequality and sexism in the economics profession, particular fuelled on by a wave of economic research investigating gender biases in the economic academia in the US. These economic analyses includes the detection of systemic biases in how women are treated and evaluated in the profession. These inequities include: women encountering more hostile and patronising questions in academic economic seminars (Dupas, Modestino, Niederle, Wolfers and The Seminar Dynamics Collective, 2021), women economists being held to higher standards of quality in paper submissions (Hengel, 2021), gender gaps in publication and co-authorship opportunities (Boschini and Sjögren, 2007; Ghosh and Liu, 2020; Hamermesh, 2013), women's contributions being valued than that of her male colleagues (Sarsons, 2017), female educators being scrutinised more strongly in students' evaluations (MacNell, Driscoll and Hunt, 2015), and the persistence of an intensely misogynistic culture in informal forums within the economics community (Wu, 2018). Although academic research on gender differentials in economics concentrates heavily on analysing gender differentials in academia, the wider literature on gender biases and inequities in the workforce can help explain gender inequities encountered by female economists working in government, private businesses, politics, media, community organisations and other institutional settings where economists can be found. This includes for instance – and from among an enormity of possible research examples to cite – evidence that CVs with male names are more likely to rated favourably than identical CVs with female names (McGinn and Tempest, 2010) and evidence that women are more likely to be expected to give their time towards voluntary roles and administrative duties in workplace that do not count for much in job promotion processes, but that divert their time away from other work that would be recognised when it comes to promotion (Babcock, Recalde, Vesterlund and Weingart, 2017).

This recent wave of research coincided with the global “me too” movement that highlighted the prevalence of sexual harassment and abuse in workplaces and wider society. The “me too” movement had its origins in community-based initiatives in the US designed to support victims and survivors of sexual violence, before evolving into a global campaign that spotlighted the ways that men in positions of institutional authority could continue to wield power and perpetuate gender inequities (Gieseler, 2019). While the original movement created by Tarana Burke focused on facilitating healing and justice for survivors, the movement also contributed towards a push for organisational change to create safer workplaces for women and minority groups (Gupta, Gupta and Nehra, 2019). It is likely that these global movements contributed to putting the issue of gender equality on the radar of many in the economics profession.

Also in recent years, female leaders in economics have been more vocal about the issue of women’s under-representation, and the lack of diversity more broadly, within the economics profession. Former Chair of the US Federal Reserve and current Secretary of the US, Janet Yellen has appealed to the importance of gender equality for the effectiveness of the profession:

“If economists are mainly of one gender or race, they are likely to miss things that matter. Underrepresentation of women likely constrains the range of issues addressed and limits our ability to understand familiar issues from new and innovative perspectives.” (Yellen, 2019, online article).

Former Managing Director of the IMF and current President of the European Central Bank, Christine LaGarde has spoken out about the gender disparities in voices of economic influence:

“In the finance world, I don’t know whether you would call it discrimination, but there is certainly disparity between men and women ... If you look at the venture capital world, it’s the same. If you look at CEOs of large, international banks, it’s the same. If you look at parliament, you have a much lower representation of women than there are women in society. So something is not working.” (LaGarde, cited by Bosley, 2021, online article)

Although some observers internationally have described the recent intensification of focus on gender biases and sexism within economics internationally as a moment of “reckoning” for the profession, it is important to acknowledge that feminist economists have long been pointing to the entrenched gender biases within the profession and in mainstream economics thinking itself (Benería, May and Strassmann; Waring, 1999) and that there have been previous attempts in

past decades to raise awareness about these inequities (Chassonnery-Zaïgouche, Cherrier, and Singleton, 2019).

In the Australian context, gender inequality persists as a confronting social, economic and political issue across many dimensions of society. In 2021, Australia slipped to 50<sup>th</sup> position in the World Global Gender Gap rankings (World Economic Forum 2021). Despite ranking equal first in women's educational attainments, Australia is ranked 54<sup>th</sup> in women's political empowerment, 70<sup>th</sup> in economic participation and opportunity, and 99<sup>th</sup> in women's health and survival. While history was made with the appointment of Australia's first female Prime Minister, Julia Gillard, in 2010, the hostile treatment of women in politics in Australia continues to make headlines. Public outrage over enduring gender inequities, sexism, abuse and violence against women within Australian Parliament and wider Australian society, and frustration over the governments' muted response, was expressed in the form of large-scale protests throughout 2020 and 2021 (Zhuang, 2021).

### **3. Creation of WEN**

#### **3.1 Origins of WEN**

To attract, retain, and support women studying and working in the economics field, the WEN was established in 2017 as nationwide, multi-sectoral association for female economists in Australia.<sup>4</sup> It was formally created as part of the Economic Society of Australia (ESA), which is the professional organisation for economists in Australia whose origins hark back to 1915.<sup>5</sup> WEN is formally run by the Women in Economics Committee in affiliation with the ESA. In this respect, WEN fulfils a similar role to the Royal Society of Economics' Women Committee in the UK, the European Economic Association Committee on Women in Economics, the Canadian Women Economists Committee (CWEC) which is part of the Canadian Economic Association, the Committee on the Status of Women in the Economics Profession (CSWEP) which is part of the American Economic Association, and the Japanese Women Economists Network which is part of the Japanese Economic Association.

The idea for the creation of a group to support women in the economics profession in Australia was generated at a mentoring retreat hosted by the ESA in 2016. The retreat had been proposed by Professor Deborah Cobb-Clark, of the University of Sydney, who had observed that professional organisations to support women in economics had been formed elsewhere in the

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<sup>4</sup> Further information about WEN can be found on the network's website: <https://esawen.org.au/>

<sup>5</sup> See Economic Society of Australia: <https://esacentral.org.au/about-us-item/16558/history-of-the-esa>

world and identified the need for one in Australia. Also participating as senior mentors in the first women in economics retreat were Professor Alison Booth, Professor Lisa Cameron, Professor Susan Dynarski, Professor Catherine Eckel, and Professor Renee Fry-McKibbin.

A small group of mid-career economists who attended the 2016 mentoring retreat took the idea of forming a women's group and turned it into action. With the support of the ESA, WEN was launched in March 2017, timed to coincide with International Women's Day. The launch of the ACT branch served as the national launch, held at Australia's Parliament House with an invited address by Assistant Governor (Economic) of the Reserve Bank of Australia, Dr Luci Ellis, who remarked:

“Equality of the sexes is essential if we are to achieve our economic potential as a nation. When someone faces bias or artificial obstacles, it holds all of us back. Overcoming those biases and unmaking those obstacles won't be easy, either in the [economics] profession or in other workplaces. But it is certainly worth doing, for both males and females, now and in future.” (Ellis, 2017, RBA website)

In establishing WEN in 2017, it must be acknowledged that there have been previous attempts to form a women in economics group in Australia, that have not been successful or endured over time. For example, 2005 Annual Report of the ESA Central Council, chaired by Glenys Byrne, indicates that women's under-representation in economics was an issue of concern at the time. In personal correspondence with senior members of the economics profession in Australia, WEN learnt that attempts to form a women in economics group in earlier decades were challenged by numbers being too low to make the group viable, as well as a broader perception that it was “not really needed”. This speaks to the need for there to be genuine support from among the economics community, and the achievement of a critical mass in size, for a group such as WEN to be achievable and maintaining viability over time.

### **3.2 WEN's scope and structure**

WEN's activities and membership extends to economists in the public sector, private sector, not-for-profit organisations, and the education sector. While it has been observed that some similar groups internationally have tended to place stronger focus on the academic sector, the WEN Committee has been cognisant of nurturing and sustaining its multi-sectoral scope.

In the creation of its governance arrangements, WEN identified four key objectives to guide its mission and activities: (1) to professionally connect and support women in economics in Australia; (2) to improve the representation of women at all levels of the economics profession;

(3) to promote public contributions by female economists; and (4) to encourage the next generation of women to study economics.

WEN's governance and structure mirrors the ESA's Federal structure. States and Territories branches to deliver localised activities and initiatives to members in their geographic region. National Chair, Deputy Chair, Secretary and Treasurer co-ordinate, administer and promote the activities of the network at a national level. They form the WEN National Committee together with the Chair of each State and Territory branch. WEN also has representation on the ESA's Central Council and State and Territory councils.

Representation on WEN committees is drawn from all sectors, including economics teachers who bring expertise from the secondary school education sector. Initial committee appointments were filled by volunteers. Within two years, formal processes were established for all Committee appointments to be determined democratically through a nomination and election process. A WEN Committee appointments are carried out in a voluntary capacity, and administrative support is provided by the ESA.

WEN's funding largely comes from membership fees and funding allocation from the ESA, supplemented by sponsorship from support organisations or through community grants that are tied to particular events or purposes.

WEN membership is open to women and all female-identifying individuals, as well as to men and individuals who identify beyond gender binary classifications. Men are encouraged to join as a way of showing their allyship and support for WEN's objectives. In forming the network, the Committee was cognisant of creating an inclusive environment where men's role in the pursuit of gender equality is recognised and promoted too. The wider research shows that achievement of gender equality requires a shift in attitudes and behaviours among men too. The reality is that many of the leaders in organisations, with the capacity to make institutional change that would foster more inclusive and equitable workplaces, are men.

Men, including male school students, are welcome to attend WEN events, where they will see female economists demonstrating their expertise on economic issues. This serves to normalise the concept of gender balance in economics. Their attendance and involvement at WEN events also means these men can be exposed to a wider range of topics including from females' perspectives, which can enhance their understanding of the issues and their appreciation of the concerns that might be more likely to be faced by women.

Many of WEN activities are open to the wider public, which has been an important mechanism for shifting public perceptions of economists and activating broader interest in economics. Other activities are exclusive to members, such as professional development workshops, the mentoring programs and the mentoring retreat. Exclusivity to members serves provide a direct benefit to members, but more importantly provides a female-only space which can be more psychologically safe and supportive environment for women in the context of these professional activities.

#### **4. WEN's evidence-based initiatives**

WEN's initiatives span a wide range of outputs and activities, aligned to the network's four key objectives. In the design and delivery of these initiatives, WEN adopted an evidence-based approach and was guided by research insights in designing its programs and initiatives.

##### **4.1 Improving perceptions of economics**

Misperceptions about what economists is about – with the common assumption that economics is all about money, profit and the stock markets – present a potential deterrent to attracting a wider demographic spectrum of people to the field. In part, a narrow perception of 'what economists do' and 'what economics is about' is not unfounded: feminist economics has long critiqued mainstream economics for being built around a male's experience of the world. Analyses of educational resources point towards the content lagging behind frontiers in economic knowledge and overlooking the issues that resonate most with younger generations of students, such as issues of environmental sustainability, climate change, inequality, global poverty and disadvantage, which also has implications for the diversity of the student cohort (Bowles and Carlin, 2020).

As part of its package of initiatives, WEN created new resources that more clearly instil a human perspective and problem-solving dimension to the purpose of economics. WEN's resources for students communicate the message that economics is about understanding human behaviour, how to improve human wellbeing, and how to address pressing real world issues such as climate change and inequality, and that economists are ultimately motivated to make a positive difference to society. In its outreach to students, WEN invested in the creation of several resources that aimed to reach students at school and university level, to inform them about the wide range of career opportunities that the study of economics can lead to, and the broad usefulness of learning economics as a life skill. These resources included a short video

“*Economics – Understand the World Around You*”<sup>6</sup> and an online booklet ‘*What is economics all about? And where can it take you?*’<sup>7</sup>. These resources are freely available via the WEN website, and are designed for teachers, educators and career guidance officers to use in their engagement with students and promotion of the subject too.

These educational resources canvas the wide range of issues that economics can be applied to, which extend far beyond monetary concepts. For example, WEN’s booklet for students, “*What is economics all about? And where can it take you?*” explains:

*“Studying economics equips you with a toolkit to understand the world around you. Economics focuses on human behaviour. Economists are interested in figuring out what incentivises people to behave the way they do.*

*“But economics is more than just understanding the world – it gives you tools to help improve the world. By analysing information and testing the impact of policies, the job of economists is to come up with solutions to tackle real world problems, improve society and enhance people’s quality of life.”*

WEN’s student resources contain first-hand quotes from female economists describing economics in their own words. This is accompanied by photos of the economists, to strengthen the chances that students will be inspired by hearing from role models who they can relate to. WEN aims to present its resources for students in a vibrantly modern and attractive way. Several WEN branches have also hosted events with students, where students participate in lively and interesting activities, such as interactive behavioural economics experiments, and can meet and talk to economists in real life.

WEN’s efforts to improve the perception of economics has extended beyond just shifting perceptions, but shifting actual practices within the field that reflect gender equity principles. An example of this is WEN’s advocacy for the application of ‘gender lensing’ approach to economic analysis and policymaking, such as through the adoption of Gender Responsive Budgeting. The approach towards policymaking acknowledges that a given policy that seems gender-neutral can still have a different implications and impacts on men and women, and reflects the goal of ensuring women’s voices and experiences are taken into account in economic policymaking. WEN has hosted masterclass workshops on the practice of gender

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<sup>6</sup> The WEN video is freely available on YouTube <https://www.youtube.com/watch?v=AtOU-DAVch0>, and has been viewed 9,900 times on YouTube.

<sup>7</sup> Available via the WEN website

<http://esawen.org.au/440/images/WENEconomicsBookletforStudentsoptimised.pdf>

lensing to help equip economists with these skills, and raised awareness about the importance of conducting gender-disaggregated analysis in wider public forums, including speaking about this issue at the Women in Economics Budget Address held at the National Press Club. The need for gender-disaggregated analysis was particularly pertinent in the wake of the COVID-19 pandemic, with women in Australia shouldering the brunt of the economic impacts in the form of job losses, declines in workforce participation, intensified pressure and burnout in female-dominated industries, and women carrying a disproportionate share of home-schooling and unpaid care responsibilities (Risse and Jackson, 2021; Wood, Griffiths and Crowley, 2021). WEN has provided a platform for economists with expertise on this issue to raise awareness about this gender dimension in economic analysis and policymaking.

#### **4.2 Improving perceptions of economists**

Narrow misperceptions about what economics is about spills over into misperceptions about economists (Yengin, 2018). Reflecting the historical dominance of men in the field, the traditional “male” stereotypical of economists can discourage females by conveying the impression that they do not belong the field. The ongoing over-representation of male economists in the media, and their higher visibility in economic leadership and positions of influence, contributes to the connotation that economists are typically men. Even if attitudes towards gender equality are changing, the perception that economics is the domain of men still heavily infuses the education materials that students are presented with: content analyses of mainstream economics textbooks has detected not only a systemic under-representation of women, but also a perpetuation of outdated gender stereotypes that associate men with positions of control and decision-making and relegate women to mundane and subservient roles in society (Stevenson and Zlotnick, 2019). These images can have the effect of not only deterring women, but also conveys the message to men that they are expected to assume dominant roles and positions of authority.

Role models can combat the effects of gender stereotypes, including the effect of stereotype threat that can impede women from reaching their potential and dissuade them from considering a full range of study and career possibilities. Exposing female students to motivating female role models with whom they identify, has been shown effective in increasing gender representation in economics classroom settings. For example, Porter and Serra (2020) show that exposing female students enrolled in introductory economics classes to successful and charismatic women who majored in economics at the same university significantly increasing the likelihood of female students majoring in economics by 8 per cent. Similarly,

Breda *et al.* (2020) detected a significant positive impact of external women role models on student enrolment in STEM fields. They used a random assignment of classroom interventions carried out by 56 women scientists among 20,000 secondary school students in the Paris Region. Findings such as these informed WEN's decision to create a student-targeted video that could be used in student outreach activities.

The positive impact of mentoring programs for women in economics, in terms of lifting research outputs and advancing career progression, has also been documented by Ginther, Currie, Blau, and Croson (2020). The positive impact of mentoring program can be borne out not only via the support, career advice and role modelling effect of mentees' interaction with senior mentors. Through bringing together women facing similar challenges, mentoring programs can also have the effect of providing women with the reassurance that they are not alone in their challenges and to find solidarity with others in the profession with whom they can relate.

As part of its initiatives to promote the contributions of female economists, which also serves to change public perceptions about economists, WEN has made use of social media platforms. As at September 2021, WEN's outreach on social media includes over 3000 followers on Twitter, over 2000 followers on LinkedIn, and 1900 followers on Facebook. As an example of a specific initiative, for each day in the month of March to commemorate International Women's Day, WEN publicly profiled the contributions and achievements of a female economist on the WEN Twitter page, using the hashtag #CelebrationWomenEconomists. The idea was based on the successful #CelebratingWomen Twitter campaign that had been initiated by Kristin Ferguson as a way of "using social media for good".

WEN's efforts to broaden public perceptions of economists extends to initiatives that promote the voices and visibility of female economists in wider public debate, including in the media. With the support of the National Press Club of Australia, WEN has presented a Women in Economics Budget Address each year, with a panel of female economists sharing their assessment of the Federal Budget and highlighting areas for policy consideration. The address is held annually and broadcast across national television stations.

#### **4.3 Determinants of students' study and career choices**

Research insights from the vocational and education space help WEN to understand the factors that motivate female students' study and career choices, and how this differs to that of male students. A survey of Australian secondary school students detected a point of difference in the

factors that were most important for males' and females' career aspirations: female students ranked "helping others" as a more important reason than the reasons expressed by male students (Fitzsimmons, Yates and Callan, 2018). These insights were consistent with secondary school student surveys conducted by the RBA that also identified that, relative to males, female students' interests in economics is more strongly motivated by wanting to identify and solve problems, and an interest in societal issues such as globalisation and climate change (Livermore and Major, 2020, 2021). In contrast, male students expressed a greater interest than female students in the share market and production decisions as economics topics.

Gender differences in students' perception of economics as a subject were also detected as potential explanation for fewer female students opting for the subject. The RBA study detected that female students were less likely than males to feel that they had good understanding of "what economics is", to find economics interesting, or to want to know more about the subject. Females' perceived ability to perform well in the subject was also a factor. According to the RBA survey, female students were less likely than males to believe "I could do well in economics if I put my mind to it" or to "have a clear idea of whether I would be good at economics". Female students were more likely than males to perceive business studies as easier, more useful and more interesting than economics (Livermore and Major, 2021).

These findings suggest that the clarity and relevance of communication presented to students makes a difference in their impression of the subject, which can consequently impact their likelihood of opting for the subject or not. Teachers, schools, and career guidance officers also have a role here: female students perceived that their teachers were less likely to promote economics as a subject. The findings of the RBA survey are in line with WEN's conjecture that a lack of accessible information about economics and economics careers among female students has been one of the reasons for female students' weak interest and declining enrolments. WEN initiatives, such as the student video, were created to help alleviate these barriers. This approach is also substantiated by other interventions in the economics field that focus on the role of information (Bayer, Bhanot and Lozano, 2019).

Importantly, the RBA survey suggests that gender inequalities that prevail in the economics field are not salient to female students at the stage of their education. When asked whether they believe that "economics is a career option for men more than women", female students were *less* likely than male students to agree with this statement (Livermore and Major, 2021). However, this finding also implies that male students are *more* likely than females to believe that economics is a career that is better suited to men. This highlights that promoting the

contributions of female economists, and presenting a balanced picture of gender equality to the next generation of students, is not just important for female students: it is also critical that men's attitudes begin to more fully recognise, respect and embrace women as equal participants in the field.

WEN incorporated many of these elements in its materials for students, outlined above in Section 4.4. In its overarching approach, WEN has placed focus on the capacity for economics to be used to contribute meaningfully to society, and also has deliberately not attempted to persuade students into field on the basis of economics' earning prospects. This is informed by research that detected that attempting to encourage more female students to choose economics on the basis of high salary had limited effectiveness and could even backfire. Putgatch and Schroeder (2020, 2021) found that sending motivating messages to prospective students which highlighted the high earning prospects had a positive effect among male students, but actually dissuaded female students.

The importance of designing an economics curriculum that students can meaningfully relate to amplifies is amplified by the fact most students first have the opportunity to engage with economics when they are reaching the age of young adults. In contrast to pedagogical approaches (the teaching of children) which centre on imparting knowledge and acquisition of concepts and facts, andragogical approaches (the teaching of adults) centre on the practical application of knowledge, and emphasise the importance of providing educational contexts where students can bring real world applications and their own life experiences to their learning processes (Kesley, 2018). This distinction implies that the content chosen as practical examples in economics curriculum matter significantly for achieving inclusive and meaningfully student engagement, as students' first exposure to the subject generally occur when are past their childhood years and are approaching or have reached young adulthood. Andragogical practices towards teaching also emphasise the importance of providing problem-solving frameworks to students and activating intrinsic motivations to learn.

WEN has integrated these insights across its initiatives, including hosting special sessions on these topics at the Australian Conference of Economists, contributing to the Australasian Teaching Economics Conference, and promoting new curricula such as CORE Project that prioritise diversity, inclusivity and practical applications in the teaching of economics.<sup>8</sup> The CORE Project is also an example of a modern economics curriculum that taps into students

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<sup>8</sup> The CORE (Curriculum Open-access Resources in Economics) Project is a new approach to the teaching and learning of economics, led by Wendy Carlin and Samuel Bowles. See: <https://www.core-econ.org/about/>

intrinsic motivation to address the real world problems that they are witnessing and care about, such as climate change and poverty, which aligns with the andragogical teaching practices that befits their stage of education.

In WEN's outreach to students, WEN activities have been inclusive of male students so that the next generation of male economists become more accustomed to seeing female economists actively participating in the field and contributing in positions of influence. In our panel of economists at student events, for example, we have included male economist, though retain a female majority in the overall composition. Inverting the traditional gender composition helps to shift stereotypes and perceptions, while still promoting inclusivity and belonging among all.

#### **4.4 Gender inequalities in workforce opportunities and outcomes**

In its design of gender equality initiatives, WEN looked towards research on policies aiming to reduce barriers and biases against women's engagement and progression in the workforce, including identifying interventions on what works and what does not. Informed by the research, WEN's approach to instilling greater gender equality in the field of economics is to go beyond placing the onus on women to change or behave differently, which implies a capability deficit, but to instead highlight the inequities within the system that implicitly advantage and elevate men and the dominant cultural group.

Behavioural economics, which draws upon insights from psychology, highlights the need to understand the influence of unconscious biases and implicit biases in shaping gender gaps in workforce outcomes, and how nudges and changes in organisational practices can foster a more equitable opportunities, outcomes and treatment (Bohnet, 2016). Insights from the field sociology that shed light on the power of societal norms, and the mechanisms that embed and perpetuate inequities in power and decision-making with institutional structures, is also relevant to the economics field and its institutions. WEN has contributed to disseminating these research insights and highlighting how to apply this knowledge in practice through its various activities, including the annual Australian Gender Economics Workshops (AGEW) which brings together latest research on gender equality and convenes a policy symposium with representatives from business, government and community organisations.<sup>9</sup> WEN has also invested in not only collating, but also communicating and disseminating the policy

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<sup>9</sup> For more information about AGEW, see <https://esawen.org.au/content/858/australian-gender-economics-workshop>.

implications of the latest economic research on gender equality in a way that is accessible to policymakers with the capacity to put it into action.<sup>10</sup>

Frontiers in gender equality research highlight the need to apply an intersectional lens to understand the experiences of women from socio-demographic cohorts who face intersecting and compounding barriers and biases. In Australia, this especially applies to women from Aboriginal and Torres Strait Islander women, women who identify as LGBTIQ, women with disabilities, and women from minority cultural and linguistic backgrounds. WEN has been cognisant of incorporating a culturally diverse picture of economists in its educational resources and composition of speakers at WEN events, and used its events to raise awareness about the issue of intersectionality, though there is scope to improve and do more as WEN grows over time. Given that WEN's membership base includes many women with parental or other caring responsibilities, it was essential for WEN's activities to accommodate the needs of this cohort, through for example hosting events at family-friendly times. Prior to WEN's formation, it was not clear that the planning of ESA events generally factored in these gender-patterned considerations. The conversion to virtual events during the COVID-19 pandemic has actually helped facilitate this inclusivity and accessibility, including by helping to overcome the barriers of geographic distances and expanding the reach of WEN's activities to participants located in more remote locations or unable to travel for other reasons such as disability. It is likely that WEN will retain a mix of in-person, virtual and hybrid event formats in the future. WEN also investigated the feasibility of providing or subsidising childminding services to facilitate women's attendance at major conferences, however this has been logistically difficult to achieve.

#### **4.5 Converting research insights into practical initiatives**

Guided by the research insights, WEN developed a range of initiatives to tangibly work towards its objectives. While several have been cited above, a summary of WEN's initiatives, and how they align to WEN's objectives, is outlined in Table 3. A case study of one of WEN's major initiatives, the student video, is detailed below.

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<sup>10</sup> For example, see the AGEW2018 Policy Brief prepared on behalf of WEN <https://esawen.org.au/440/images/AGEW2018PolicyBrief.pdf>

Table 3: Summary of WEN's initiatives

Objective	What this meant in practice	Examples of initiatives
(1) To professionally connect and support women in economics in Australia	<ul style="list-style-type: none"> <li>• Providing supportive spaces for women to connect with each other</li> <li>• Nurturing women's career development</li> </ul>	<ul style="list-style-type: none"> <li>• Mentoring programs including annual WEN Mentoring Retreat for junior and mid-career female economists, and ANU-BETA-WEN Mentoring program for female university students</li> <li>• Professional development workshops focused on capacity building (eg. effective communication workshops)</li> <li>• Hosting regular events (in-person or online)</li> <li>• Provision of career information and supportive resources on WEN website</li> <li>• Newsletter articles which profile the work of WEN members and provide a voice for women to share their professional experiences, challenges, and solutions with other women</li> </ul>
(2) To improve the representation of women at all levels of the economics profession	<ul style="list-style-type: none"> <li>• Improving visibility and recognition of female economists</li> <li>• Nurturing women's career development</li> <li>• Raising awareness about gender biases and inequalities in organisational structures and practices</li> </ul>	<ul style="list-style-type: none"> <li>• Media and public speaking register for female economists</li> <li>• All-female panel annual Budget Address at National Press Club</li> <li>• Nomination of female keynote speakers for economics conferences</li> <li>• Promote profiles of female economists on social media (eg. #CelebratingWomenEconomists campaign)</li> <li>• Promoting research and evidence-based policy on gender inequality within economics and wider organisational practices and societal norms, at annual Australian Gender Economics Workshop</li> </ul>
(3) To promote public contributions by female economists	<ul style="list-style-type: none"> <li>• Highlighting the research outputs, teaching contributions, industry engagements, contributions to policy and public debate, and wider professional achievements of women at all levels of the profession</li> </ul>	<ul style="list-style-type: none"> <li>• Nomination of female candidates for ESA Awards and other honours</li> <li>• Convene special sessions at Australian Conference of Economists with female role models and addressing economics topics relating to gender equality</li> <li>• Promote the outputs of female economists in WEN newsletter, blog articles, and social media</li> <li>• Share announcements about appointments of female economists in positions of leadership</li> </ul>
(4) To encourage the next generation of young women to study economics	<ul style="list-style-type: none"> <li>• Informing and inspiring students to consider studying and pursuing a career in economics</li> </ul>	<ul style="list-style-type: none"> <li>• Creation of information resources for prospective students illustrating career opportunities and broad usefulness of studying economics: <ul style="list-style-type: none"> <li>○ 'Economics – Understand the World Around You' YouTube Video</li> <li>○ 'Pathways to Economics' information booklet</li> <li>○ 'Career Journeys of Australian Economists' booklet and social media tiles</li> </ul> </li> <li>• Hosting student outreach events giving students the opportunity to meet female economists and hear about career experiences</li> <li>• Exposing students to relatable and inspiring role models, by sharing profiles of female economists on social media</li> <li>• Supporting progressive and more inclusive curriculum development in economics, through participation in the Australasian Teaching Economics Conference and promoting relevant research and new education initiatives</li> </ul>

To provide a case study initiative, WEN has produced a student-targeted video, titled “*Economics – Understand the World Around You*”, to promote the study of economics among prospective students and provide the general public with a clearer idea about what economics is about. This 2018 project was led by Leith Thompson, a WEN National Committee member and an Economics Teacher from Sydney Grammar School. The video, about seven minutes length and is subtitled, was co-sponsored by the University of Adelaide, University South Australia, ANZ, and the Economic Society of Australia. The video is shared with public on YouTube (<https://youtu.be/AtOU-DAVch0>) as well as on the WEN website. The video features snippets from interviews held with seven economists (6 female and 1 male; 6 living in Australia and 1 in US) from different sectors: Michelle Meyer (Head of US Economy- Bank of America), Dr Andrew Charlton (AlphaBeta), Associate Professor Duygu Yengin (University of Adelaide), Professor Gigi Foster (UNSW), Dr Bethany Cooper and Dr Rachel Milte (University of South Australia), Guilia Lavinia Specchia (ANZ) and Eliza Owen (Core Logic).

The video aims to introduce what economics is about, such as how it helps to address global problems such as environment, poverty and wars, how it helps us to understand the world we live in, how it helps us to solve problems that each individual as well as societies as a whole face. The video aimed to ignite enthusiasm and interest to study economics, by showcasing economists openly and authentically talking about what they love about their jobs.

The video was motivated by two main factors: 1) to expose students and the public to female role models and show a diversity of economists and 2) to raise the interest among secondary school students to study economics by highlighting what economics is about and what careers in economics look like. WEN has conjectured that the low female enrolments in economics was influenced by a lack of role models and the fact that women (as well as students from other under-represented groups such as students from low-socioeconomic backgrounds) are less likely to have a clear idea about what economics is about, due to having weaker contacts and exposure to the people working in the field. These conjectures, supported by the research, led to the production of this video.

## **5. What has been WEN’s impact?**

To evaluate the impact of WEN’s initiatives, we have tracked a range of numerical metrics as well as qualitative feedback from the economics community. We acknowledge that at the same time that WEN has been implementing its initiatives, various other organisations have also

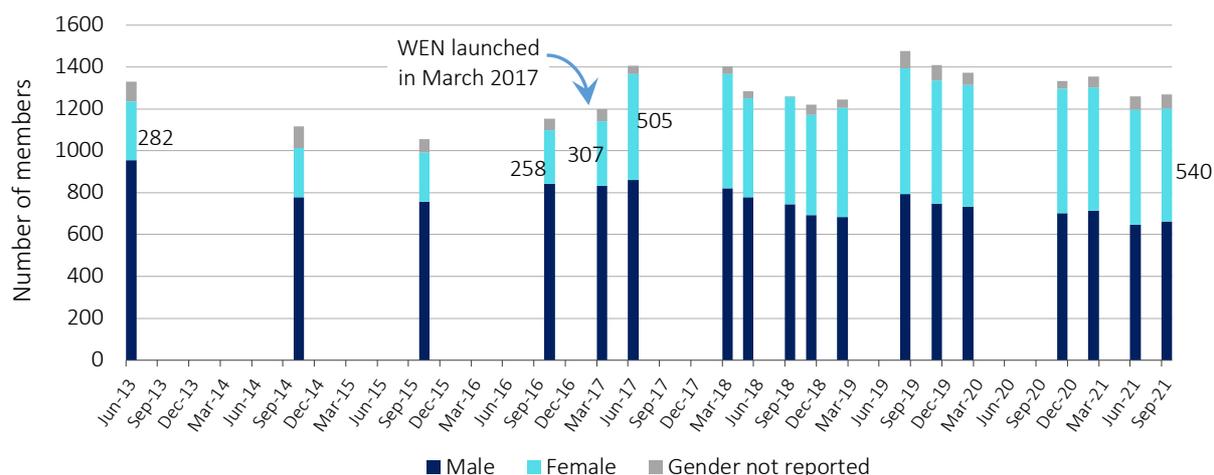
enacted initiatives with the shared goal of improving diversity and inclusion within economics. This includes, for example, the RBA launching a public education program to support economics educators and students at both school and tertiary level, university outreach programs, and several organisations that employ economists implementing internal gender equality targets in their own workforce composition. Government agencies have also been raising greater awareness on issues of gender equality more broadly, such as through the Workplace Gender Equality Agency and the setting of targets in some government boards.

### 5.1 ESA membership

The creation of WEN led to a substantial and sustained rise in the number of female economists opting to join the Economic Society of Australia (ESA) (Figure 8). ESA membership is the avenue through which people become members of WEN, but also represents a measure of people feeling affiliated with, identifying with, and experiencing a sense of belonging to the field of economics as their profession.

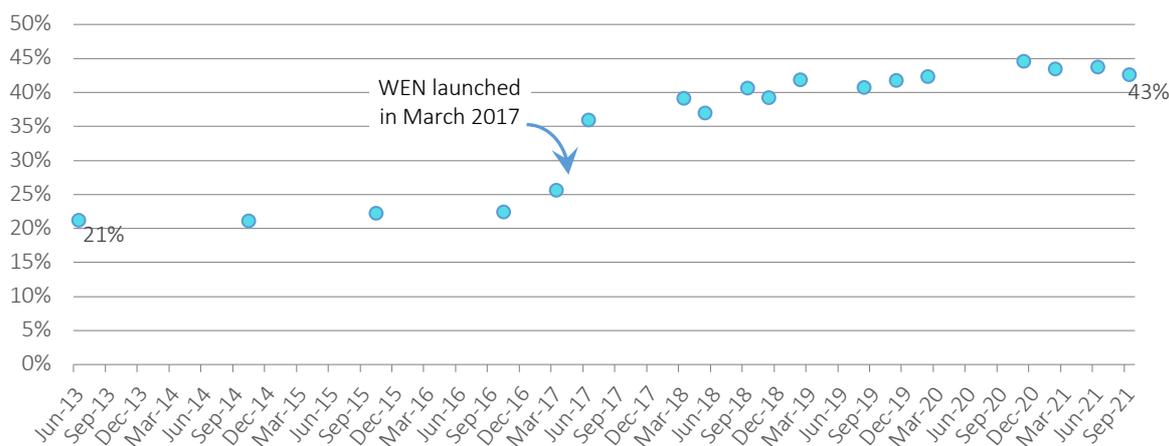
In the four years preceding the creation of WEN, females constituted a little over 20 per cent of total ESA membership. Within three months of WEN’s creation, females’ share of ESA membership rose to 36 per cent. Within 18 months of WEN’s creation, female membership of ESA had reached 40 per cent and has steadily retained this proportion (Figure 9). This rise in female membership numbers from 258 (in the months preceding WEN’s launch in March 2017) to current numbers of over 540 (as at September 2021) equates to 109 per cent increase.

Figure 8: ESA membership by gender, 2013 to 2021



Source: Economic Society of Australia.

Figure 9: Female share of ESA Membership, 2013 to 2021



Source: Economic Society of Australia.

This rise in ESA membership numbers constitutes a boost in the ESA’s visibility and presence, as well a boost in ESA revenue in the form of membership fees. The creation of WEN has also attracted significantly more sponsorship funding and in-kind support for ESA and WEN activities. Aiding WEN’s growth, organisations within the economics community who support WEN’s cause, and the values that WEN represents, and have generously demonstrated their support through funding, sponsorship, in-kind resourcing and collaborations. The attraction of sponsors to women’s causes, and the goal of equality and diversity more broadly, has been beneficial for WEN as well as for the ESA.

Men are welcome to join WEN as an indication of their allyship and support for WEN’s cause. Men comprise around 12 per cent of all WEN members, and this fraction has stayed steady for all of the years that WEN has been in existence.

## 5.2 Representation in ESA awards

The impact of WEN has also been significant in female economists’ visibility and acknowledgement of their achievements in the profession. Efforts by the WEN Committee to ensure that female economists have been the nominees shortlisted for awards has translated into an improvement in female shares of award recipients. Nominations are put forward by ESA Committee members and the final deliberation is made by a selection panel drawn from members of the ESA Central Council.

The ESA Distinguished Fellow Award was created in 1985 to honour distinguished Australian economists for their contribution to the development of economics. Between 1988 and 2016, no women were awarded the ESA Distinguished Fellow Award. Since WEN’s formation, out of the four awardees, two were women. The Young Economist Award was established by the

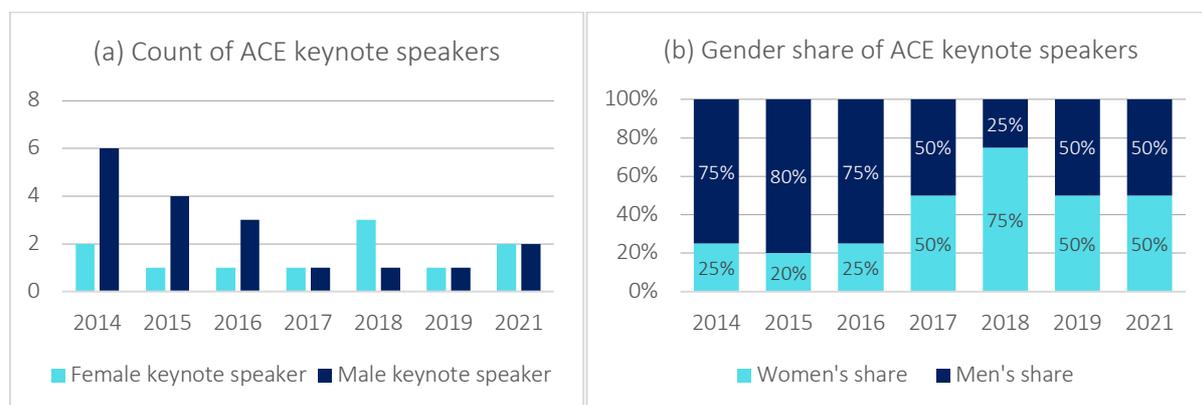
ESA in 2006 to honour Australian economists under the age of forty who are deemed to have made a significant contribution to economic thought and knowledge. Between 2007 to 2016, there were no female recipients of the Young Economist Award. Since WEN was formed in 2017, two recipients of this award were women.

### 5.3 Representation among keynotes speakers at conferences

The Australian Conference of Economists (ACE) is the premier conference for economists in Australia, organised annually by ESA. First held in 1970, each year ACE attracts top academic, policy and industry economists to present their research and interact with the wider economics community. The conference features both Australian and international speakers. With input and support from the Central Council, the organisational of the conference is hosted by an ESA State or Territory branch on rotational basis over time. Since forming, WEN Committees have contributed their input towards the nomination and selection of keynote speakers and the design of the conference program. Earlier records of ACE programs indicate that women keynote speakers were significantly outnumbered by the male counterparts: in 2005 ACE featured 8 male and 1 female, and 2008 ACE featured 6 male and 1 female.<sup>11</sup>

Since WEN’s creation, women’s representation among ACE keynote speakers has reached parity (Figure 10). In 2018, ACE featured a majority of female speakers.

Figure 10: Gender composition of keynote speakers at Australian Conference of Economists (2014 to 2021)



Source: Economic Society of Australia. ACE was not held in 2020 due to the COVID-19 pandemic.

### 5.4 Case study evaluation of WEN’s mentoring program

As part of its efforts to nurture women’s career development, WEN facilitates regular professional development workshops, an annual mentoring retreat, and mentoring programs.

<sup>11</sup> Conference information for all other years has not yet been sourced. The authors will add further information when available.

A case study of a specific initiative is a mentorship program for university students that the ACT Branch of WEN formulated in conjunction with the ANU (Australian National University) Department of Economics. Targeted at female students enrolled in undergraduate economics, this behavioural economics intervention was implemented as a randomised control trial and evaluated jointly by the Behavioural Economics Team of the Australia Government (BETA), WEN and the ANU. Undergraduate students in their first and second year of their university degree were targeted, because this was identified as the stage of a student's educational journey where women were at risk of disengaging from the subject. Namely, it had been observed that the transition from second to third year economics studies had the greatest attrition rate. A similar targeted approach was adopted by Avilova and Goldin (2018) in their design of the Undergraduate Women Economics (UWE) Challenge implemented in US universities.

WEN's mentoring program was designed to provide female students greater access and interaction with role models, broadening their perspective on career options and practical applications of economics, with the ultimate goal of inspiring more women to continue with their economics studies.

Mentors were approached through the network and included a diverse group of experienced economists working across government, academia and the private sectors. Core to the program design was a matching process, where information about mentees interests and their mentor preferences were factored in to facilitate a mentor-mentee match that would have a greater chance of success. Guidance materials and networking events also helped bring participants together, with the networking events serving as an additional exposure of mentees to role models. The program operated for twelve months, with on average three mentor-mentee meetings, although with wide variation across the group.

The study found evidence to support the effectiveness of tailored mentoring programs for female university students, in terms of lifting their economics study and career intentions (BETA, 2021). Specifically, using administrative data, the trial found that substantially more mentored students continued on with their economics studies, 46 per cent compared to 33 per cent in the control group. Those treatment group also had a slightly higher grade point average compared to the control group. Although these results were not significant using conventional statistical benchmarks, additional evidence of the programs relative success were drawn from survey data. Qualitative responses from an end-line survey saw 70 per cent of mentored students agreeing that they were more likely to pursue a job in economics due to the program

and 77 per cent said they were better able to understand practical applications of economics due to the program (BETA 2021).

As the study attests, a number of lessons for future programs can be gained, including narrowing the participant scope to include only those enrolled in an economics degree and front-loading the program with networking events to accelerate the mentor-mentee relationship. Both the duration and timing of the program were also identified as considerations for future programs. Optimising the intervention at key decision-making periods in the academic calendar and condensing the program to a shorter period were put forward as ways in which the program could be both more effective and efficient.

The mentoring program is an important case study that illustrates how well-designed interventions can increase the pipeline of female economists and offers instructive insights for future similar programs across the globe.

### **5.5 Qualitative responses on WEN's impact**

There are numerous mechanisms through which WEN has made a difference to women and the profession more widely, in ways that go beyond tangible metrics.

To evaluate the perceived impact of WEN by its members and the public, WEN conducted a survey in September 2021. The survey was disseminated to all ESA and WEN members and anyone who has ever registered for an ESA or WEN event despite not being a member. It was also promoted on WEN social media to invite input from the wider community. 115 complete responses were received, comprised of 77 members and 41 non-members.

Indicative of women's positive impact, 82 per cent of survey respondents agreed that overall WEN has made a positive contribution to the economics profession in Australia (Table 4). When asked about specific channels of impact, 75 per cent of survey respondents agreed that WEN has improved the representation and recognition of women in the economics profession; 70 per cent agreed that WEN has improved awareness about gender equality issues in the economics profession; and 56 per cent agree that WEN has given them a greater sense of belonging to and feeling connected to their profession.

Table 4: What is your assessment of WEN's impact?

	Strongly agree	Moderately agree	Indifferent or unsure	Moderately disagree	Strongly disagree
WEN has improved awareness about gender equality issues in the economics profession	36%	35%	25%	3%	2%
WEN has improved the representation and recognition of women in the economics profession	34%	41%	20%	3%	3%
WEN has given me a greater sense of belonging to and feeling connected to my profession	29%	27%	27%	10%	8%
WEN has broadened the range of topics and perspectives in economic analysis and policy debate	28%	43%	23%	5%	2%
WEN has improved awareness about diversity and inclusion issues in economics broadly	26%	43%	25%	3%	3%
WEN has improved students' awareness about career opportunities in economics	19%	25%	49%	5%	2%
WEN has improved the reputation and status of the economics profession in Australia	18%	33%	40%	6%	3%
WEN has made a difference to my career and study choices	17%	15%	34%	14%	20%
WEN has improved the public's perception of economists	16%	28%	49%	4%	3%
Overall WEN has made a positive contribution to the economics profession in Australia	43%	39%	14%	2%	2%

Source: Survey conducted by Women in Economics Network Australia, September 2021. Sample of 115 responses, comprised of 71 members and 44 non-members. Rows sum to 100%.

The services and activities of WEN that are deemed as most valuable, according to survey participants, are WEN's efforts to promote the contribution of female economists and to advocate for a greater representation of women in the field (Table 5). The provision of seminar events on economics topics, WEN's media and public speaking register for female economists, and its mentoring programs and professional development workshops are also among the most highly valued activities. All of the services and activities of WEN listed in the survey were rated as either highly or moderately valuable by the majority of survey participants.

Table 5: How would you rate the value of WEN's services and activities?

	Highly valuable	Moderately valuable	A little value	Not much value
Promoting contributions of female economists	62%	26%	8%	4%
Advocacy for greater representation of women in economics	56%	31%	10%	3%
Seminar/webinar events on economics topics	51%	30%	12%	7%
Mentoring programs and annual mentoring retreat	50%	23%	12%	14%
Media and public speaking register for female economists	44%	36%	15%	5%
Professional development workshops	40%	39%	10%	11%
Australian Gender Economics Workshop	38%	33%	22%	7%
Professional networking opportunities	37%	32%	19%	11%
Career and study information for students	37%	34%	19%	10%

Outreach activities with schools	36%	30%	22%	12%
Social media pages	31%	31%	27%	10%
Special sessions at Australian Conference of Economists	26%	33%	34%	7%
Provision of general information and resources on website	26%	43%	23%	7%

Source: Survey conducted by Women in Economics Network Australia, September 2021. Sample of 115 responses, comprised of 71 members and 44 non-members. Rows sum to 100%.

The survey responses indicates that WEN members are motivated to join the network to support the goals and mission that WEN represents (Table 6). Among paid members who participated in the survey, the most commonly cited reason for being a WEN member was to show support for WEN's purpose and objectives. The next most common reasons extended to practical benefits: to build professional connections and networks, and to gain from WEN's services and activities. The value of belonging to a community of like-minded people also featured among the top reasons.

Table 6: What are your main reasons for being a WEN member?

Reason	Share of responses (%)
To show my support for WEN's purpose and objectives	21%
To build professional connections and networks	18%
To gain the professional benefits of WEN's services and activities	13%
To gain a sense of belonging to a community of like-minded people	13%
To learn more about economic issues	11%
To connect to role models and mentors	10%
To learn more about gender equality issues	7%
To gain inspiration	6%
Other reasons	2%

Source: Survey conducted by Women in Economics Network Australia, September 2021. Sample of 71 participants who identified as current paid members participating in the survey. Multiple responses permitted.

Open feedback from survey participants elucidated on these beneficial impacts. This feedback highlighted the value of WEN's contribution towards broadening the range of economic topics for discussion and analysis, providing relatable and approachable role models, and demonstrating how both men and women belong in economics – which is important for shifting men's attitudes and perceptions too.

*“I really appreciate having visible female role models as I start out my career. The network does a great job of championing the role of women in the field and I really enjoy the broadening topics brought to light through WEN's activities, for example, the value of unpaid labour.”*

*“Meeting people I look up to has been very important for me professionally: it demystifies career progression and gives me the sense that I might be able to make a bigger contribution than I thought.”*

*“WEN has made a huge difference to my decision to continue studying economics. I wish there were more opportunities to speak to people about their experiences and gain advice about how to make a career shift.”*

*“In broad terms, I think that WEN is a fantastic concept. It is really important to broaden the purview of economics in terms of which topics are researched. It's also crucial for young women to have role models to look up to in the field, and to think "I can do that too". It's just as important for young men to look up and see both genders represented, and for them to broaden their thinking around economics – and to think about "women's issues" as actually being "human issues".”*

Feedback collected from participants of the Australian Gender Economics Workshop 2019 also illustrates the initiatives that are valued by the WEN community and have been positively perceived as contributing to WEN’s goals. Demonstrated in some examples of feedback below, these benefits include providing a supportive environment for women to connect with each other, promoting women’s career advancement through both professional development, and sharing research insights that make the case for the need for institutional change as a pathway towards gender equality:

*“I have heard so much about the toxic environment of economic workshops, but this experience was so positive and supportive. It was brilliant to see so many female economists in one space and certainly something I have never been exposed to before ... I have left with an even greater passion to continue trying to promote economics particularly towards young women.”*

*“Thank you for creating a forum that allowed early-career researchers to mix with impressive international researchers, policy-makers, and private-sector economists. The structure of the workshop really did reflect WEN's overarching goals and a recognition that a disproportionate percentage of female economists are in the early stages of their career. The opportunities and support for early-career economists were impressive, and I am very appreciative.”*

*“AGEW2019 had a huge impact on me, and I came away from the workshop feeling very inspired. Professionally, I have been able to bring some of the ideas presented back to my workplace and start some discussions, particularly around gender lensing. It highlighted to me the enormous amount of work that could be done to help with gender equality through policy.”*

*“Professionally, AGEW2019 has made me more keen to pursue gender equality in the workplace using the research and evidence presented at the workshop. Also personally it made me realise that perhaps the barriers I face at work are not specific to myself, but due to a broader issue.”*

Feedback on WEN’s video, *Economics – Understand the World Around You*, attests that the video has been positively received as a valuable contribution to the profession:

*“Thank you so much for the video... I will certainly be using it to promote our subject at the next course information session. It is very important for our students to see that both genders can equally do well in this subject.”* Zita Damaj, Canberra Grammar School

*“I want to use [the video] in the first class of the semester that starts next week. I think it is a very powerful one!”* Rafaella Belloni, USC

*“Congratulations, the video is great and it's fantastic to see so many women talking about economics! I've shared it on our Twitter and will add the link to our student website.”* Ashley Lait, The Economics Network UK, University of Bristol

*“What a superb statement. Many congratulations! Having helped with the AEA video, “Economics Is Not What You Think...” I know how difficult the entire production is. Yet, a great video, such as yours, makes it look easy.”* Professor Claudia Goldin, Harvard University

Students and teachers’ feedback on WEN’s student outreach activities reflect the motivating impact of exposing students to a variety of economists openly talking about their work:

*“I had the pleasure of attending today’s Pathways in Economics event at PwC Melbourne. It was wonderful to hear from such a diverse range of speakers, each bringing their own backgrounds and perspectives to the table to speak on the role that economics plays in shaping the world as we know it.*

*“It’s truly inspiring to see so many people unified by a shared desire to use their passion and expertise to address global issues, from gaps in education and healthcare to wage inequality – economics certainly encompasses it all! Thankyou for an empowering evening.”* School student

Women’s contribution to lifting gender equality in the economics profession has been recognised externally. Award-winning journalist and gender equality expert Catherine Fox, co-

authoring with leadership expert Kristin Ferguson, recognised how WEN had been created as a grassroots group of ‘women supporting other women’ in a field that has traditionally been seen as “aggressive and competitive” (Ferguson and Fox, 2018). Drawing on an interview with WEN National Chair, the authors identified the successful elements of the network in their book *Women Kind*:

“While a number of senior women have joined the [WEN] group, the goal is to involve as many younger women and students as possible, to show that the male-dominated field is changing and offers a wide range of potential careers. The network now has about 500 members nationally, sharing information in a safe environment, with a wide variety of role models.

“What collective movements such as ... WEN do says [WEN National Chair] Dr Risse, is send the message to women that they are not alone. And instead of focusing on just women in the boardroom, these movement have spilled into the street, taking in everyday women and commanding a bigger role in the public sphere.” (Ferguson and Fox, 2018, pp. 124-125)

There are a range of other metrics that WEN will continue to track as a way of assessing WEN’s impact. This includes future Women in Media report, to assess whether WEN’s creation has have contributed to an improvement in the representation of female economists interviewed cited in business and economics new stories. Early indications are that this metric is expected to improve, in part also due to a 50:50 gender equality target that the ABC News channel in Australia enacted as part of a concerted campaign to provide a gender balanced representation of voices in the media.<sup>12</sup> WEN’s existing media connections, and the establishment of a Media Register for female economists, meant that female economists were actively sought after and were granted more opportunities to participate in print, television and radio news coverage. WEN supported its members with capability building, through a range of practical workshops focused on communication skills.

It is not yet clear whether WEN has made a substantive difference to student enrolments, in part because the reach of WEN’s educational resources is not clear. These metrics will be monitored as WEN’s outreach to students continues to expand over time. There is potential for more systematic evaluations to be conducted in more controlled settings.

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<sup>12</sup> See ABC 50:50 The Equality Project <https://about.abc.net.au/5050-the-equality-project/>

## **6. Challenges and future directions**

### **6.1 Addressing limitations and resistance**

While WEN has achieved much in its first five years, there are still challenges and limitations to be addressed and scope for WEN to continue to improve.

Logistically, one of the largest hurdles for WEN's capacity to deliver on its objectives are resourcing constraints. For most of WEN's Committee members, this service is in addition to their full-time job or studies, and often alongside parental and other caring responsibilities. All WEN Committee members serve the network as unpaid volunteers in their own time. The coordination and provision of WEN's initiatives requires not only an intensive investment of time and effort, but also an investment in the research knowledge base to ensure that initiatives are designed and implemented in responsible and effective way. In a comprehensive summary of the evidence on gender equality initiatives that are applicable to the economics field, Buckles (2019) similarly identified the costs and resourcing demands associated with these gender equality initiatives:

“While many of the interventions discussed here have been shown to yield important benefits, they also have costs. The CeMENT mentoring program [the mentoring program implemented by CSWEP] requires a significant time investment from its mentors and even more from its organizers; anti-bias training can be expensive and requires faculty time; developing service plans and transparent systems for rewarding service can be complex and (again) time-consuming. Even lower-cost interventions like having successful alumni speak to Principles classes require time to coordinate and manage.” (Buckles, 2019, p. 59)

One way to address this demand on volunteer time is to promote an organisational practice where employers more fully recognise the contributions of their employees who voluntarily give their services to groups such as WEN. This should be seen as a form of service to the profession that is given credit in hiring, promotion and performance evaluation processes, and in assessments of an individual's management and leadership capacities.

In another point of potential improvement, there is scope for WEN to continue to nurture and promote diversity and inclusion across intersecting dimensions of identity, including through improving the representation of women from Indigenous backgrounds, lower socioeconomic backgrounds, women with a disability, LGBTQI women and individuals who identify as non-

binary, and women from cultural, racial or linguistic backgrounds that are also under-represented.

Potential avenues for WEN to focus on in its future initiatives were identified in our survey of members (Table 7). Promoting more gender equitable practices in the institutional policies and procedures of organisations where economists work and study was the area that survey members identified as the most useful area to concentrate on.

Informatively, investing in “institutional change” rated more highly than improving services and resources for paid members, implying that members recognise the value of WEN advocating for improvements in systems and structures, beyond simply trying to support women at an individual level. This is consistent with the emerging literature of ‘what works’ in the gender equality space (for example, see Bohnet, 2016).

Table 7: What areas should WEN focus on expanding in the future?

	Share of all responses (%)
Promoting more gender equitable practices in institutional policies and procedures where economists work and study	23%
Representation of women economists in media and public speaking	21%
Representation of women in senior, executive and leadership roles in economics	17%
Equality and inclusion among women from under-represented cultural, linguistic, socioeconomic, and disability groups, including Australia's First Nations peoples	16%
Student outreach	15%
Improving services and resources for paid members	12%
Diversity and inclusion in economics education	12%
Equality and inclusion among women and individuals who identify as LGBTQI+ and gender non-binary	4%
Other areas (please specify)	4%

Source: Survey conducted by Women in Economics Network Australia, September 2021. Sample of 115 responses, comprised of 71 members and 44 non-members. Multiple responses permitted.

It is understandable that not all members of the economics community are ideologically supportive of the formation of a women’s group, and this has also been communicated to the WEN Committee through various channels of feedback.

As to be expected with any initiatives that pursue social change, the proposal and implementation of women’s network encountered various forms of resistance or opposition including from within the economics community. Insights from social psychology helped us to understand resistance to equality initiatives and anticipate its occurrence (VicHealth, 2018). Previous research has identified that people who are least supportive of diversity and inclusion initiatives in the workplace are those who place a high value on self-enhancement and opportunities for their own achievement, and on traditionalism and preserving the status quo

(Anglim, Sojo, Ashford, Newman and Marty, 2019). It makes sense that some members of the economics community perceived the creation of WEN, and the diversity and inclusion initiatives that the network has implemented, as a threat to their own career advancement and aspirations, and a disruption to a system that they do not believe needed to change. Cognisant of these potential reactions from within the economics community, WEN focused on communicating the collective benefits of WEN for the outcomes and standing of the profession overall, and the potential for WEN to widen opportunities for everyone rather than impose upon individual opportunities.

In the process of formally establishing WEN, it became evident that not all women were interested in joining a women's group or in support of the establishment of one. This was a position to be respected, though it is not possible to fully know the reasons for their reservations. It is possible that some women may have harboured a fear that affiliating themselves with a women's group would be viewed unfavourably by male colleagues, perceived as "playing the gender card". There is potential that women feared that joining a women's group would flag that they were deficient in capability and in need of additional support, and that they aspired to prove their capabilities unassisted, on the basis of "merit" in the existing system. It is possible that some women did not feel an affiliation with a women-focused group because other dimensions of prejudice or marginalism could have been more salient to them, such as racism or homophobia. It is also possible that some women, particularly younger women, did not feel a need to join a women's group because they did not have an awareness of gender-based inequalities or ever consciously experienced in their career to date.

While constituting a very small minority of survey responses, some survey participants expressed an opposition to the existence of a women's group, perceiving that it had a divisive effect on the economic community, and that it also disrespected women who chose to prioritise having a family rather than pursue a career. Expressions of disappointment were also communicated by some members who felt that the benefits of the network had not extended to all members, but largely accrued to the women who were running the network and to women who already had a high media profile. The need to broaden the racial and cultural diversity of Committee's composition was also highlighted in survey responses.

In sum, the ideological resistance that WEN has encountered on occasions is consistent with the broader research on barriers to social change, and echoes the pushback that similar organisations internationally have reported encountering.

## **6.2 Challenges and opportunities for the future**

It is one thing to create a network: it is another for the network to sustain its momentum and endure over time. The sustainability of WEN is a matter for strategic consideration that is likely to require commitment, support and resourcing contributions from the organisations and institutions in the future that benefit from WEN's contribution.

Sustaining momentum also entails expanding responsibility and accountability for gender equality and diversity in the field beyond the job of women's groups and minority cohorts. There is also a need to focus on improving not just equality of representation and the diversity of the profession's composition, but also to foster a culture where all individuals in the field feel a genuine sense of inclusion and belonging to the profession and respect by their colleagues and peers.

Expanding responsibility for gender equality, diversity and inclusion beyond the responsibility of women's groups and minority cohorts is an important step towards mainstreaming gender equality and expediting these goals. WEN has a number of allies in this respect, and it will be important for the network to continue to draw on, integrate and partner with allies to expand this responsibility.

A key consideration for the future of WEN is to ensure that members are able to see and receive value from their involvement, and that the membership base does not deteriorate, as can happen with many new initiatives. Ensuring strong and effective leadership, energy and enthusiasm within the WEN community, and supportive opportunities for the next cohort of Committee members to step into the leadership roles, will be essential ingredients.

Continued data collection and evaluation of the success of the network relative to objectives will be important. Annual data collection of membership, membership surveys and evaluations of specific initiatives will be a valuable evidence base to continue to draw on to ensure viability and relevance, and to progress the work of the network.

In terms of other opportunities for expansion, WEN has identified opportunities for future research and analysis in terms of systematically tracking women's representation in economics, expanding data collection to incorporate an intersectional lens, and designing more robust ways to test and evaluate the impact of WEN's initiatives.

### **6.3 Lessons and insights to share with others**

A key choice to make, as a new women's organisation, is whether to establish as a standalone body or to become part of the broader professional body for economists. There are costs and benefits to both.

Establishing as a standalone entity provides greater flexibility and autonomy, and there is less need to spend a lot of time convincing those sceptical about the objectives. However, setting up an entirely new organisation is resource intensive. It requires mapping out governance arrangements, establishing financial accounts and auditing, IT supports and insurance. These can be a substantial burden for a volunteer not-for-profit body and divert time from the core mission. Establishing separately also means that prospective members would have to pay two sets of membership fees if they want to also remain a member of the broader professional body.

On balance, the creators of WEN decided to align with the Economic Society in Australia to gain the benefits of the ESA's existing structures and administrative supports. Establishing through the ESA also provided benefits in terms of credibility and the ability to communicate about the establishment of WEN with economists around the country through the ESA's mailing list. It did require managing doubters within the organisation, but this was managed by identifying key allies and supporters, and having an authentic and compelling pitch about the prospective benefits to be gained the broader body in terms of boosting membership numbers, dynamism, and building the future pipeline. Integrating WEN within the profession's peak body, rather than creating a separate entity external to ESA, was also likely to be a more effective of way to bring about change within the profession's culture and practices.

The Committee worked early on to make sure that there was a process for formal recognition of WEN within the ESA's governance arrangements. Within six months of launching WEN, the ESA Central Council democratically voted to amend the constitution to formally include WEN as a Branch, with the same status as each State Branch, for the purposes of voting on resolutions and matters such as award nominations. This constitutional change ensures that WEN will have longevity and status, regardless of who comprises the ESA's governing committee at any time.

Another challenge in establishing a new organisation is attracting enough volunteers early on to deliver on the vision. As co-creators of WEN, we recommend casting the net widely and using existing and diverse networks of friends and colleagues to find people whose values align with the objectives of the new organisation, and who are intrinsically motivated and willing to

volunteer their time. WEN's Facebook page and an initial article about the formation of the network written by a prominent economics journalist, Jessica Irvine, helped build WEN's reach, attract volunteers from around the country, and bolster the credibility of this new venture (Irvine, 2016).

Embarking on a new venture like WEN is akin to progressing through a proof-of-concept process in the innovation space. Once WEN began to demonstrate its capacity to deliver on its goals, attract interest and have a meaningful impact, other groups and leaders of organisations came forward to offer their support and endorsement in various ways, including providing sponsorship funding and collaboration opportunities.

A strength of WEN has been its multi-sectoral reach, with its activities and resources designed to cover issues of interest and relevance to economists in the public sector, private sector, and academic and teaching space. This dynamic blend of sectors has contributed to building more diverse and expansive networks for members, a more productive sharing of knowledge across research and policy, and opportunities for cross-fertilisation and collaboration between members from different sectors. This multi-sector approach also provides a supportive environment for economists who move between sectors throughout their careers, recognising the transferability of their skills and the value of their experiences in other sectors.

The final message is that the mission to close gender gaps in economics cannot be placed in the hands of women's groups alone: the economics profession is a microcosm of wider society where the undoing systemic inequities require collective effort and systemic change. WEN's initiatives exemplify how we are using our economics toolkit, combined with insights from complementary disciplines, to optimise opportunities and outcomes within our own profession, and ultimately contribute to a more equitable and effective economics community for all. We hope this paper helps inform and inspire others in the economic profession to join this global cause.

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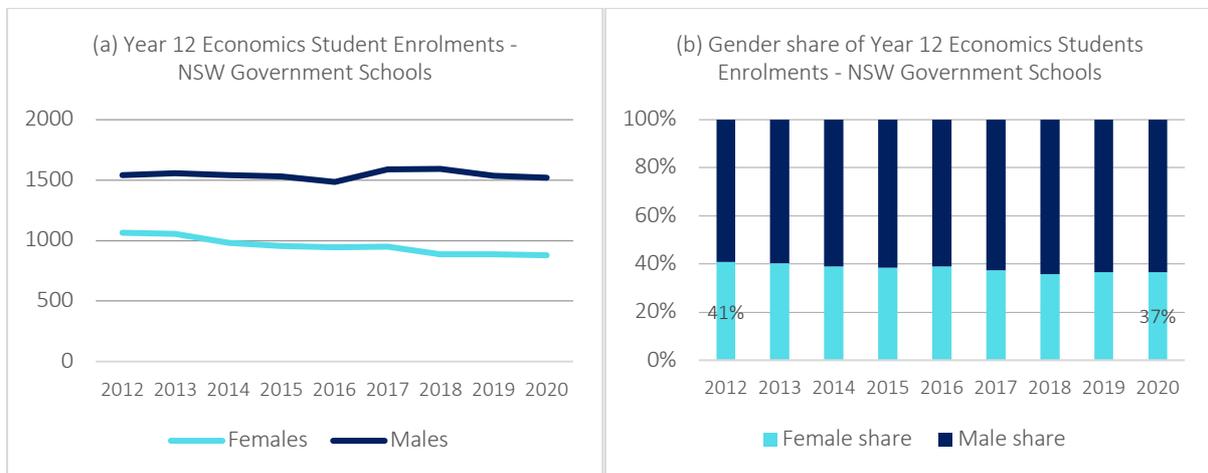
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# Appendix

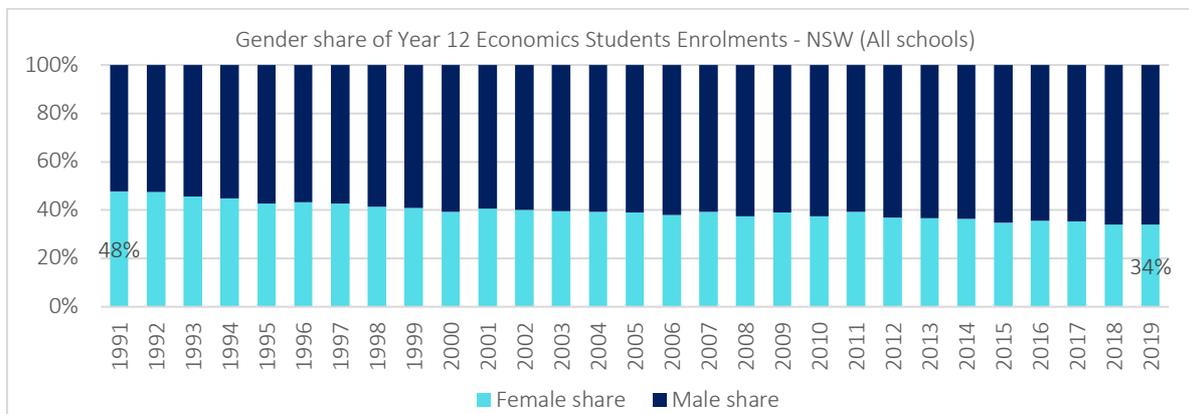
## Appendix A

Table A1: Gender composition of secondary school students in New South Wales, Government schools (2012 to 2020)



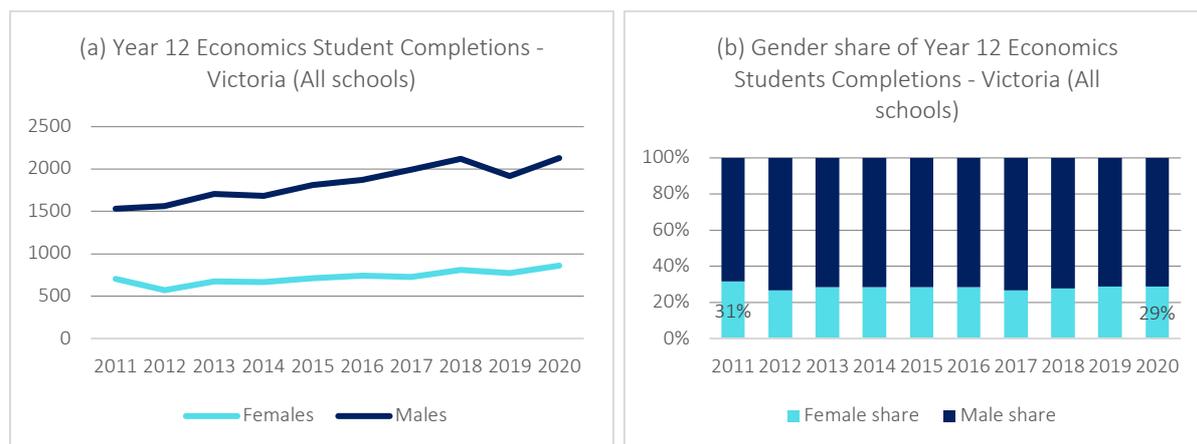
Source: NSW Education Standards Authority (NESA), NSW Government

Table A2: Gender composition of secondary school students in New South Wales, All schools (1991 to 2019)



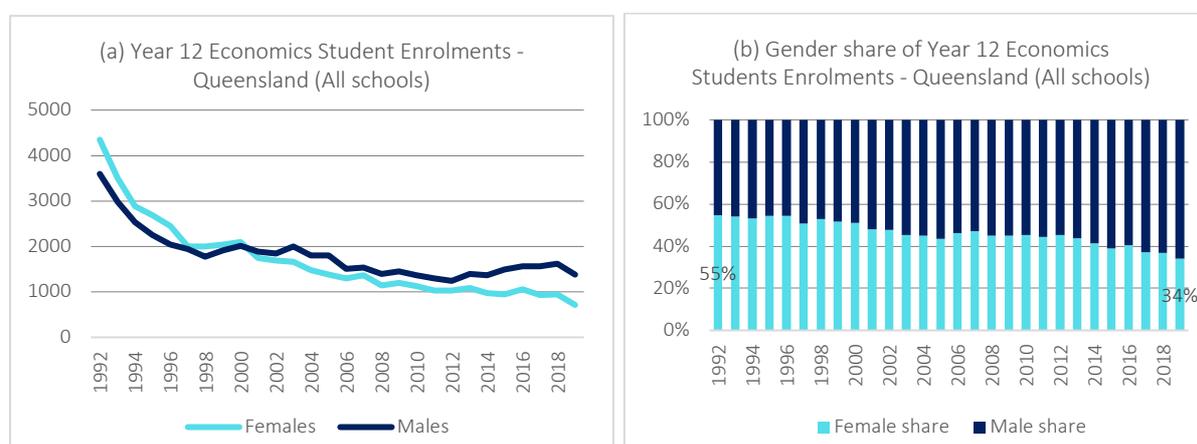
Source: RBA, drawn from NSW Education Standards Authority

**Table A3: Gender composition of secondary school students in Victoria (2011 to 2020)**



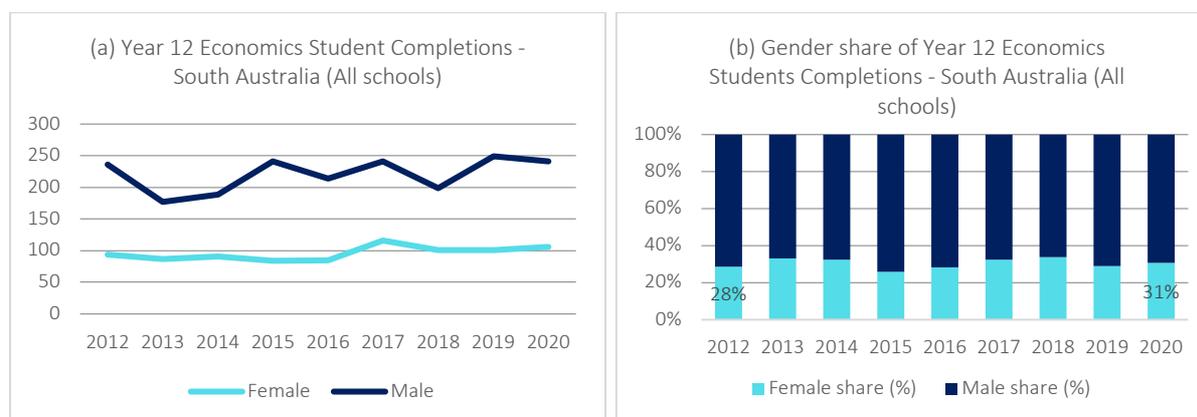
Source: Victoria Curriculum and Assessment Authority (VCAA), Victorian Government

**Table A4: Gender composition of secondary school students in Queensland (1992 to 2019)**



Source: Queensland Curriculum and Assessment Authority (QCAA), Queensland Government

**Table A5: Gender composition of secondary school students in South Australia, All schools (2012 to 2020)**



Source: South Australia Certificate of Education, South Australian Government.