



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

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This paper is available publicly on the Women in Economics Network website <https://esawen.org.au/>

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## Summary

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 at 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 (ESA). Though still in its infancy, WEN's impact is evidenced across a range of metrics, including a marked increase in ESA membership numbers. Within a year of WEN's creation, women's share of ESA memberships rose from 25 per cent to 40 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 explains the evidence-based steps that were taken to establish WEN and guided the design of its initiatives. WEN's impact is evaluated across a range of quantitative and qualitative metrics. Our evaluation of WEN's impact 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 the practical experiences of WEN committee members in combination with research insights, this 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; discrimination

**JEL Codes:** A11 (Role of Economics, Role of Economists, Market for Economists); J16: Economics of Gender; Non-labor Discrimination); J71 (Discrimination)

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# 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. In 2017, it was 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 was despite numerous female economists demonstrating their expertise and capabilities in deputy roles in these various agencies.

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

Looking ahead at Australia's pipeline of future economists, female students constitute around 37 per cent of university domestic enrolments in economics in Australia, while females' share of secondary school enrolments in economics is around one-third. However, current economics enrolments in Australia's schools and universities are part of a concerning trend. 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, 2018; Livermore

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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 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.

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-concentrated field of economics and in 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 – including the appointment of a female Prime Minister, several female Premiers, and a female Chief Scientist in Australia – 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. This mission aims to foster 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> Although there is much progress to be made, Australia has had several female appointments in the highest levels of political governance including as Governor-General, Prime Minister, State Premiers and Territory Chief Ministers <[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

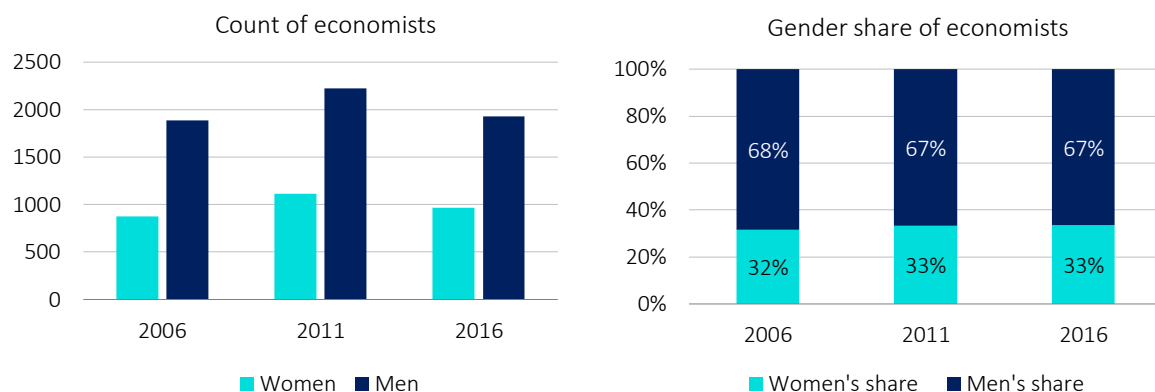
### 2.1 A statistical picture of the gender composition of economics profession in Australia

We use several metrics to calculate 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.

#### 2.1.1 Gender composition of Australia's economists

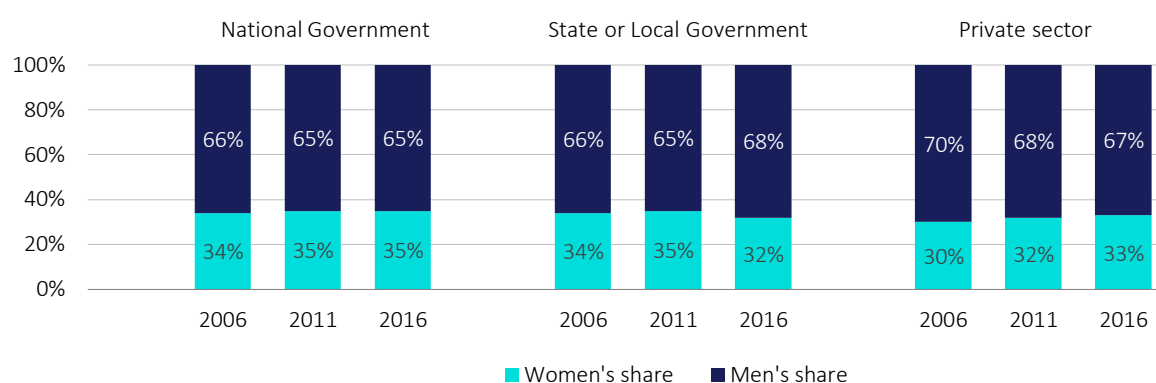
A count of economists can be derived from Australia's Census data collections which are available for 2006, 2011 and 2016, and made available by the Australian Bureau of Statistics (ABS). Based on occupation information, women constitute around 33 per cent of all economists in Australia. This one-third share has been stable across all years of Census data available to date (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 governments 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)

Figure 2: Gender of economists in Australia, by sector of employment, 2006 to 2016



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 1). Relative to this one-third benchmark, women are slightly over-represented in the Education and Training sector at 42 per cent, although 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 remaining largest five industries of employment for economists in Australia.

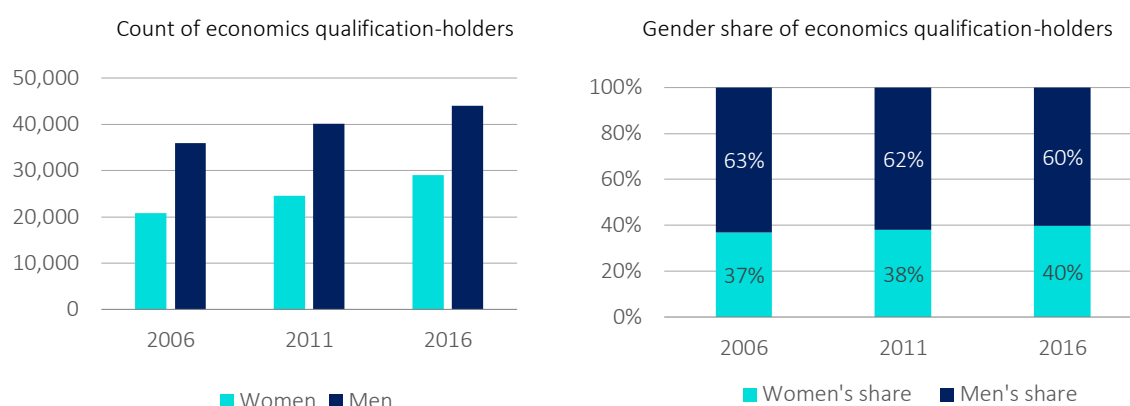
Table 1: Gender composition of economists in Australia, by industry of employment, 2016

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 possible for people to work 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 (Figure 3). 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.

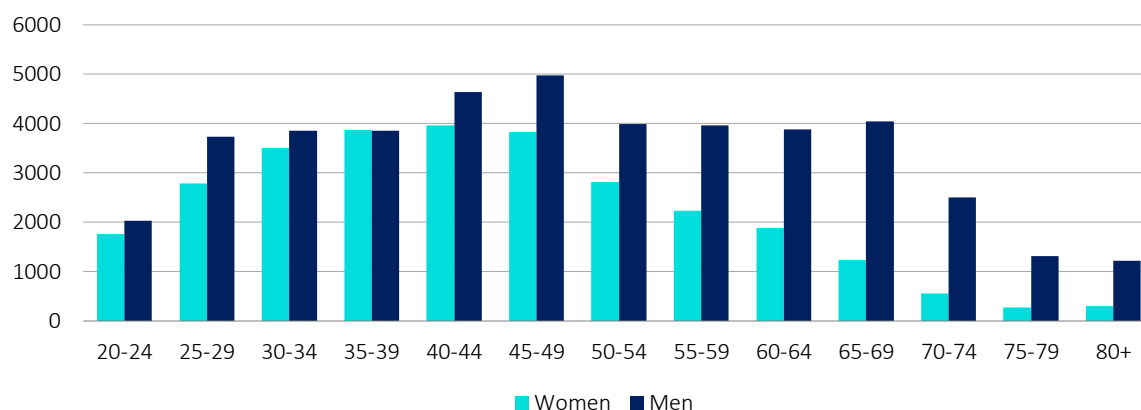
Figure 3: Gender composition of economics qualification-holders in Australia, 2006 to 2016



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.

Profiling economics qualification-holders according to their age shows that the gender disparity in economics qualifications is starkest among older age groups (Figure 4). In part, this reflects the limited educational opportunities that older generations of women experienced throughout their lifetimes. While the gender disparity generally narrows progressively among younger cohorts, it 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).

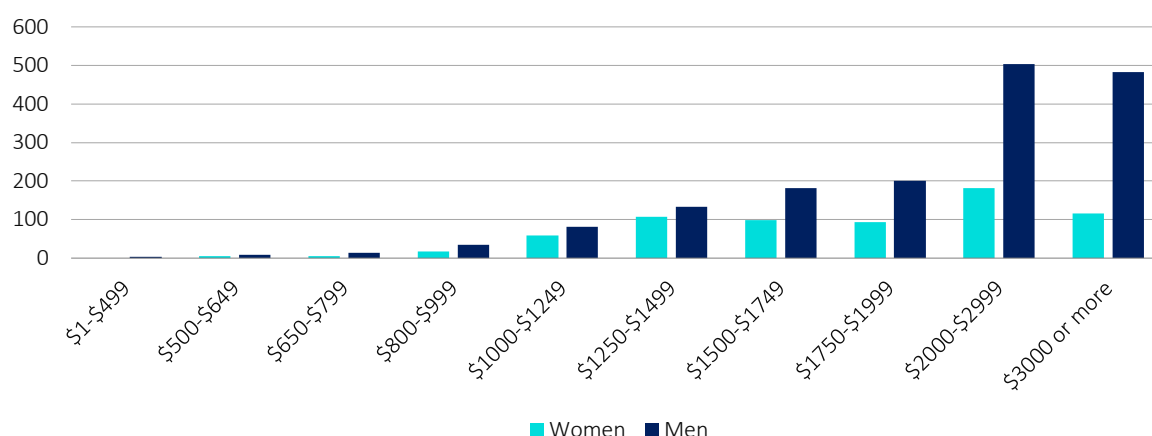
Figure 4: Count of economics qualification-holders by age and gender, Australia, 2016



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

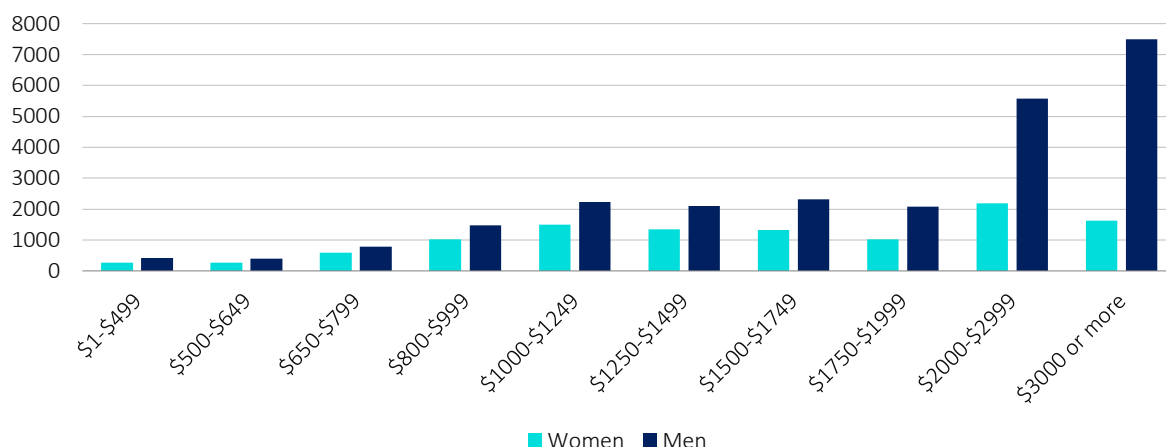
A profile of the full-time weekly earnings of economists and economics qualification-holders shows strong gender differentials, with men over-represented in the highest earning brackets (Figures 5 and 6).

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.

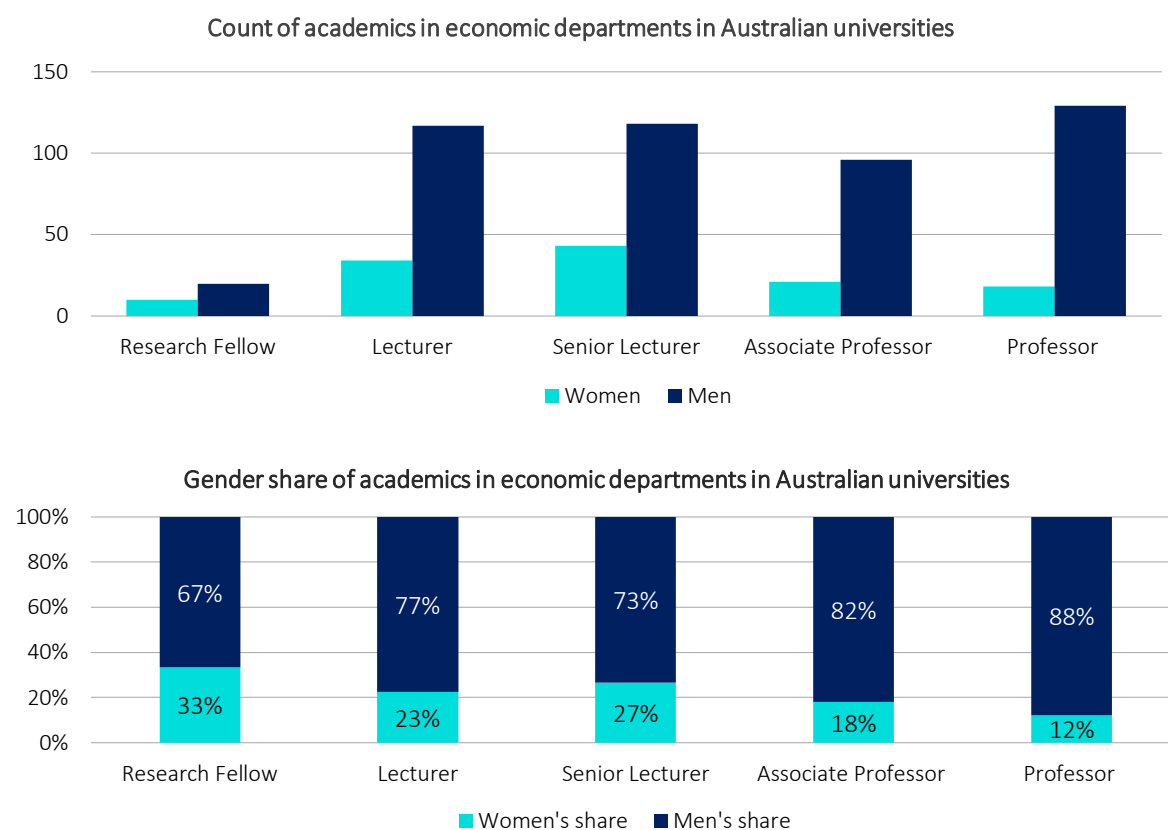
Figure 6: Count of full-time employed economics qualification-holders, by weekly income and gender, Australia, 2016



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.

Analysis of economic academics within Australia's universities is of particular interest, as this is the cohort who have responsibility for the design and delivery of economics courses university level, and therefore the capacity to significantly influence students' experiences and career decisions. An analysis of academic appointments in economics in Australian universities, that was commissioned by the ESA in 2016, found that women made up around 21 per cent of economists employed at university economics departments. Men were over-represented among senior levels (12 per cent of Professors and 18 per cent of Associate Professors), while women were more heavily concentrated among the early-career and mid-career ranks (Figure 7).

Figure 7: Gender composition of university economics departments, Australia, 2016

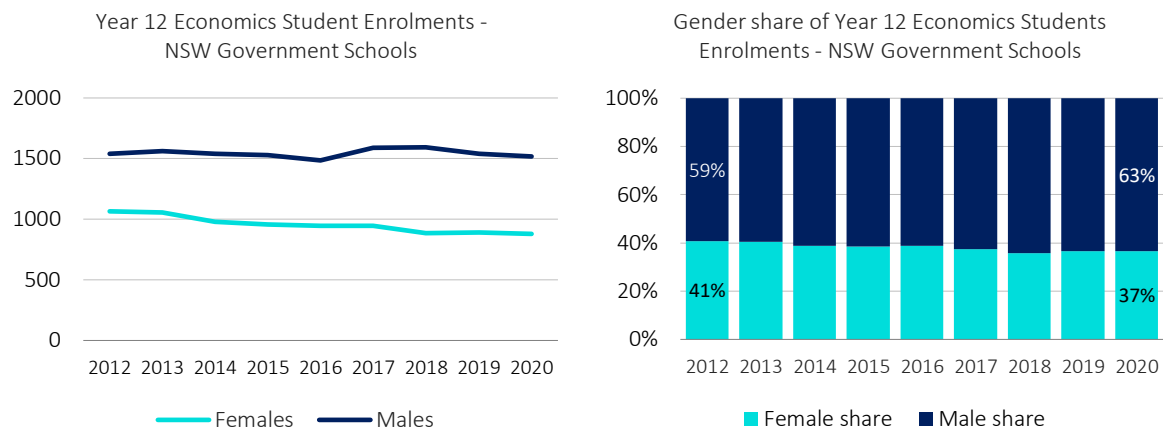


Source: Economic Society of Australia. Data compiled in 2016 from a survey of 41 Australian university economics departments. 18 economics departments responded to the survey, comprising 4 departments from the Group of 8 (Go8) and 14 from non-Go8 universities. Data for the remaining Go8 were added from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

### 2.1.2 Gender composition of Australia's future pipeline of economists

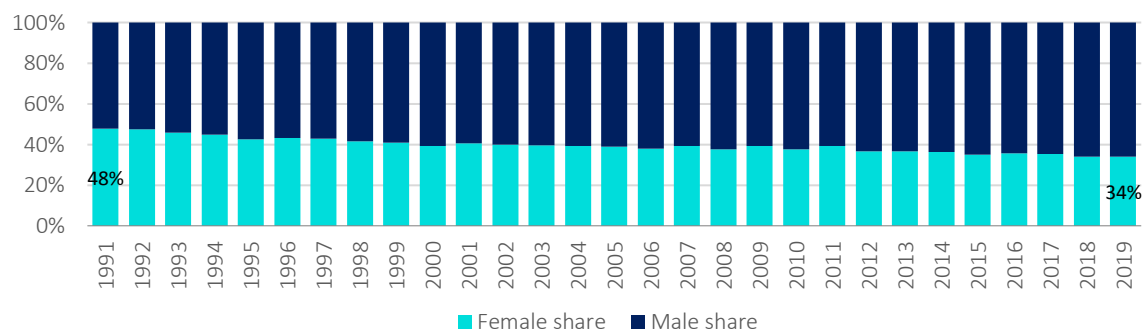
Feeding into the low proportion of women in the economics profession is the under-representation of female students in the education pathways that lead to economics careers. Data on school student enrolments reveal that female students are in the minority in economics classrooms and that this share has generally been shrinking over time (Figures 8 to 12). 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 (Figure 11).

Figure 8: Gender composition of secondary school students in New South Wales, Government schools, 2012 to 2020



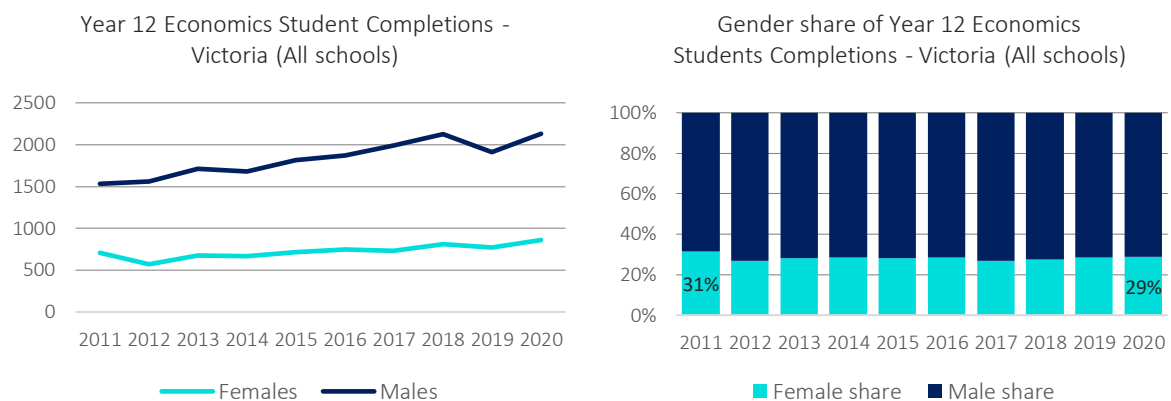
Source: NSW Education Standards Authority (NESA), NSW Government

Figure 9: Gender composition of secondary school students in New South Wales, All schools, 1991 to 2019



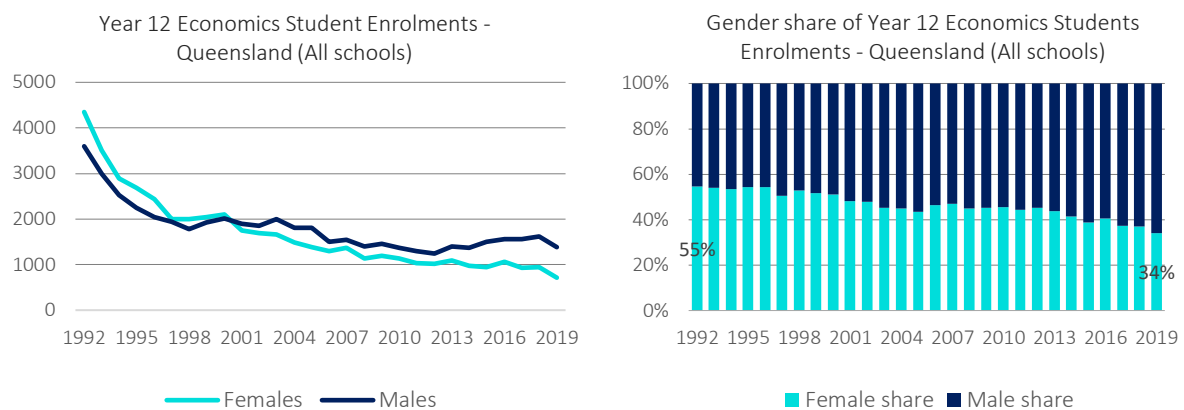
Source: RBA, drawn from NSW Education Standards Authority (NESA)

Figure 10: Gender composition of secondary school students in Victoria, 2011 to 2020



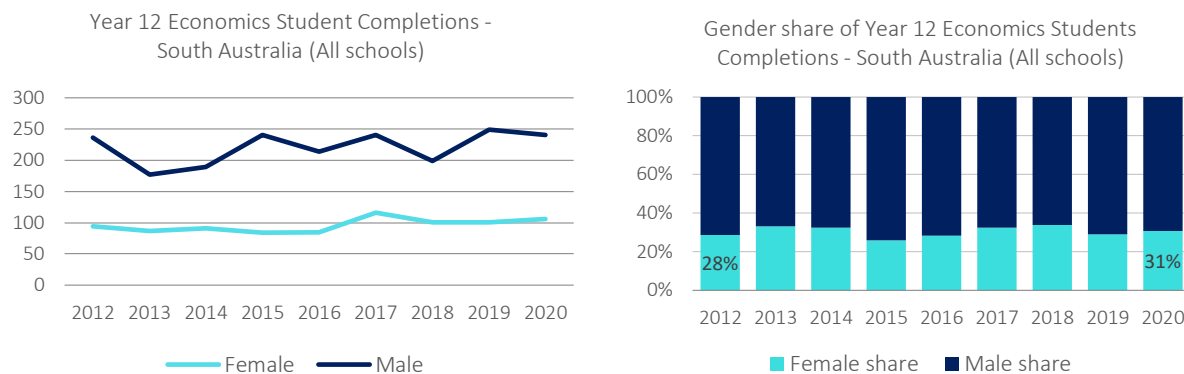
Source: Victoria Curriculum and Assessment Authority (VCAA), Victorian Government

Figure 11: Gender composition of secondary school students in Queensland, 1992 to 2019



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

Figure 12: Gender composition of secondary school students in South Australia, All schools, 2012 to 2020



Source: South Australia Certificate of Education, South Australian Government

There are multiple factors that potentially explain the decline of school students enrolments in economics over time. This overall decline in economics enrolments coincides with a noticeable rise in the offering in business studies, presenting a competitive substitute choice of subject for prospective students. It is apparent that business, finance and commerce have been effective in reaching prospective students through clearly communicating the types of job opportunities that these fields can lead to, explaining the practical usefulness of studying these subjects, and relating the subject content to the issues that students care about. The general perception 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.

Similarly, recent decades have seen a concerted efforts by governments, industry and education bodies to lift the representation of women in STEM (Science, Technology, Engineering and Mathematics). This includes dedicated investments by government departments to increase skill

acquisition in these fields and fund gender equality initiatives in these disciplines, such as Athena Swan accreditation.<sup>3</sup> While these efforts are important for addressing women's underrepresentation in these male-concentrated fields, the rising appeal of STEM to female students also presents a competitive substitute for prospective economics students. This particularly applies to students with strong mathematical aptitude and an orientation towards problem-solving, 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 notable proportion of teachers who have been assigned responsibility for delivering economics courses are teaching "out-of-field" without a qualification in economics. 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 13). Overall, 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.

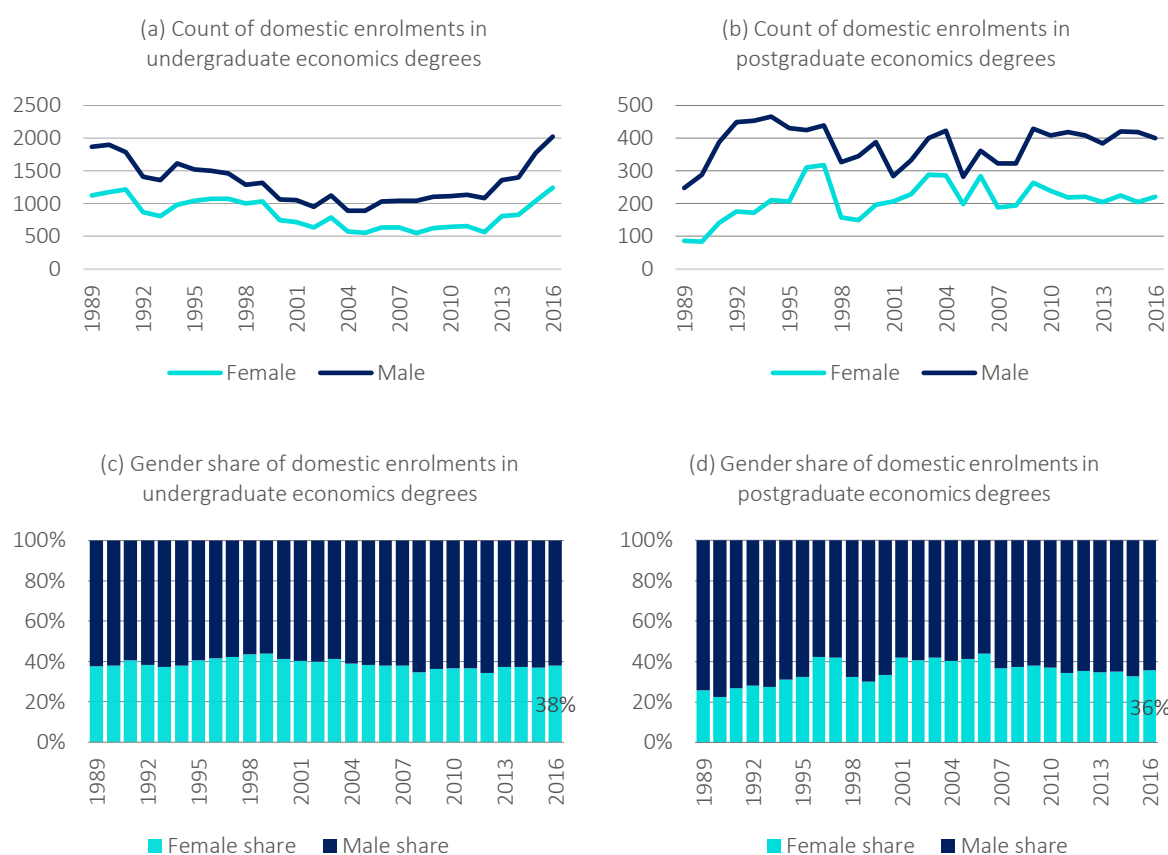
Expressed as shares, women comprised around 38 per cent of undergraduate students enrolled in economics for the most recent year of data available in 2016, but has generally been declining on average over the past three decades. Women's share averaged 37 per cent during the 2010s, a drop from 39 per 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, however this occurred to a relatively larger decline in male students' enrolment numbers rather than an increase in female's enrolment numbers. Overall enrolments climbed during the 2000s, but the rate of increase among male students outpaced that of female students, contributing to a shrinking female share.

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

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

Figure 13: Gender share of university economics enrolments, Australia, 1989 to 2016



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 commencing enrolments in undergraduate and postgraduate degrees classified as Economics or Econometrics using the Australian Standard Classification of Education (ASCED). Undergraduate refers to a Bachelor degree. Postgraduate includes Graduate Diploma, Masters and PhD degrees. Excludes degrees that are classified by universities as general commerce degrees. Excludes international students.

### 2.1.3 Gender composition of economists in Australian media

The composition of economists who are given a voice in the media provides not only an indication of women's representation in the profession, but also their degree of public influence and societal perceptions of whose voice matters most. A 2018 gender analysis of mainstream Australian media identified an under-representation of women's voices in the areas of the media where economists are expected to feature. Women constituted a mere 18 per cent of direct sources cited in business and finance articles and 32 per cent of direct sources in articles on government and politics (Price and Payne, 2019). Female journalists are also in the minority within these field of reporting, constituting 40 per cent of the journalists working in these areas.

Overall the statistical picture the women's under-representation in Australia's economic profession is largely consistent with broader gender disparities in economics that have been well documented

internationally (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 capacity of the profession to perform its role and contribute meaningfully to society.

There are multiple channels through which greater diversity and broader demographic representativeness can enhance the effectiveness of a profession. In many respects, the benefits of women's increased representation reflect the positive impact that greater diversity brings to a team, workplace or any decision-making setting, as has been documented in the broader research literature on diversity and inclusion. Firstly, the gains of expanding women's involvement in a field can be productivity-based, reaped through a more resourceful deployment and matching of workers' skills and capabilities to the tasks at hand. 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 the different perspectives and insights that men and women can bring as a result of their different life experiences. 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, including 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 capabilities, insights and lived experiences, which in turn has the potential to enhance the numerous processes and outputs that the profession is responsible for generating. A more diverse profession lifts the profession's capacity to detect and diagnose real world problems, to respond to the needs of the population, to interrogate evidence, and to consider various possible ways of interpreting analytical results. A more diverse professions strengthen the robustness of debate and the breadth and

comprehensiveness of issues that are placed on the economic research and policy agenda. A more diverse profession can influence the weighting assigned to competing topics in editorial, grant and funding decisions, and bring into scope topics that may have been previously discounted in importance and relevance. Significantly, the diversity of the economics affects the profession's capacity to deliver teaching, learning and academic supervision to an increasingly demographically diverse body of students. As the 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 and technical 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 decision-making.

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 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 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 interventions. 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 self-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 declining 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, as well as the declining diversity within the economics profession, 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 issue of the under-representation, under-recognition and marginalisation of women in economics in Australia has taken place in the context of the wider cultural changes in the gender equality space that have occurred in recent years.

While women's under-representation in economics has been an ever-present issue, focus has been sharpening internationally on the prevalence of gender inequality and sexism in the economics profession, particularly spurred on by a wave of economic research investigating gender biases in the economic academia in the U.S. These economic analyses detected systemic and cultural 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 less 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 has concentrated on gender differentials in academia, the literature on gender biases and inequities in the labour force more widely can also help explain the gender inequities encountered by female economists in the various other institutional settings where economists can be found, including in government, private businesses, politics and the media. From among an enormity of possible research examples to cite, some relevant examples include evidence that CVs with male names are more likely to be rated favourably than identical CVs with female names (McGinn

and Tempest, 2010) and findings that social expectations pressurise women to take on the voluntary and administrative tasks in the workplace that do not count for much in performance evaluations and job promotions, in ways that are not experienced by men (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 marches and protests throughout 2020 and 2021 including 'March for Justice' rallies on the outdoor grounds of Australia's Parliament House (Zhuang, 2021).

## 3. How was WEN created?

### 3.1 Origins of WEN

To address the gender disparities and inequities 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 grew out of mentoring retreat hosted by the ESA in 2016. The retreat had been proposed by

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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>

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 world and identified the need for such a group 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 Renée Fry-McKibbin. The proposal for mentoring retreat received strong endorsement from Dr Matthew Butlin in his role as the President of the ESA at the time. The ESA was cognisant that membership numbers were on the decline and females were under-represented within the profession. Butlin's role as ESA President was instrumental in ensuring that the new initiative for a women in economics group would be supported by the ESA through both resourcing and institutional changes.

Following the 2016 women in economics mentoring retreat, a small group of mid-career economists who attended the 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, the 2005 Annual Report of the ESA Central Council, chaired by ESA President Glenys Byrne, includes a specific report indicating that women's under-representation in economics was an issue of concern at the time. The 2005 ESA Annual Report observes:

"For young women majoring in economics, career prospects are significantly greater now than they were 30 years ago, when it was normal for women economists in the workforce to cop a barrage of sexual harassment, 'put downs', and other forms of humiliation on a regular basis. One needed a very tough skin, a wicked backhand slice and other self-defence skills just to hang in. Witnessing the breaking down of these barriers to participation over time has been a very satisfying experience for older women. Nevertheless, there are still many lingering issues for women in the economics profession, including: the tendency for female points of view to be dismissed or not heard, suggesting a lack of tolerance for diversity of opinion in the profession; the persistence in some quarters of chauvinist views that women are less intelligent

and less equipped to master technical skills; male economists tend to quote themselves and other men rather than seek out more relevant and better articles and books written by women; and other forms of alienation, for example: women are 'overlooked' in that they are not invited to join groups of male economists in promoting a particular public policy initiative; and it is often the case that women are not sought as speakers at conferences, seminars, and public lectures, and their contributions to economics, the profession, and public policy lack due recognition."<sup>6</sup>

The 2005 ESA Annual Report cites that its main initiative to promote the achievements of individual women would be the creation of a 'Women in the News' section of the ESA website. It goes on to recommend a list of initiatives that the ESA could undertake to improve women's representation and recognition, namely: facilitate networking for women economists; expand opportunities for women to speak at the ESA conferences and to present public lectures; and to undertake more detailed research into the representation of women in the economics profession in Australia.

Two years later, the Minutes of the ESA Central Council for March 2007, chaired by ESA President Neville Norman, noted:

"The matter of the apparent demise of the Women in Economics group was discussed and Ann Harding suggested that women economists possibly were not interested in being separated as a special group. There were no volunteers to restart the group."<sup>7</sup>

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", as was conveyed in the ESA meeting minutes cited above. These observations point to the need for there to be genuine support from among the economics community, and for the achievement of a critical mass in size, for a group such as WEN to be built, adequately resourced and sustained at a viability level of operation 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.

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<sup>6</sup> Sourced from ESA administrative archives.

<sup>7</sup> Sourced from ESA administrative archives. Ann Harding was serving as the President of the ESA ACT Branch and a member of the ESA Central Council at the time.

While its broad remit is to improve gender equality in the economics profession, in the creation of its governance arrangements, WEN articulated four operational 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 more young women to study economics. These objectives work holistically to not only directly support women who are currently in the profession, but also to bring about the broader systemic and cultural change that is needed to foster a gender equitable profession, and to look ahead at nurturing the pipeline of economists in the future.

WEN's governance and structure mirrors the ESA's Federal structure, where State and Territory branches deliver localised activities and initiatives to members in their respective jurisdictions and the National Committee co-ordinates, administers and promotes the activities of the network at a national level. The WEN National Committee is comprised of the WEN National Chair, Deputy Chair, Secretary and Treasury, together with the Chair of each WEN State and Territory branch and Special Advisors who are appointed for their expert knowledge on educational outreach. Each WEN State and Territory Branch has its own WEN Committee. WEN also has representation and voting rights on the ESA's Central Council and on each ESA State and Territory councils.

Representation on WEN committees is drawn from all sectors, including high school economics teachers who bring expertise to guide WEN's educational outreach activities. WEN's 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 any individuals who identify beyond gender binary classifications. Men and all individuals 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, who have the capacity to make the institutional and cultural changes 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 women's equal involvement in economics through the eyes of men. Men's attendance and involvement at WEN events also enables men can be exposed to a wider range of economics topics than they might otherwise encounter, including hearing females' perspectives, which can enhance their understanding of the issues 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 a broader interest in economics. Other activities are exclusive to members, such as WEN's annual mentoring retreat, some professional development workshops, and the branch-based mentoring programs. This exclusivity provides a direct benefit to members, but more importantly, offers a female-only space which can be more psychologically safe and supportive environment for women in the context of certain 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>8</sup> and an online booklet '*What is economics all about? And where can it take you?*' 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.<sup>9</sup>

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." *What is economics all about? And where can it take you?*"

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

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<sup>8</sup> The WEN video is freely available on YouTube <https://www.youtube.com/watch?v=AtOU-DAVch0>

<sup>9</sup> Available via the WEN website <http://esawen.org.au/440/images/WENEconomicsBookletforStudentsoptimised.pdf>

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 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 2022, WEN's outreach on social media includes over 3000 followers on Twitter, over and over 2000 followers on Facebook. As an example of a specific initiative to publicly elevate and recognise the contributions of female economists, for each day in the month of March 2021 to commemorate International Women's Day, WEN publicly profiled the service and achievements of a female economist on the WEN Twitter page, using the hashtag #CelebratingWomenEconomists. 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 an annual Women in Economics Budget Address, with a panel of female economists offering their expert assessment of the Federal Budget and highlighting areas for policy consideration. The address has been held in most years since WEN's creation and broadcast across national television stations. In the first year that WEN's Budget Address was delivered, it was the first time that the National Press Club had ever hosted an all-female panel to speak about the Federal Budget.

### 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 stronger overall interest 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 inequities that prevail in the economics field do not appear to be overtly salient to female students during their educational experiences. 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 finding illustrates that achieving gender equality in economics also requires shifting attitudes and beliefs among men. 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 presenting role models to female students: it is also critical that male students and men in the profession 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. In its overarching approach, WEN has highlighted the capacity for economists to contribute meaningfully to society and help to identify solutions to real world problems. When aiming to inspire more female students to study economics and pursue a career in the field, WEN has intentionally *not* focused on economists’ prospective earnings: this is informed by research that has detected that attempts to encourage more female students into economics on the basis of economists’ high salaries had limited effectiveness and could even backfire. Putgatch and Schroeder (2020, 2021) found that university departments’ attempts to motivate prospective students by mentioning the high earning prospects of economists had a positive effect among male students, but actually dissuaded female students. It is possible that this approach backfired because it simply accentuates the misconception that “economists only care about money”, and fails to inspire a broader spectrum of students who are motivated by other goals and aspirations.

The importance of designing an economics curriculum to which students can meaningfully relate is amplified by the fact that 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 new knowledge and the acquisition of new skills, andragogical approaches (the teaching of adults) centre on the practical application of knowledge and emphasise the importance of providing educational contexts where students can integrate real world applications and their own life experiences into their learning processes (Kesley, 2018). As students’ first exposure to the subject of economics generally occur throughout the upper secondary education or tertiary education, when are past their childhood years, elements of andragogical teaching matter for the teaching of economics. This distinction implies that the content used in economics curriculum, such as examples of practical application of economic concepts, needs to be intentionally diverse in nature if it is to be relevant and engaging for a diverse student cohort. Andragogical teaching practices also emphasise the importance of providing

opportunities for students to actively apply their knowledge to problem-solving scenarios and channelling students' intrinsic motivation to learn, such as a desire to make a difference to society.

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>10</sup> The CORE Project is also an example of a modern economics curriculum that taps into students' 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

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<sup>10</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/>

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>11</sup> WEN has also invested in not only collating, but also communicating and disseminating the policy 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>12</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 LGBTQI, 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 a 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 2.

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<sup>11</sup> For more information about AGEW, see <https://esawen.org.au/content/858/australian-gender-economics-workshop>.

<sup>12</sup> For example, see the AGEW 2018 Policy Brief prepared on behalf of WEN <<https://esawen.org.au/440/images/AGEW2018PolicyBrief.pdf>>

Table 2: 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 of one of WEN's key initiatives, 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 subtitled for accessibility, was co-sponsored by the University of Adelaide, the University South Australia, ANZ, and the Economic Society of Australia. WEN had made the video freely available online via YouTube and the WEN website. The video features excerpts from interviews held with seven economists, the majority of whom were female, who brought different perspectives and career stories from across different sectors and locations.<sup>13</sup>

The video aimed 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. Firstly, the aim was to expose students and the public to female role models and showcase a diversity of economists beyond the traditional stereotypes. Secondly, the video aimed to raise the interest among secondary school students to consider pursuing economics as a subject, by highlighting the relevance of economics to real world issues and provide insights on what a careers in economics look like. WEN was guided by research that suggests that the low female enrolments in economics is in part influenced by a lack of role models with whom female students and other under-represented cohorts can relate. Furthermore, it was motivated by research suggesting that women, as well as 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 insights 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

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<sup>13</sup> The YouTube link is <https://youtu.be/AtOU-DAVch0>. The economists featured on the WEN video include: Dr Andrew Charlton (AphaBeta), Dr Bethany Cooper (University of South Australia), Michelle Meyer (Bank of America), Professor Gigi Foster (University of New South Wales), Dr Rachel Milte (University of South Australia), Eliza Owen (Core Logic), Guilia Lavinia Specchia (ANZ) and Associate Professor Duygu Yengin (University of Adelaide).

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.

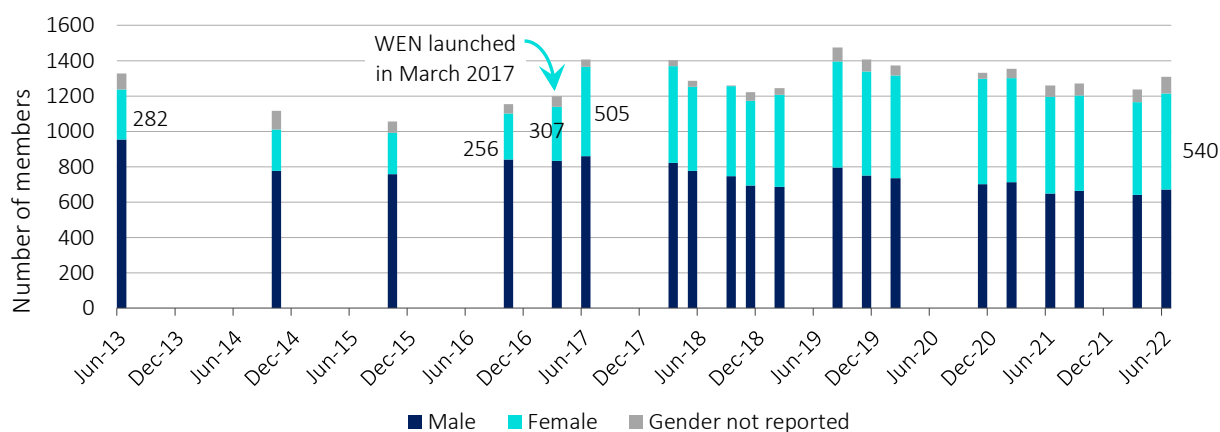
## 5.1 Women’s share of ESA membership and executive roles

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 14). ESA membership is the avenue through which people become members of WEN, but also represents a measure of people feeling affiliated with the field of economics and feeling a sense of belonging to their profession.

In the four years preceding the creation of WEN, women constituted a little over 20 per cent of total ESA membership. Within three months of WEN’s creation, women’s share of ESA membership had risen to 36 per cent of all members. Within 18 months of WEN’s creation, this share had reached 40 per cent and has steadily stayed above 40 per cent since then (Figure 15).

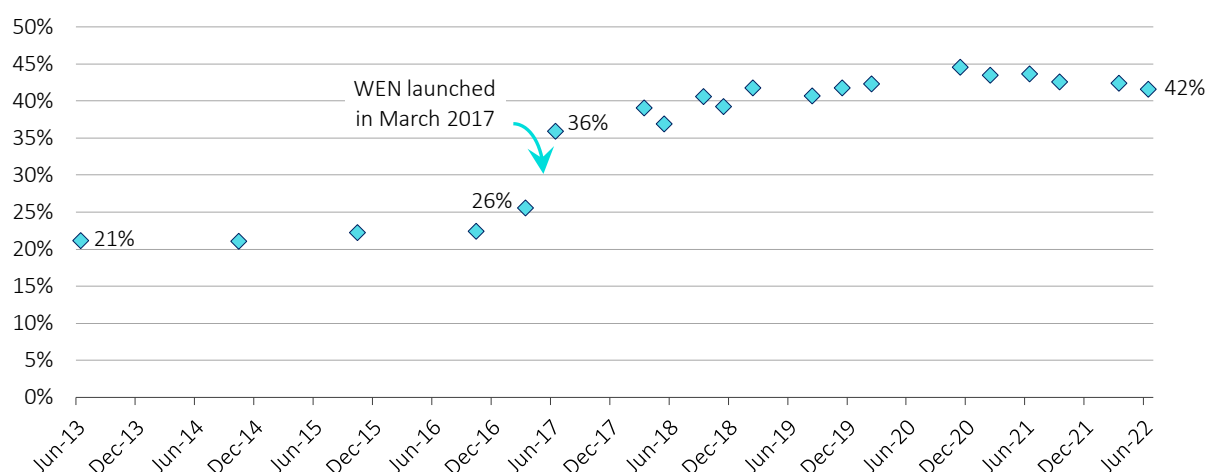
In the months immediately preceding WEN’s launch in March 2017, women’s membership numbers were at 256. WEN’s membership numbers, as July 2022, had risen to 540, effectively doubling since WEN was established. Compared to a share of 26 per cent in the months immediately preceding WEN’s launch, as at July 2022 women make up 42 per cent of all ESA members. Over this period, men’s membership numbers have generally continued to fall. Had it not been for this rise in female members, ESA memberships would have overall declined during this time.

Figure 14: ESA membership by gender, 2013 to 2022



Source: Economic Society of Australia

Figure 15: Female share of ESA Membership, 2013 to 2022



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 and the wider economics community.

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.

The creation of WEN has occurred alongside a higher representation of women among the executive roles on the ESA Central Council. In the 95-year history of the ESA, there had never been a female President of the ESA Central Council until 2019, when Danielle Wood was nominated and elected to this executive role. At the end of Wood’s three-year term as President in 2022, Catherine de Fontenay became the second woman was elected to the role.

## 5.2 Women’s representation in ESA awards

The impact of WEN has also been significant in female economists’ visibility and acknowledgement of their achievements in the profession. 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. Efforts by the WEN Committee to ensured that deserving female economists have been

the nominees shortlisted for awards has translated into a marked improvement in the female share of award recipients (Figure 16 and Table 3).

The ESA Distinguished Fellow Award was first presented in 1987 to honour distinguished Australian economists for their contribution to the development of economics. Up until the creation of WEN in 2017, only 2 out of a total 29 recipients were women, equivalent to 7 per cent. These were Professor Helen Hughes AO (awarded in 2004) and Professor Maureen Brunt AO (awarded in 2006). Since WEN's establishment in 2017, 3 of the 6 awardees have been women. These were Professor Alison Booth (awarded in 2017), Deborah Cobb-Clark (awarded in 2018) and Elizabeth (Beth) Webster (awarded in 2022). As of 2022, women comprise 5 out of the 35 recipients of this award, effectively doubling women's share of recipients to 14 per cent.

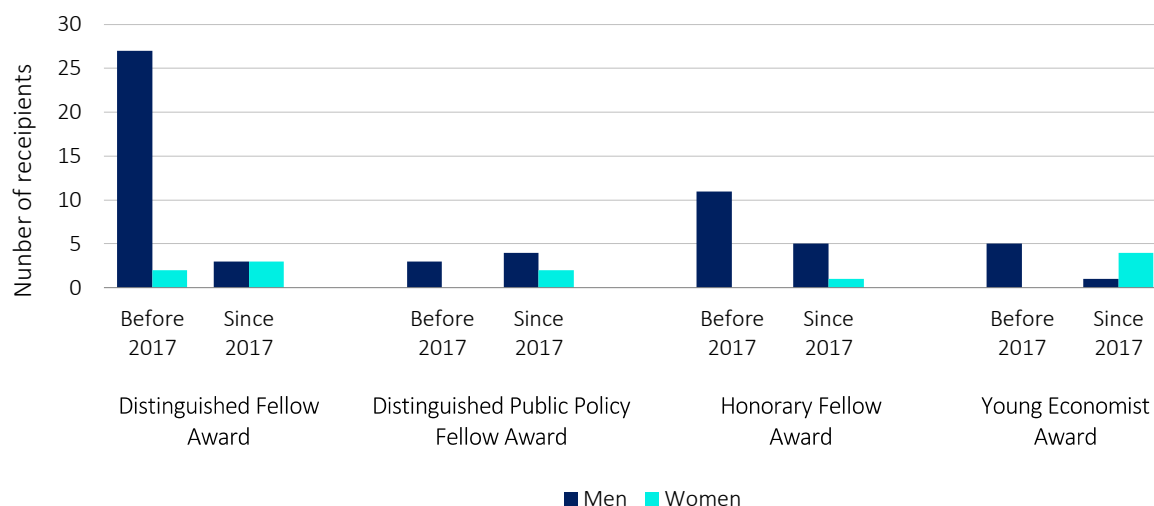
The ESA Distinguished Public Policy Fellow Award was first presented in 2014 to recognise contributions by economists to public debate on policy issues. Before the establishment of WEN, no women had been among the recipients of this award. Since WEN's creation in 2017, two out of the six recipients to date have been women. These were Professor Sue Richardson (awarded in 2019) and Karen Chester (awarded in 2022). This has lifted women's share of recipients from zero to 22 per cent.

The ESA Honorary Fellow Award was first presented in 2006 to acknowledge ESA members who make a significant and substantial contribution to the ESA. Prior to WEN's establishment in 2017, no women had been awarded this honour. From 2017 onwards, one woman has been among the six recipients to date – Danielle Wood (awarded in 2018) – which has lifted women's share of total recipients from zero to 6 per cent.

The ESA Young Economist Award was first presented in 2007 to recognise Australian economists under the age of forty who are deemed to have made a significant contribution to economic thought and knowledge. The age criteria that applies to this award meant that it is based on the career outputs that a candidate accumulates before turning forty years of age. WEN identified that this criteria has long created an inequitable hurdle to women who are more likely than men to experience interruptions to their careers due to childrearing and other care responsibilities throughout their working lives. Once the network was formed, WEN proposed to the ESA Central Council that the criteria applying to the Young Economist Award be modified to account for the effects of career interruptions. The criteria was consequently amended to: "The Society will consider nominations of individuals over the age of 40 who have had career interruptions, which when taken into account, would qualify them for nomination." Before WEN's creation, there had been no female recipients of the Young Economist Award. Since WEN was formed in 2017, and the criteria was

amended, four out of five recipients have been women. These were Professor Rachel Ong ViforJ (awarded in 2018), Professor Gigi Foster (awarded in 2019), Professor Stefanie Schurer (awarded in 2021) and Professor Shuping Shi (awarded in 2022). This has increased women’s share of recipients of this award from zero to 40 per cent in total to date.

Figure 16: Recipients of Economic Society of Australia Awards



Source: Economic Society of Australia. Count of award recipients up to 2022. Further details are provided in Table 3.

Table 3: Recipients of Economic Society of Australia Awards

	Distinguished Fellow Award	Distinguished Public Policy Fellow Award	Honorary Fellow Award	Young Economist Award
Year first awarded	1987	2014	2006	2007
<b>Before 2017</b>				
Number of female recipients	2	0	0	0
Total number of recipients	29	3	11	5
Female share (%)	7%	0%	0%	0%
<b>Since 2017</b>				
Number of female recipients	3	2	1	4
Total number of recipients	6	6	6	5
Female share (%)	50%	33%	17%	80%
<b>All years (up to 2022)</b>				
Number of female recipients	5	2	1	4
Total number of recipients	35	9	17	10
Female share (%)	14%	22%	6%	40%

Source: Economic Society of Australia. Count of award recipients up to 2022.

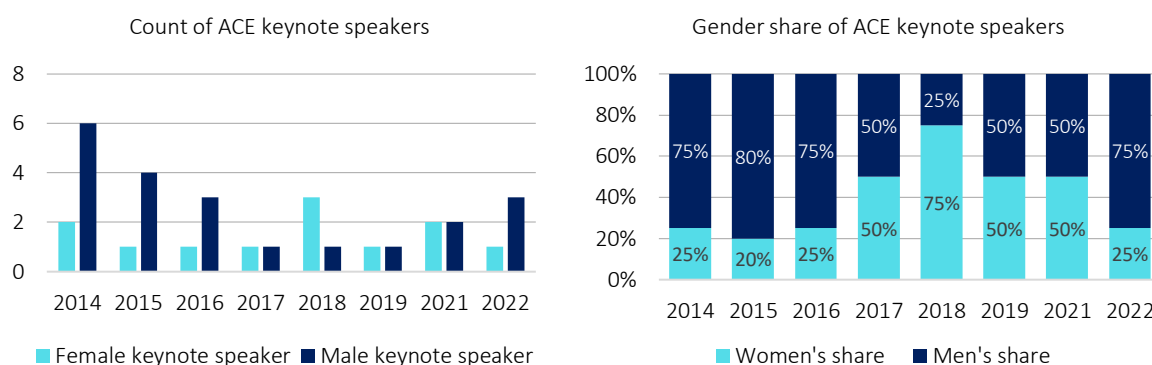
### 5.3 Women’s representation among keynotes speakers

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, which are intermittently available, indicate that women keynote speakers were significantly outnumbered by the male counterparts: the 2005 ACE featured 8 male and 1 female keynote speakers, and 2008 ACE featured 6 male and 1 female keynote speakers.

Since WEN's creation, women's representation among ACE keynote speakers generally risen and even reached parity in some years (Figure 17). ACE 2018, hosted by the ACT Branch of the ESA, stands out for featuring a majority of female keynote speakers.

Figure 17: Gender composition of keynote speakers at Australian Conference of Economists, 2014 to 2022



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. 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 WEN's contribution to data collection and collation of research**

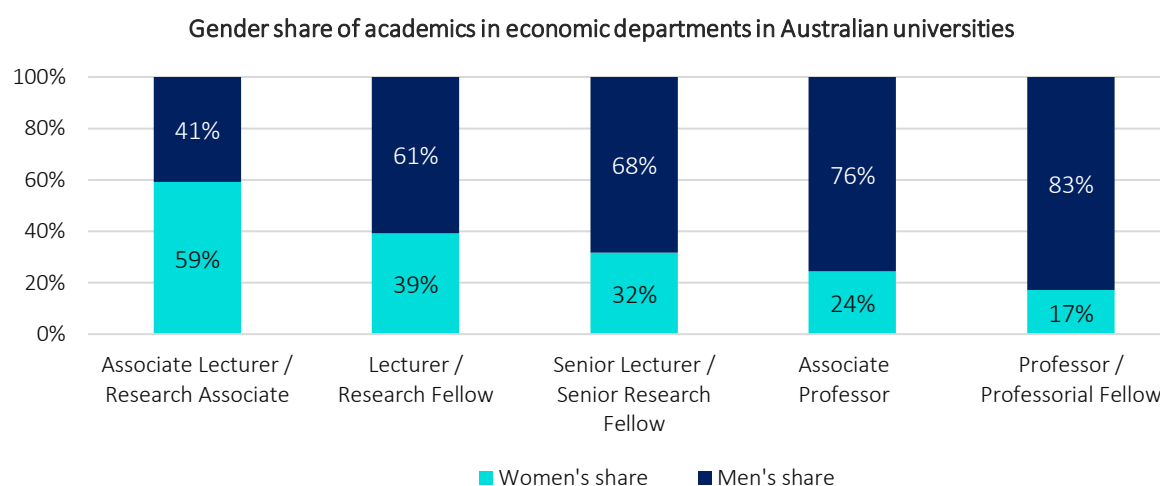
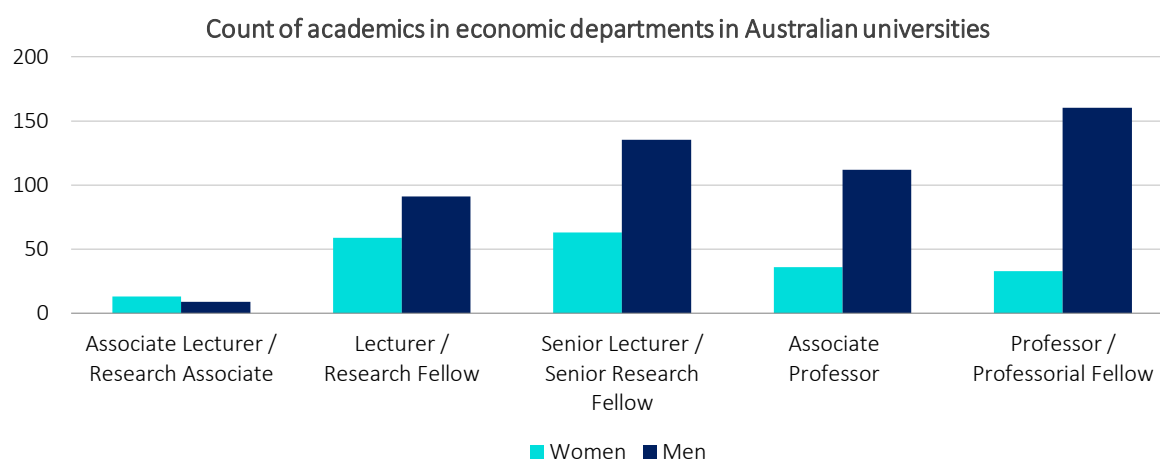
Prior to WEN's creation, data collection on women's representation in the economics profession in Australia had been largely ad hoc. Since WEN's creation, the gender composition of ESA membership has been calculated more systematically by ESA administration and reported in ESA Central Council meetings. This keeps the issue of gender equality a salient one for the ESA Central Council and enables the ESA to track changes in women's representation over time.

WEN has invested in collating statistics and research insights that are relevant to understanding women's under-representation in the field and making this material openly available on WEN's website. These research insights include academic studies and evidence-based insights that have guided WEN's initiatives and can also guide other organisations aiming to improve equality, diversity and inclusion in their respective fields. Many of these studies have been cited throughout this paper.

Following the gender audit of university economics departments that the ESA commissioned in 2016 (reported earlier in Figure 7), WEN undertook a gender audit of economics departments in Australian universities in 2022 (Figure 18). This analysis found that in 2022 women made up 29 per cent of academic economists in Australia's economic departments – a marked increase from women's 21 per cent share in 2016.

Women's representation has increased at all academic ranks, although women are still over-represented among lower ranks and under-represented at higher ranks. From 2016 to 2022, women have risen from 12 per cent to 17 per cent of Professors, and from 18 per cent to 24 per cent of Associate Professors, in Australia's economics departments.

Figure 18: Gender composition of university economics departments, Australia, 2022

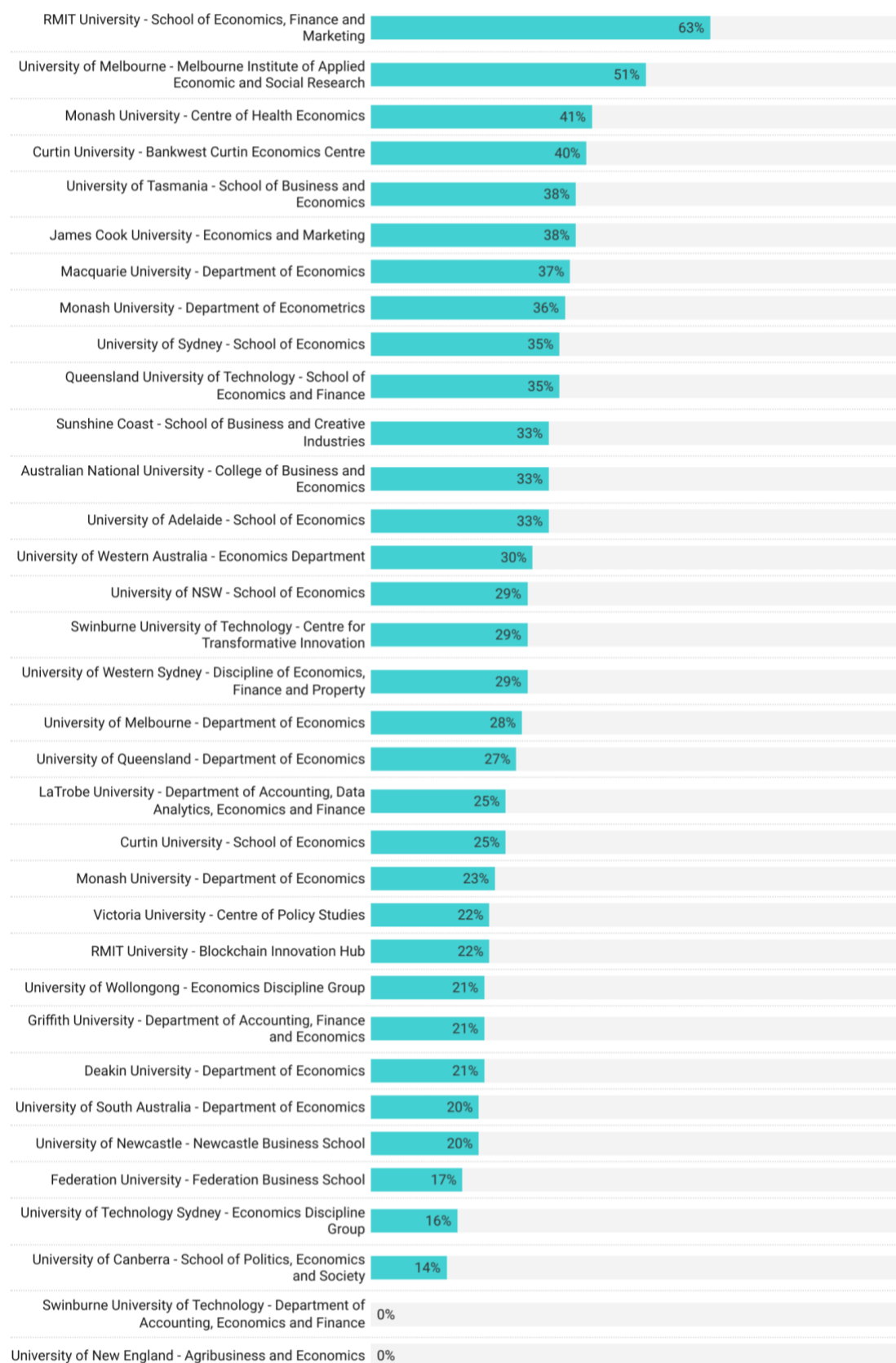


Source: Women in Economics Network Australia. Audit was based on university website information over the period April to July 2022. The data is based on the staff profiles of 29 universities that have an economics department and for which data on academic staff is available on the university's website. For comparability to the ESA 2016 data reported, data reported in Figure 18 is based on staff employed in university economics departments and excludes other research centres. Staff employed in other research centres are included in Figures 19 to 21.

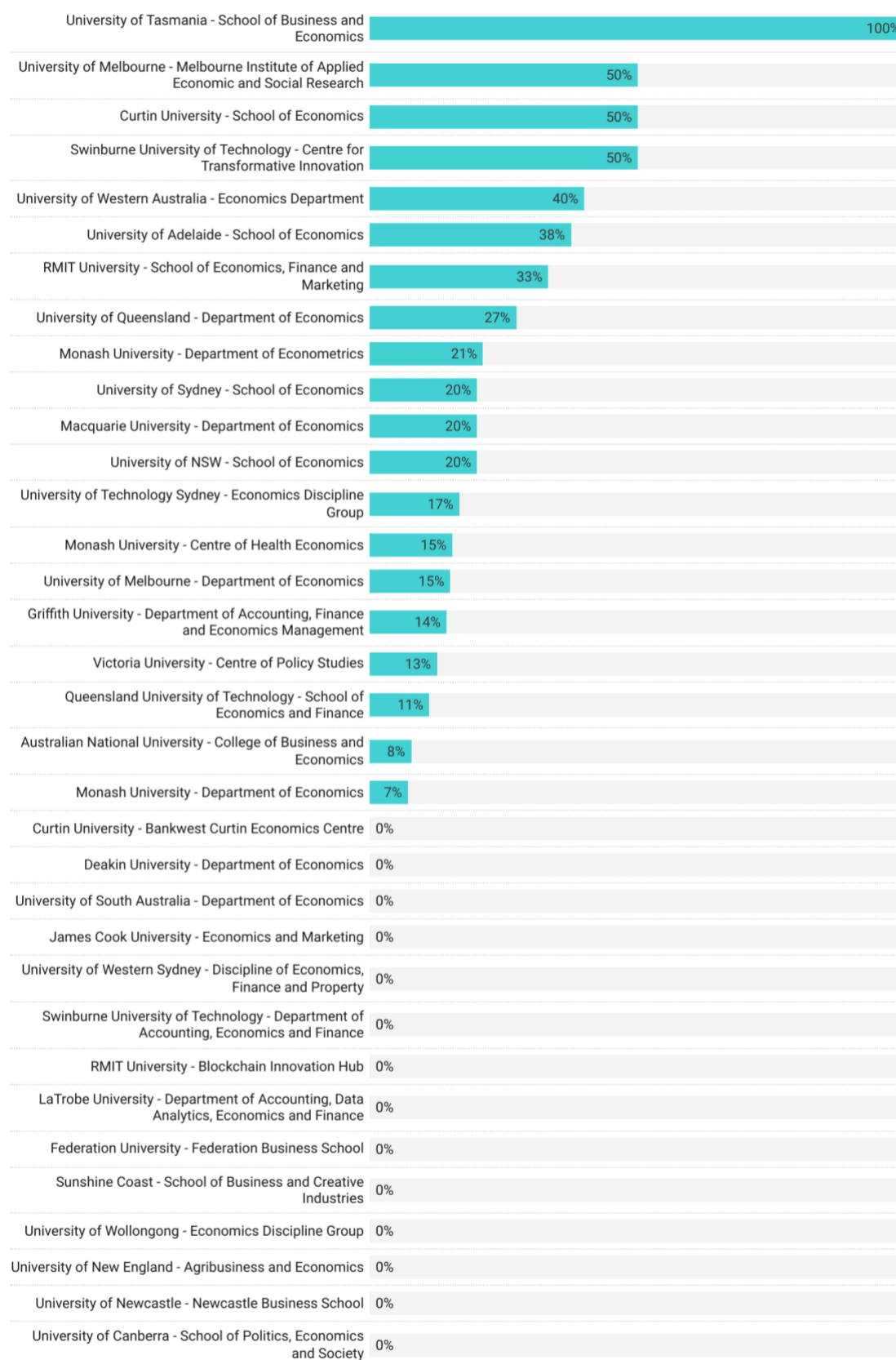
A detailed breakdown of the gender composition of economists at Australian universities by institution shows there is wide variability in women's representation, with some universities having no women at all among their economics academic staff (Figure 19). The data indicate that some of the universities that have achieved a relatively higher share of women overall do not have a strong representation of women at Professorial or Associate Professorial ranks. It also illustrates the extent to which some economics departments and research centres have no women at all at these senior ranks. The data presented in Figure 19 extends to non-teaching and multi-disciplinary centres within Australian universities where economists are also appointed.

Figure 19: Gender composition of economics academics according to university, Australia, 2022

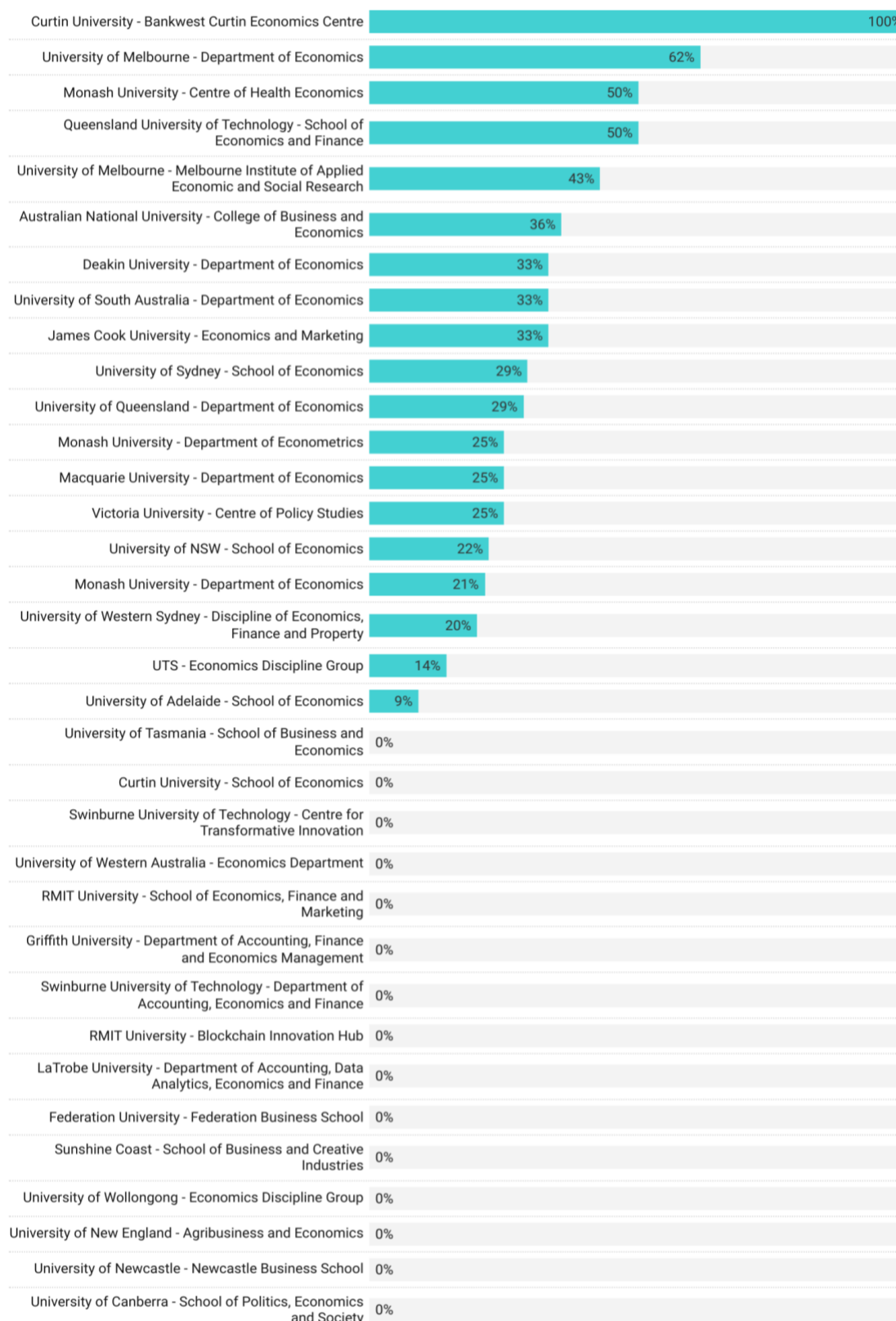
Gender composition of economics academics at all academic ranks in Australian universities



### Gender composition of economics academics at Professor level in Australian universities



### Gender composition of economics academics at Associate Professor level in Australian universities



Source: Women in Economics Network Australia. Audit was based on university website information over the period April to July 2022. The data is based on the staff profiles of 29 universities for which data on academic staff is available on the university's website.

## 5.6 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 WEN members and 41 non-members.

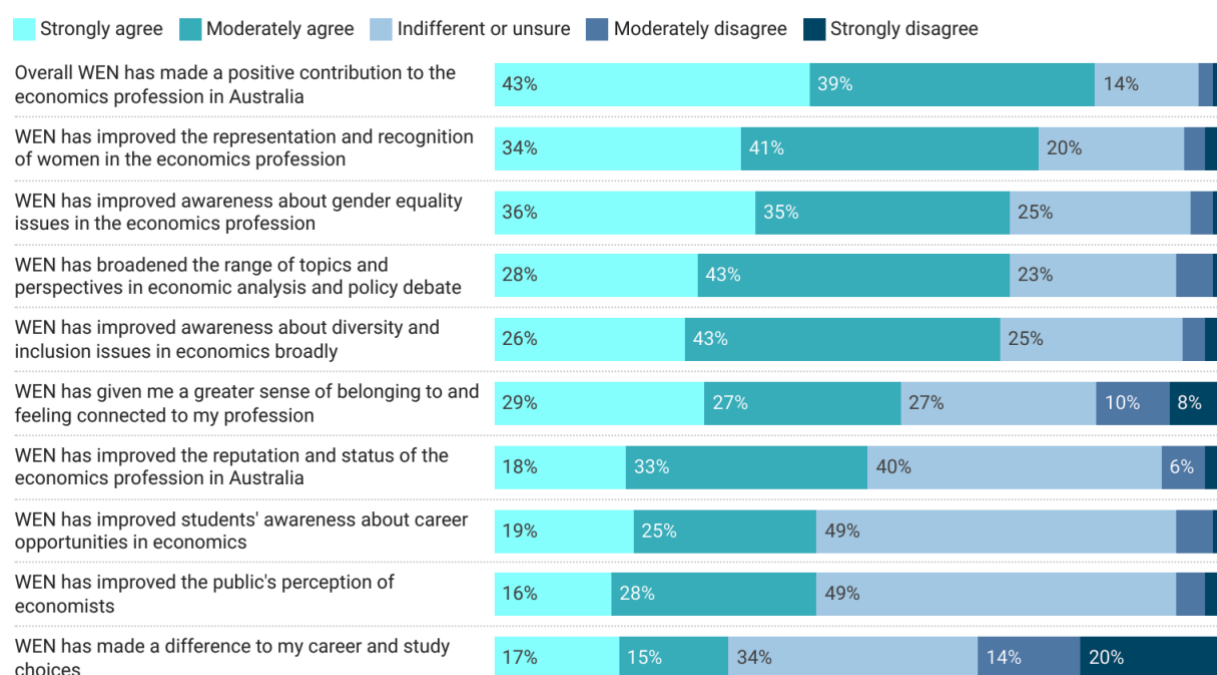
Indicative of women's positive impact, 82 per cent of survey respondents agreed that overall WEN has made a positive contribution to the economics profession in Australia (Table 4). When asked about specific channels of impact, 75 per cent of survey respondents agreed that WEN has improved the representation and recognition of women in the economics profession. A majority of responses also agreed that WEN has improved awareness about gender equality issues in the economics profession, that WEN has broadened the range of topics and perspectives in economic analysis and policy debates, and that WEN has improved awareness about diversity and inclusion issues in economics broadly. Just over half of respondents felt that WEN has given them a greater sense of belonging and connection to their profession, and that WEN has improved the reputation and status of the economics profession in Australia.

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

	Share who agree (%)
Overall WEN has made a positive contribution to the economics profession in Australia	82%
WEN has improved the representation and recognition of women in the economics profession	75%
WEN has improved awareness about gender equality issues in the economics profession	71%
WEN has broadened the range of topics and perspectives in economic analysis and policy debate	70%
WEN has improved awareness about diversity and inclusion issues in economics broadly	69%
WEN has given me a greater sense of belonging to and feeling connected to my profession	56%
WEN has improved the reputation and status of the economics profession in Australia	51%
WEN has improved students' awareness about career opportunities in economics	44%
WEN has improved the public's perception of economists	43%
WEN has made a difference to my career and study choices	32%

Source: Survey conducted by Women in Economics Network Australia, September 2021. Sample of 115 responses, comprised of 71 members and 44 non-members. Share who answered either 'Strongly agree' or 'Moderately agree', as a proportion of all responses. Full responses are detailed in Figure 20.

Figure 20: Assessment of WEN's impact – Full responses



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

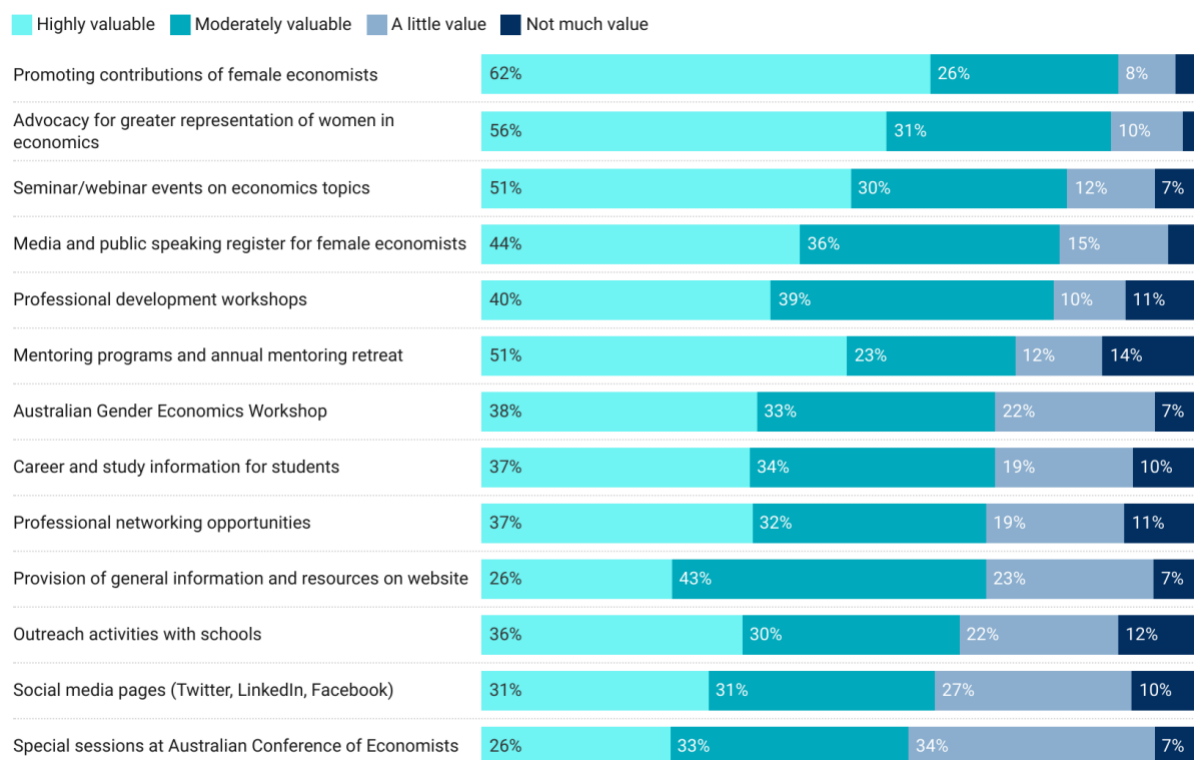
The services and activities of WEN that are deemed as most valuable, according to survey participants, are WEN's efforts to promote the contribution of female economists and to advocate for a greater representation of women in the field (Table 5). The provision of seminar events on economics topics, 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?

	Share of responses who rate as valuable (%)
Promoting contributions of female economists	88%
Advocacy for greater representation of women in economics	87%
Seminar/webinar events on economics topics	81%
Media and public speaking register for female economists	80%
Professional development workshops	79%
Mentoring programs and annual mentoring retreat	74%
Australian Gender Economics Workshop	71%
Career and study information for students	70%
Professional networking opportunities	70%
Provision of general information and resources on website	70%
Outreach activities with schools	66%
Social media pages (Twitter, LinkedIn, Facebook)	63%
Special sessions at Australian Conference of Economists	59%

Source: Survey conducted by Women in Economics Network Australia, September 2021. Sample of 115 responses, comprised of 71 members and 44 non-members. Share who answered 'Highly valuable' or 'Moderately valuable'. Full responses are detailed in Figure 21.

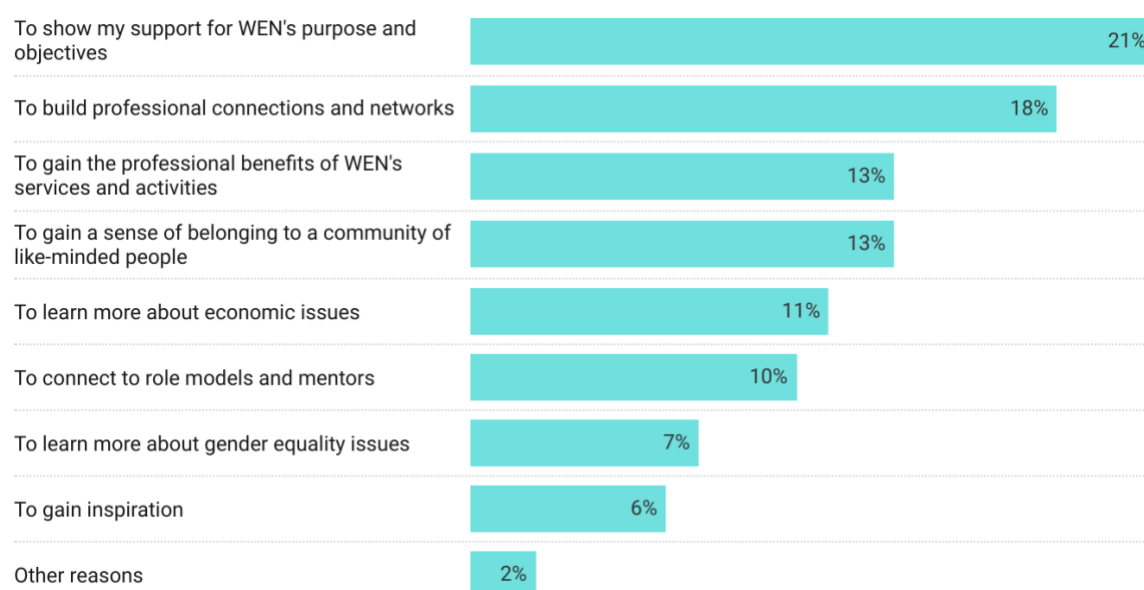
Figure 21: Value of WEN's services and activities – Full responses



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

The survey responses indicates that WEN members are motivated to join the network to support the goals and mission that WEN represents (Figure 22). 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.

Figure 22: What are your main reasons for being a WEN member?



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 in broadening the range of economic topics for discussion and analysis, providing relatable and approachable role models, and demonstrating how 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 that 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 over the years 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 cultural and institutional change in the pursuit of 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."

"[The workshop] 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, [the workshop] 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 monitoring future *Women in Media* reports to assess whether WEN's creation has have contributed to an improvement in the representation of female economists interviewed and cited in business and economics news articles. Early indications are that this metric is expected to improve, in part also due to a 50:50 gender equality target that ABC News has implemented as

part of a concerted campaign to provide a gender balanced representation of voices in the media.<sup>14</sup> WEN's existing media connections, and the establishment of a Media Register for female economists, has meant that female economists are being more actively sought after and offered more opportunities to participate in print, television and radio news coverage. WEN has equipped its members to professional contribute to the media through a range of capability-building activities, such as 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.

## 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 impeding WEN's capacity to deliver on its objectives are resourcing constraints. All WEN Committee members serve in a volunteer capacity, in addition to their paid job or studies, and often alongside parental and other caring responsibilities. Designing, coordinating and delivering 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 well-informed 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 that fall upon the groups and individuals who take responsibility for delivering 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)

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<sup>14</sup> See ABC 50:50 The Equality Project <https://about.abc.net.au/5050-the-equality-project/>

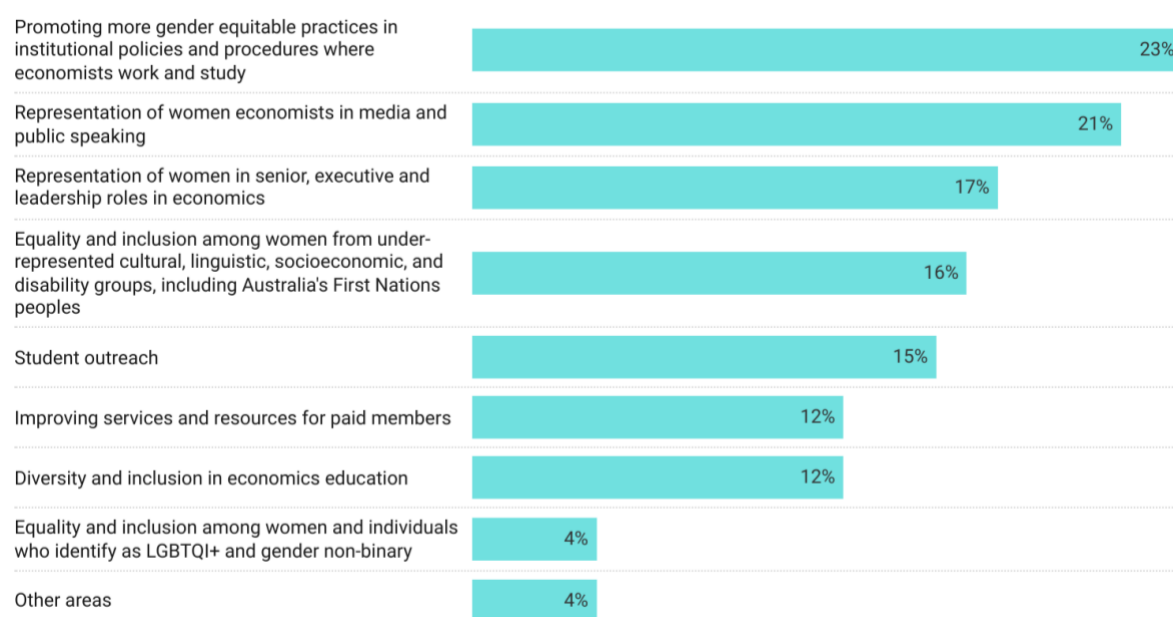
One way to address this demand on volunteer time is to promote an organisational practice where managers and employers more fully recognise the contributions of their employees who voluntarily give their services to professional groups such as WEN. WEN advocates that service to the profession should be duly acknowledged in staff hiring, promotion and performance evaluation processes, and that the capabilities that WEN Committee Members demonstrate as part of their service should be recognised when assessing their executive capability and leadership potential.

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 initiatives to improve the representation of First Nations women, women who come from low socioeconomic backgrounds or remote geographic areas, women living with a disability, LGBTQI women and individuals who identify as non-binary, and women from under-represented cultural backgrounds.

Potential avenues for WEN to focus on in its future initiatives were identified in our survey of members (Figure 23). 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 wider culture, systems and structures. This is consistent with the emerging literature of ‘what works’ in the gender equality space that points towards the need for organisation-level change to eradicate systemic biases and inequities, rather than an individualised or deficit-approach focus that places the onus on women to change (for example, see Bohnet, 2016).

Figure 23: What areas should WEN focus on expanding in the future?



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.

As expected with any social change initiative, the creation of a women’s network has encountered various forms of resistance and opposition including from within the economics community. This has been communicated to the WEN Committee through various channels of feedback as well as through encounters experienced by WEN Committee members throughout the process of establishing WEN across all states and territories.

Research insights equipped WEN with a realistic expectation that not all members of the economics community would be ideologically supportive of the formation of a women’s group as a diversity and inclusion initiative. Insights from social psychology helped us to understand sources of 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 the standing of the profession overall, and the potential for WEN to widen opportunities for everyone rather than infringe 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, particular 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. It also means there is less need to spend time attempting to convince those who are 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 processes, IT systems, and insurance. These can be a substantial burden for a volunteer not-for-profit body and divert time from the core mission. Establishing a separate organisation 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 propose aligning with the ESA, rather than create a new organisation, so that the new network could be positioned as part of the ESA's existing community. This was important for confirming an alignment of values between the new network and the existing ESA. Logistically, this also enabled WEN to benefit of the ESA's existing structures and administrative supports in return for the expected benefits that WEN would offer the ESA. Establishing WEN through the ESA provided credibility and the capacity to disseminate news about the establishment of WEN with economists around the country through the ESA's mailing list and other existing communication channels.

Proposing to establish WEN as part of the ESA did, however, require managing doubters and some individuals who resisted such change within the ESA. This was managed by identifying key allies and supporters, and presenting an authentic and compelling case for the prospective benefits that would be gained the broader body in terms of boosting ESA membership numbers, the importance of dynamism and inclusive growth, and building the future pipeline of economists. 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 way to bring about change within the profession's culture and practices.

Early on, the new WEN Committee worked to make sure that there was a process for the 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 ESA 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.

Our 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 towards building a more equitable and effective economics community for all. We hope this paper helps inform, inspire and empower others in the economic profession to join this global cause.

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