KPMG

DIVERSITY COUNCIL AUSTRALIA

Australian Government

Workplace Gender Equality Agency

She's Price(d)less

The economics of the gender pay gap

Prepared with Diversity Council Australia (DCA) and the Workplace Gender Equality Agency (WGEA)

13 July 2022

KPMG.com.au

Alison Kitchen

National Chairman

KPMG Australia

KPMG is pleased to release the current edition of the gender pay gap report, She's Price(d)less.

This report is the fourth of its kind and builds on our critical work with the Diversity Council Australia and the Workplace Gender Equality Agency from 2009, 2016, and 2019.

KPMG recognises that since the last report in 2019, the gender pay gap has remained stubbornly unchanged despite action across the public and private sector to tackle gender inequality.

This report tracks changes in drivers relating to the gender pay gap and shows that gender discrimination is the single largest contributor to the gender pay gap. It also shows a worrying trend in the rise of industry and occupation segregation.

For the first time, this report has shone a spotlight on the drivers of the gender pay gap by industry to provide policy and decision makers evidence and answer the 'why'. By investigating industry specific pay gaps, we open the door to targeted action to tackle the gender pay gap where it is most persistent.

The past two years have been a challenging time for many in Australia as we have endured a global pandemic. This report pleasingly shows that COVID–19 has not been a setback as we feared with the drivers remaining largely consistent and the headline hourly pay gap unchanged however neither have we managed to capitalise on an opportunity to bring the pay gap down.

As is proven in the She's Price(d)less report, addressing barriers to equality is critical to the development of Australia's society and the nation's economic growth.

To address the root cause of the gender pay gap and realise the social and economic benefits of closing the gap we must collectively increase our efforts to build a better and fairer Australia.

Lisa Annese

CEO

Diversity Council Australia

DCA proudly presents the 4th edition of She's Price(d)less with KPMG and WGEA.

This series of reports provides critical evidence about the drivers of the gender pay gap in Australia.

This latest report shows that discrimination against women remains the single biggest driver of the gender pay gap, followed by the combined impact of family, unpaid care and time out of the workforce.

Women's overrepresentation in certain industries and occupations also continues to be a significant driver of the pay gap and for the first time in this series, this report includes analyses of the gender pay gap by industry and income quintiles.

Women make up most of the workforce in low-paying industries and jobs we rely on to carry out our daily lives but simultaneously undervalue, and this needs to change.

We hope this data will help make a case for why Australia's industries, governments and communities must work together to tackle the systemic drivers of pay inequity.

But our approach to addressing the systemic drivers cannot be one size fits all. We know from overseas evidence that a woman's race or disability status can exacerbate the pay gap.

We don't currently collect national data that would enable us to examine this through an intersectional lens, so this report should also be a call to action to policymakers to broaden data collection (including recognising non-binary genders) to help us understand these issues better.

Australian women are among the most educated in the world. Yet despite many years of higher educational attainment than men, and women working more than ever, the gap between women's and men's earnings hasn't significantly budged.

This report is a timely reminder that addressing the gender pay gap is an investment in our nation's future economic prosperity and will also help overcome the tough economic conditions we face.

Hon. Mary Wooldridge

Director

Workplace Gender Equality Agency

The fourth iteration of the She's Price(d)less report comes at a critical time for gender equality in Australian workplaces. Over the past several years, Australian employers have been asked to consider the persistence of gender inequality as they responded to the COVID-19 pandemic, the National Inquiry into Sexual Harassment in Australian Workplaces, and the review of the Workplace Gender Equality Act 2012.

This report shows that, despite the national conversation and our efforts to tackle the gender pay gap, the value assigned to women's work has not improved. The hourly gender pay gap is the same as the previous iteration of this report in 2017 (when both are adjusted to 2021 dollars). The three main contributors to the gender pay gap in Australia remain and are gender discrimination; care, family and workforce participation; and type of job which refers to occupational and industrial segregation.

To look deeper at occupational and industrial segregation (type of job) as a contributing factor, the She's Price(d)less analysis has used data from WGEA's census reporting for the first time. It shows that women are more likely to work in lower paying industries, and men who join those industries are more likely to be in higher-paid, managerial positions.

The results send a clear message: we need to act urgently. Without meaningful action, we risk gender inequality becoming a permanent feature in the Australian workforce.

Australian employers need to accelerate the rate of change for workplace gender equality and address the main contributors to the gender pay gap. An important first step is an audit and report on their gender pay gap. We know transparency can help to drive change to address gender discrimination.

Employers need to support both women and men in their roles as carers by providing and supporting gender equitable parental leave, normalising flexible working arrangements and facilitating access to childcare. Finally, employers need to think innovatively about leadership and management roles by creating opportunities for the part-time workforce.

The Workplace Gender Equality Agency will support employers in driving change. The recommendations resulting from the recent review of our Act include publishing organisational gender pay gaps, working with employers to set and meet gender equality targets, and collecting broader diversity data to enable intersectional analysis of the gender pay gap and other gender equality measures. These recommendations will all speed up the rate of change.

The insights in the 2022 She's Price(d)less report highlight the importance of taking action now to ensure the full and equal participation of all people in the Australian workforce.

Disclaimer

Inherent Limitations

This report has been prepared as outlined with the Diversity Council Australia Limited (**DCA**) and the Workforce Gender Equality Agency (**WGEA**) in the Scope Section of the engagement letter dated 14 December 2021 (**Engagement Letter**). The services provided in connection with this engagement comprise an advisory engagement, which is not subject to assurance or other standards issued by the Australian Auditing and Assurance Standards Board and, consequently no opinions or conclusions intended to convey assurance have been expressed.

KPMG have indicated within this report the sources of the information provided. We have not sought to independently verify those sources unless otherwise noted within the report.

No warranty of completeness, accuracy or reliability is given in relation to the statements and representations made by stakeholders consulted as part of the process.

KPMG is under no obligation in any circumstance to update this report, in either oral or written form, for events occurring after the report has been issued in final form.

Third Party Reliance

This report is provided solely for the purpose set out in the Scope Section of the Engagement Letter and for the information of the DCA and the WGEA, and is not to be used for any other purpose or distributed to any other party without KPMG's prior written consent.

This report has been prepared at the request of DCA and WGEA in accordance with the terms of KPMGs engagement letter dated 14 December 2021. Other than our responsibility to DCA and WGEA neither KPMG nor any member or employee of KPMG undertakes responsibility arising in any way from reliance placed by a third party on this report. Any reliance placed is that party's sole responsibility.

Acknowledgements

This paper uses unit record data from Household Income and Labour Dynamics in Australia (**HILDA**) conducted by the Australian Government Department of Social Services (**DSS**). The findings and views reported in this paper, however, are those of the author[s] and should not be attributed to the Australian Government, DSS, or any of DSS' contractors or partners. DOI:10.4225/87/VHRTR5

Contents

Acronyms

Term	Definition
ABS	Australian Bureau of Statistics
ACT	Australian Capital Territory
ANZSCO	Australian and New Zealand Standard Classification of Occupations
ANZSIC	Australian and New Zealand Standard Industry Classification
ASX	Australian Securities Exchange
AWE	Average Weekly Earnings
CEO	Chief Executive Officer
COVID-19	Coronavirus
DCA	Diversity Council Australia
GLM	Generalised Linear Model
GPG	Gender Pay Gap
HILDA	Household, Income and Labour Dynamics in Australia
HOB	Head of Business
ILO	International Labor Organisation
IMR	Inverse Mills Ratio
KMP	Key Management Personnel
NATSEM	National Centre for Social and Economic Modelling
NGO	Non-Government Organisation
NSW	New South Wales
OECD	Organisation for Economic Co-operation and Development
PPL	Paid Parental Leave
SACS	Social and Community Services
SDG	Sustainable Development Goal
WGEA	Workplace Gender Equality Agency
WMS	Workplace Workforce Management Statistics
WPP	Workplace Profile

In this edition

About She's Price(d)less

This is the fourth release of *She's Price(d)less*.

She's Price(d)less is the only analysis of its kind in Australia that analyses the contributing drivers of the gender pay gap to explain why the gender pay gap exists, and where it needs to be addressed the most.

It provides policy makers and business leaders with evidence-based insight to better understand and take more informed action to reduce the gender pay gap in Australia.

New analysis in this edition

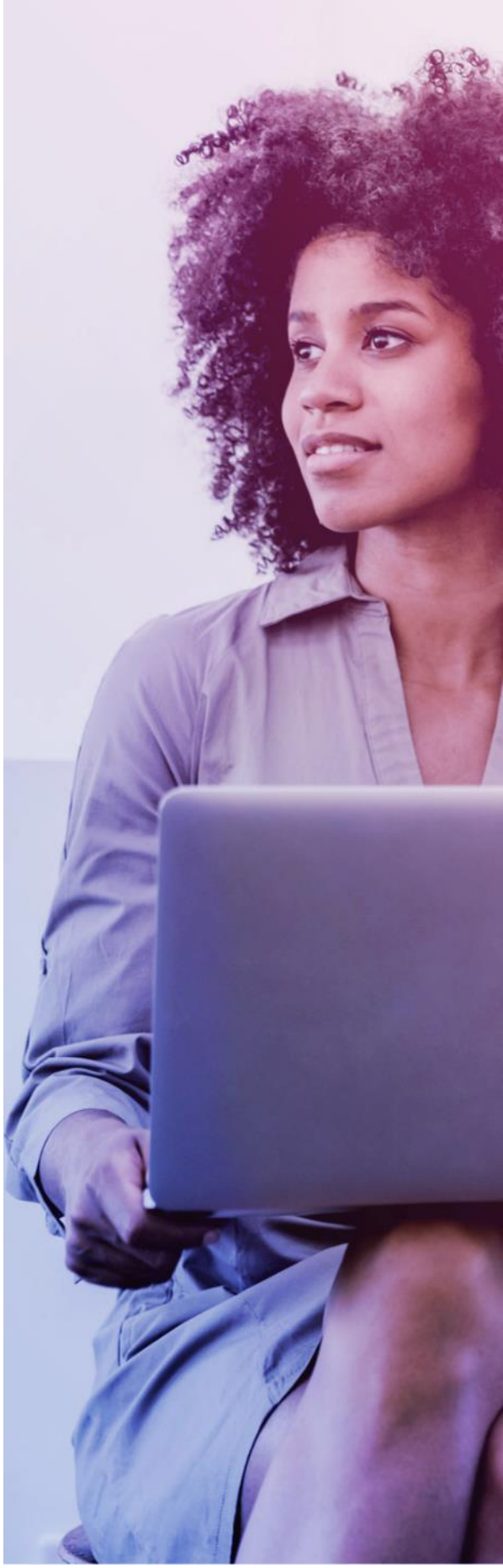
This report builds on prior editions of *She's Price(d)less* based on the latest data and information. We have extended our analysis in several ways, including:

- Updating analysis of drivers of the gender pay gap in Australia, based on Wave 20 (August 2020) of the Household, Income and Labour Dynamics in Australia (HILDA) Survey.
- Developing detailed industry profiles based on the Workplace Gender Equality Agency 2020-21 employer census, HILDA Wave 20, and data published by the Australian Bureau of Statistics (ABS).
- Understanding the impact of the COVID-19 pandemic on drivers of the gender pay gap.
- Analysis of the impact of closing the gender pay gap by income quintile.

Limitations

She's Price(d)less is a point-in-time analysis of the gender pay gap based on the fullest extent of available data and should be considered alongside other analytical approaches. The main body of the report discusses the limitations around the available data and analytical approach in detail.

The authors of this report recognise that gender does not only exist in binary categories and there are people whose experiences and identities cannot be captured by binary language. However, the datasets that we have used only report data in a binary way. We would urge policymakers to broaden the data we capture in relation to the gender pay gap so that we can better understand these issues for people of all genders.



Executive Summary

Australia's hourly gender pay gap

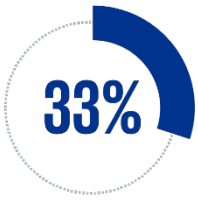
	Men	Women	Gap	
2020	$39.44	$36.89	$2.56	(6.5%)
2017	$35.29	$32.74	$2.56	(7.2%)

Key drivers of the pay gap in 2020

Our analysis shows that systemic drivers of the pay gap remain the largest contributors to the pay gap in 2020.

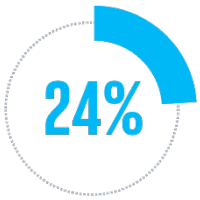
Gender discrimination

39% in 2017



Care, family and workforce participation

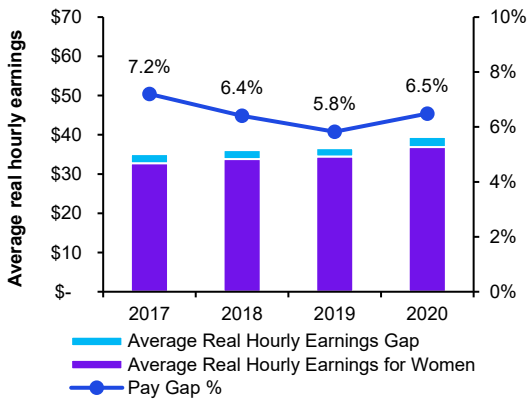
39% in 2017



Type of job

17% in 2017

COVID-19



Although there has been no change in the gender pay gap in real terms between 2017 and 2020, data shows that the pay gap had been trending down from 2017, with a slight increase between 2019 and 2020.

Testing of additional variables for this analysis found that taking paid leave had a statistically significant, but small contribution to the pay gap, while a reduced ability to work from home had stronger associations with the pay gap within certain industries.

While it is pleasing that the gap did not further worsen in the context of the significant disruption through the COVID-19 pandemic, equally, progress on closing the gap has stalled.

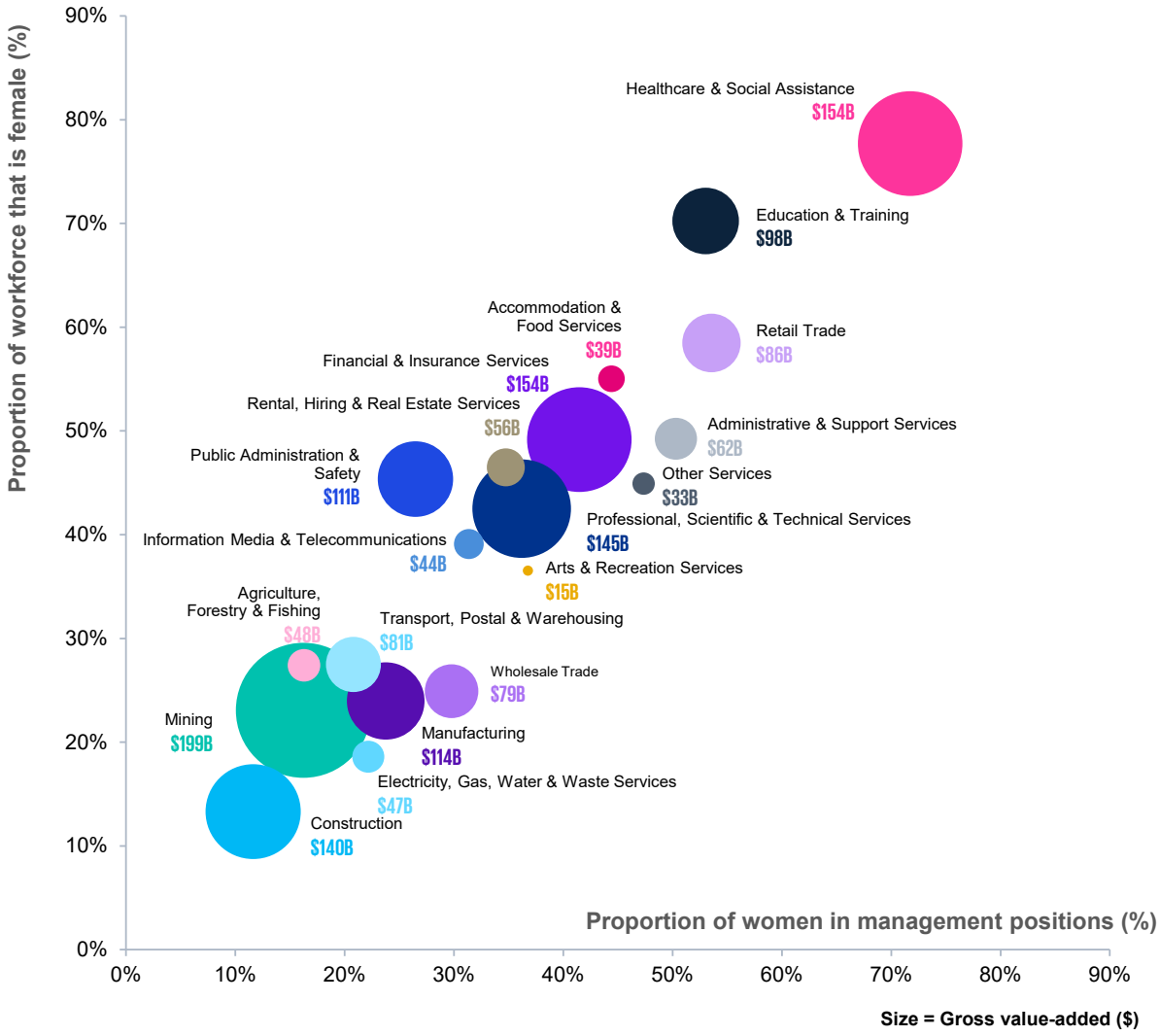
Source: KPMG analysis of the Household, Income and Labour Dynamics in Australia Survey, Release 17 and 20, Wave 17 and 20 (HILDA Survey)

An industry-by-industry story

Our analysis finds significant differences across industries in relation to progress on closing the gap, gender segregation and representation in management.

Deep dives across five key industries (Healthcare and Social Assistance, Education and Training, Retail Trade, Manufacturing and Accommodation and Food Services) exhibit how gender pay gaps remain prevalent regardless of labour force size, gender composition or average rate of pay.

The industry analysis finds that women in feminised industries face barriers to achieving wage parity, with gender pay gaps above the national average and underrepresentation in promotions and key management positions. The graph below illustrates how women's representation in management positions continues to fall short of their participation across a majority of Australian industries – a key impediment to closing the national gender pay gap.



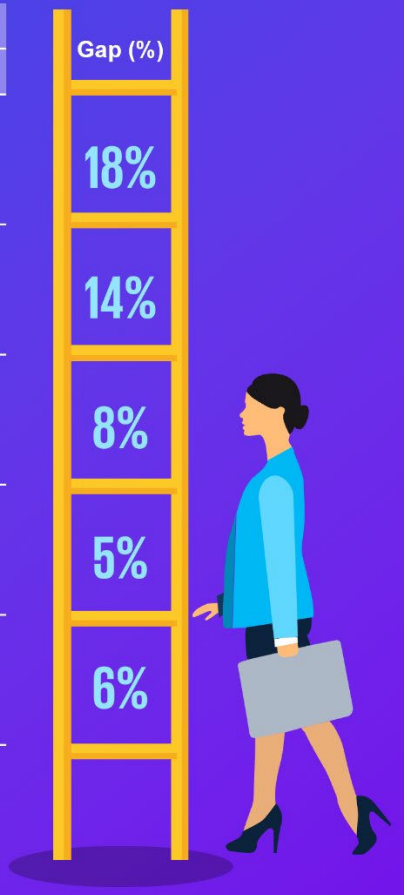
Source: KPMG analysis of the Household, Income and Labour Dynamics in Australia Survey, Release 20, Wave 20 (HILDA Survey); WGEA Workplace Profile and Management Statistics data (2020)

The glass ceiling

For the first time, our income quintile analysis shows how the impacts of

gender discrimination, lack of promotional opportunities & underrepresentation in management are most prevalent at top management levels.

Quintile of earnings	Average hourly wage	
	Male	Female
80-100%	$80.37	$66.11
60-79%	$49.33	$42.38
40-59%	$36.72	$33.79
20-39%	$28.96	$27.52
0-19%	$19.81	$18.68



Accounting for labour force participation rates and incomes across all quintiles the national pay gap is estimated to be

$966M per week or

$51.8B per annum in national earnings.

Source: KPMG analysis of the Household, Income and Labour Dynamics in Australia Survey, Release 20, Wave 20 (HILDA Survey)

Opportunities for closing the gap

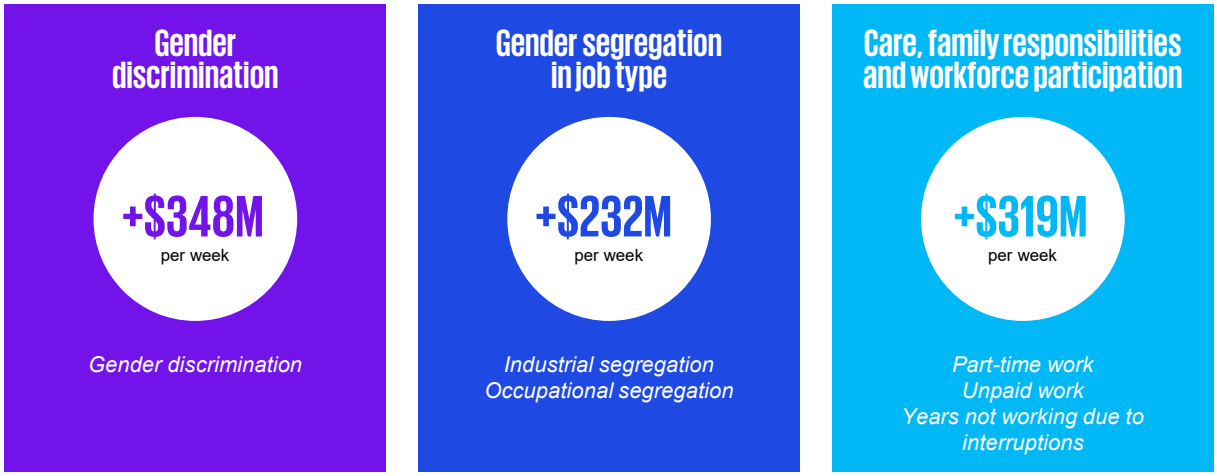
Greater action by industry, the community, and governments to address the systemic drivers of the gender pay gap is both a collective obligation and an investment in our future economic prosperity.

Closing the gap across the three key driver categories is equivalent to $898M per week in national earnings.

ACTIONS TO EFFECT CHANGE

- Eliminating workplaces sexual harassment, every-day sexism and gendered violence.
- Addressing discrimination in work practices such as hiring, promotion and access to training.
- Increased pay transparency and reporting on gender pay gaps.
- Undertaking gender pay gap audits and actioning findings.
- Breaking down social norms regarding what roles and industries are appropriate for men and women.
- Addressing wage inequality in feminised industries.
- Increasing the share of women in leadership positions, including through targets or other diversity policies.
- Developing networks of advocates for gender equality among men and women who can address barriers and affect change.
- Improving work life balance, increasing availability of flexible work.
- Increasing availability of childcare and decreasing cost.
- Enhancing availability and uptake of shared parental care.
- Reducing disincentives to increasing workforce participation through personal tax, family payment and childcare support systems.
- Changing workplace culture and addressing unconscious bias.
- Rethinking and redesigning part-time roles for managers.

EQUIVALENT NATIONAL EARNINGS*



Source: KPMG analysis of the Household, Income and Labour Dynamics in Australia Survey, Release 20, Wave 20 (HILDA Survey)

**Note: In line with the decomposition analysis, this analysis assumes that Gender discrimination, Gender segregation in job type, and Care, family responsibilities and workforce participation account for 36 per cent, 24 percent and 33 per cent of the hourly gender pay gap respectively. These shares have been applied to the estimated national earnings gap to derive the estimates above.*

1 Introduction

Diversity Council Australia (DCA) and the Workplace Gender Equality Agency (WGEA) share a commitment to diversity and inclusion, particularly gender equality. As part of this commitment, KPMG, DCA, and WGEA have worked together since 2009 to develop a greater evidence base on the nature and drivers of the gender pay gap in Australia.

This work has culminated in the release of three major reports, namely, *Understanding the Economic Implications of the Gender Pay Gap in Australia* ('the 2009 report'), *She's Price(d)less: The Economics of the Gender Pay Gap* ('the 2016 report') and S*he's Price(d)less: The Economics of the Gender Pay Gap* ('the 2019 report').

This report expands on the methodology developed for those reports and makes further contributions to the evidence base and public discussion around the nature and impact of factors contributing to the gender pay gap.

1.1 Purpose and scope

The purpose of this report is to document the latest-available evidence on the nature and magnitude of drivers of the gender pay gap in Australia. Its scope includes:

- Modelling factors contributing to the gender pay gap using the latest data from the Household, Income and Labour Dynamics in Australia (HILDA) Survey;
- Analysis of labour market segregation at the industry and workforce level; and
- Understanding the impact of the COVID-19 pandemic on drivers of the gender pay gap.

1.2 Report structure

This report is structured as follows:

- **Section 1 (this section)** introduces the report and provides details on the purpose, scope and structure;
- **Section 2** provides background on the gender pay gap in Australia;
- **Section 3** explains the analytical approach;
- **Section 4** discusses recent evidence on contribution of factors to the gender pay gap at the national level;
- **Section 5** examines industry pay gaps;
- **Section 6** analyses the pay gap by income quintile; and
- **Section 7** discusses the opportunities associated with closing the gender pay gap in Australia.

A set of appendices provides supplementary information to the main body of the report:

- **Appendix A** includes industry analysis data;
- **Appendix B** provides background on the Australian labour market and trends in the key drivers of the gender pay gap; and
- **Appendix C** provides the detailed methodology and data limitations.

2 Background

This section defines the gender pay gap, outlines different approaches to calculating gender pay gaps, highlights recent trends and summarises government and business initiatives to address the gender pay gap in Australia.

Although different methodologies and data sources return different figures for the gender pay gap, there are consistent findings of a gender pay gap in Australia. Australia has seen a range of government and business initiatives introduced in recent years to tackle the gender pay gap, however, the pay gap remains stubborn.

2.1 Defining the gender pay gap

The gender pay gap measures the difference between the average earnings of women and men in the workforce. It is not the difference between two people being paid differently for work of the same or comparable value, which is unlawful. This is called equal pay. The gender pay gap is an internationally established measure of women's position in the economy in comparison to men. It is the result of the social and economic factors that combine to reduce women's earning capacity over their lifetime.

The gender pay gap is influenced by a number of factors, including:

- Conscious and unconscious discrimination and bias in hiring and pay decisions;
- Men and women working in different industries and different jobs, with female-dominated industries and jobs attracting lower wages;
- High rates of part-time work for women;
- Women's disproportionate share of unpaid caring and domestic work;
- Lack of workplace flexibility to accommodate caring and other responsibilities, especially in senior roles; and
- Women's greater time out of the workforce impacting career progression and opportunities.

The gender pay gap starts from the time women enter the workforce. The pay gap, together with time out of the workforce for caring reasons and women's higher likelihood of part-time work, impacts on their lifetime economic security.

Source: Workplace Gender Equality Agency, 2022

2.2 Approaches to calculating gender pay gaps

There are various approaches to calculating the gender pay gap, but gender pay gaps favouring men remain apparent regardless of the data source or approach used. Using different data sources, wage periods (e.g. hourly, weekly or annual wages) and methodological approaches can produce different results. Figure 1 explores some of the approaches taken by prominent organisations in more detail.

In this report, the gender pay gap has been calculated based on average hourly earnings calculated from the latest available data from the HILDA Survey, Wave 20 (2020). The HILDA Survey is a household-based longitudinal survey which began in 2001 and is collected and published annually by the Melbourne Institute in conjunction with the Department of Social Services. HILDA comprises a sample of over 9,500 households and over 23,000 individuals, with interviews conducted annually with all adult members of each household followed over time to enable longitudinal analysis.[1]

Previously this report series has calculated the gender pay gap as the difference between women's and men's average hourly earnings, expressed as a percentage of women's earnings. This approach has been updated to align more closely with the approach taken by other organisations reporting on the gender pay gap in Australia and internationally. As such, this report calculates the gender pay gap as the difference between women's and men's average hourly earnings, expressed as a percentage of men's earnings.

$$\text{GPG} = \frac{Men's\ average\ hourly\ earnings - Women's\ average\ hourly\ earnings}{Men's\ average\ hourly\ earnings} \times 100$$

Further detail on the approach used in this report can be found in Section 3.

Figure 1: Prominent organisations' approaches to calculating the gender pay gap

Workplace Gender Equality Agency (WGEA)

The WGEA gender pay gap is 22.8%.[2] Data used to calculate the gender pay gap for all workers total remuneration data, which includes the full-time equivalent of part-time and casual employees, however, is limited to private sector organisations with 100 or more employees.

WGEA also calculates Australia's full-time gender pay gap at 13.8 per cent (November 2021). The data used by WGEA for calculating the full-time gender pay gap is the Australian Bureau of Statistics (ABS) Full-Time Adult Average Weekly Ordinary Time Earnings Trend series from the Australian Weekly Earnings (AWE) survey.[3] This data estimates Australian weekly ordinary time earnings before tax in their main job, excluding overtime pay, pay that is salary sacrificed, casual and part-time earnings.

Victorian Public Sector Commission (VPSC)

VPSC calculates the Victorian public service's gender pay gap at 9.3 per cent (2021).[4] The pay gap is measured using the median full-time equivalent pay (annual salary) for men and women employees in the public sector, excluding casual employees. Data is collected from annual workforce and executive data collections that cover over 1,800 Victorian public sector employers.[5]

ACT Chief Minister, Treasury and Economic Development Directorate (CMTEDD)

The CMTEDD defines the gender pay gap as equal to one minus women's average annual salary, divided by men's average annual salary, multiplied by 100.[6] The average annual salary represents the full-time equivalent salary for the increment point at which an employee is being paid. It is not prorated for part-time employees and does not include allowances or other pay components. Based on this approach, the ACT public service's gender pay gap is estimated at 0.8 per cent (2021).[7]

[1] Summerfield, M., et al. 2021, *HILDA User Manual – Release 20,* Melbourne Institute, Applied Economic & Social Research.

[2] WGEA. 2022. Australia's gender equality scorecard Key results from the Workplace Gender Equality Agency's 2020-21 employer census. Available at: https://www.wgea.gov.au/sites/default/files/documents/2020-21_WGEA_SCORECARD.pdf [Accessed May 16 2022]

[3] WGEA, 2022. *Australia's Gender Pay Gap Statistics.* Australian Government.

[4] Victorian Public Sector Commission. 2022. *Employee pay and gender pay.* Available at: https://vpsc.vic.gov.au/data-and-research/data-facts-visuals-state-of-the-sector/employee-pay-and-gender-pay/ [Accessed May 16 2022]

[5] Ibid

[6] ACT Government. 2021. *State of the Service 2021-2022 Annual Report.* Available at: https://www.cmtedd.act.gov.au/__data/assets/pdf_file/0018/1910106/State-of-the-Service-2020-2021-Annual-Report.pdf [Accessed May 16 2022]

[7] Ibid.

Organisation for Economic Co-operation and Development (OECD)

The OECD defines the gender pay gap as the difference between median earnings of men and women relative to median earnings of men, and estimates Australia's gender pay gap at 12.3 per cent (2020).[8] Gross earnings of full-time wage and salary worked is used as the estimate of earnings in the calculation, and data is collected annually through labour force and household surveys'.[9]

International Labor Organisation (ILO)

In its Global Wage Report 2018/2019, the ILO uses a "factor weighted gender pay gap" to estimate Australia's gender pay gap at 13.3 per cent (2018).[10] The approach uses hourly wages and groups men and women wage employees into clustered subgroups, before estimating the gender pay gap in each subgroup to create a weighted average.[11]

Directly comparing international gender pay gaps is challenging due to differences in sources, definitions and methods used to calculate gender pay gaps. Country-specific factors such as the structure of the economy, legislative measures and practices, how wages are set, the degree of collective bargaining and reporting requirements are important determinants of gender pay gaps.

However, gender pay gaps in favour of men are a common feature of these international economies despite differences in data sources and calculation methods. For example, on average, women across the Organisation for Economic Co-operation and Development (OECD) countries earn 13 per cent less than men.[12]

2.3 Trends in women's economic participation

Trends in women's economic participation can have a significant effect on the gender pay gap. In Australia, women currently comprise 47.9 per cent of all employees, up slightly from 46.9 per cent in 2018.[13] Women are disproportionately represented in part-time work (accounting for 68.5 per cent of the part-time workforce) and under-represented in full-time work (accounting for 38.6 per cent of the full-time workforce).[14]

There have been significant increases in women's labour force participation, educational attainment (where women now out-perform men), and total earnings over the last few decades. The rate of women's labour force participation increased to a record high of 62.4 per cent in February 2022, although it remains more than eight percentage points below men's.[15] Expressed as a ratio of women's to men's labour force participation, women are underrepresented in the workforce by 12 per cent.

Table 1: Labour Force Participation Rates

	Feb 2012	Feb 2016	Feb 2018	Feb 2020	Feb 2022
Men	71.8%	70.7%	71%	70.7%	70.8%
Women	58.6%	59.4%	60.6%	61.2%	62.4%

Source: Australian Bureau of Statistics (ABS) 2022, Labour Force, Australia, February 2022, cat.no. 6202.1 (Seasonally adjusted figures).

[8] Organisation for Economic Co-operation and Development (OECD). 2020. *OECD Family Database LMF1.5: Gender pay gaps for full-time workers and earnings differentials by educational attainment.* Available at: https://www.oecd.org/els/LMF_1_5_Gender_pay_gaps_for_full_time_workers.pdf [Accessed May 16 2022]

[9] Ibid.

[10] International Labour Organisation (ILO), 2018. *Global Wage Report 2018/19 What lies behind gender pay gaps.* Geneva:International Labour Office. Available at https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_650553.pdf [Accessed May 16 2022]

[11] Ibid.

[12] Organisation for Economic Co-operation and Development (OECD). 2020. *OECD Family Database LMF1.5: Gender pay gaps for full-time workers and earnings differentials by educational attainment.* Available at: https://www.oecd.org/els/LMF_1_5_Gender_pay_gaps_for_full_time_workers.pdf [Accessed May 16 2022]

[13] ABS, 2022. Labour Force. 6202.0 (Seasonally adjusted figures).

[14] Ibid.

[15] Ibid.

As seen in Table 2 below, the rate of women's labour force participation between the ages of 15 and 24 exceeds that of men, at 72.1 per cent as of February 2022. However, between the ages of 25 and 44 the gap between men's and women's rate of participation widens significantly. This is despite the women's rate of participation being higher in the 25- to 44-year-old age bracket than in the 15- to 24-year-old age bracket.

Table 2: Labour Force Participation by Age

	15-24	25-34	35-44	45-54	55-64	65+
Men	71.2%	91.0%	92.0%	89.4%	76.0%	19.3%
Women	72.2%	82.3%	82.1%	82.6%	64.8%	11.3%

Source: Australian Bureau of Statistics (ABS) 2022, Labour Force, Australia, Detailed, February 2022, (Original figures). Note, seasonally adjusted figures were not available at the time of writing this report.

These figures suggest the disproportionate effect that taking time out of the workforce to raise and care for children and other family members have on women's workforce participation, with the gap between men's and women's participation at its widest during the typical ages of childbirth and childrearing.

Distribution of income across the employed is also skewed. Women are disproportionately represented in lower income brackets, while men are approximately twice as likely to be in the top 25 per cent of earners than women, according to WGEA data. This can reinforce traditional gender roles by making it financially more 'rational' for households to prioritise a man's career. While it is at times suggested in public discourse that women have 'chosen' to reduce their time in work, social norms regarding the distribution of unpaid care and work can mean that these 'choices' are inherently constrained and act as a barrier to achieving pay parity.[16]

The World Economic Forum's *Global Gender Gap Report* attempts to benchmark countries' performance on gender equality more broadly, against four key sub-indexes: economic participation and opportunity; educational attainment; health and survival; and political empowerment. According to the report, Australia's ranking of women's economic participation and opportunity has fallen from 42nd in the world in 2016 to 70th in 2021.[17]

This is largely attributed to the indicator of estimated earned income, which seeks to estimate how much command women have over a country's economic resources. On this indicator, Australia has dropped from 57th in the world to 125th over the 5-year period.[18]

While Australia's performance on other indicators within the economic participation and opportunity sub-index have shown modest improvements over this period, its rankings have fallen, suggesting that Australia is not keeping pace with the progress made in other countries.

[16] Preston, A. & Yu, S., 2015. Is there a part-time/full-time pay differential in Australia? *Journal of Industrial Relations,* 57(1): pp. 24-47.

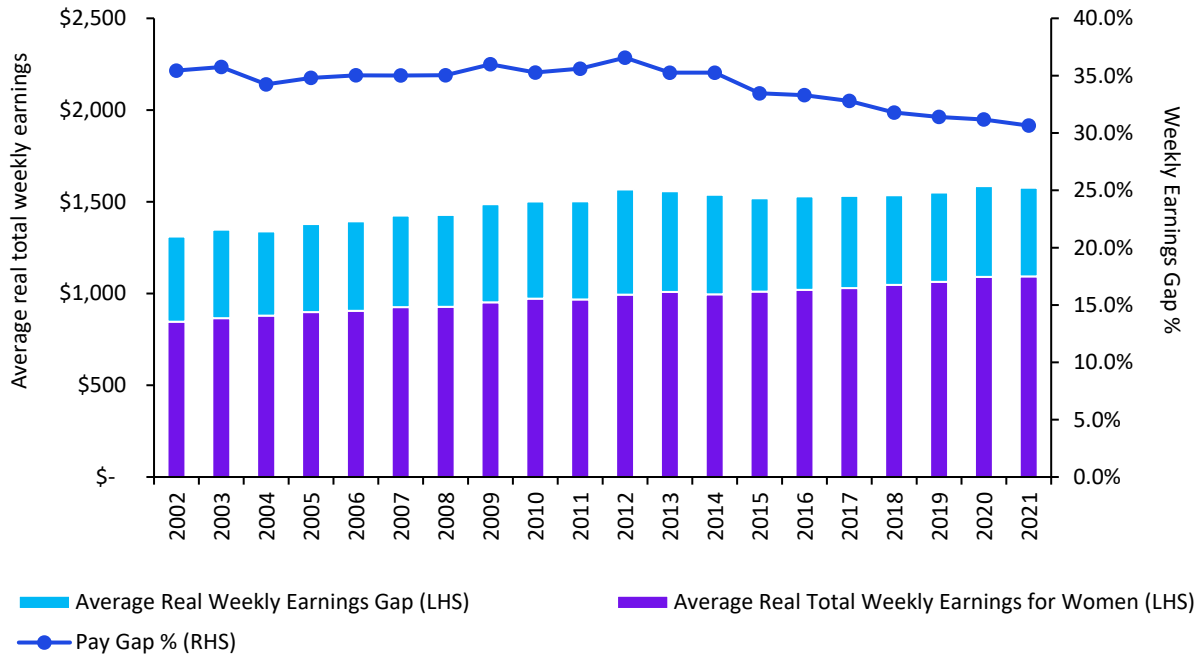
[17] World Economic Forum, 2021. *Global Gender Gap Report 2021 Insight Report.* World Economic Forum: Geneva. Available at: https://www3.weforum.org/docs/WEF_GGGR_2021.pdf [Accessed May 17 2022]

[18] World Economic Forum, 2014. *Global Gender Gap Report Insight Report.* World Economic Forum: Geneva. Available at: https://www3.weforum.org/docs/GGGR14/GGGR_CompleteReport_2014.pdf [Accessed May 17 2022]

2.4 Weekly pay gap

In Australia, gender pay gaps exist nationally across industries and occupations. Data from the ABS shows the gap between men and women in total average weekly earnings (AWE), which includes the full-time equivalent of part-time and casual employees, has hovered between 37 per cent and 30 per cent over the past 20 years and is currently at 30.6 per cent (Chart 1).[19] As seen below, there has been a steady decline in the weekly gender pay gap since 2014.

Chart 1: Average real total weekly earnings



Source: KPMG analysis of Australian Bureau of Statistics Average Weekly Earnings (Original), Cat. 6302, November 2021.
Note: Wages are reported in 2021 dollars.

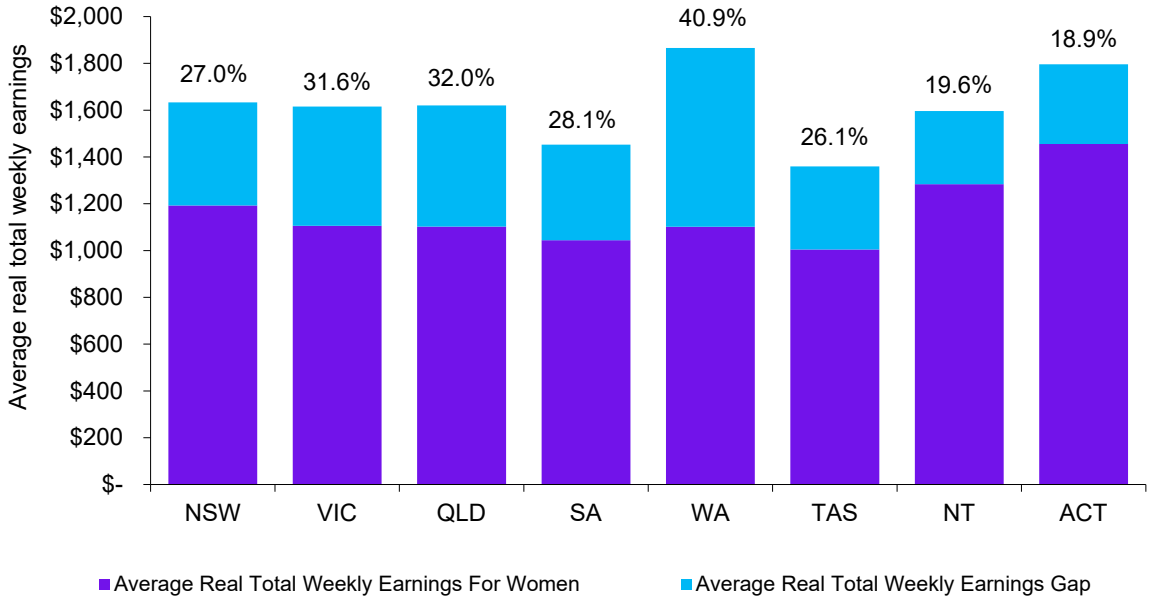
Across Australia, the pay gap varies in different States and Territories. As of November 2021, Western Australia had the widest weekly gender pay gap at 40.9 per cent,[20] while the Australian Capital Territory had the smallest

[19] Workplace Gender Equality Agency (WGEA). 2022. 'Gender workplace statistics at a glance February 2020'. Available at: https://www.wgea.gov.au/sites/default/files/documents/Stats_at_a_glance_Feb2022.pdf. [Accessed May 16 2022]

[20] WGEA, 2022. *Australia's Gender Pay Gap Statistics.* Australian Government.

weekly gender pay gap at 18.9 per cent.[21] Industry and occupational profiles as well as the underlying structure of the economy influence these differences across jurisdictions. For example, the full-time workforce in Western Australia is concentrated in the Mining and Construction sectors, which have relatively higher earnings and lower representation of women.[22]

Chart 2: Average total weekly earnings by state and territory



Source: KPMG analysis of Australian Bureau of Statistics Average Weekly Earnings, Cat. 6302, November 2021.
Note: Wages are reported in 2021 dollars.

2.5 Hourly pay gap

Weekly gender pay gaps differ from hourly gender pay gaps, as they eliminate differences in labour force participation. In Australia, women are overrepresented in part-time and casual work, and therefore tend to work fewer hours per week than men. Using hourly wages to estimate the gender pay gap has the advantage of disentangling working time from earnings and is in line with international best practice (as per SDG indicator 8.5.1). However, it is important to note that hourly pay gaps alone do not account for gender differences in annual 'take-home' pay and purchasing power (the ability to buy goods and services).

For this report, hourly wages were calculated by dividing total earnings by total hours worked. The total earnings variable is imputed by HILDA based on the gross weekly wages and on salaries respondents provide for all their jobs. The hourly gender pay gap is then calculated using the difference between men' average hourly earnings and women's average hourly earnings, divided by men's hourly earnings.

Data from the 2020 HILDA Survey (Wave 2-20) shows that on average, women in Australia earned $36.89 per hour while men earned $39.44 per hour in 2020. This represents an hourly wage gap of 6.5 per cent. This is a slight decrease from 7.2 per cent in 2017[23], although a marginal increase is seen between 2019 and 2020 (Chart 3). The COVID-19 pandemic caused major disruption to Australia's labour force in 2020. Industries employing large proportions of women were heavily impacted by public health restrictions, with women accounting for three out of five job losses at the peak of the pandemic.[24] An uptick in the pay gap could be attributed to a range of factors, including structural shifts and changes in the labour market and the provision of the JobKeeper payment to certain industries and workers.

[21] Ibid.

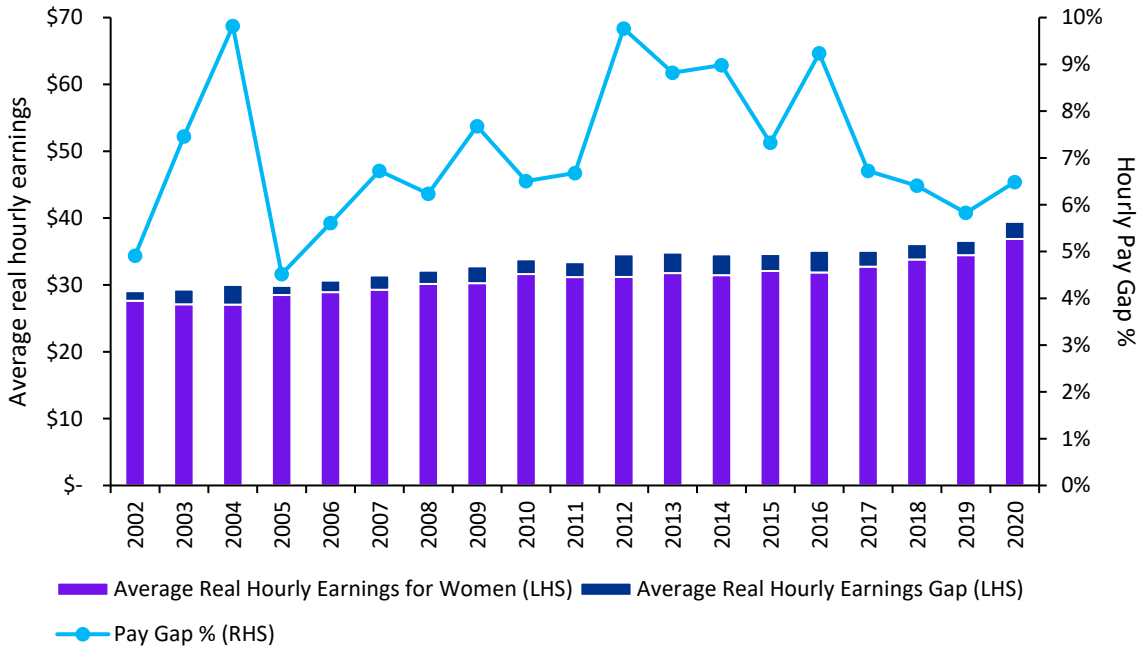
[22] Ibid.

[23] Based on HILDA Wave 17, Release 17 data and adjusted to 2021 dollars.

[24] Australians Investing in Women and Equity Economics, 2021. *Changing the Trajectory.* Available at: AIIW-EE_Changing-the-Trajectory-Investing-in-Women-for-a-Fairer-Future-202111-page-view.pdf [Accessed May 16 2022]

The gender pay gaps between 2002 and 2020 estimated from HILDA data, are summarised below.

Chart 3: Changes in the calculated gender pay gap between 2002 and 2020



Source: KPMG analysis of the Household, Income and Labour Dynamics in Australia Survey, Waves 2 - 20 (HILDA Survey). Note: Wages are reported in 2021 dollars. This figure uses Release 20 data only to produce like-for-like analysis. 2017 figures may differ slightly due to revisions made by HILDA across releases.

2.6 Pay gap initiatives and awareness

At a government, business, and community level, there is increasing focus on gender equality and drivers of the gender pay gap. These are considered in more detail below.

Legislative framework

An equal pay case in 1972 established the principle of 'equal pay for work of equal value' in Australia. This was enshrined in legislation via the *Affirmative Action (Equal Employment Opportunity for Women) Act 1986* being replaced by the *Equal Opportunity for Women in the Workplace Act 1999* and then the *Workplace Gender Equality Act 2012.* Australia's legislation aims to improve and promote equality for both women and men in the workplace. The principal objectives are to:

- Promote and improve gender equality (including equal remuneration between women and men) in employment and in the workplace;
- Support employers to remove barriers to the full and equal participation of women in the workforce;
- Promote, among employers, the elimination of discrimination on the basis of gender in relation to employment matters (including in relation to family and caring responsibilities);
- Encourage workplace consultation between employers and employees on issues concerning gender equality in employment and in the workplace; and
- Improve the productivity and competitiveness of Australian business through the advancement of gender equality in employment and in the workplace.

WGEA was created by the *Workplace Gender Equality Act 2012.* Australia is the only country in the world where employers are required to submit raw data to an agency (WGEA) for data checking. WGEA is charged with promoting and improving gender equality in Australian workplaces and for calculating and monitoring key data including gender pay gaps.[25] All non-public employers with 100 or more employees are required to report to WGEA each year. This accounts for nearly 40 per cent of the Australian labour force.[26] Areas for reporting include formal policies and strategies, employee movements, governing bodies, employer actions and consultations, flexible working support, carers and parents, sex-based harassment policies and familial or domestic violence.[27]

The Women's Budget Statement 2021-2022 made a commitment to review the *Workplace Gender Equality Act 2012*. The review sought feedback to address workplace gender equality from across the community while also considering the regulatory requirements of employers.[28] In March 2022, the Australian Government released its review, which proposes ten recommendations to help employers address identified problems proactively and accelerate progress on gender equality.[29] The headline recommendations included making it easier for employers to report to WGEA, improving WGEA's data collection through more nuanced data, publication of organisation gender pay gaps, bridging the 'action gap' with new gender equality standards that set targets and exploring the collection of broader diversity data.[30] The WGEA Review also supports the implementation of the Respect@Work Report to prevent and address workplace sex-based harassment and discrimination.[31]

Policy directions

The Australian Government has made a range of investments to improve women's economic security, including an $8.3 billion investment into the new child care system in 2018-19, and superannuation reforms to protect retirement savings in the Inaugural Women's Economic Security Statement.[32] The 2020 Women's Economic Statement significantly expands on the previous statement, including increasing investment into the child care system to $10 billion a year.[33] A further $240.4 million will be invested from 2020 to 2025 to create new opportunities for women.[34]

State and Territory Governments have also progressed initiatives related to gender equality. For example, the *South Australian Women's Leadership and Economic Security Strategy 2021-2024* sets out how the South Australian Government will work with its partners across business and community to advance women's economic participation and security as well as improve opportunities for leadership across all sectors in the state.[35] The *Queensland Women's Strategy 2022-27* also provides a framework for how to drive work to strengthen the status of women in Queensland.[36] The proposed Tasmanian Women's Strategy 2022-2027 (currently in draft form) will focus on developing a gender impact assessment process for government. In addition, it will support business and community groups in the adoption of similar practices through the provision of tools and resources.[37] The recently elected Albanese Government has committed to developing a National Strategy to Achieve Gender Equality with a wide mandate to assess new policy and funding decisions for their impact on gender.

---

[25] WGEA, 2019. *International Reporting Schemes.* Sydney: Australian Government. Available at https://www.wgea.gov.au/sites/default/files/documents/2019-04-4%20International%20reporting%20schemes_Final_for_web_0.pdf [Accessed May 16 2022]

[26] Ibid.

[27] WGEA, 2018. *Reporting Questionnaire.* Available at: https://www.wgea.gov.au/reporting/reporting-questionnaire [Accessed July 24 2019]

[28] Department Prime Minister & Cabinet, 2022. *Review of Workplace Gender Equality Act Report. Available at:* https://ministers.pmc.gov.au/payne/2022/review-workplace-gender-equality-act-report [Accessed May 6 2022]

[29] Ibid.

[30] Department Prime Minister & Cabinet, 2022. *WGEA Review Report*. Available at: https://www.pmc.gov.au/sites/default/files/publications/wgea-review-report_1.pdf [Accessed May 6 2022]

[31] Department Prime Minister & Cabinet, 2022. *Review of Workplace Gender Equality Act Report. Available at:* https://ministers.pmc.gov.au/payne/2022/review-workplace-gender-equality-act-report [Accessed May 6 2022]

[32] Department of the Prime Minister and Cabinet, 2018. *Women's Economic Security Statement.* Australian Government. Available at https://www.pmc.gov.au/office-women/economic-security/wess [Accessed February 19 2019]

[33] Department of the Prime Minister and Cabinet, 2020. *Women's Economic Statement*. Australian Government. Available at https://www.pmc.gov.au/sites/default/files/images/wess/wess-2020-report.pdf [Accessed April 29 2022]

[34] Ibid.

[35] Government of South Australia, 2021. *South Australian Women's Leadership and Economic Security Strategy 2021-2024.* Available at: https://officeforwomen.sa.gov.au/__data/assets/pdf_file/0012/106410/Womens-Leadership-and-Economic-Security-Strategy-2021.pdf [Accessed May 2 2022]

[36] Queensland Government, 2022. *Queensland Women's Strategy 2022-2027*. Available at: https://www.publications.qld.gov.au/dataset/womens-strategy/resource/162d3203-5253-481e-bf98-851215d2bf34?truncate=30&inner_span=True [Accessed May 3 2022]

[37] Tasmanian Government, 2022. *Tasmanians Women's Strategy*. Available at: https://www.women.tas.gov.au/__data/assets/pdf_file/0022/210199/Tas-Womens-Strategy_wcag_5-April.pdf [Accessed April 29 2022]

Australia has a government-funded Paid Parental Leave (PPL) scheme that provides eligible working parents 20 weeks of PPL at the national minimum wage.[38] Government-funded PPL was introduced in 2011 and in 2012, a 'use it or lose it' entitlement of two weeks of leave was introduced for the other parent. The current minimum wage in Australia is $772.60 per week (before tax), which equates to a minimum hourly rate of $20.33.[39] The 20-week entitlement can be taken by either parent or both parents, and must be fully paid within 52 weeks of the child's birth, stillbirth or adoption. Claims must be made within 34 weeks of the birth or adoption. Employees can take PPL before, after or in conjunction with employer-provided paid parental leave or other leave. The National Employment Standards provide long-term employees with access to unpaid parental leave. A 2014 review of PPL suggests that parental leave is primarily taken by mothers.[40] The evaluation also found that PPL increased employers' retention of mothers when they returned to work.[41] Prior to 2022, government-funded PPL was 18 weeks with the Australian Government announcing in their 2022 budget that working parents can now share up to 20 weeks of government-funded fully flexible leave, while single parents can also benefit from an additional two weeks leave. This is the first time both parents are able to take a combination of paid leave from employer and government, allowing for families to tailor make leave that suits their family's needs.[42]

While changes to government childcare subsidies, introduced in mid-2018, have made childcare more affordable for many families, the government subsidy system continues to financially penalise families where there are two parents in full-time work. For many Australian families, this disproportionately impacts women's economic outcomes as opposed to men's, due to persistence in the gendered nature of caring. A significantly larger proportion of women work part-time than men, and if women increase the number of days worked there are financial disincentives through increased tax, lost payments and out-of-pocket childcare expenses.[43]

The Morrison Government made a commitment to make childcare more affordable by increasing government spending on the child-care subsidy from July 2022 by $1.7 billion over three years. This is in addition to the current investment of $9 billion a year.[44] The policy was designed to target the cost of childcare for second and subsequent children, and to tackle the work disincentive impact of the marginal cost of childcare. The newly elected Albanese Government has committed to lifting the maximum childcare subsidy rate up to 90 per cent for families for the first child in care and will increase childcare subsidy rates for every family with one child in care earning less than $530,00 in household income.[45] They plan to invest a total of $5.4 billion to make childcare cheaper, starting from July 2023.[46]

The NSW Government in June 2022 announced $5 billion over 10 years from 2022-23 to reduce the disparity in labour market outcomes between men and women through affordable early childhood education and care. The policy includes $4,000 per child fee relief and is part of a wider reform agenda to tackle the gender pay gap.[47]

As the policy landscape continues to evolve, it will remain important to focus on interactions between Australian personal income tax, family payment and childcare support systems to ensure these do not deter Australian women with young children from increasing their workforce participation.[48]

[38] WGEA, 2017. Towards Gender Balanced Parental Leave.

[39] Fair Work Ombudsman, 2021. *Minimum Wages.* Available at: https://www.fairwork.gov.au/sites/default/files/migration/723/Minimum-wages.pdf.[Accessed April 29 2022]

[40] Institute for Social Science Research, University of Queensland, 2014. *Paid Parental Leave Scheme: Review Report.* Department of Social Services.

[41] Ibid.

[42] Commonwealth of Australia, 2022. *Women's Budget Statement 2022-23.* Available at: https://budget.gov.au/2022-23/content/womens-statement/download/womens_budget_statement_2022-23.pdf [Accessed March 29 2022]

[43] KPMG, 2018. *The Cost of Coming Back: Achieving a Better Deal for Working Mothers.* Available at: https://home.kpmg/au/en/home/insights/2018/10/working-mothers-returning-to-work.html. [Accessed February 19 2019]

[44] The Conversation, 2021.*The Coalition's child-care subsidy plan: how it works, and what it means for families and the economy.* Available at: https://theconversation.com/the-coalitions-child-care-subsidy-plan-how-it-works-and-what-it-means-for-families-and-the-economy-160173 [Accessed May 6 2022]

[45] Labor, *Labor's plan for cheaper child care.* Available at: https://www.alp.org.au/policies/cheaper-child-care [Accessed May 6 2022]

[46] Ibid.

[47] NSW Treasury, 2022. *NSW Budget 2022-23 – Women's Opportunity Statement*, Available at ww.budget.nsw.gov.au/sites/default/files/2022-06/20220620_01_2022-23-Budget-Paper-Womens-Opportunity-Statement-Glossy.pdf

[48] Ibid.

Business and industry

Awareness and advocacy

Gender equality continues to be promoted across Australian workplaces through a number of key initiatives. DCA has been contributing to building awareness of all aspects of diversity and inclusion among its members and the broader community through research, events, resources, access to experts and knowledge programs. DCA is gaining traction, with over 1,000 members in 2021. These members are estimated to employ nearly two million Australians, covering up to 20 per cent of the workforce, up from 15 per cent in 2017.[49]

In Australia, the number of women on the Boards of Australian Stock Exchange (ASX)-200 listed companies grew from 8.3 per cent in 2009 to 34.2 per cent in 2021 due in part to a target-setting diversity policy implemented by the ASX Corporate Governance Council in 2010.[50]

The WGEA Employer of Choice for Gender Equality citation commenced in 2014 and is a leading practice recognition program that aims to encourage, recognise and promote active commitment to achieving gender equality in Australian workplaces. The citation is strategically aligned with the *Workplace Gender Equality Act (2012)*. It recognises that gender equality is increasingly critical to an organisation's success and is viewed as a baseline feature of well-managed and leading organisations. In 2022, 120 Australian organisations received the citation, including 12 first-time recipients.[51]

Workplace initiatives

Initiatives including the Champions of Change Coalition, WGEA Pay Equity Ambassador, CEOs for Gender Equity, and Employer of Choice programs aim to prioritise reforming workplaces by challenging existing structures and ways of thinking that may drive inequality.[52, 53, 54, 55] For example, the Champions of Change Coalition challenges the notion that gender equality is reliant on 'women's activism' and emphasises the need for active engagement by men to drive and accelerate the change on what is not only a gender issue, but also an economic and social issue. The Champions of Change Coalition is made up of 225 organisations that represent more than 1.5 million employees globally. The 2021 Champions of Change Coalition Impact Report highlights the results that are being achieved from the strategy. For example, 84.9 per cent of member organisations achieved gender balance in recruitment and 91.7 per cent revised or relaunched their approach to enable flexible work.[56]

Advances in parental leave policies

Since the last iteration of She's Price(d)less, there has been progress with more workplaces introducing leading practice parental leave policies. For example, in 2021, KPMG Australia introduced a new flexible parental leave scheme with no distinction between primary and secondary carers, where the number of weeks of leave would rise to 26 weeks.[57] KPMG envisages an economy and society where the care of young children is more equally shared between mothers and fathers and therefore enabling more women to participate consistently in the workforce during their career.[58] In 2022, Deloitte Australia also introduced new measures to help ease key pressures facing families. Parents returning to work after a continuous break for parental leave will receive an

[49] Diversity Council Australia, 2020. *Annual Report.* Available at https://www.dca.org.au/sites/default/files/final_2020_annual_report_approved.pdf. [Accessed March 29 2022]

[50] Australian Human Rights Commission, 2018. *Face the Facts: Gender Equality.* AICD Board Diversity Statistics. Available at: http://aicd.companydirectors.com.au/advocacy/board-diversity/statistics [Accessed March 29 2022]

[51] WGEA, 2022. *Meet the gender equality change makers: Leading Australian businesses in 2022 announced*. Australian Government. Available at: https://www.wgea.gov.au/newsroom/Leading-Australian-businesses-in-2022-announced [Accessed March 29 2022]

[52] The first Male Champions of Change (MCC), 2021. *About The Champions Of Change Coalition*. Available at: https://malechampionsofchange.com/about-us/ [Accessed March 4 2019]

[53] WGEA, *Pay Equity Ambassadors*. Australian Government. Available at: https://www.wgea.gov.au/leading-practice/pay-equity-ambassadors/meet-our-ambassadors. [Accessed May 16 2022]

[54] CEOs For Gender Equity. *About us.* Available at: https://www.ceosforgenderequity.com.au/about-us [Accessed April 16 2019]

[55] WGEA. *Employer of Choice for Gender Equality*. Australian Government. Available at https://www.wgea.gov.au/leading-practice/employer-of-choice-for-gender-equality. [Accessed May 16 2022]

[56] Male Champions of Change, 2021. *Impact Report.* Available at: https://championsofchangecoalition.org/wp-content/uploads/2021/12/Champions-of-Change-2021-Impact-Report.pdf. [Accessed March 29 2022]

[57] KPMG, 2021. *Enhancing work-life balance*. Available at: https://assets.kpmg/content/dam/kpmg/au/pdf/2021/better-system-for-paid-parental-leave-report.pdf

[58] Ibid.

additional support payment over 12 months. That is parents working three or four days a week will be paid for an extra day a week and those working less than three days a week will be paid an extra half a day a week.[59]

Despite these advances in some workplaces, access to paid parental leave remains a challenge for gender equality. According to the ABS, in 2018-19, 93.5 per cent of primary parental leave (paid or unpaid) was taken by women (non-public sector employees).[60] While WGEA's dataset shows that women account for 88 per cent of all primary carer's leave utilised and men account for 12 per cent.[61] While parental leave is important for promoting gender equality by enabling women's workforce participation, this low take-up by men also reinforces traditional gender roles concerning work and childcare.[62]

The rate that men take up parental leave in Australia is low compared to international standards.[63] Men face cultural and policy barriers to taking up parental leave. The government funded scheme is 'parental leave' in name but its design means that it is mostly taken by women. Further, while more employers are offering gender-neutral parental leave, a small number of employers still only offer leave to mothers.[64] Research also shows that men who take parental leave face discrimination and negative attitudes.[65] Many men also report that workplace culture can discourage them from taking leave.[66] Social norms revolving around the 'ideal worker' or male breadwinner are also barriers to men taking more parental leave, and taking time away from paid work to care for a child may not be seen as 'masculine' in Australian culture.[67]

Further, gendered industrial segregation also has an effect on the availability of parental leave. WGEA data found that organisations in male-dominated industries are much less likely to offer paid leave.[68] So, while progress is being made in terms of the number of organisations offering employer-paid parental leave, many Australian parents are still missing out. Many working parents only have access to the government-funded scheme, have no access to parental leave at all, or face barriers to taking leave even when it is available.

National Inquiry into Sexual Harassment in Australian Workplaces

Although sexual harassment in workplaces in Australia is against the law, findings from the fourth *National Survey on Sexual Harassment in Australian Workplaces* in 2018 show that workplace sexual and sex-based harassment continue at alarming rates, with one in three people having experienced sexual harassment at work in the last five years (an increase from previous surveys).[69] On 20 June 2018, Australia's Sex Discrimination Commissioner, Kate Jenkins, announced a national inquiry into sexual harassment in Australian workplaces. 55 public consultations were undertaken with approximately 600 attendees around Australia, where individuals and organisations had the opportunity to make an online submission until February 2019.

---

[59] Ibid.

[60] Australian Bureau of Statistics, 2020. *Gender Indicators, Australia.* Available at: https://www.abs.gov.au/statistics/people/people-and-communities/gender-indicators-australia/latest-release#work-and-family-bala[60] Deloitte, 2022. *Making work work for families: Deloitte Australia introduces new policies to give people more time with their families*. Available at: https://www2.deloitte.com/au/en/pages/media-releases/articles/making-work-work-families.html [Accessed May 3 2022]

[61] WGEA. 2022. Australia's gender equality scorecard Key results from the Workplace Gender Equality Agency's 2020-21 employer census. Available at: https://www.wgea.gov.au/sites/default/files/documents/2020-21_WGEA_SCORECARD.pdf [Accessed May 16 2022]

[62] Baird, M., et al. 2021, Gender equality and paid parental leave in Australia: A decade of giant leaps or baby steps? *Journal of Industrial Relations.* 63(4), 546–567

[63] Australian Institute of Family Studies, 2017. *Fathers and Parental Leave*. Available at: https://aifs.gov.au/aifs-conference/fathers-and-parental-leave#footnote-001 [Accessed June 24 2022]

[64] WGEA. 2022. Australia's gender equality scorecard Key results from the Workplace Gender Equality Agency's 2020-21 employer census. Available at: https://www.wgea.gov.au/sites/default/files/documents/2020-21_WGEA_SCORECARD.pdf [Accessed May 16 2022]

[65] Australian Human Rights Commission, 2022. *Experiences of employees during pregnancy, parental leave and on return to work after parental leave.* Available at: https://humanrights.gov.au/our-work/chapter-3-experiences-employees-during-pregnancy-parental-leave-and-return-work-after [Accessed June 24 2022]

[66] WGEA, 2022. *Gender equality means mums and dads should have equal access to parental leave.* Available at: https://www.wgea.gov.au/newsroom/gender-equality-means-mums-and-dads-should-have-equal-access-to-parental-leave [Accessed 24 June 2022]

[67] Borgkvist, A., 2021. 'It Would Be Silly to Stop Now and Go Part-Time': Fathers and Flexible Working Arrangements in Australia', *Engaged Fatherhood for Men Families and Gender equality*. Springer, Cham.

[68] WGEA, 2022. Australian employers paying up for mums and dads on parental leave. Available at: https://www.wgea.gov.au/newsroom/parental-leave-scorecard [Accessed June 24 2022]

[69] Australian Human Rights Commission, 2018. Everyone's Business: Fourth National Survey on Sexual Harassment in Australian Workplaces, Australian Human Rights Commission.

In 2020, the findings from the national inquiry were detailed in the Respect@Work report. The Australian Human Rights Commission heard that the current system for addressing workplace sexual harassment in Australia was complex and confusing for both victims and employers. Therefore, the report recommends a new approach to better prevent and respond to sexual harassment in the workplace. This approach includes a framework that is victim-centred, practical and suitable for businesses of all sizes.[70] The Albanese Government has committed to fully implement the report's 55 recommendations.

Gender norms

People's lives are shaped by gender norms and attitudes. Gender norms refer to:

- How people are divided into categories of 'man' and 'woman', without recognition of the full spectrum of gender diversity;
- The meanings given in society to being a 'man' or a 'woman', such as how men and women are 'supposed' to talk, think, look and behave;
- Different images and representations of people with particular gender identities; and
- The organisation of people's lives, including who holds power and makes decisions, who does what kinds of work, and expectations around how a person's sexuality can be expressed based on their gender.[71]

Community attitudes

Community attitudes play an important role in changing gender norms and achieving progress on gender equality. In Australia, there have been a number of studies undertaken in recent years to understand how community attitudes are changing, and how they vary across different industries and parts of the community. As noted in Table 3, evidence from these studies suggest that there have been some improvements in attitudes supportive of gender equality, though in other areas challenging attitudes persist.

Table 3: Key research on community attitudes towards gender equality in Australia

Publication	Key findings
Citizens Call for a Gender-Equal World: A Roadmap for Action.[72] 2021	• 59 per cent of respondents believing that gender equality is 'better' in the country than it was 25 years ago. • 26 per cent of respondents consider the state of gender equality as 'more or less the same' as 25 years ago, and ten percent report that it has 'worsened'.
Allyship and Gender Equality Research[73] 2021	• 48 per cent of male respondents indicate feeling fatigued by the diversity and inclusion discussion and 87 per cent feel that they have not seen any significant change to their work environment. • 52 per cent of male respondents feel like they are suffering from reverse-discrimination with women being favoured for jobs and promotions. • The same sample of men indicate that opportunities for advancement in the workplace had either remained the same (57 per cent) or that it had improved (26 per cent).

[70] Australian Human rights Commission, 2020. *Sexual Harassment National Inquiry Report (2020),* Available at: https://humanrights.gov.au/our-work/sex-discrimination/publications/respectwork-sexual-harassment-national-inquiry-report-2020 [Accessed March 29 2022]

[71] Flood, M. and Russell, G., 2017, Men Make a Difference: How to Engage Men on Gender Equality, Sydney: DCA.

[72] Focus 2030, 2021. *Focus on the Results of the Survey in Australia, Citizens Call for a General-Equal World: A Roadmap for Action.* Available at: https://focus2030.org/IMG/pdf/global_survey_gender_equality_australia_deepdive.pdf [Accessed May 9 2022]

[73] The Dream Collective, 2021. *Allyship and Gender Equality Research.* Available at: https://fs.hubspotusercontent00.net/hubfs/8993753/Allyship%20&%20Gender%20Equality%20Research%20Report%20-%20The%20Dream%20Collective.pdf?__hstc=118920214.625d3391d14e28d17de56b8e1b08c952.1651552227463.1651552227463.1652069767230.2&__hssc=118920214.1.1652069767230&__hsfp=2956490961 [Accessed May 9 2022]

Publication	Key findings
From Girls to Men: Social Attitudes to Gender Equality in Australia[74] 2018	• The overwhelming majority (88 per cent) of respondents agree that inequality between women and men is still a problem in Australia today. • Nearly half of all male respondents "agree or strongly agree" with the statement that "gender equality strategies in the workplace do not take men into account".
Young Australians' attitudes to violence against women and gender equality[75] 2017	• 10 per cent of respondents feel that discrimination against women is no longer a problem in the workplace in Australia. • 14 per cent of respondents agreed that men generally make more capable bosses than women. • 6 per cent of respondents think it is embarrassing for a man to have a job that is usually filled by a woman.

[74] Evans, M., Hausseger, V., Halupka, M. and Rowe, P., 2018. *From Girls to Men: Social Attitudes to Gender Equality in Australia.* Available at: https://www.broadagenda.com.au/wp-content/uploads/attachments/From-Girls-to-Men.pdf [Accessed June 15 2022]

[75] Webster, K et al, 2018, Australians' attitudes to violence against women and gender equality. Findings from the 2017 National Community Attitudes towards Violence against Women Survey (NCAS). Sydney, NSW: ANROWS.

3 Approach

This section outlines the approach to analysing drivers of the gender pay gap in Australia.

3.1 Background

The literature cites several analytical approaches to understand the gender pay gap. All approaches have strengths and limitations and utilise different data. A high-level summary from Cassells et al. (2009) is provided in Table 4 below.

Consistent with the 2009, 2016 and 2019 reports, this report applies the Walby and Olsen technique, tailored for the Australian context, and updated with the most recent data available (2020). This approach was originally developed and applied in the United Kingdom (UK). The underlying rationale of the methodology is that it attempts to isolate the impact of gender discrimination (the target variable) by simulating the hypothetical changes needed to bring women's levels of these variables in line with those of men, while controlling for as many other known external factors on differences between equivalent male and female employee's pay as is practical within the constraints of available published data.[76]

The analysis is based on individuals who indicated that they are employed within the HILDA Survey and assumes that wages are broadly equivalent to the value of a person's output.[77] The gender discrimination component of the pay gap can materialise in various ways, including (but not limited to) the systematic undervaluation of women's economic contribution, the allocation of less productive tasks to women, or fewer opportunities for promotion.

Table 4: Strengths and limitations of techniques to decompose gender gap gaps

Technique	Strengths	Limitations
Walby and Olsen simulation technique	• Enables direct discrimination to be measured. • Allows emphasis on policy relevant variables and treats others as controls or irrelevant. • Removes 'female advantaging' variables. • Removes need to distinguish between rewards and endowments. • Pre-market labour discrimination addressed by giving women 'best average situation among men'.	• Measurement error associated with variables. • Omitted variable bias. • Removing factors considered 'controls' or not of policy relevance.
Oaxaca-Blinder decomposition technique	• Can calculate and quantify separate effects of endowments and prices. • Can measure separate coefficients for men and women for each endowment.	• Unsatisfactory choice of a true non-discriminatory wage structure. • Feedback effects mean that discrimination is under-estimated.

[76] Olsen, W. and Walby, S., 2004, *Decomposing the Gender Pay Gap*, Working Paper No. 17, Manchester, UK: Equal Opportunities Commission, pp. 24.

[77] It is important to note that the implication is *not* that women are currently paid less than men because they are not as productive and is in no way a reflection on the current contribution or value of the work of women. Instead, wages are used as a substitute for productivity, which is widely recognised as an acceptable proxy. See Walby, S. and Olsen, W., 2002, *The impact of women's position in the labour market on pay and implications for UK productivity*. Report to Women and Equality Unit, pp. 18-20.

Technique	Strengths	Limitations
		• Women and men cannot be compared directly due to separate wage estimations. • Challenging to separate discrimination from other factors.
Juhn-Murphy-Pierce decomposition	• Enables estimates of wage gaps over time and between countries. • Can decompose changes in the residual into price and quantity effects, allowing consideration of the relative importance of gender specific factors and wage structures. • Minimises problems of sample selection bias.	• Assumptions about distribution of men's wage residuals and that similar factors raise wage inequality of men and women may not hold. • Complex to interpret the impact of discrimination on wage gaps.

Source: Cassells, R., Vidyattama, Y., Miranti, R. and McNamara, J., 2009, 'The impact of a sustained gender wage gap on the Australian economy', Report to the Office for Women, Department of Families, Community Services, Housing and Indigenous Affairs, viewed 28 April 2021, available at: http://library.bsl.org.au/jspui/bitstream/1/1601/1/gender_wage_gap.pdf.

3.2 Estimation approach

Overview

The Walby and Olsen approach was applied through three steps:

Table 5: Walby and Olsen Approach

Step	Description
Likelihood of being in the labour force	The first step involves modelling the probability of selection into the labour force, based on a range of potential explanatory variables.
Factors affecting hourly wages	The second step involves estimating the factors that affect the hourly wages earned by a person in the workforce. Several potential explanatory variables were included. Further, this analysis controls for approximately 40 variables, including (but not limited to) parental status, industry and educational attainment.
Decomposition of the gender pay gap	The third step involves estimating the effect of gender differences on pay, and the implications of this for broader economic output, using the methodology established by Walby and Olsen (2002) was to break down the contributors of the gender wage gap and estimate the gross effect of each underlying factor on the wage gap. This makes it possible to estimate the change in earnings that would occur 'if women's conditions changed to reflect the best or the average situation among men' (Olsen and Walby, 2004, p. 66).

Further discussion of the technical approach and variables tested is available in Appendix B.

Approach enhancements

The literature includes several different sets of variables used across different analytical approaches to understand the gender pay gap.[78] Several enhancements have been made to the previous methodology utilised in the 2009, 2016 and 2019 reports to reflect trends more fully in underlying data.

The sections below confirm the variables tested in our analysis, based on the data available.

Variables tested in the driver analysis

Consistent with the 2009, 2016 and 2019 reports, the following variables were assessed and included in this 2022 analysis based on a literature review, consideration policy relevance, and methodological suitability for inclusion in the analysis.

Table 6: Variables tested in the 2009, 2016 and 2019 reports

Control variables	Variables tested to estimate employment likelihood	Variables tested to estimate wages
• State • Region • Size of firm • Size of industry • Satisfaction with work flexibility arrangements • Industry • Occupation • Trade union membership.	• Gender • Age and age squared • Education scale • Marital status • Number of 0-4 year old children • Number of 5-9 year old children • Number of 10-14 year old children • Migrant status • Whether the respondent has a long term health condition • Whether the respondent has poor health • Currently attending full-time education • Currently attending part-time education • Number of years since left full-time education • Years of work experience, base and squared • Urban location.	• Gender • Age and age squared • Education scale • Marital status • Number of 0-4 year old children • Number of 5-9 year old children • Number of 10-14 year old children • Years of work experience, base and squared • Whether in casual employment • Whether in part-time employment • Tenure with current employer in years • Usual hours of work in all jobs per week • Number of years not in the labour force • Number of years unemployed • Entitlement to paid maternity/paternity leave • Industry gender segregation • Occupation gender segregation • Number of on the job training hours completed per week

[78] Cassells, R., Vidyattama, Y., Miranti, R. and McNamara, J., 2009. The impact of a sustained gender wage gap on the Australian economy Report to the Office for Women, Department of Families, Community Services, Housing and Indigenous Affairs. Available at: http://library.bsl.org.au/jspui/bitstream/1/1601/1/gender_wage_gap.pdf.

Control variables	Variables tested to estimate employment likelihood	Variables tested to estimate wages
		• Hours per week spent on housework • Size of firm • Whether promoted at work last year • Inverse Mills Ratio from Employment equation.

Similar to previous reports, additional variables were also tested to understand the significance of other measurable factors in explaining the gender pay gap. These variables were identified by considering the available literature and Wave 20 of the HILDA dataset, and are summarised in Table 7 below.

Table 7: Additional variables tested in this report (not previously tested in 2009, 2016 or 2019)

Issue	Overview
Compulsory paid leave	• The COVID-19 pandemic and the associated downturn experienced by many businesses resulted in some companies asking employees to take a certain amount of leave, as a way of managing the downturn and reducing leave liability whilst ensuring employees can still access their full wages.[79] • In Australia, the rules about when and if an employer can direct an employee to take annual leave are set out in awards and enterprise agreements. Under an award or enterprise agreement, an employer may be able to direct an employee to take annual leave in certain circumstances, for example if the business temporarily closes because of the impacts of coronavirus.[80] • This factor was found to be a statistically significant negative driver on the pay gap at the national level, although the magnitude of its contribution was found to be minimal. This means that compulsory paid leave taken during the COVID-19 pandemic slightly reduced the hourly pay gap between men and women.
Cut in rate of pay	• Across industries, several employees in Australia were requested to take a pay cut by their employers to avoid redundancies in response to the COVID-19 pandemic.[81, 82, 83] • This factor was not found to be a statistically significant driver of the pay gap at the national level, however, appears to have had a larger impact within certain industries.

[79] Australian Broadcasting Corporation. 2020. *Can your boss make you take leave during coronavirus?*. ABC News. Available at: https://www.abc.net.au/news/2020-05-27/can-your-boss-force-you-to-take-annual-leave-coronavirus-travel/12282444 [Accessed May 16 2022]

[80] Fair Work Ombudsmen. 2022. Annual leave. Available at: https://coronavirus.fairwork.gov.au/coronavirus-and-australian-workplace-laws/pay-leave-and-stand-downs/annual-leave [Accessed May 16 2022]

[81] Professional Scientists Australia & Science and Technology Australia, 2020. *The Initial Employment Impact Of The Covid-19 Pandemic On Australia's Science Workforce.* Available at: https://scienceandtechnologyaustralia.org.au/wp-content/uploads/2020/08/2020-Initial-Employment-Impacts-of-Covid-19.pdf [Accessed May 16 2022]

[82] Tija, T. et al. 2020. Australian university workforce responses to COVID-19 pandemic: reacting to a short-term crisis or planning for longer term challenges?. Available at: https://melbourne-cshe.unimelb.edu.au/lh-martin-institute/fellow-voices/australian-university-workforce-responses-to-covid-19-pandemic [Accessed May 16 2022]

[83] Tadros, E. & Wootten, H., 2020. *Deloitte to cut partner pay by at least 20pc.* Available from: https://www.afr.com/companies/professional-services/deloitte-to-cut-partner-pay-by-at-least-20pc-20200402-p54ggs [Accessed May 16 2022]

Issue	Overview
Loss of work	• By May 2020, 870,000 people in Australia had lost their jobs, with many others working with reduced hours or being temporarily stood down.[84] As women are disproportionately represented in part-time and casual work, and many of the industries and occupations impacted by lockdown measures are significant employers of women, analyses suggest that women were more likely than men to have lost work as a result of the pandemic.[85] • Notwithstanding data limitations, reduced hours, total loss of work and being stood down were tested as a proxy and were not found to be a statistically significant contributor to the gender pay gap.
Ability to work from home	• In order to manage the spread of the coronavirus, many employers were urged to adapt to a work-from-home model throughout 2020 and 2021 where possible. Occupations which have limited ability to perform their duties remotely were therefore considered to be disproportionately impacted by the public health measures. • A reduced ability to execute job duties from home was not found to be a statistically significant driver of the pay gap at the national level, however, appears to have stronger associations with the pay gap within certain industries.
JobKeeper support	• The JobKeeper Payment scheme was a subsidy for businesses significantly affected by coronavirus (COVID-19) and formed a major part of Australia's economic response to the pandemic. JobKeeper payments were claimed by businesses rather than individuals, however employers were required to pay eligible employees at least the equivalent amount of the payment when claiming the subsidy.[86] Casual employees and employees with a tenure of less than 12 months were not eligible for the payments.[87] Analysis suggests that women are more likely than men to be in this cohort, and therefore were less likely to be eligible for the support.[88] • This factor was not found to be a statistically significant driver of the pay gap at the national level, however, appears to have had a larger impact within certain industries (including Manufacturing and Accommodation and Food Services) as opposed to others.
Increase in income	• Despite the significant economic disruptions and income losses experienced across Australia because of the COVID-19 pandemic, evidence suggests that certain firms and individuals experienced an increase in income during this period. Notably, the JobKeeper subsidy and the Coronavirus Supplement paid to recipients of JobSeeker contributed to reductions in poverty for some groups, such as single parent families.[89] • This factor was not found to be a statistically significant contributor to the pay gap.

[84] Australian Bureau of Statistics, 2021. *One year of COVID-19: Aussie jobs, business and the economy.* Available at https://www.abs.gov.au/articles/one-year-covid-19-aussie-jobs-business-and-economy [Accessed May 16 2022]

[85] Wood, D., Griffiths, K., & Crowley, T. 2021. *Women's work: the impact of the COVID crisis on Australian women.* Grattan Institute. Available at: https://grattan.edu.au/wp-content/uploads/2021/03/Womens-work-Grattan-Institute-report.pdf [Accessed May 16 2022]

[86] Australian Taxation Office. 2022. *JobKeeper Payment.* Australian Government. Available at: https://www.ato.gov.au/general/jobkeeper-payment/ [Accessed May 16 2022]

[87] Australian Taxation Office. 2022. JobKeeper Payment. Australian Government. Available at: https://www.ato.gov.au/general/jobkeeper-payment/ [Accessed May 16 2022]

[88] Wood, D., Griffiths, K., & Crowley, T. 2021. Women's work: the impact of the COVID crisis on Australian women. Grattan Institute. Available at: https://grattan.edu.au/wp-content/uploads/2021/03/Womens-work-Grattan-Institute-report.pdf [Accessed May 16 2022]

[89] Australian Institute of Health and Welfare. 2021. *The first year of COVID-19 in Australia: direct and indirect health effects.* Available at: https://www.aihw.gov.au/getmedia/a69ee08a-857f-412b-b617-a29acb66a475/aihw-phe-287.pdf.aspx?inline=true [Accessed May 27 2022]

Additional variables were tested based on available data; however, it is acknowledged that there are potential factors that cannot be directly observed or measured which impact the gender pay gap. These are outlined further in the limitations section below.

It should also be noted that Wave 20 of the HILDA dataset measures to August 2020, and therefore does not reflect the full extent of the impacts of the COVID-19 pandemic, including those experienced beyond August 2020. The COVID-19 pandemic has had complex implications across the economy and our communities. While this analysis has sought to test whether any of the variables in Table 7 are significant in explaining the gender pay gap, it is acknowledged that each of these measures in isolation is not sufficient to measure or understand the implications of COVID-19 on the labour market, economic growth or within industry. ABS data was investigated to supplement the analysis and extrapolate trends beyond August 2020, however, insufficient data was available to understand the interrelationships between factors.

Industry-specific driver analysis

Previous iterations of this report have examined the impact of industry and occupational segregation at a high-level, but not the drivers of gender pay gaps within industries and occupations themselves. To understand how determinants of the gender pay gap fluctuate across industries, the same modelling that is applied at the national level was applied to five industries: Healthcare and Social Assistance, Education and Training, Manufacturing, Retail Trade and Accommodation and Food Services. However, the HILDA data was found to be insufficient for this level of analysis. Limitations of the HILDA data for conducting this analysis included insufficient granularity in industry and occupational definitions, as well as limited sample sizes for many industries and occupations. These limitations meant that industry-level models were not able to appropriately capture trends within the industries or accurately determine the contribution of particular drivers to the industry gender pay gaps. Where possible, WGEA data has therefore been used to supplement this analysis and understand how intra-industry dynamics may be contributing to the gender pay gap.

Availability of WGEA employer data

WGEA Workplace Profile (WPP) and Workforce Workforce Management Statistics (WMS) data from 2014 to 2021 has been used to supplement the findings of this analysis, particularly in relation to workforce dynamics at the industry level. The data provides insight into the opportunities women are receiving within the workplace through promotions and appointments, as well as their level of representation across management positions. Although the data is limited to employers in the private sector with 100 or more employees, the granularity of this data provides a deeper insight into how industries are performing in comparison to one another when it comes to advancing gender equity within the workplace.

Table 8: Total employees in WGEA Workplace Profile and Workforce Workforce Management Statistics data provided for the purposes of analysis

Reporting year	Workplace Profile[90]		Workplace Workforce Management Statistics[91]		Total labour force[92]
	Total employees	Proportion of the total labour force	Total employees	Proportion of the total labour force	
2014	2,551,901	21%	N/A	N/A	12,247,507
2015	2,631,726	21%	N/A	N/A	12,452,039
2016	2,769,281	22%	3,292,764	26%	12,661,909
2017	2,897,194	22%	3,943,000	31%	12,893,156

[90] The WPP sample used for this analysis is a sub-set of the WPP sample. Because this data contains confidential remuneration information, suppression rules had to be applied where there was an insufficient sample size for aggregated groups.

[91] WMS data is only available from 2016 onwards. It includes number of appointments, promotions, resignations, and employees on parental leave.

[92] ABS. 2022. Labour Force, Australia, March 2022. Australian Government. Available at: https://www.abs.gov.au/statistics/labour/employment-and-unemployment/labour-force-australia/latest-release#underemployment [Accessed May 16 2022]. Note: total labour force numbers reported are seasonally adjusted for April in each calendar year to align with the collection of WGEA data in the same month annually.

Reporting year	Workplace Profile[90]		Workplace Workforce Management Statistics[91]		Total labour force[92]
	Total employees	Proportion of the total labour force	Total employees	Proportion of the total labour force	
2018	3,270,471	25%	3,873,778	29%	13,240,120
2019	3,428,521	25%	4,049,996	30%	13,519,936
2020	3,224,152	24%	4,150,905	31%	13,240,467
2021	3,303,446	24%	4,685,109	34%	13,768,285
Total	**24,076,692**	**-**	**23,995,552**	**-**	

3.3 Data sources used in this report

This report draws upon a wide range of data sources to inform the analysis of the gender pay gap. Table 9 outlines the data sources used to inform specific findings and analysis in this report. It is also intended to enable the easy comparison of the findings of this report and data sets to other reports, literature, and publications on the gender pay gap.

Table 9: She's price(d)less gender pay gap report data sources

Data source	Organisation	Date	Description of use
Average Weekly Earnings, Australia	Australian Bureau of Statistics	November 2021	• Weekly pay gap (Section 2.4)
HILDA Waves 2-20 **(Release 17 & 20)**	Melbourne Institute Australian Government Department of Social Services	July 2017 August 2020	• Hourly pay gap (Section 2.5) • Hourly gender pay gap and drivers (Section 4) • Industry analysis (Section 5, Appendix A) • Quintile analysis (Section 6) • Labour market characteristics (Appendix B)
Labour Force, Australia	Australian Bureau of Statistics	February 2022	• Trends in women's economic participation (Section 2.3) • Driver analysis (Section 4) • Labour market characteristics (Appendix B)
Labour Force, Australia, Detailed	Australian Bureau of Statistics	February 2022	• Trends in women's economic participation (Section 2.3) • Industry analysis (Section 5, Appendix A)
Job mobility	Australian Bureau of Statistics	February 2021	• Driver analysis (Section 4)
Australian System of National Accounts	Australian Bureau of Statistics	2020-21 financial year	• Industry analysis (Section 5, Appendix A)

Data source	Organisation	Date	Description of use
Workplace Profile and Workforce Management Statistics	Workplace Gender Equality Agency	2021	• Industry analysis (Section 5, Appendix A)
Australia's Gender Pay Gap Statistics	Workplace Gender Equality Agency	February 2022	• Driver analysis (Section 4)
Data explorer	Workplace Gender Equality Agency	2021	• Quintile analysis (Section 6) • Labour market characteristics (Appendix B)
Census of Population and Housing	Australian Bureau of Statistics	2016 2006	• Labour market characteristics (Appendix B)
Gender Indicators	Australian Bureau of Statistics	December 2020 September 2018	• Labour market characteristics (Appendix B)
Work-Related Training and Adult Learning, Australia	Australian Bureau of Statistics	2020-21 financial year	• Labour market characteristics (Appendix B)
Characteristics of Employment, Australia	Australian Bureau of Statistics	August 2020 August 2017	• Labour market characteristics (Appendix B)
Household Impacts of COVID-19 Survey	Australian Bureau of Statistics	March 2022	• Driver analysis (Section 4) • Labour market characteristics (Appendix B)

3.4 Limitations

The modelling approach provides a point-in-time analysis of the gender pay gap. While there are acknowledged limitations to the approach, it represents one contribution to the evidence base around the issue of pay equity. Results should be considered alongside other analytical approaches for a more complete picture of the links between gender and pay.

The analysis within this report is based on the sample of respondents included within the HILDA. The sample of respondents to the HILDA survey is expanded with each consecutive wave of the survey through both exits and entries from the underlying sample of respondents. The HILDA user manual[93] was used to apply appropriate weightings to control and adjust, to the extent permissible, for these sampling issues and to provide estimates for the Australian population.

The key limitations identified in undertaking this work are described below.

Measurement error

Any analysis that draws on survey data will be impacted by measurement error because respondents may not respond accurately to questions or there may be errors in how those open-ended responses are coded. However, Uhrig and Watson (2014) analysed five waves of both the British Household Panel Survey and the HILDA survey and found that the effect of measurement error, where it could be corrected, on the comparison of men's and women's wages was small.[94]

[93] Summerfield, M., et al. 2021, *HILDA User Manual – Release 20,* Melbourne Institute, Applied Economic & Social Research.

[94] Uhrig, SCN., and Watson, N., 2014, The impact of measurement error on wage decompositions: evidence from the British Household Panel Survey and the Household Income and Labour Dynamics in Australia Survey. University of Essex, Institute for Social and Economic Research (ISER): Colchester, ISER Working Paper Series, No. 2014-24.

Decomposition method

The data and methodology used for decomposition analysis impacts the results and different methodologies have strengths and weaknesses.[95] HILDA is the most appropriate data source for an Australian setting. This decomposition analysis is undertaken with the Walby and Olsen (2002) methodology, which is an established approach for the Australian context.[96] A key feature of this approach is its ability to highlight variables with 'practical policy relevance to reduce gender wage gaps' while controlling for a range of irrelevant variables that impact wages but not gender.[97] The analysis attempts to capture the statistical association between the gender pay gap and key explanatory variables modelled, but this cannot be definitively attributed and needs to be considered in the broader context of available evidence and key developments.

The core list of variables included for decomposition was based on prior research cited in our 2009, 2016 and 2019 reports and is retained for consistency and to facilitate comparison (Table 3). Importantly, this includes working in the NGO or government sector which was statistically insignificant in 2017 and 2020 (in contrast to previous waves) but is retained for completeness. As the only statistically significant COVID-19 variable, the requirement to take paid leave has also been included in the decomposition, despite having a negative effect on the pay gap.

Use of HILDA and WGEA Gender Equality datasets

For many of the issues and factors considered in this report and our analysis, there are different measures available through different datasets. Invariably, different datasets can provide different figures and results due to differences in methodologies (such as census data compared with surveys and other sampling approaches), quality and robustness of responses, and granularity.

For the purposes of consistency and availability of the breadth of indicators required to be tested within our analysis of the gender pay gap, the HILDA survey dataset was utilised as the primary input to our analysis. As a panel survey, HILDA tracks the same people over time, and provides key information about incomes, labour dynamics and family life.

In addition to the HILDA data, the WGEA Gender Equality data collection also provides detailed information that can be used to understand gender dynamics across industries such as industrial and occupational segregation.

HILDA collects information about the industry and occupation of employment by asking respondents to provide their current main job. This response is then coded by HILDA surveyors to the Australian and New Zealand Standard Classification of Occupations (ANZSCO) and Australian and New Zealand Standard Industry Classification (ANZSIC).[98] However, there are some acknowledged data quality issues associated with the coding of these variables.[99] and the use of ANZSCO and ANZSIC categorisations can limit analysis at the industry level, due to a lack of granularity in industry and occupational definitions.

Despite these limitations, industrial and occupational data from HILDA is widely used in academic research, including papers specifically examining gender pay gaps and remains a valid and important data source for this type of decomposition.[100, 101] For the purposes of this report, WGEA Gender Equality data has been used to supplement the findings of the HILDA data, particularly at the industry level.

---

[95] Cassells, R., Vidyattama, Y., Miranti, R. and McNamara, J., 2009. The impact of a sustained gender wage gap on the Australian economy Report to the Office for Women, Department of Families, Community Services, Housing and Indigenous Affairs. Available at: http://library.bsl.org.au/jspui/bitstream/1/1601/1/gender_wage_gap.pdf.

[96] Ibid.

[97] Ibid.

[98] Summerfield, M., et al. 2019, HILDA User Manual – Release 17, Melbourne Institute, Applied Economic & Social Research.

[99] Watson, N., and Summerfield, M., 2009. Quality of the Occupation and Industry Coding in the HILDA Survey. *HILDA Project Discussion Paper Series.* 3(9)

[100]Cassells, R., Vidyattama, Y., Miranti, R. & McNamara, J., 2009. The impact of a sustained gender wage gap on the Australian economy Report to the Office for Women, Department of Families, Community Services, Housing and Indigenous Affairs. Available at: http://library.bsl.org.au/jspui/bitstream/1/1601/1/gender_wage_gap.pdf [Accessed May 16 2022]

[101] Watson, I. 2010. *Decomposing the Gender Pay Gap in the Australian Managerial Labour Market.* Australian Journal of Labour Economics, 13(1), pp. 47-79.

The WGEA Gender Equality data collection includes data collected from all private businesses with 100 or more employees annually from 2013-14. This captures approximately 40 per cent of all employees in Australia. The WGEA Gender Equality data collection does not include public sector organisations or small businesses with fewer than 100 employees.

While the WGEA Gender Equality data collection has not been utilised in the main statistical analysis due to data scope reasons, it has been drawn on in preparing our analysis and presented alongside the analytical results. Importantly, the WGEA and HILDA data (as well as other sources such as ABS), all show that gender pay gaps persist in Australia and that gender segregation is persistent across industries and occupations.

Impact of the COVID-19 pandemic

While new variables have been included in Wave 20 of the HILDA survey which are specifically related to the effects of the COVID-19 pandemic, data has only been collected up to August 2020. Australia had its first case of COVID-19 in January 2020, however, severe restrictions and lockdown measures continued into late 2021 and early 2022. As such, the effects of some of Australia's longest lockdowns have not been captured in this iteration of HILDA data.

In addition, the COVID-19 pandemic has had complex implications across the economy and our communities. Although this analysis has sought to test whether any of the variables in Table 4 are significant in explaining the gender pay gap, it is acknowledged that each of these measures in isolation is not sufficient to measure or understand the implications of COVID-19 on the labour market, economic growth or within industry. Where possible, trends in drivers have been extrapolated using ABS and WGEA data, and further supplemented with relevant literature. However, insufficient data is available across drivers to draw detailed conclusions.

Impacts of other factors

There is a significant body of research on the financial differences between men and women such as the wealth gap, differences in lifetime earnings, and superannuation. These issues are outside the scope of this report.

The authors of this report also recognise that gender does not only exist in binary categories and there are people whose experiences and identities cannot be captured by binary language. However, the datasets that are used only report data in a binary way.

4 Drivers of the gender pay gap

This section discusses the identified drivers of the hourly gender pay gap in Australia.

4.1 Results summary

Chart 4 shows the contribution of the various drivers modelled to the gender pay gap. It is important to note that a decrease in the contribution of a factor to the gender pay gap does not necessarily indicate that things have 'improved' in that area. Rather, it suggests that the factor's significance in driving differences in pay has reduced.

The results show that the hourly pay gap between men and women has remained consistent from $2.56/hr in 2017 (adjusted to 2021 dollars) to $2.56/hr in 2020 (adjusted to 2021 dollars). In absolute terms, the results suggest that the impact of gender discrimination on pay decreased slightly from $1.00/hr in 2017 (adjusted to 2021 dollars) to $0.91/hr in 2020 (adjusted to 2021 dollars). A further breakdown of the drivers is outlined below.

Chart 4: Drivers of the gender pay gap

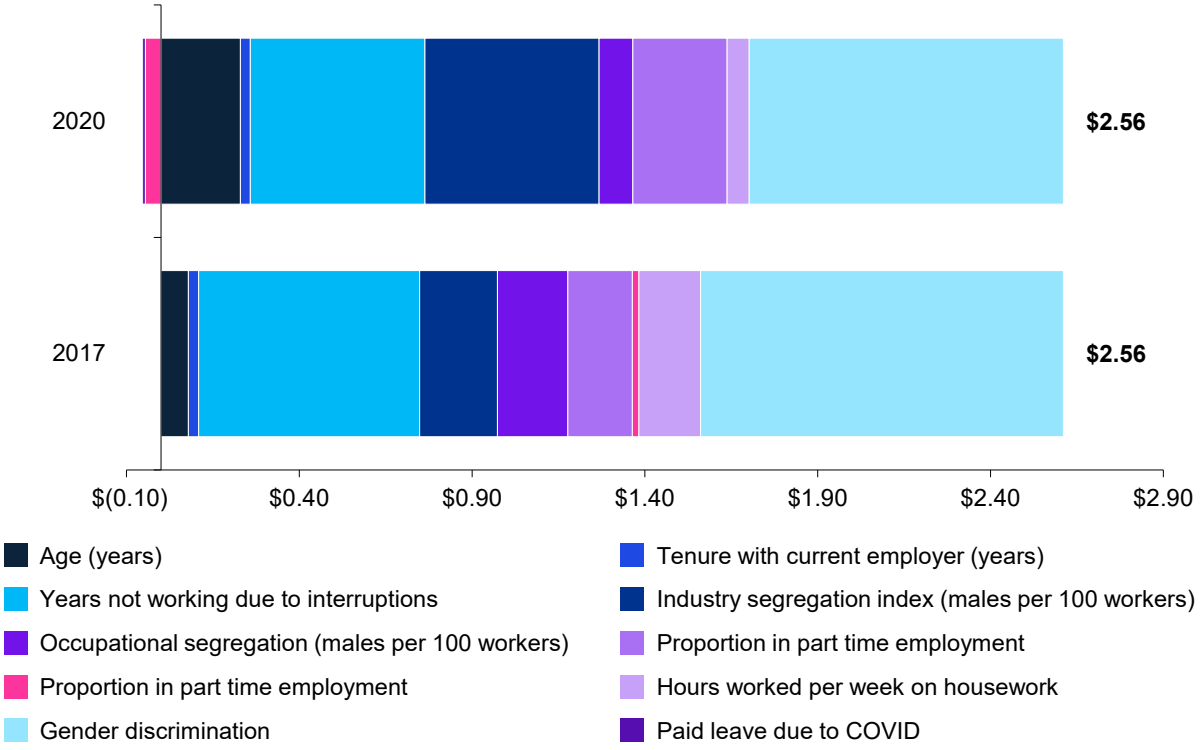


Table 10 shows the proportion of the gender pay gap explained by specific drivers. Gender discrimination remains the single most important driver of the pay gap contributing 36 per cent of the total gap, although this is a decrease of three percentage points from 2017. Industrial segregation's contribution to the pay gap grew the most, up from nine per cent in 2017 to 20 per cent in 2020. It should be noted that the ability to attribute contributions to specific drivers is limited by the granularity in HILDA data and may not fully take into effect the impacts of COVID-19.

Table 10: Relative contribution of selected factors to the 2017 and 2020 Australian gender pay gap (2021 dollars)

		Contribution			Dollar-equivalent		
		2017 (Wave 17)	2020 (Wave 20)	Change	2017 (Wave 17)	2020 (Wave 20)	Change
Gender discrimination	**Gender discrimination**	39%	36%	-3%	$1.00	$0.91	-$0.08
Care, family and workforce participation	**Years not working due to interruptions**	25%	20%	-5%	$0.64	$0.51	-$0.13
	Part-time employment	7%	11%	+4%	$0.19	$0.27	+$0.08
	Unpaid care and work (proxied by hours per week on housework)	7%	2%	-5%	$0.18	$0.06	-$0.12
Type of job	**Occupational segregation**	8%	4%	-4%	$0.20	$0.10	-$0.10
	Industrial segregation	9%	20%	+11%	$0.23	$0.50	+$0.27
Other	**Age (years)**	3%	9%	+6%	$0.08	$0.23	+$0.15
	Tenure with current employer	1%	1%	0%	$0.03	$0.03	$0.00
	Working in Government or NGO	1%	-2%	-3%	$0.02	-$0.05	-$0.07
	Taking paid leave due to Coronavirus	NA	-0.3%	NA	NA	-$0.01	NA
	Total	100%	100%	NA	$2.56	$2.56	$0.00

Note: Results may add to more than 100% or the total due to rounding. The total gender pay gap has been derived from the difference between the average hourly wage for male and female wage earnings, with the decomposition undertaken for selected variables only. In line with the 2019 report, 2017 results have been sourced from Release 17 data and may vary slightly from Release 20 data due to imputations and corrections made by HILDA over time. ***Results are adjusted for inflation and presented in 2021 dollars.***

Source: KPMG analysis of the Household, Income and Labour Dynamics in Australia Survey, Release 17 and 20, Wave 17 and 20 (HILDA Survey).

The following sub sections discuss each driver in more detail.

4.2 Gender discrimination

The results show that the most significant component contributing to the gender pay gap in Australia continues to be gender discrimination, accounting for 36 per cent in 2020 (down from 39 per cent in 2017). The findings of the analysis that gender discrimination is the most significant driver of the gender pay gap is in line with a considerable body of evidence about the impact of discrimination on wage gaps in Australia and other high-income economies.[102]

For the purposes of this report, gender discrimination is the part of the gender pay gap that is not able to be explained by factors associated with people's employment, labour force participation, household characteristics and unpaid care and work responsibilities. Gender discrimination can be systemic or overt and can influence the other factors that drive gender pay gaps, such as industrial and occupational segregation.

Gender discrimination can materialise in various ways, including the systematic undervaluation of women's economic contribution, the allocation of less meaningful tasks to women or fewer opportunities for promotion. In the workforce, gender discrimination has been linked to practices such as workplace culture, hiring, promotion and access to training, which can impact human capital.[103] For example, a 2019 study by WGEA on gender equitable recruitment and promotion finds that women and men are held to different standards in recruitment processes, with women more likely to face tougher evaluation standards, or to have their achievements and qualifications more closely scrutinised.[104] The study also found that women are more likely than men to be penalised for attempting to negotiate for higher pay.[105]

4.3 Care, family and workforce participation

Years not working due to interruptions

There can be numerous reasons for career interruptions, including career breaks, study and unemployment. However, for women, time out of the workforce to care for young children or other family members is a key aspect. The incidence of these career interruptions is gendered and highly persistent. The total proportion of the gender pay gap explained by career interruptions decreased from 2017 to 2020, from 25 per cent to 20 per cent.

Career interruptions impact on pay. There is the perception that taking time out of the workforce will result in depreciated skills and missed opportunities for upskilling and training. This can mean that individuals return to the workforce in lower status or lower paid roles. The effects of taking time out of the workforce to care for children and other family members can increase over time, becoming further entrenched and resulting in women having less pay and less opportunities for promotions and management positions.

Research suggests that career breaks taken because of unemployment or to care for family tend to reduce future wages, while other breaks (such as for education or self-employment) have little effect. The "motherhood pay gap" measures the pay gap between mothers and non-mothers in the workforce. The ILO estimates that Australia has a motherhood pay gap of approximately five per cent. [106] Part of this gap may be explained by the career interruptions that mothers often experience due to childrearing and caring responsibilities. Where women face penalties in the workforce for parental responsibilities, however, men are rewarded. Indeed, men are seen to experience a "fatherhood premium" of approximately 7.3 per cent. [107]

---

[102] ILO. 2018. Global Wage Report 2018/19 What lies behind gender pay gaps. Geneva:International Labour Office. Available at https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_650553.pdf [Accessed May 16 2022] ; Polacheck, S., Xiang, J. 2014. The Gender Pay Gap Across Countries: A Human Capital Approach. *IZA Discussion Paper Series,* No. 8603.

[103] Chang, J., Connell, J., Burgess, J., and Travaglione, A., 2014. Gender Wage Gaps in Australian Workplaces: Are Policy Responses Working? *Equality, Diversity and Inclusion,* 33(8), pp. 764-775.

[104] WGEA, 2019. Gender equitable recruitment and promotion. Australian Government. Available at: https://www.wgea.gov.au/publications/gender-equitable-recruitment-and-promotion [Accessed May 16 2022]

[105] Ibid.

[106] ILO. 2018. Global Wage Report 2018/19 What lies behind gender pay gaps. Geneva:International Labour Office. Available at https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_650553.pdf [Accessed May 16 2022]

[107] Ibid.

Fathers' involvement in childcare has been linked to improved well-being, happiness and increases their commitment to family.[108] Fathers have also been found to benefit through a reduction of risky behaviours such as smoking and alcohol consumption.[109] They report learning new skills such as prioritising, role modelling and compassion which they transfer to the workplace.[110]

The COVID-19 pandemic is also likely to have had an impact on career interruptions for women. At the peak of the pandemic in 2020, three out of five job losses in Australia were female.[111] Although economic recessions have traditionally affected men's employment more severely than women's employment, the employment drop related to social distancing measures had a large impact on sectors with high levels of women's employment such as Accommodation and Food Services, Education and Training and Retail Trade.[112] Further to this, at the beginning of the pandemic, women were overrepresented in part-time and casual employment, thereby making them more vulnerable to job losses and less likely to be eligible for government support, such as the JobKeeper payment.[113]

Part-time employment

There has been an increase in the proportion of the gender pay gap explained by part-time employment. In 2017, part-time employment accounted for seven per cent of the gender pay gap. In 2020, it increased to 11 per cent. This is despite the men's and women's shares of part-time employment remaining largely stable over this period, with women over twice as likely as men to be in part-time employment.

Chart 5: Gender composition of part-time workforce

Source: KPMG analysis of Australian Bureau of Statistics Labour Force, Australia

Part-time work reduces current income and long-term earning potential, as part-time workers may be provided with fewer opportunities to develop their skills and miss out on promotional opportunities.[114, 115]

[108] Norman, H., Elliot, M., and Fagan, C., (2018), "Does Fathers' Involvement in Childcare and Housework Affect Couples' Relationship Stability?" Social Science Quarterly 99.5: 1599–1613.

[109] Chan, Ko Ling et al. (2017), "Association Among Father Involvement, Partner Violence, and Paternal Health: UN Multi-Country Cross-Sectional Study on Men and Violence." American Journal of Preventive Medicine, 52.5, 671–679.

[110] Harvey, V, and Tremblay, D. (2018), "Parental Leave in Québec: Between Social Objectives and Workplace Challenges," *Community, Work & Family*, 1–17

[111] Australians Investing In Women & Equity Economics. 2021. *Changing The Trajectory Investing In Women For A Fairer Future*. Available at: https://www.aiiw.org.au/wp-content/uploads/2021/11/AIIW-EE_Changing-the-Trajectory-Investing-in-Women-for-a-Fairer-Future-202111-spread.pdf [Accessed May 16 2022]

[112] Alon, T. et al. 2020. The Impact of COVID-19 on Gender Equality. National Bureau of Economic Research Working Papers. 26947

[113] Wood, D., Griffiths, K., & Crowley, T. 2021. Women's work: the impact of the COVID crisis on Australian women. Grattan Institute. Available at: https://grattan.edu.au/wp-content/uploads/2021/03/Womens-work-Grattan-Institute-report.pdf [Accessed May 16 2022]

[114] WGEA. 2016. Unpaid care work and the labour market: Insight paper. Australian Government: Sydney.

[115] Abhayaratna, J., Andrews, L., Nuch, H. and Podbury, T., 2008. *Part Time Employment: The Australian Experience*. Staff Working Paper, Productivity Commission, Canberra.

WGEA's 202-21 Gender Equality Scorecard finds that 60 per cent of Australia's female workforce is employed part-time or casually, compared to 33 per cent of the male workforce.[116] Only two out of five of all full-time employees are women.[117] While women are disproportionately more likely to be in part-time work than men, they are also more likely to be underemployed than men. Underemployed workers are employed people who want, and are available to work, more hours than they currently have. In March 2022, the underemployment rate for women was 7.8 per cent, while the underemployment rate for men was five per cent.[118]

The COVID-19 pandemic demanded employers to provide increased flexibility to employees juggling increased care responsibilities and higher levels of burnout. However, it is unclear how these trends will impact part-time wages and participation in the future.

Unpaid work

The results in Table 5 suggest the level of unpaid work undertaken by women relative to men (proxied by hours of housework undertaken each week) contributed to two per cent of the gender pay gap in 2020. The impact of this driver has decreased since 2017, when it accounted for seven per cent of the pay gap. This change may be explained by the increase in unpaid care and work hours contributed by men, however, the time spent by women has not significantly changed (Chart 6).

Unpaid care and work are inherently gendered issues. They contribute to labour market inequalities, are associated with employment quality and increase the likelihood of part-time or insecure casual and contract work.[119, 120] Analysis by Chief Executive Women suggests that in Australia, on average, a woman spends 43 per cent less time in paid work than a man, yet 81 per cent more time in unpaid work.[121]

While it is at times suggested in public discourse that women have 'chosen' to reduce their time in work, social norms regarding the distribution of unpaid care and work and factors such as job segmentation and pay mean that these 'choices' are inherently constrained.[122]

Australian parents face some of the highest out of pocket early childhood education and care costs in the OECD, while tax and family benefit policies disincentivise women from working additional hours or working at all.[123, 124] These factors can often make it financially more 'rational' for households to prioritise a man's career.[125] In primary research conducted in 2016, almost half of Australian working women indicated that having access to care for dependents and a partner to share unpaid work responsibilities with was an important factor in their work success.[126]

[116] WGEA. 2022. Australia's gender equality scorecard Key results from the Workplace Gender Equality Agency's 2020-21 employer census. Available at: https://www.wgea.gov.au/sites/default/files/documents/2020-21_WGEA_SCORECARD.pdf [Accessed May 16 2022]

[117] WGEA. 2022. Australia's gender equality scorecard Key results from the Workplace Gender Equality Agency's 2020-21 employer census. Available at: https://www.wgea.gov.au/sites/default/files/documents/2020-21_WGEA_SCORECARD.pdf [Accessed May 16 2022]

[118] ABS. 2022. Labour Force, Australia, March 2022. Australian Government. Available at: https://www.abs.gov.au/statistics/labour/employment-and-unemployment/labour-force-australia/latest-release#underemployment [Accessed May 16 2022]

[119] Ferrant, G., Pesando, L. & Nowacaka, K., 2014, *Unpaid care work: the missing link in the analysis of gender gaps in labour outcomes.* OECD Development Centre, viewed 4 April 2019, https://www.oecd.org/dev/development-gender/Unpaid_care_work.pdf.

[120] WGEA, 2016. Unpaid care work and the labour market: Insight paper. Australian Government: Sydney.

[121] Chief Executive Women, 2022. Addressing Australia's Critical Skill Shortages:Unlocking Women's Economic Participation. Available at: https://cew.org.au/wp-content/uploads/2022/05/Chief_Executive_Women_RESEARCH_REPORT.pdf [Accessed May 16 2022]

[122] Preston, A. & Yu, S., 2015. Is there a part-time/full-time pay differential in Australia? *Journal of Industrial Relations,* 57(1): pp. 24-47.

[123] Chief Executive Women, 2022. Addressing Australia's Critical Skill Shortages:Unlocking Women's Economic Participation. Available at: https://cew.org.au/wp-content/uploads/2022/05/Chief_Executive_Women_RESEARCH_REPORT.pdf [Accessed May 16 2022]

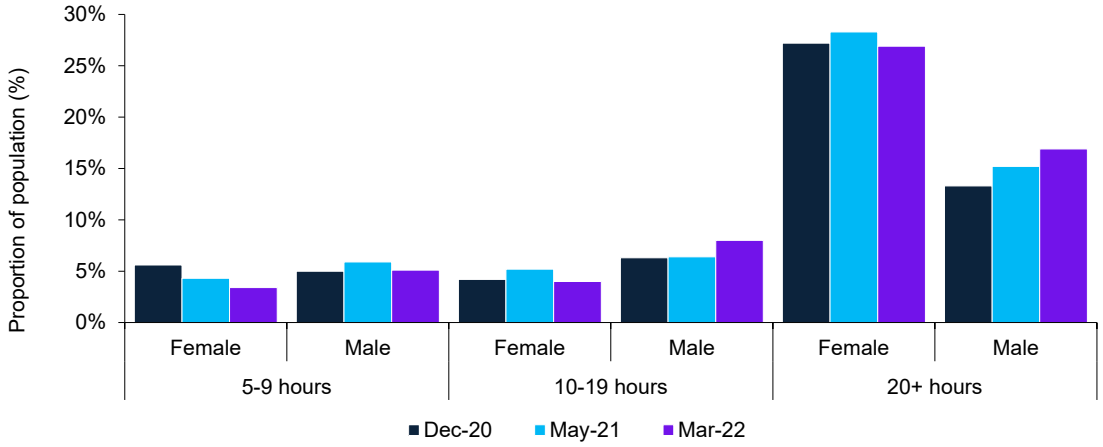
[124] KPMG Australia, 2021.*Towards a more equal sharing of work.* Available at: https://assets.kpmg/content/dam/kpmg/au/pdf/2021/towards-a-more-equal-sharing-of-work-parental-equality.pdf [Accessed May 16 2022]

[125] Schieder, J. & Gould, E., 2016.*"Women's work" and the gender pay gap*. Economic Policy Institute. Available at: https://www.epi.org/publication/womens-work-and-the-gender-pay-gap-how-discrimination-societal-norms-and-other-forces-affect-womens-occupational-choices-and-the tc65ir-pay/. [Accessed May 16 2022]

[126] Baird, M. et al. 2018. Women and the Future of Work: Report 1 of the Australian Women's Working Futures Project. University of Sydney.

Data published on the COVID-19 pandemic suggests that the transition to working and learning from home disproportionately increased unpaid care work for women, with women being almost twice as likely as men to spend over 20 hours per week on unpaid child caring responsibilities throughout the pandemic.[127] In March 2022, however, as much of Australia emerged out of COVID-19 restrictions, the total share of women spending over ten hours per week on unpaid caring responsibilities decreased by almost nine percent.[128] The share of men spending ten hours per week or more on unpaid caring responsibilities increased over the same period, suggesting that there has been some progress towards equality in this area.

Chart 6: Hours spent on unpaid care or supervision of children in a week



Source: ABS Household Impacts of COVID-19 Survey, March 2022

4.4 Type of job

Type of job (also referred to as occupational segregation and industrial segregation) refers to the unequal distribution of women and men in certain jobs or industries. For example, industrial segregation can be seen in the high number of women in education and primary care relative to the low number of women in mining. Occupational segregation can be seen in the underrepresentation of women in high paying roles, such as management and chief executives, and overrepresentation in low paying roles, such as care work.

In 2020 gender segregation in type of job (including both occupational segregation and industrial segregation) accounted for 24 per cent of the gap, an increase from 2017 when it explained 17 per cent. Between 2017 and 2020, the contribution of industrial and occupational segregation to the gender pay gap have moved in different directions. Occupational segregation has decreased from explaining eight per cent of the gender pay gap in 2017 to four per cent in 2020 while industrial segregation has increased from explaining nine per cent in 2017 to 20 per cent in 2020. Industry data suggests that there are a range of trends occurring in labour force participation, promotions and representation in management positions which are likely to be impacting these drivers.

As outlined in Section 3, there are some limitations to the industrial and occupational segregation data derived from the HILDA dataset, including sample sizing and the granularity of ANZSIC and ANZSCO classifications. However, it still holds that a key driver of the persistence of the pay gap is the limited success of efforts in changing gendered norms around ‘women’s work’ and ‘men’s work’. This is evident in the Australian labour force as indicated by the ABS, HILDA, WGEA, and other published data, making it clear that Australia has a highly gender-segregated labour market.

The Australian labour market has high levels of “vertical occupational segregation” – that is the imbalance between men and women in leadership categories. In 2021, although women accounted for 41 per cent of all levels of managers in Australia, less than one in five CEOs or business leaders were women and only one in four organisations had a gender-balanced leadership team.[129]

[127] ABS 2022, Household Impacts of COVID-19 Survey, March 2022.

[128] Ibid.

[129] WGEA. 2022. Australia’s gender equality scorecard Key results from the Workplace Gender Equality Agency’s 2020-21 employer census. Available at: https://www.wgea.gov.au/sites/default/files/documents/2020-21_WGEA_SCORECARD.pdf [Accessed May 16 2022]

Data also shows that industries, occupations and enterprises that are dominated by women often face a wage penalty, suggesting the undervaluation of women's work. In Europe, for example, working in an enterprise with a predominantly female workforce can give rise to a 14.7 per cent wage penalty compared to working in a similarly productive enterprise but with a predominantly male workforce.[130] Studies also show that certain sectors and occupations, such as nursing and teaching, which have gradually become female-dominated, have exhibited a steady decline in average earnings relative to national average wages.[131, 132]

In Australia, industries with high levels of women's representation are also found to have significantly higher proportions of part-time and casual workers.[133] This can have a compounding effect on wages, as women can face a wage penalty for working in a female-dominated industry or occupation. This is particularly relevant in the context of the COVID-19 pandemic, where women in part-time and casual work were disproportionately vulnerable to reduced work hours and job losses, and female-dominated sectors were hit hardest by public health measures.[134]

Lower wages in female-dominated industries and roles can reduce incentives for women to engage in more paid work, and lower participation in the labour market.[135, 136]

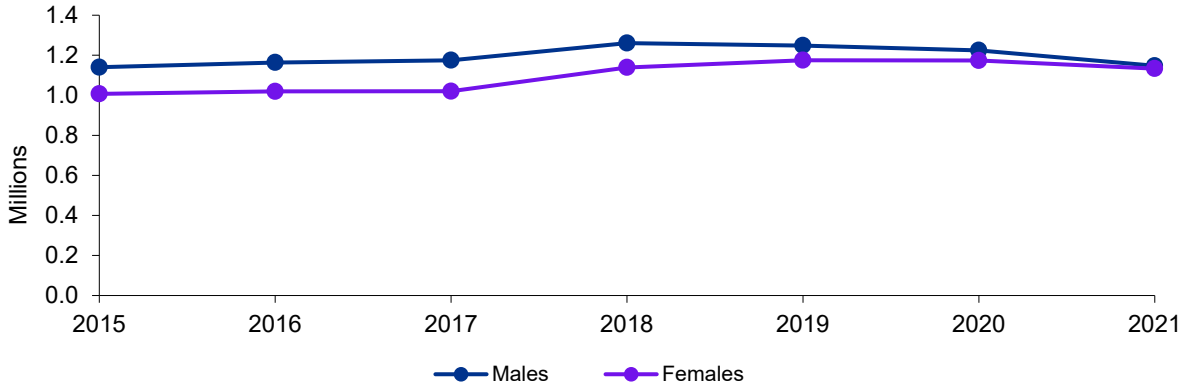
4.5 Other drivers

Tenure

The impact of tenure with a current employer on the gender pay gap has remained relatively constant and insubstantial, at one per cent in 2017 and 2020.

However, Chart 7 shows that the proportion of women spending less than one year in their current job has increased in recent years. Between February 2015 and February 2021, the number of men who were employed for less than one year in their main job increased by approximately 7,000. In the same period, the number of women who were employed for less than one year in their main job increased by over 125,000. This could indicate higher labour mobility for women in the workforce, or a concerning increase in career interruptions, and is consistent with broader findings regarding the substantial increase in women's workforce participation over this period and disproportionate impact of COVID-19 related job losses on women.

Chart 7: Workforce with less than one year in current job, ABS



Source: KPMG analysis of Australian Bureau of Statistics Job Mobility, Table 17, February 2021

[130] ILO. 2019. A quantum leap for gender equality: for a better future of work for all. ILO: Geneva

[131] Brynin, M. and Perales, F., 2016. Gender wage inequality: The de-gendering of the occupational structure. *European Sociological Review*, 32(1), pp.162-174

[132] Murphy, E. and Oesch, D., 2016. The feminization of occupations and change in wages: A panel analysis of Britain, Germany, and Switzerland. *Social Forces,* 94(3), pp.1221-1255.

[133] WGEA. 2022. Australia's gender equality scorecard Key results from the Workplace Gender Equality Agency's 2020-21 employer census. Available at: https://www.wgea.gov.au/sites/default/files/documents/2020-21_WGEA_SCORECARD.pdf [Accessed May 16 2022]

[134] Ibid.

[135] Chief Executive Women, 2022. *Addressing Australia's Critical Skill Shortages:Unlocking Women's Economic Participation*. Available at: https://cew.org.au/wp-content/uploads/2022/05/Chief_Executive_Women_RESEARCH_REPORT.pdf [Accessed May 16 2022]

[136] WGEA. 2022. Australia's gender equality scorecard Key results from the Workplace Gender Equality Agency's 2020-21 employer census. Available at: https://www.wgea.gov.au/sites/default/files/documents/2020-21_WGEA_SCORECARD.pdf [Accessed May 16 2022]

Working in government or NGO sector

In 2020 working in the government and NGO sectors resulted in a two per cent reduction of the gender pay gap. This is a decrease from 2017 when working in these sectors explained one per cent of the pay gap. While the impact of working in government or an NGO is relatively minor compared to other drivers of the gender pay gap, evidence about why gender pay gaps are smaller in these sectors illustrates potential ways to minimise such gaps in the broader economy.

Age

Age is a proxy for experience. Differences in male and female work experience (as proxied by their age) explained nine per cent of the 2020 gender pay gap and three per cent of the 2017 gender pay gap an increase of six per cent.

5 Industry analysis

This section discusses the characteristics of the gender pay gap at the industry level.

5.1 Background

Australian and New Zealand Standard Industrial Classifications (ANZSIC) have been used to classify the industries, in consistency with the HILDA dataset. ANZSIC is the standard classification used in Australia and New Zealand for the collection, compilation and publication of statistics by industry.

A deep dive into five key industries has been undertaken: Healthcare and Social Assistance, Education and Training, Retail Trade, Manufacturing and Accommodation and Food Services. These industries have been selected based on a combination of factors including HILDA sample size, total size of labour force, gender composition and average rate of pay, to represent a cross-section of Australia's labour force.

In addition to quantifying the size of the hourly gender pay gap within each industry, the analysis considers the size, gender composition and economic contribution to the national economy of each industry. Intra-industry characteristics relating gendered segregation, occupational seniority and opportunities for advancement are also considered. A combination of HILDA, ABS and WGEA data have been used to derive these insights.

Australia's two female-dominated industries, Healthcare and Social Assistance as well as Education and Training, are also some of the largest in terms of labour force size. Yet, the gender pay gaps for both are also larger than the national average of 6.5 per cent, at 11.3 per cent and 13.8 per cent respectively per hour. Promotions and management positions are also disproportionate to women's participation in the industries, suggesting that in line with the findings of WGEA and the ILO, women in feminised industries face greater barriers to achieving wage parity.

Across the workforce, women and men are concentrated in different industries. Analysis shows that women tend to be underrepresented in management positions when compared to their overall participation across industries (Table A-1). At the national level, women are underrepresented in management positions by seven per cent when compared to their labour force participation. In male-dominated industries, women are seemingly overrepresented in the receipt of promotions, suggesting that women have a tendency to get promoted at a faster rate than men within these industries. However, this trend does not necessarily carry through to women's representation in management positions within the same industries.

Across all industries, women are also found to do the lion's share of unpaid work. This suggests that the burden of unpaid work still remains disproportionately on women, regardless of the industry they work in.

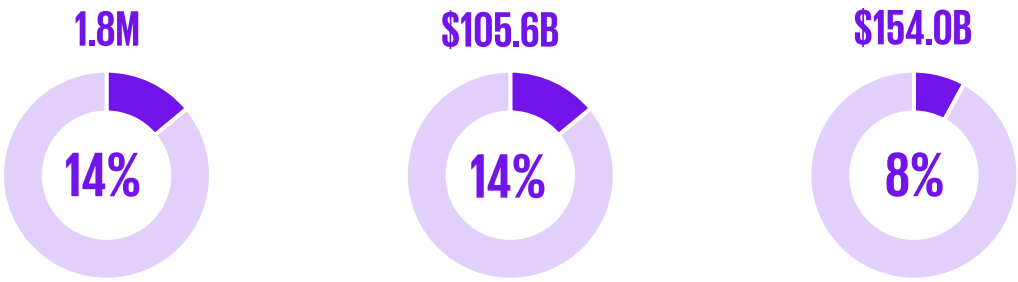
5.2 Industry deep dives

The industry deep dive section explores the hourly gender pay gap, management gap, economic contribution, workforce gender contribution, and share of promotions for the following industries:

- Healthcare and social assistance;
- Education and training;
- Retail trade;
- Manufacturing; and
- Accommodation and food services.

Healthcare and Social Assistance

Industry economic contribution (2020)



Share of total national employment (ABS 2020)

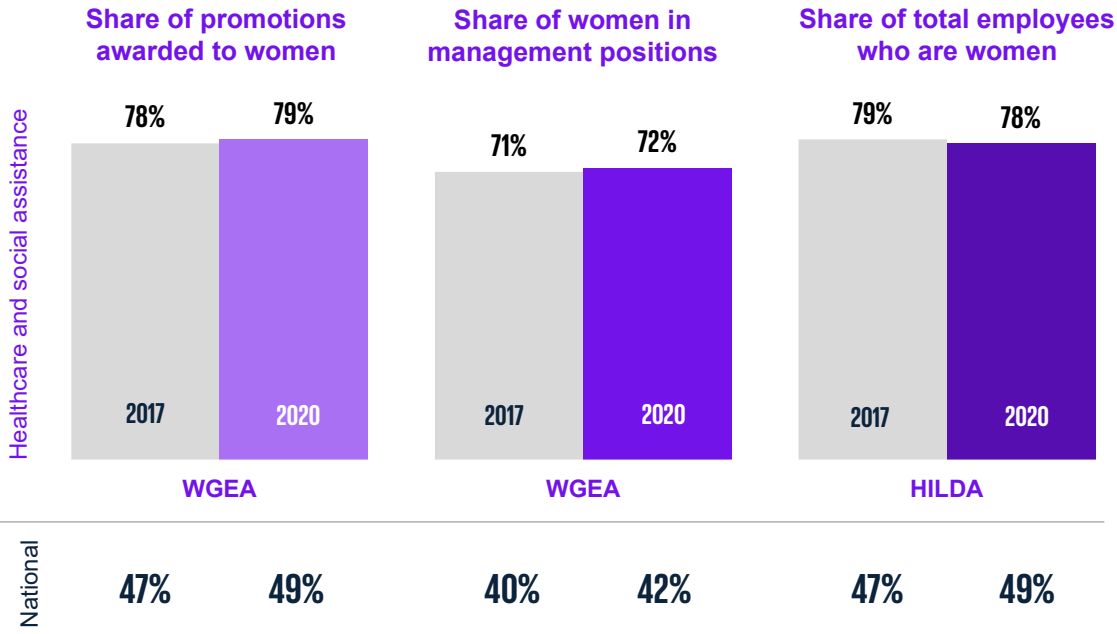
Share of total national wages (ABS 2020)

Share of total economic output (ABS 2020-21)

Hourly wage gap (as at August 2020, HILDA)

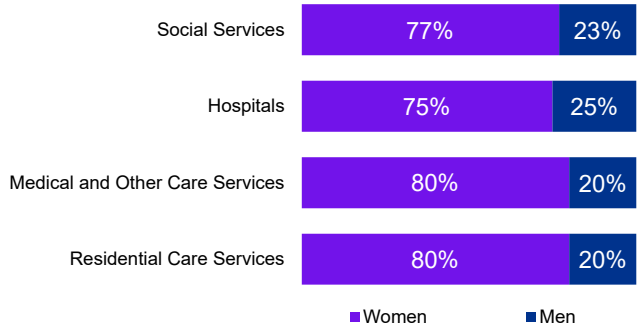
	MEN	WOMEN	GAP	
Healthcare and social assistance	$43.24/hr	$38.37/hr	$4.88/hr	(11.3%)
National	$39.44	$36.89	$2.56	(6.5%)

Women's representation in the Industry



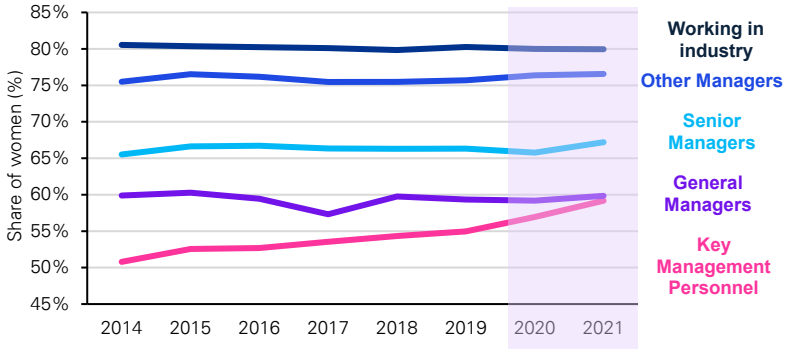
Healthcare and Social Assistance findings

Chart 8 – Gender composition of Healthcare and Social Assistance sub-industries



Source: KPMG analysis of the Household, Income and Labour Dynamics in Australia Survey, Wave 20 (HILDA Survey)

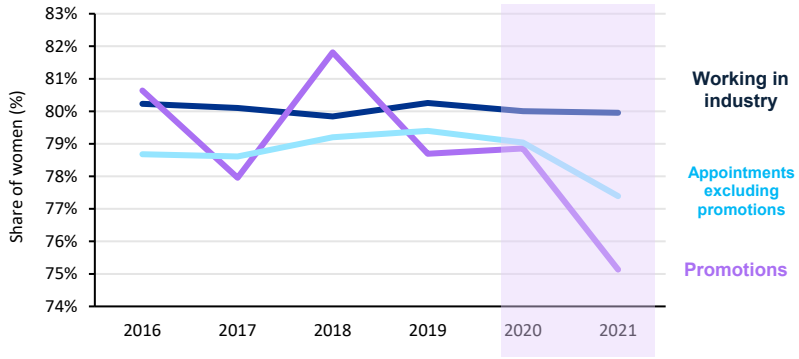
Chart 9 – Management positions held by women in the Healthcare and Social Assistance industry



Source: KPMG analysis of WGEA Workplace Profile and Workforce Workforce Management Statistics data

Note: This figure only uses WGEA Workplace Profile and Workforce Workforce Management Statistics data to provide like-for-like analysis. Detailed definitions of manager categories can be found in Appendix B.

Chart 10 – Promotions awarded to women in the Healthcare and Social Assistance industry



Source: KPMG analysis of WGEA Workplace Profile and Workforce Workforce Management Statistics data

Note: This figure only uses WGEA Workplace Profile and Workforce Management Statistics data to provide like-for-like analysis.

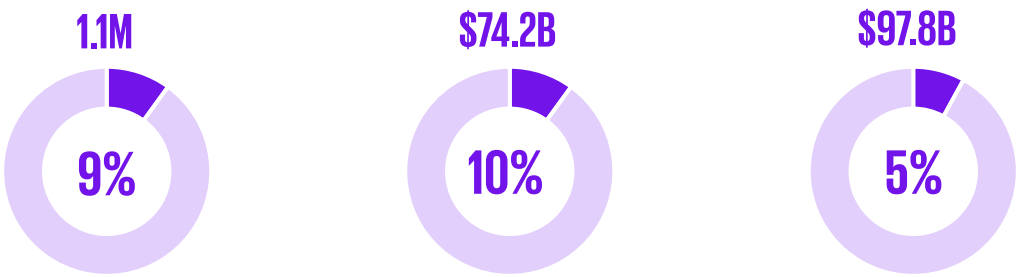
The Healthcare and Social Assistance industry has the highest rates of women's participation, but the management gap remains significant.

This disparity widens as we consider more senior management positions and represents a key limiting factor in the ability to attain higher earnings. The gender pay gap for women in the Healthcare and Social Assistance industry is $4.88 per hour.

In 2021, the gap between women's participation and rate of promotion has widened, indicating that the management gap is likely to persist at the current rate of progress. Women are also more likely to be appointed to a role than promoted within their current workplace, suggesting that women may not be receiving the same opportunities as men within their workplaces.

Education and Training

Industry economic contribution (2020)



Share of total national employment (ABS 2020)

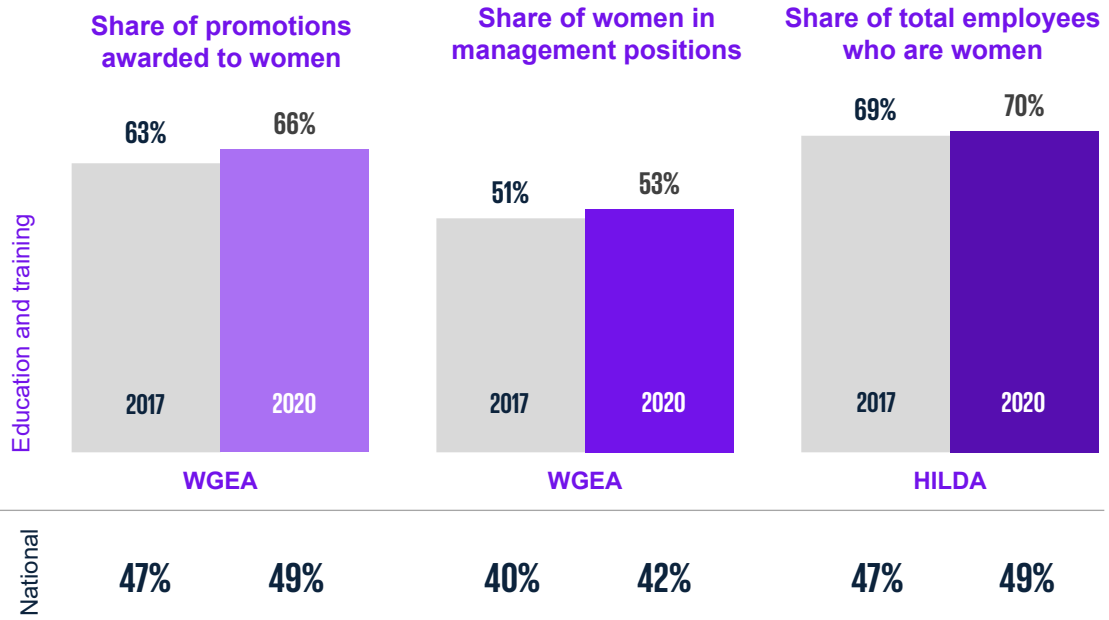
Share of total national wages (ABS 2020)

Share of total economic output (ABS 2020-21)

Hourly wage gap (as at August 2020, HILDA)

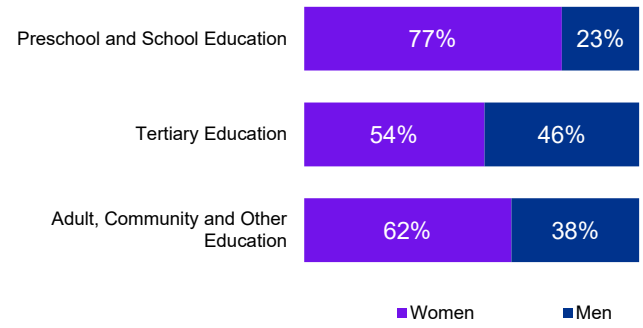
	MEN	WOMEN	GAP	
Education and training	$45.79/hr	$39.46/hr	$6.33/hr	(13.8%)
National	$39.44	$36.89	$2.56	(6.5%)

Women's representation in the industry



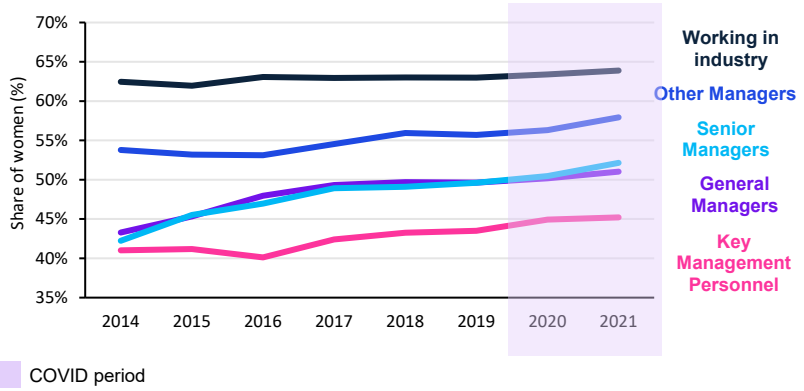
Education and Training findings

Chart 11 - Gender composition of Education and Training sub-industries



Source: KPMG analysis of the Household, Income and Labour Dynamics in Australia Survey, Wave 20 (HILDA Survey).

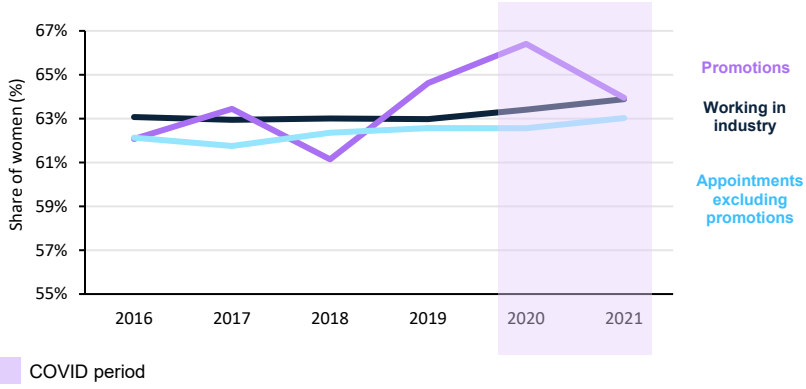
Chart 12 – Management positions held by women in the Education and Training industry



Source: KPMG analysis of WGEA Workplace Profile and Workforce Management Statistics data

Note: This figure only uses WGEA Workplace Profile and Workforce Management Statistics data to provide like-for-like analysis. Detailed definitions of manager categories can be found in Appendix C.

Chart 13 – Promotions awarded to women in the Education and Training industry



Source: KPMG analysis of WGEA's Workplace Profile and Workforce Management Statistics data

Note: This figure only uses WGEA Workplace Profile and Workforce Management Statistics data to provide like-for-like analysis.

Despite a long history of being female-dominated, women in Education and Training are still underrepresented among higher paid management staff.

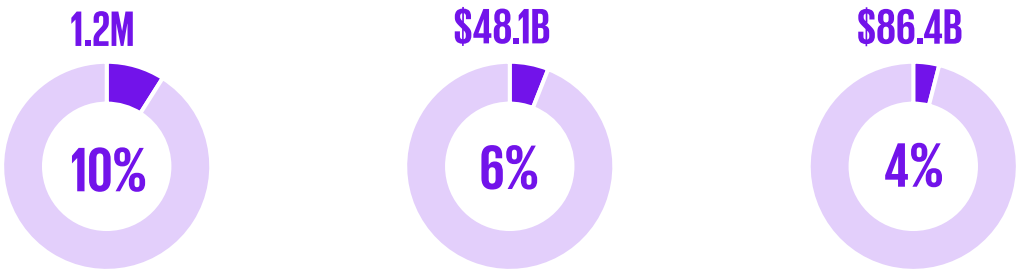
As of 2020, the share of management positions held by women was disproportionate to their participation in the industry by 17 percentage points - a disparity that widens with seniority.

This underrepresentation is reflected in the industry gender wage gap, with women in Education and Training earning on average $6.33 (13.8 per cent) less per hour than their male counterparts.

The most gender segregated sub-industry within Education and Training is Preschool and School Education, with women accounting for 77 per cent of the workforce.

Retail Trade

Industry economic contribution (2020)



Share of total national employment (ABS 2020)

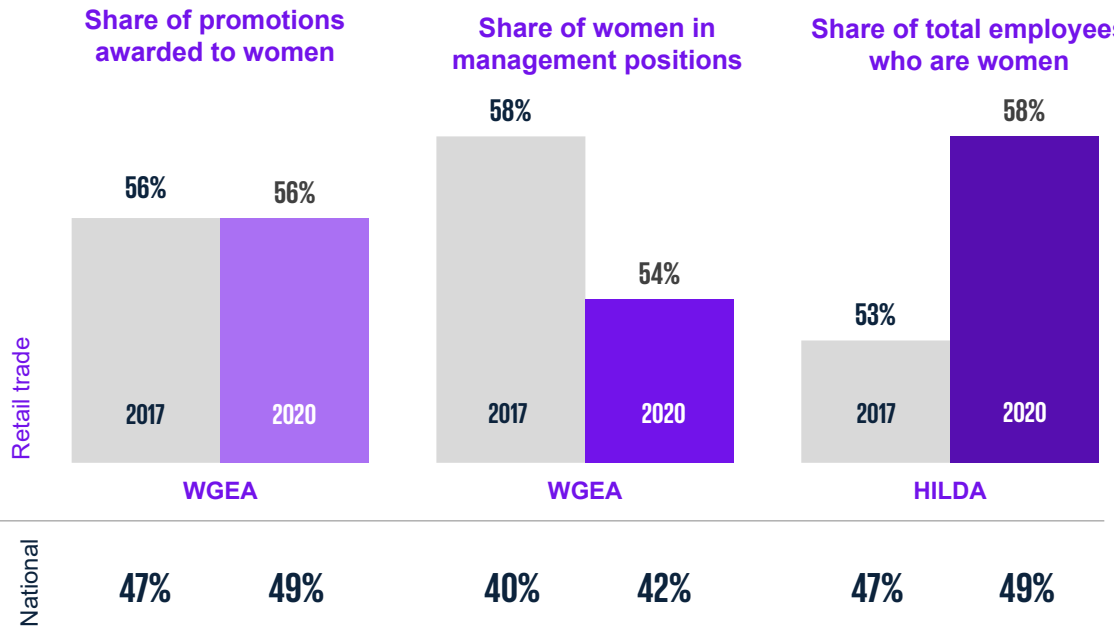
Share of total national wages (ABS 2020)

Share of total economic output (ABS 2020-21)

Hourly wage gap (as at August 2020, HILDA)

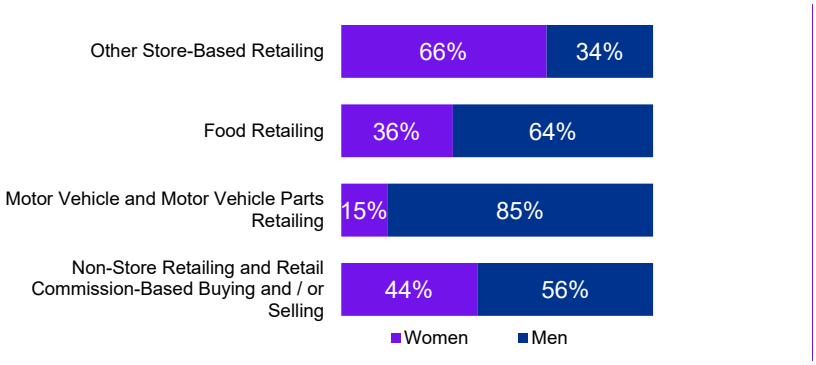
	MEN	WOMEN	GAP	
Retail trade	$29.69/hr	$26.96/hr	$2.73/hr	(9.2%)
National	$39.44	$36.89	$2.56	(6.5%)

Women's representation in the industry



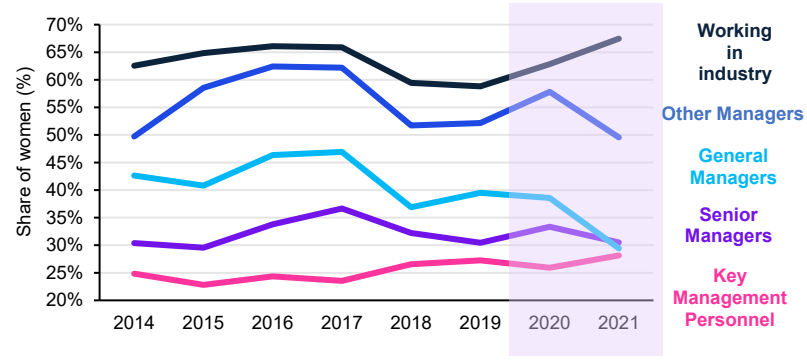
Retail Trade industry findings

Chart 14 – Gender composition of Retail Trade sub-industries



Source: KPMG analysis of the Household, Income and Labour Dynamics in Australia Survey, Wave 20 (HILDA Survey).

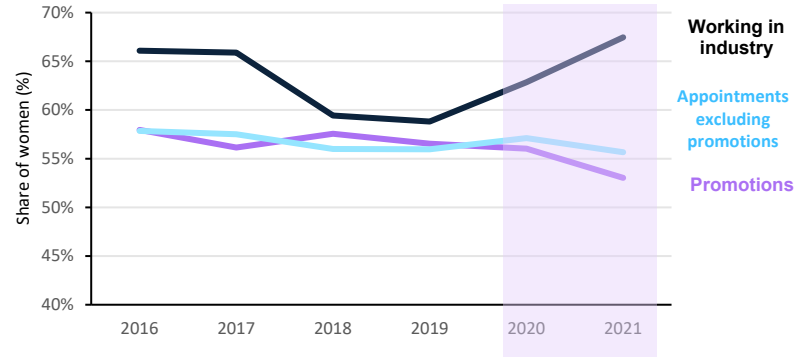
Chart 15 – Management positions held by women in the Retail Trade industry



Source: KPMG analysis of WGEA Workplace Profile and Workforce Management Statistics data

Note: This figure only uses WGEA Workplace Profile and Workforce Management Statistics data to provide like-for-like analysis. Detailed definitions of manager categories can be found in Appendix B.

Chart 16 – Promotions awarded to women in the Retail Trade industry



Source: KPMG analysis of WGEA's Workplace Profile and Workforce Management Statistics data

Note: This figure only uses WGEA Workplace Profile and Workforce Management Statistics data to provide like-for-like analysis.

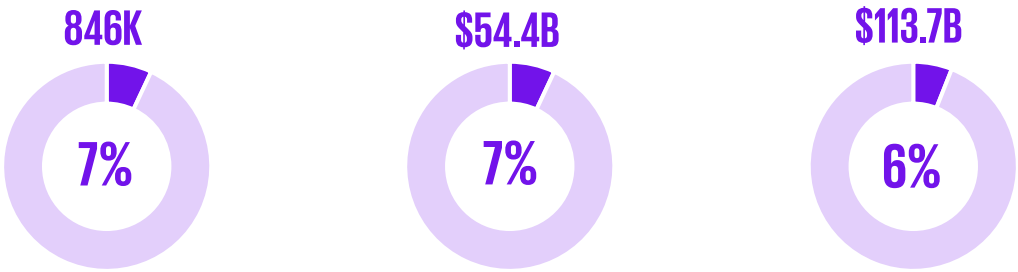
Although women's participation in Retail Trade has increased in recent years, their representation in management positions is on the decline.

This represents a concerning trend, with women already significantly underrepresented in senior management positions. This is in spite of the relative gender balance of the industry.

The industry gender pay gap is also stark, at 9.2 per cent of hourly earnings. Analysis indicates that part of this may be explained by the glass ceiling, with women struggling to move beyond middle management positions. Additionally, women may be disincentivised to move into higher management positions due to a lack of flexibility in managing home and work responsibilities.

Manufacturing

Industry economic contribution (2020)



Share of total national employment (ABS 2020)

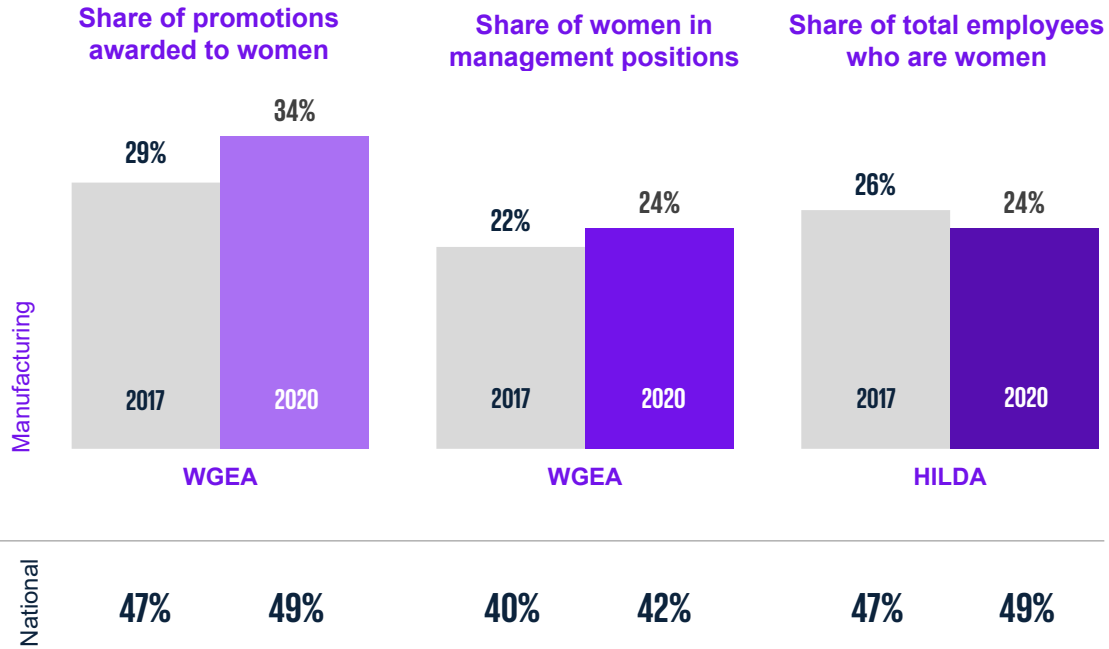
Share of total national wages (ABS 2020)

Share of total economic output (ABS 2020-21)

Hourly wage gap (as at August 2020, HILDA)

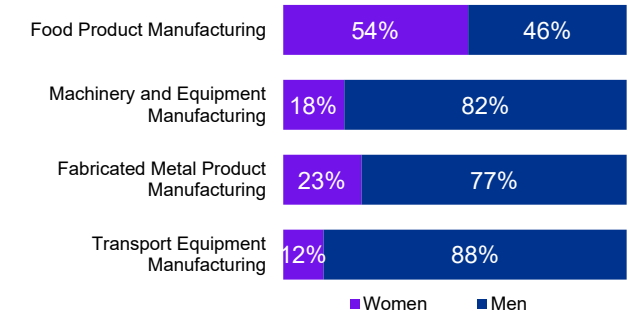
	MEN	WOMEN	GAP	
Manufacturing	$39.48/hr	$38.62/hr	$0.87/hr	(2.2%)
National	$39.44	$36.89	$2.56	(6.5%)

Women's representation in the industry



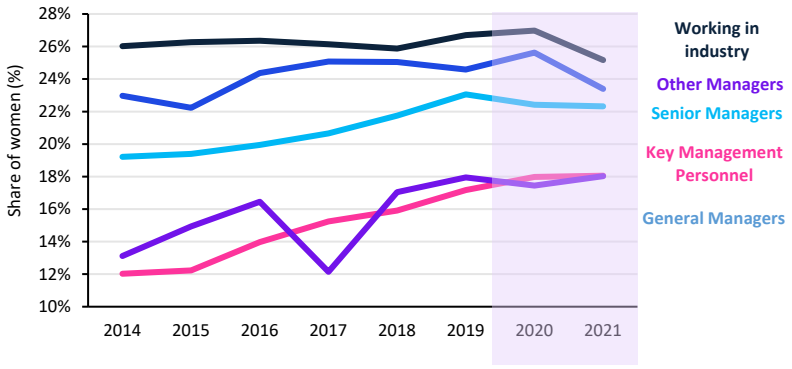
Manufacturing industry findings

Chart 17 – Gender composition of Manufacturing sub-industries



Source: KPMG analysis of the Household, Income and Labour Dynamics in Australia Survey, Wave 20 (HILDA Survey).

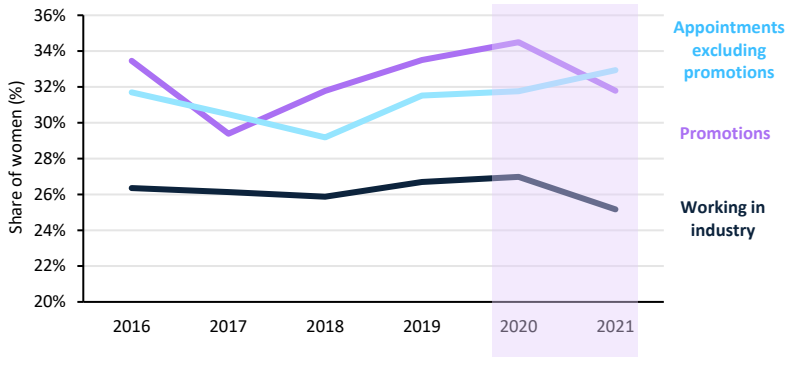
Chart 18 – Management positions held by women in the Manufacturing industry



Source: KPMG analysis of WGEA Workplace Profile and Workforce Management Statistics data

Note: This figure only uses WGEA Workplace Profile and Workforce Management Statistics data to provide like-for-like analysis. Detailed definitions of manager categories can be found in Appendix B.

Chart 19 – Promotions awarded to women in the Manufacturing industry



Source: KPMG analysis of WGEA's Workplace Profile and Workforce Management Statistics data

Note: This figure only uses WGEA Workplace Profile and Workforce Management Statistics data to provide like-for-like analysis.

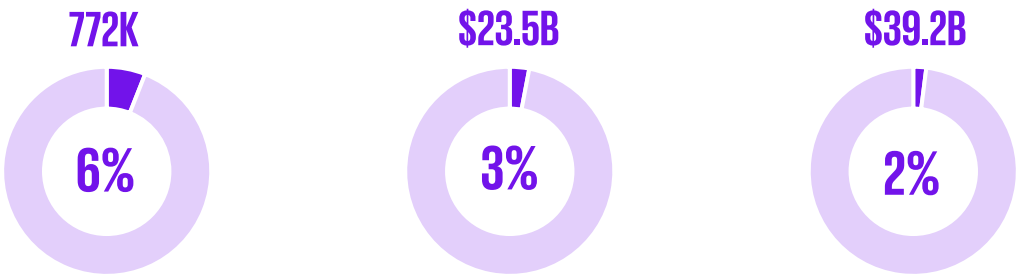
Women are getting promoted at a faster rate than men, and strong progress is being made on closing the management gap.

Despite strong levels of gender segregation at the sub-industry level, women's rate of promotion in Manufacturing exceeds their participation in the industry by 10 per cent. This is reflected in the gender pay gap, at less than $1 per hour (2.2 per cent).

In 2020, women's participation in management positions was on par with their participation in the industry. Although women still remain significantly underrepresented in senior management positions, notable progress has been made with women's representation in key management positions increasing by 6 percentage points between 2014 and 2021.

Accommodation and Food Services

Industry economic contribution (2020)



Share of total national employment (ABS 2020)

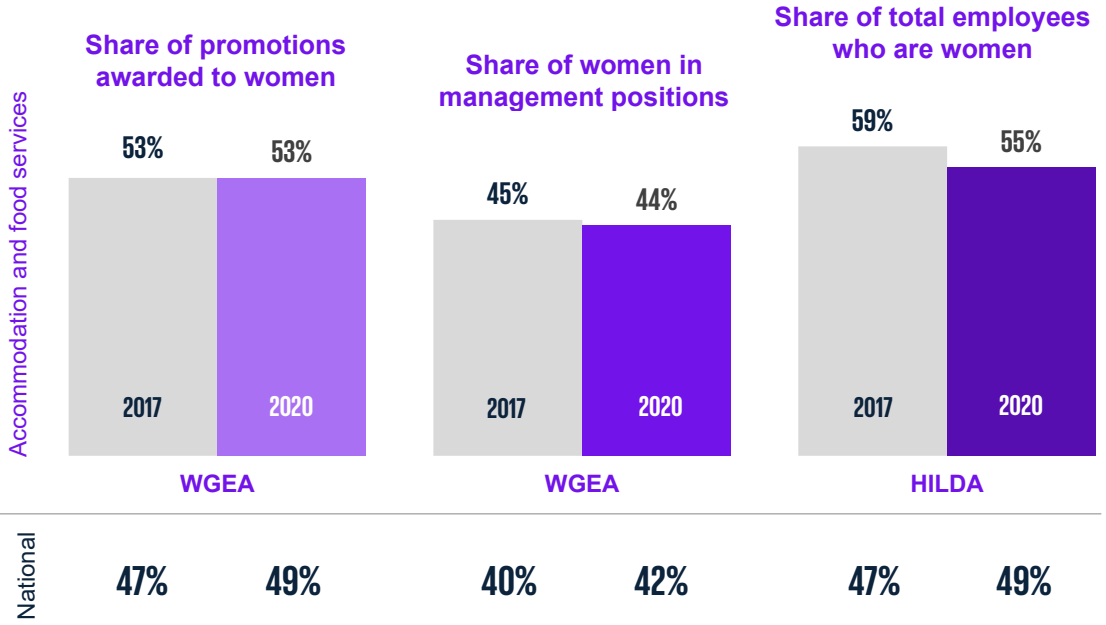
Share of total national wages (ABS 2020)

Share of total economic output (ABS 2020-21)

Hourly wage gap (as at August 2020, HILDA)

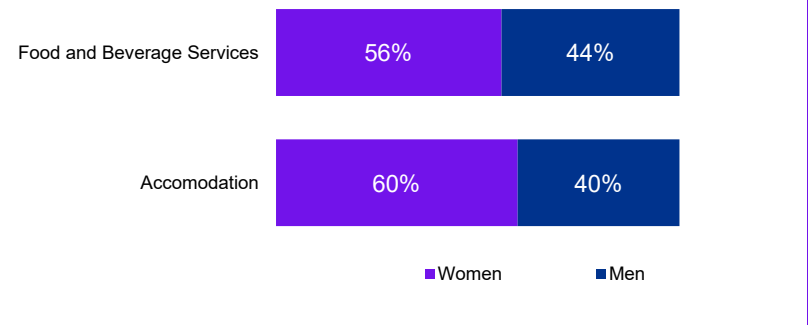
	MEN	WOMEN	GAP	
Accommodation and food services	$25.92/hr	$24.01/hr	$1.91/hr	(7.4%)
National	$39.44	$36.89	$2.56	(6.5%)

Women's representation in the industry



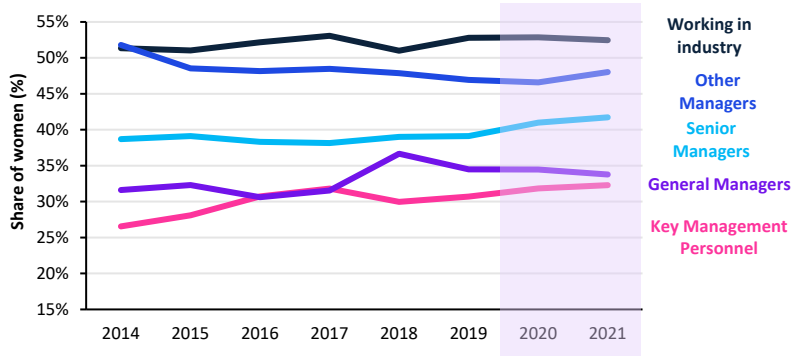
Accommodation and Food Services industry findings

Chart 20 – Gender composition of Accommodation and Food Services sub-industries



Source: KPMG analysis of the Household, Income and Labour Dynamics in Australia Survey, Wave 20 (HILDA Survey).

Chart 21 – Management positions held by women

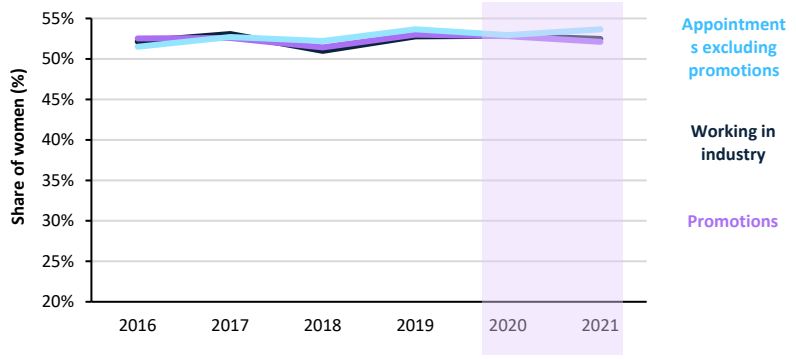


COVID period

Source: KPMG analysis of WGEA Workplace Profile and Workforce Management Statistics data

Note: This figure only uses WGEA Workplace Profile and Workforce Management Statistics data to provide like-for-like analysis. Detailed definitions of manager categories can be found in Appendix B.

Chart 22 – Promotions awarded to women



COVID period

Source: KPMG analysis of WGEA's Workplace Profile and Workforce Management Statistics data

Note: This figure only uses WGEA Workplace Profile and Workforce Management Statistics data to provide like-for-like analysis.

Even though women are getting promoted at a similar rate to men, their representation in management positions remains significantly lower.

This is reflected in the industry gender pay gap at 7.4 per cent. In 2020, Accommodation and Food Services had a management gap of 11 percentage points, with the gap widening in more senior positions.

Appointments and promotions awarded to women in 2020 were proportionate to their representation within the Accommodation and Food Services industry. However, the share of promotions awarded to women has seen a marginal decline between 2020 and 2021.

6 Pay gap by earnings quintile

For the first time in this report series analysis has been undertaken to break down the wage gap by earnings quintile to better understand the relative scale of the pay gap for different parts of the workforce.

The data below provides a point-in-time view of the pay gap across earnings quintiles based on the latest HILDA data. While it is point in time, the data demonstrates the increased earnings gap as women progress throughout their career, which can be driven by gender discrimination in the workforce, lack of promotional opportunities, and underrepresentation in management.

Table 11: Pay gap by earnings quintile

Quintile of earnings	Average hourly wage			Average weekly earnings		
	Men	Women	Gap (%)	Men	Women	Gap (%)
80-100%	$80.37	$66.11	18%	$3,218	$2,126	34%
60-79%	$49.33	$42.38	14%	$2,004	$1,466	27%
40-59%	$36.72	$33.79	8%	$1,474	$1,101	25%
20-39%	$28.96	$27.52	5%	$1,132	$877	23%
0-19%	$19.81	$18.68	6%	$713	$532	25%

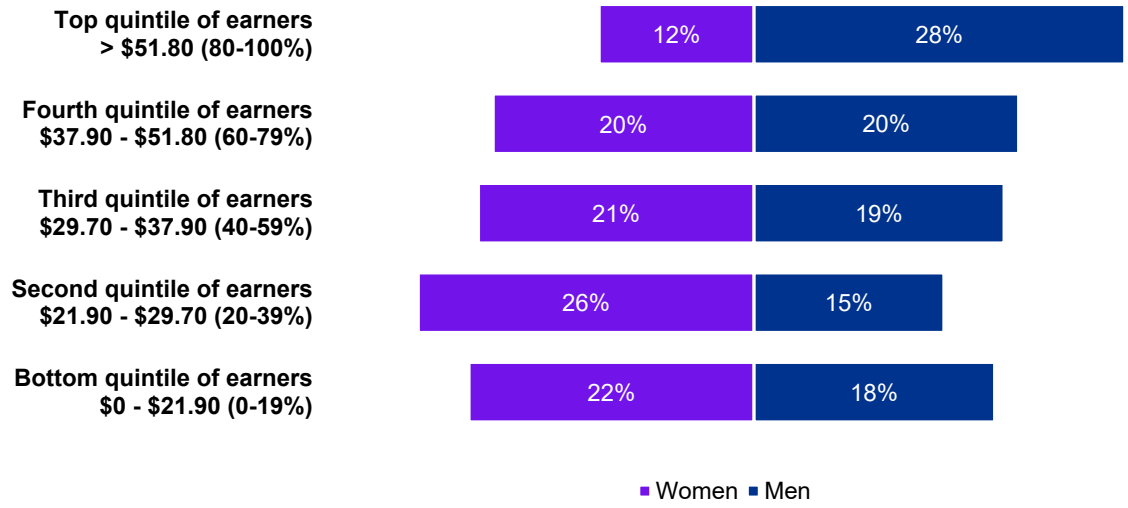
Source: KPMG analysis of the Household, Income and Labour Dynamics in Australia Survey, Waves 2 – 20 (HILDA Survey).
Note: Includes only employed persons with greater than $0 average weekly earnings.

While the hourly gender pay gap in the bottom two quintiles is below the national average, it should be noted that approximately 23 per cent of Australia's workforce are directly covered by award wages which have legislated hourly pay equality between genders.[137] The bottom quintile may be below the minimum wage for several reasons including (but not limited to) employment status such as self-employed, age, and wage theft.

Analysis of workforce distribution across income quintiles also suggests that distribution of income across the employed is skewed. Women are disproportionately represented in lower hourly income brackets, while men are overrepresented in the top 20 per cent of earners (Chart 23).

[137] ABS 2021, Employee Earnings and Hours, Australia, May 2021.

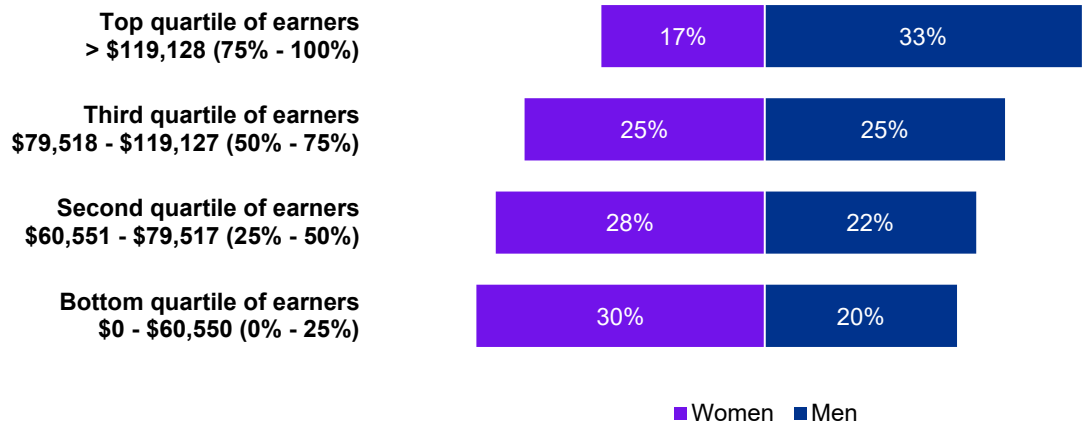
Chart 23: Distribution of men's and women's workforce by income quintile (HILDA)



Source: KPMG analysis of the Household, Income and Labour Dynamics in Australia Survey, Wave 20 (HILDA Survey).
Note: Results may add to more than 100% or the total due to rounding.

These findings are consistent with WGEA data, which indicates that employees who are men are almost twice as likely to be in the top 25 per cent of earners, earning over $119,128 per annum, than women (Chart 24).

Chart 24: Distribution of men's and women's workforce by income quartile (WGEA)



Source: WGEA Data Explorer, 2021.

7 Impacts of closing the gap

This section discusses potential strategies and the associated benefits of closing the gender pay gap, based on the results of this study and available domestic and international evidence.

7.1 Background

This report identifies the drivers of the gender pay gap and shifts in the contribution of various drivers towards the hourly gender pay gap since the last analysis in 2019. Tracking and identifying the trends in the underlying drivers of the gender pay gap creates an evidence base that can be used to inform targeted policymaking to close the gap. This report does not make specific recommendations regarding policy levers that can effect change, rather it focuses on identifying areas of need.

In 2017, the key drivers of the gender pay gap were categorised as gender discrimination, gender segregation by job type, and care, family responsibilities, and workforce participation. These categories continue to be the most significant drivers of the gender pay gap up to 2020.

Since the previous report, the share of the gender pay gap driven by **gender discrimination** has decreased, although remains the largest contributing factor to the gender pay gap. Gender discrimination is defined as the element of the gender pay gap that would remain if men and women in other respects such as education, time in the workforce, and age were equal. Gender discrimination in the workforce is linked to practices such as workplace culture, hiring, promotion and access to training.[138]

Analysis of **gender segregation by job type** found women are over-represented in lower paid roles and positions and underrepresented in more senior roles and managerial roles (vertical segregation). At an industrial level, horizontal segregation - a concentration of genders in particular occupations - can arise through historical stereotyping and social norms regarding 'appropriate' men's and women's work, workplace culture and bias, leadership and experiences of bullying and harassment.[139] Since 2017, industrial segregation has grown by 11 per cent to contribute 20 per cent of the gender wage gap in 2020.

Factors relating to **care, family responsibilities and workforce participation** include drivers such as the proportion working part-time, hours of unpaid care and work (proxied by hours of housework) and years not working due to interruptions. Women are more likely than men to take unpaid leave to fulfil care requirements, take up part-time work and unpaid work than men.[140]

For the first time in this report series, analyses of the **gender pay gap by industry** and **income quintiles** create an evidence base for targeted action by individuals, policymakers, and industry leaders. The analysis suggests the need for change in management and promotion gaps. The analysis also compares the economic benefit of pay equalisation by income quintiles, which provides further insight into barriers to bridging the gap.

[138] Chang, J. et al. 2014. Gender wage gaps in Australian workplaces: are policy responses working. Gender wage gaps in Australian workplaces: are policy responses working. Equality, Diversity and Inclusion. 33(8), pp. 764-775.

[139] Senate Standing Committees on Finance and Public Administration, 2017. *Gender segregation in the workplace and its impact on women's economic equality.* Australian Government: Canberra.

[140] Australian Human Rights Commission, 2018. *Face the Facts: Gender Equality*. AHRC: Sydney. Available at: https://www.humanrights.gov.au/sites/default/files/2018_Face_the_Facts_Gender_Equality.pdf. [Accessed May 16 2022]

7.2 Opportunities and Impacts

Measuring the pay gap, tracking trends, establishing drivers, and drawing conclusions creates an opportunity to use these insights and findings to direct targeted interventions to affect change. This report outlines the potential macro-economic benefits of bridging the gap. Indeed, removing barriers to women's full participation in the workforce and providing them with the opportunity to utilise their human capital more fully can increase female worker productivity, and thereby increase national earnings. While it is important to understand the opportunities and levers available to policymakers to affect change it is also worth keeping in mind that equalising the pay gap will have real tangible individual benefits, which will improve quality of life and contribute towards building a more equitable society.

Section 4 examines the drivers of the gender pay gap by industry. Industry insights such as the higher-than-average gender pay gap in the female-dominated Healthcare and Social Assistance and Education and Training sectors demonstrates that there is an opportunity for focused attention in these sectors. This section builds on those insights by measuring the economic benefits of closing the gap by driver category, and for the first time in this report series, by income quintile.

Analysis outlined in Table 12 below shows that the pay gap between men and women is equivalent to $966 million a week, or $51.8 billion per annum. The analysis also shows that there is a significant disparity in the highest quintile of earners. In 2020, the top 20 per cent of male earners earned an estimated $508 million more per week than the top 20 per cent of female earners. This points to the need for more action to address the 'glass ceiling' in Australia.[141]

Table 12: Impacts of raising pay to parity by earnings quintile

Quintile of earnings	Estimated pay gap
80-100%	$508M / week
60-79%	$266M / week
40-59%	$106M / week
20-39%	$51M / week
0-19%	$36M/ week
Total	**$966M / week**

Source: KPMG analysis of the Household, Income and Labour Dynamics in Australia Survey, Waves 2 – 20 (HILDA Survey).

Table 13 shows the impacts of key drivers on the gender pay gap and opportunities to effect change to close the gap across these drivers.

Table 13: Impacts and opportunities related to closing the drivers of the gender pay gap

Underlying driver	Contributing factor (modelled)	Estimated impact on gender pay gap (2020)	Example of opportunities to effect change
Gender Discrimination	Gender discrimination	-$0.91 / hour	• Eliminating workplaces sexual harassment, every-day sexism and gendered violence. • Addressing discrimination in work practices such as hiring, promotion and access to training. • Increased pay transparency and reporting on gender pay gaps. • Undertaking gender pay gap audits and actioning findings.
Gender segregation in job type	Industrial segregation	-$0.50 / hour	• Breaking down social norms regarding what roles and industries are appropriate for men and women. • Addressing wage inequality in feminised industries. • Increasing the share of women in leadership positions, including through targets or other diversity policies. • Developing networks of advocates for gender equality among men and women who can address barriers and affect change.
	Occupational segregation	-$0.10 / hour	
Care, family responsibilities and workforce participation	Proportion working part-time	-$0.27 / hour	• Improving work life balance. • Increasing availability of flexible work. • Increasing availability of childcare or decreasing cost. • Enhancing availability and uptake of shared parental care. • Rethinking and redesigning part-time roles for managers.
	Hours of unpaid work (proxied by hours of housework)	-$0.06 / hour	• Reducing disincentives to increasing workforce participation through personal tax, family payment and childcare support systems.
	Years not working due to interruptions	-$0.51 / hour	• Changing workplace culture and addressing unconscious bias.

Source: KPMG analysis of the Household, Income and Labour Dynamics in Australia Survey, Waves 2 – 20 (HILDA Survey).
Note: The decomposition analysis also includes age (years), tenure with a current employer and working in government or an NGO. These factors are not considered for the purpose of this analysis. The illustration above assumes that all other factors would be held constant. However, a change in any one factor would also likely be associated with changes in other factors.

Appendices

Appendix A: Industry analysis

Table A-1: Industry-by-industry analysis of all industries

Industry	Share of labour force (ABS)		Total yearly earnings (ABS)		Gross value-added (ABS)		Management gap (WGEA/HILDA)		Promotions gap (WGEA/HILDA)		Women's share of unpaid work (HILDA)	
	2017	*2020*	*2017*	*2020*	*2017*	*2020*	*2017*	*2020*	*2017*	*2020*	*2017*	2020
National	100%	100%	$617.8B	$742.3B	$1.9T	$2.0T	7.2%	7.0%	0.1%	-0.3%	67%	65%
Healthcare & Social Assistance	14%	14%	$83.6B (14%)	$105.6B (14%)	$130.0B	$154.0B	7.8%	6.0%	0.6%	-1.2%	65%	63%
Education & Training	8%	9%	$61.2B (10%)	$74.2B (10%)	$93.1B	$97.8B	17.6%	17.2%	5.4%	3.8%	69%	66%
Retail Trade	10%	10%	$45.2B (7%)	$48.1B (6%)	$81.4B	$86.4B	-4.7%	4.9%	-2.9%	2.5%	68%	62%
Construction	9%	9%	$49.4B (8%)	$57.8B (8%)	$148.9B	$139.7B	-0.9%	1.7%	-13.2%	-7.4%	72%	65%
Professional, Scientific & Technical Services	8%	9%	$58.4B (9%)	$75.0B (10%)	$130.5B	$144.6B	9.2%	6.3%	2.1%	0.0%	67%	67%

Industry	Share of labour force (ABS)		Total yearly earnings (ABS)		Gross value-added (ABS)		Management gap (WGEA/HILDA)		Promotions gap (WGEA/HILDA)		Women's share of unpaid work (HILDA)	
	2017	*2020*	*2017*	*2020*	*2017*	*2020*	*2017*	*2020*	*2017*	*2020*	*2017*	2020
Manufacturing	7%	7%	$49.2B (8%)	$54.4B (7%)	$114.5B	$113.7B	3.4%	0.2%	-3.6%	-10.5%	69%	71%
Accommodation & Food Services	7%	6%	$23.8B (4%)	$23.5B (3%)	$42.4B	$39.2B	13.6%	10.6%	6.2%	2.2%	66%	66%
Public Administration & Safety	6%	7%	$53.8B (9%)	$73.0B (10%)	$98.2B	$111.0B	11.8%	18.9%	17.0%	10.7%	60%	63%
Transport, Postal & Warehousing	5%	5%	$35.8B (6%)	$36.6B (5%)	$92.4B	$81.4B	7.1%	6.7%	-6.3%	-6.2%	71%	68%
Financial & Insurance Services	3%	3%	$28.7B (5%)	$44.0B (6%)	$147.7B	$153.6B	13.9%	7.7%	-0.1%	-2.3%	64%	64%
Administrative & Support Services	3%	3%	$14.3B (2%)	$17.0B (2%)	$64.7B	$62.1B	1.7%	-1.1%	-1.7%	-3.8%	70%	66%
Other Services	4%	3%	$17.9B (3%)	$18.7B (3%)	$33.3B	$32.6B	0.7%	-2.4%	-10.5%	-12.4%	65%	63%
Wholesale Trade	3%	3%	$22.3B (4%)	$25.8B (3%)	$74.2B	$79.3B	-1.5%	-4.9%	-7.3%	-15.5%	65%	68%
Agriculture, Forestry & Fishing	3%	3%	$7.8B (1%)	$8.2B (1%)	$49.4B	$48.5B	13.6%	11.1%	-6.0%	-7.5%	76%	71%

Industry	Share of labour force (ABS)		Total yearly earnings (ABS)		Gross value-added (ABS)		Management gap (WGEA/HILDA)		Promotions gap (WGEA/HILDA)		Women's share of unpaid work (HILDA)	
	2017	*2020*	*2017*	*2020*	*2017*	*2020*	*2017*	*2020*	*2017*	*2020*	*2017*	2020
Arts & Recreation Services	2%	2%	$8.8B (1%)	$8.9B (1%)	$15.1B	$15.0B	6.5%	-0.2%	-5.6%	-13.8%	69%	68%
Mining	2%	2%	$22.1B (4%)	$31.8B (4%)	$186.0B	$198.7B	7.9%	6.8%	-0.3%	0.5%	63%	65%
Electricity, Gas, Water & Waste Services	1%	1%	$10.3B (2%)	$14.0B (2%)	$48.0B	$46.8B	-3.4%	-3.6%	-23.1%	-16.2%	59%	59%
Information Media & Telecommunications	2%	2%	$14.5B (2%)	$13.4B (2%)	$41.5B	$44.4B	21.2%	7.7%	6.5%	-4.8%	62%	51%
Rental, Hiring & Real Estate Services	2%	2%	$10.6B (2%)	$12.3B (2%)	$54.3B	$56.2B	18.1%	11.7%	2.0%	3.9%	66%	67%

Females over-represented (61%+ female employment)

Gender-balanced industry (41-60% female employment)

Males over-represented (61%+ male employment)

Note: Management and promotion gaps have been calculated as women's representation in management positions or promotions, relative to women's participation in the industry. This calculation uses a combination of WGEA Workplace Profile and Workforce Management Statistics data and HILDA data. The share of housework is proxied by the average number of hours per week spent on housework by women relative to men. Total yearly earnings are calculated using mean weekly earnings, assuming 52 weeks worked. 2017 data has been used for comparison in line with the last iteration of the She's Price(d)less report. Negative values indicate instances where the gap is in favour of women. Sample sizes may affect the accuracy of results.

Source: KPMG analysis of the Household, Income and Labour Dynamics in Australia Survey, Release 20, Wave 17 and 20 (HILDA Survey); KPMG analysis of Australian Bureau of Statistics, Characteristics of Employment, August 2020; KPMG analysis of Australian Bureau of Statistics, Characteristics of Employment, August 2017; KPMG analysis of Australian Bureau of Statistics, Labour Force, Australia, Detailed, February 2022; Australian Bureau of Statistics, Australian System of National Accounts, 2020-2021; KPMG analysis of WGEA Workplace Profile and Workforce Management Statistics data, 2021

Appendix B: Trends in drivers of the gender pay gap

This section provides an overview of the Australian labour force and underlying trends in the significant drivers of the Australian gender pay gap identified in this study. Such trends are important to note from two perspectives. Firstly, many drivers are inherently gendered issues themselves (for example, some industry and occupational segregations). Further, it is important to understand trends in the context of the relative importance of those factors to the gender pay gap.

Labour force participation

Overall, women currently comprise 47.9 per cent of all employees in Australia, up slightly from 46.9 per cent in 2018.[142] Women are disproportionately represented in part-time work (accounting for 68.5 per cent of the workforce) and under-represented in full-time work (accounting for 38.6 per cent of the workforce).[143]

There have been significant increases in women's labour force participation, educational attainment, and total earnings over the last few decades. Women's rate of labour force participation increased to a record high of 62.4 per cent in February 2022.[144] Over the last 40 years, men's labour force participation declined from 79.5 per cent to 70.7 per cent, while women's participation increased from 43.5 per cent to 62.4 per cent.[145]

Table B-1: Labour Force Participation Rates

	Feb 2012	Feb 2016	Feb 2018	Feb 2020	Feb 2022
Men	71.8%	70.7%	71%	70.7%	70.8%
Women	58.6%	59.4%	60.6%	61.2%	62.4%

Source: Australian Bureau of Statistics (ABS) 2022, Labour Force, Australia, February 2022, cat.no. 6202.1 (Seasonally adjusted figures).

[142] ABS, 2022, Labour Force, Australia, February 2022.

[143] Ibid.

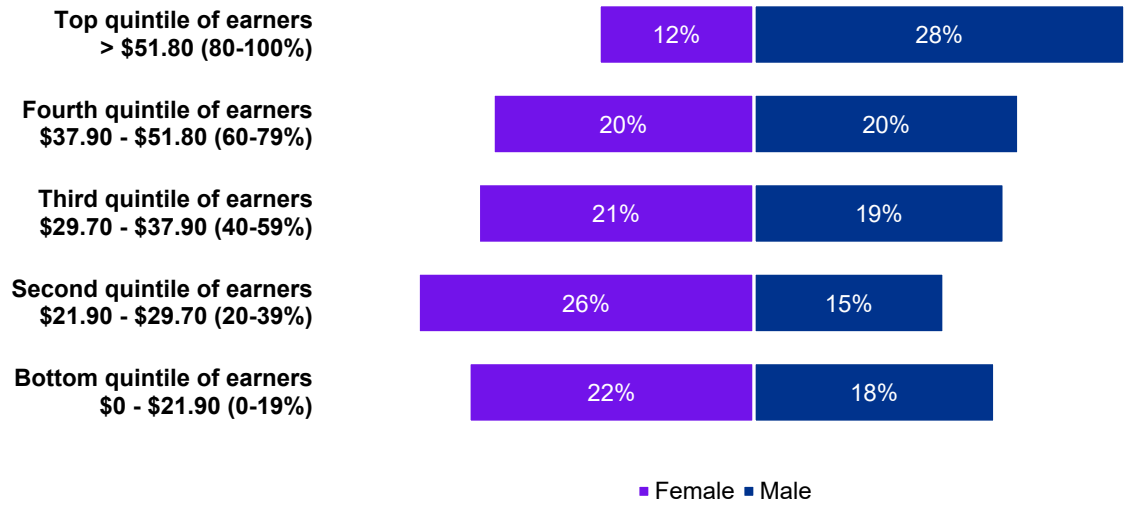
[144] Ibid.

[145] Ibid.

Total earnings

The distribution of income across the employed is skewed. Women are disproportionately represented in lower income brackets, while men are overrepresented in the top 20 per cent of earners.

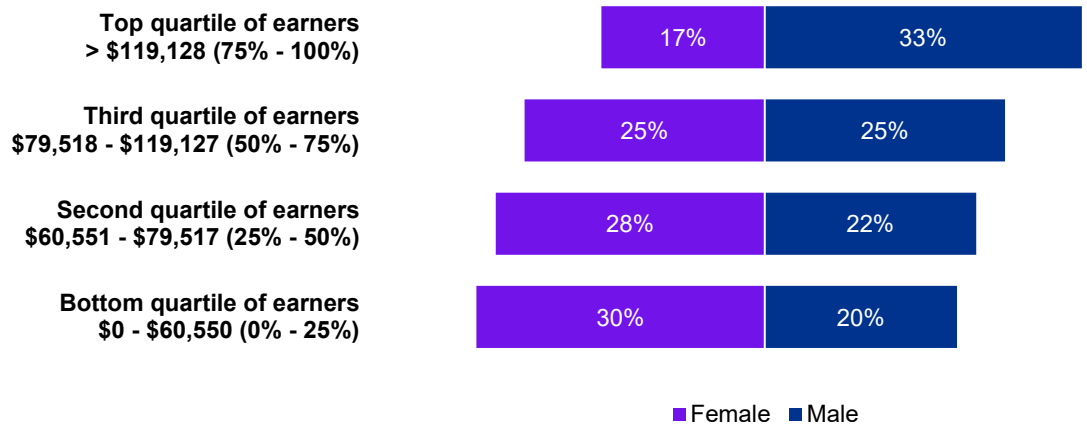
Chart B-1: Income quintile distribution by gender, 2020



Source: KPMG analysis of the Household, Income and Labour Dynamics in Australia Survey, Wave 20 (HILDA Survey).

This is consistent with WGEA data, which indicates that employees who are men are almost twice as likely to be in the top 25 per cent of earners, earning over $119,128 per annum, than women.

Chart B-2: Distribution of men's and women's workforce by income quintile



Source: WGEA Data Explorer, 2021.

It is also consistent with 2016 ABS data, which indicates that women make up approximately 60 per cent of the workforce earning $799 per week or less, while men make up almost 80% of people earning $2,000 or more per week.

Skills differentials

Three potential factors contribute to skills differentials, namely:

- differing educational qualifications and levels of educational attainment;
- differing levels of on-the-job training; and
- differing work tenure and experience.

These issues are outlined in the sub sections below.

Educational attainment

Levels of educational attainment for women increased between 2010 and 2022, with women representing a higher share of educational attainment across all categories except Certificate qualifications. On average, across men and women, levels of non-school level qualification increased from 56 per cent to 62 per cent.[146] Further, the gap in favour of men's educational attainment has been eliminated over this period, with the proportion of women with a non-school qualification now exceeding the proportion of men by almost two per cent.[147] Despite women's levels of educational attainment exceeding men's, the pay gap continues to be in favour of men.

Table B-2: Share of population with non-school qualifications, by gender (2010, 2015, 2018, 2020)

Non-school qualifications	Postgraduate degree	Graduate diploma or certificate	Bachelor degree	Advanced diploma or diploma	Certificate	Total
Women's educational attainment						
Share of female population 2020 (%)	8.5	4.0	22.7	11.1	15.3	64.3
Share of female population 2018 (%)	6.9	3.4	21.6	11.5	16.7	62
Share of female population 2015 (%)	5.7	3.7	19.8	11.2	17	60
Share of female population 2010 (%)	4.1	2.8	18.1	10.6	17	54.6
Men's educational attainment						
Share of male population 2020 (%)	7.9	2.4	17.5	8.8	22.9	62.7
Share of male population 2018 (%)	6.5	2.0	16.9	8.6	24.9	60.9
Share of male population 2015 (%)	6.1	2.3	15.6	7.8	26.2	60.9
Share of male population 2010 (%)	4.7	1.5	14.8	8.0	25.4	56.9

Source: Australian Bureau of Statistics (ABS) December 2020, Gender Indicators

[146] ABS 2020, Gender Indicators, December 2020.

[147] Ibid.

Work-related training and adult learning

Skills endowment can also be increased through training and learning programs. However, data shows that rates of participation are decreasing overall. In 2020-21, 42 per cent of Australians aged 15 to 74 years participated in formal and/or non-formal learning compared to 40.9 per cent in 2016-17. This was down from 46.4 per cent (2013) and 48.9 per cent (2005).[148]

That said, women tend to have higher participation rates in on-the-job training, with 33.4 per cent of women participating, compared to the 27.4 per cent of men.[149] This was despite the statistics showing that participation in on-the-job training was lower for individuals who were employed part-time, worked in smaller organisations, operated at a lower occupational level, or worked in the private sector.[150]

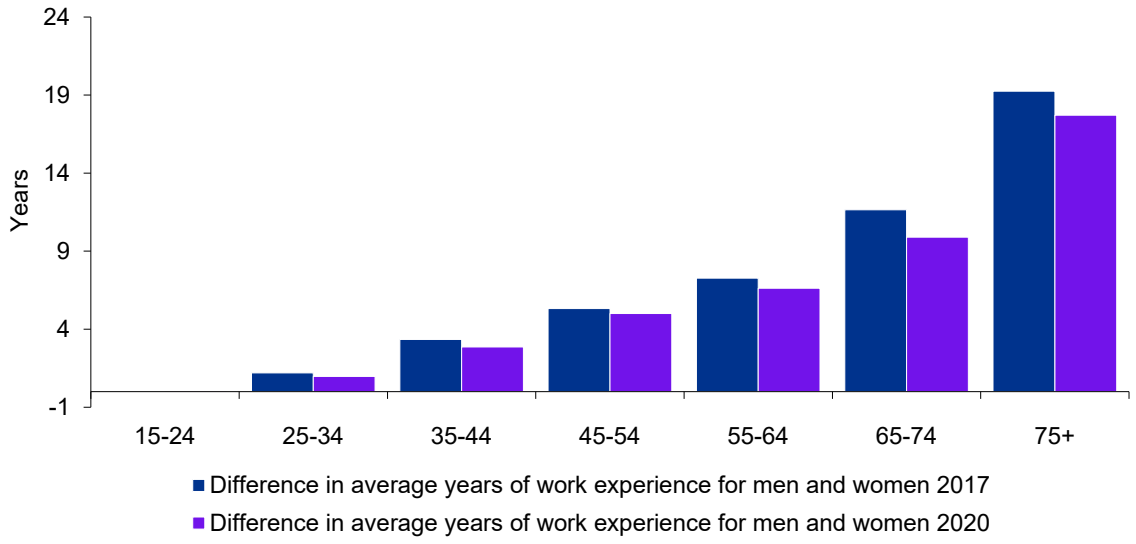
The data suggests that while women are more likely to participate in training and learnings than men, they can face greater barriers to doing so.

Work experience and career disruptions

In addition to formal education and on-the-job training, time spent in employment and tenure with an employer can makes a positive contribution to an individual's human capital. This is linked to changes in productivity as individuals gain more employment experience and acquire higher levels of firm-specific knowledge, expertise and skills. For women, the data shows that the average number of years of work experience is often lower due to disruptions in work histories, typically due to fulfilling primary carer duties for their children.[151]

Chart B-3 below indicates the difference in average years of work experience between men and women across all age groups. It can be seen that as women get older, the gap increases significantly. Overall, it appears that across almost all age groups the gap in work experience has reduced between 2017 and 2020, likely reflecting the cultural and labour markets shifts that have occurred over time.

Chart B-3: Difference in average years of work experience for men and women by age (2017 and 2020)



Source: KPMG analysis of the Household Income and Labour Dynamics in Australia (HILDA) Survey, Waves 17 and 20.

When assessed alongside Chart B-4 below, it can be observed that as the gap between women's and men's years of work experience widens, so too do the years not working. This supports the statement above that women have less years of work experiences due to experiencing more career disruptions, although this has also reduced in the time period between 2017 and 2020.

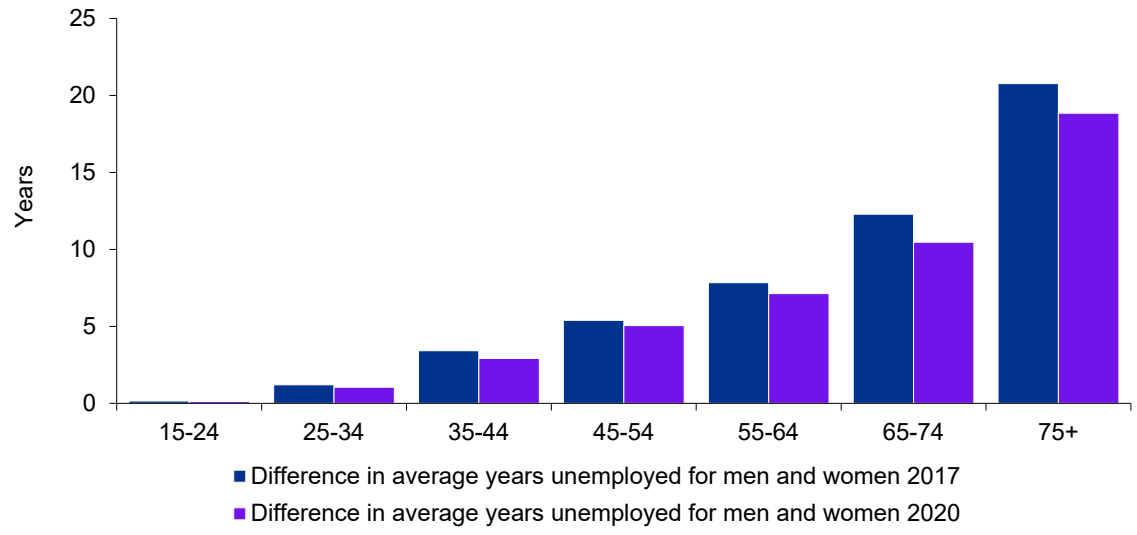
[148] ABS 2020-21, Work-Related Training and Adult Learning, Australia, 2020-21 (Cat No. 4234.0).

[149] Ibid.

[150] Ibid.

[151] Hosking, A., 2007, *The Effects of Motherhood and Job Transitions on Female Earnings in Australia*, Conference Paper for the non-refereed stream of the 2007 HILDA Survey Research Conference, 19-20 July 2007, The University of Melbourne, p. 8.

Chart B-4: Difference in number of years not working due to interruptions for men and women (2017 and 2020)



Source: KPMG analysis of the Household Income and Labour Dynamics in Australia (HILDA) Survey, Waves 17 and 20.

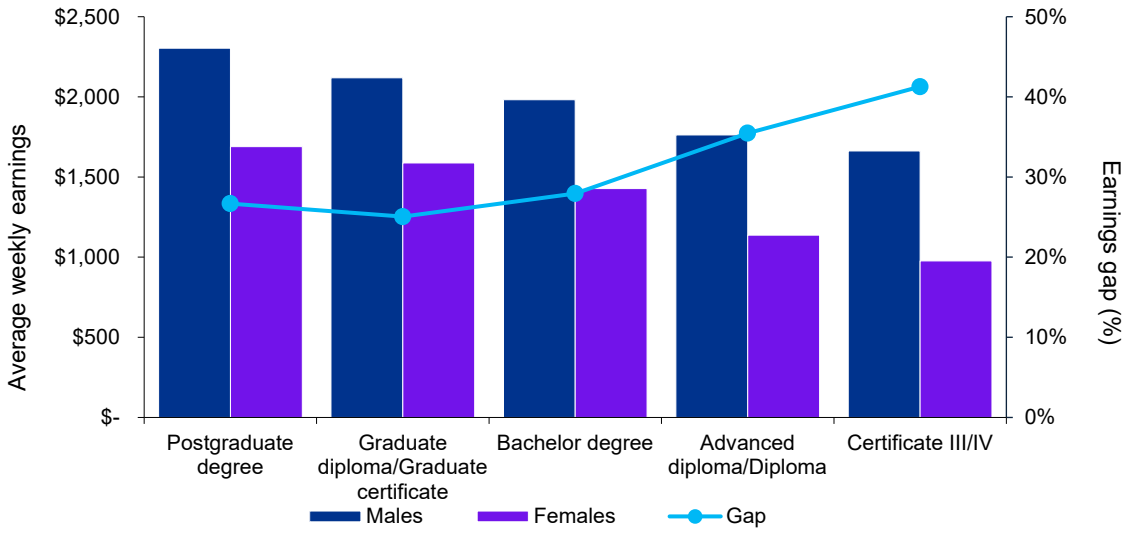
Returns to investment in human capital

The theory of returns to investment in human capital is focused on the impact of education on employment and income.

Education and income

Looking at the income earned by full-time and part-time men and women employees with different educational qualifications (without controlling for other differences) suggests that for all educational levels, women earn less income than men on average. The charts below shows that there is a significant gap in average weekly income levels between men and women across all levels of educational attainment, with the percentage difference in weekly income being greatest for women with a certificate.

Chart B-5: Average individual weekly income for women and men in the workforce, by educational attainment



Source: Australian Bureau of Statistics (ABS) August 2021, Characteristics of Employment, Australia

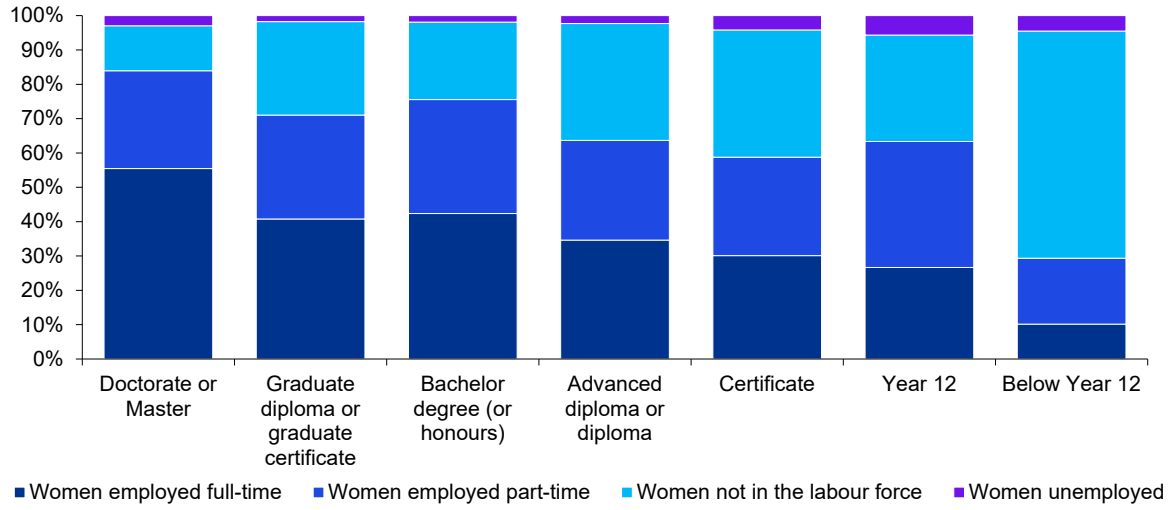
Education and labour market status

A number of studies have also used differences in the employment rates between women and men with similar qualifications as an indicator of gendered returns to education. Chart B-6 shows that across all levels of education, the share of women with full-time employment is lower than that of men with the same level of education. The gap is largest for women with lower levels of education.

Despite women reaching higher levels of educational attainment, there has not been an associated decrease in the pay gap between women and men.

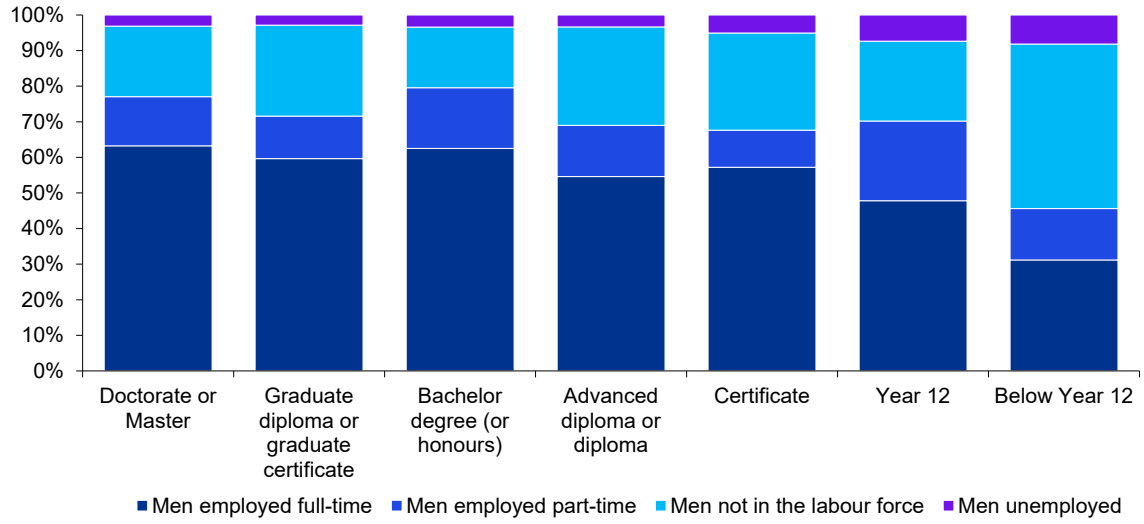
Women are more likely to be engaged in higher education, so it is possible that a greater proportion of women than men are in jobs that are not suited to their level of educational attainment. However, an analysis of data from Graduate Destination Surveys indicates that gender differences in education make a minute contribution to the 'endowment effect' in the gender pay gap decomposition'.[152]

Chart B-6: Labour status of women by highest educational qualification (2020)



Source: KPMG analysis of the Household Income and Labour Dynamics in Australia (HILDA) Survey, Wave 20.

Chart B-7: Labour status of men by highest educational qualification (2020)



Source: KPMG analysis of the Household Income and Labour Dynamics in Australia (HILDA) Survey, Wave 20.

[152] Li, I.W. and Miller, P.W., 2012, *Gender discrimination in the Australian graduate labour market*, IZA Discussion Papers, No. 6595, Institute of Labor Economics (IZA), Bonn.

Labour market rigidities

Gender discrimination

Labour market discrimination occurs when there are different earnings and employment opportunities across equally skilled workers employed in the same job due to differences in workers' demographics, in this case gender.[153] Labour discrimination can be characterised as a form of market failure as it prevents women from reaching their full economic potential. Moreover, labour discrimination reduces the measurable output of women that is recognised by companies at the firm-level and by the economy through unequal returns to human capital endowments.

This discrimination can be overt or systemic in nature. The existence of more embedded and structural discrimination, evident through wage gap decomposition studies, has remained fairly constant in the last two decades. As highlighted in the 2009 Report, research continues to find that there are differences in the returns to human capital endowments, including education, training and labour force experience. Many studies conclude that lower rates of return to education and experience are indicative of discrimination in the workplace. For example, Langford (1995) found that 24 per cent of the wage gap was a result of human capital differences, while 50-60 per cent was due to employer discrimination.[154]

The 2008 Senate Committee Report on the effectiveness of the *Sex Discrimination Act 1984* found that the Act had an impact on the most overt forms of sex discrimination but had lesser impact on systemic discrimination.[155] This is supported by the findings of the 2018/19 Global Wage Gap Report by the International Labour Organisation (ILO), which finds that among high-income countries the gender pay gap is largely unexplained by labour market endowments, attributes and characteristics across all income groups.[156] In fact, the contribution of educational differences to the gender pay gap in these countries is most frequently negative: meaning that when education explains part of the gender pay gap, most of the time it contributes to reduce it rather than to increase it.[157]

Factors such as vertical and horizontal occupational gender segregation, and the gender composition of the workforce in an enterprise stand out as more significant causes. In Europe, for example, working in an enterprise with a predominantly female workforce can give rise to a 14.7 per cent wage penalty compared to working in a similarly productive enterprise but with a predominantly male workforce.[158] The 2019 A Quantum Leap for Gender Equality Report finds that "work performed by women is frequently undervalued either because it mirrors work which has traditionally been carried out by women in the home without pay or simply because it is work performed by women".[159]

Labour market segmentation

Labour market segmentation refers to differences in the share of men's and women's representation in different industries and occupations across the economy. These can include part-time work, industry segregation, occupational segregation, and employer type.

Industrial segregation

Industry segregation occurs when women and men are more concentrated in different industry sectors. This is a significant factor underlying the gender pay gap, particularly when women's employment is concentrated in lower paid sectors.

Chart B-8 below shows that in 2020, men continued to dominate an array of higher paid sectors including the Transport, Postal and Warehousing, Construction and Mining sectors. Women still make up the majority of the Healthcare and Social Assistance, and Education and Training sectors. These sectors traditionally attract lower

[153] Boras, G.J., 2008, *Labor Economics*, McGraw-Hill/Irwin, 4th edition.

[154] Langford, M., 1995, *The Gender Wage Gap in the 1990s*, Australian Economic Papers, Vol. 34 (64). pp. 62-85.

[155] Standing Committee on Legal and Constitutional Affairs 2008, Effectiveness of the Sex Discrimination Act 1984 in eliminating discrimination and promoting gender equality, Department of the Senate, Australia.

[156] ILO. 2018. Global Wage Report 2018/19 What lies behind gender pay gaps. Geneva:International Labour Office. Available at https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_650553.pdf [Accessed May 16 2022]

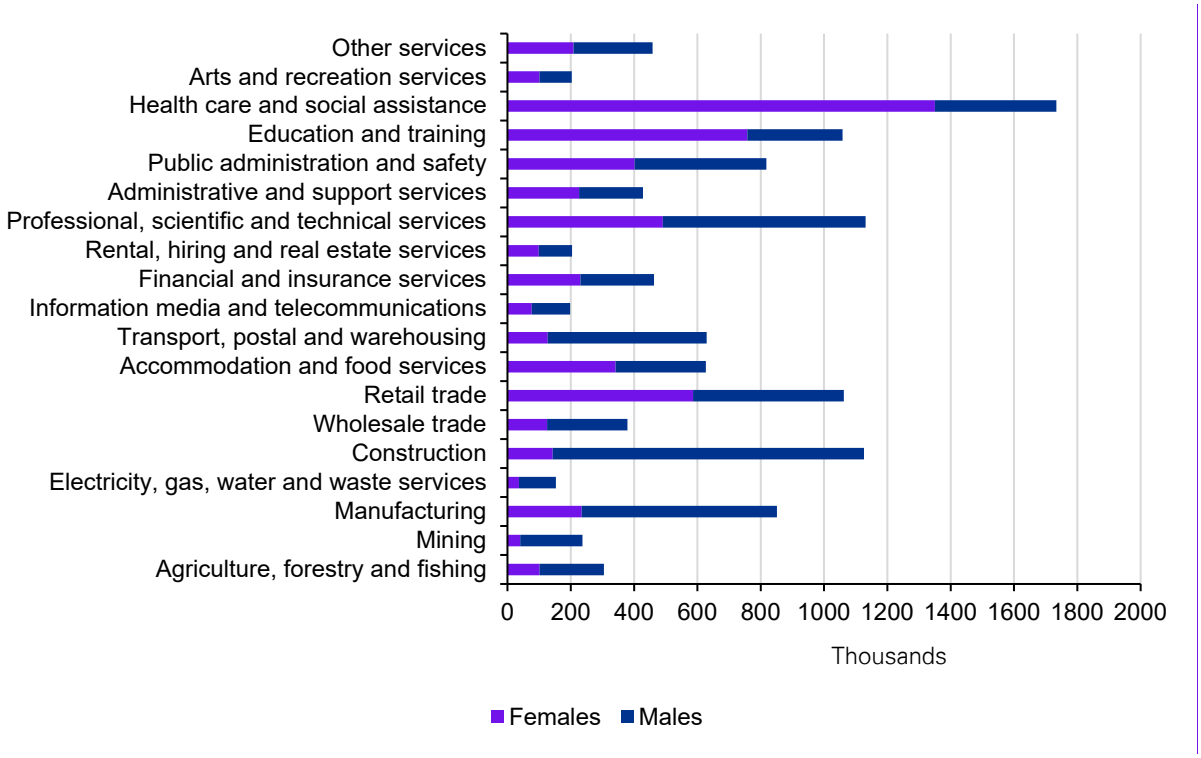
[157] Ibid.

[158] ILO. 2019. A quantum leap for gender equality: for a better future of work for all. ILO: Geneva

[159] Ibid.

incomes. Women's representation in the Healthcare and Social Assistance sector has markedly increased over the last decade.

Chart B-8: Number of persons employed by ANZSIC division, December 2020



Source: Australian Bureau of Statistics (ABS) 2020, Gender Indicators

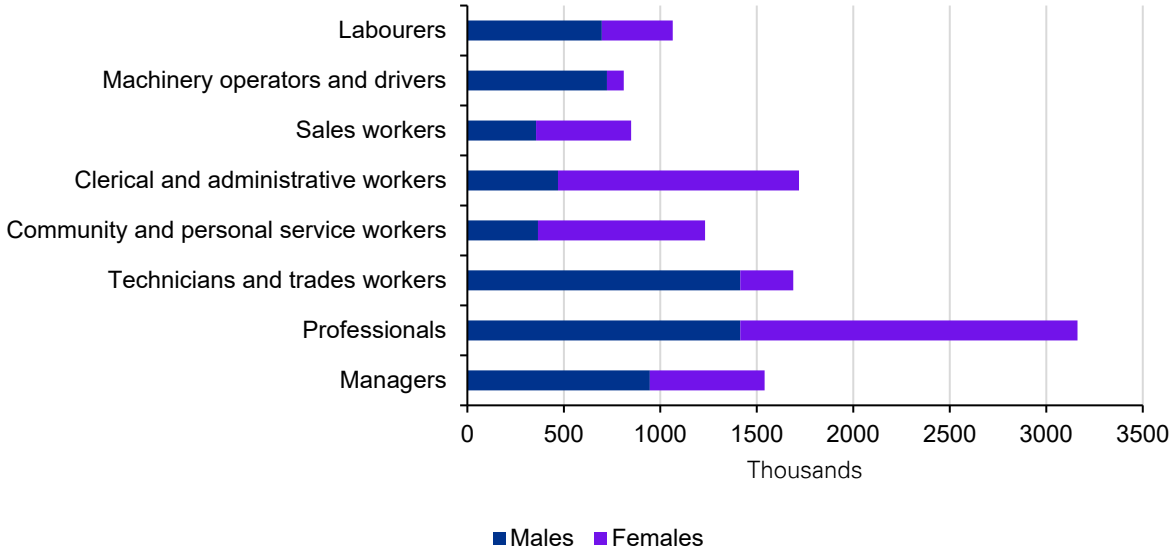
Occupational segregation

Segregation by occupation is another labour market rigidity that has been found to contribute to the gender pay gap. Chart B-9 shows there is a clear difference in men's and women's employment by occupation.

Occupational segregation is partially explained by differences in education levels. Men are more likely than women to hold certificate type qualifications that lead to careers in manufacturing, construction work, mining and transport. By contrast, women who do not have university qualifications are much less likely to hold certificates and diplomas, meaning that women will be more likely to be placed in lower skilled jobs, both within an occupational class and across occupations that generally attract lower incomes. Further, even when women are equally qualified – in terms of level of qualifications – there are often barriers to pay equity, as seen in the social and community services (SACS) industry.

Different occupational classes also face varying rates of pay, with occupations dominated by women typically being lower paid. As such, occupational segregation has often been cited as a key factor underlying the gender pay gap. The component of the wage differential attributable to occupational distribution is of reasonable size, and reflects the impacts of gender discrimination and stereotyping in the labour force.

Chart B-9: Occupational segregation by gender, December 2020



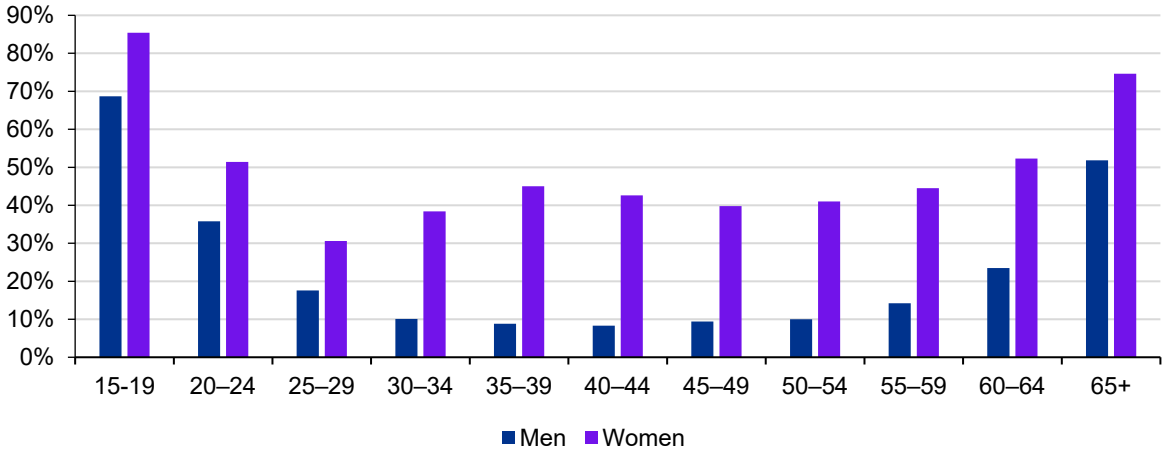
Source: Australian Bureau of Statistics (ABS) 2020, Gender Indicators

As can be seen in Chart B-9, in 2020, women were significantly overrepresented compared to men as Community and personal services workers and Clerical and administrative workers.

Part-time employment

The data shows that in 2020 there was generally a trend across both genders towards working part-time in the 15-29 and 60-65+ age brackets, although women are still working part-time at significantly higher proportions than men.

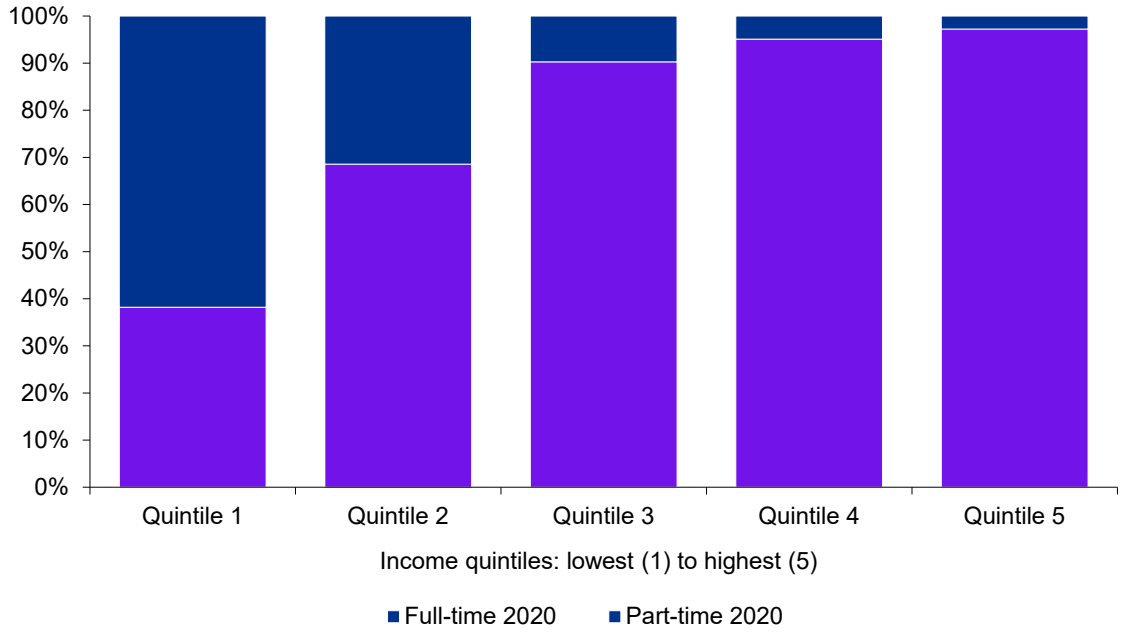
Chart B-10: Share of employed persons working part-time, by age and sex, 2020



Source: Australian Bureau of Statistics (ABS) 2020, Gender Indicators

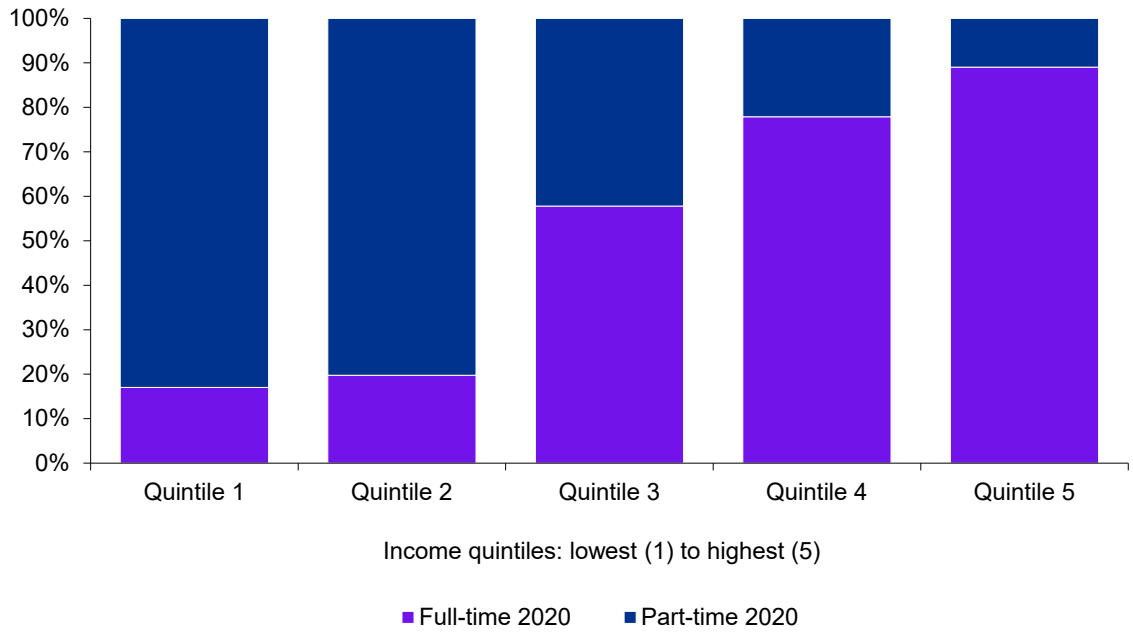
Charts B-11 and B-12 demonstrate that not only are there greater shares of women working part-time by age, but they are also more highly represented as part-time workers across income quintiles.

Chart B-11: Distribution of men in full-time and part-time work across income quintiles, 2020



Source: KPMG analysis of the Household Income and Labour Dynamics in Australia (HILDA) Survey, Wave 20.

Chart B-12: Distribution of women employees in full-time and part-time work across income quintiles, 2020



Source: KPMG analysis of the Household Income and Labour Dynamics in Australia (HILDA) Survey, Wave 20.

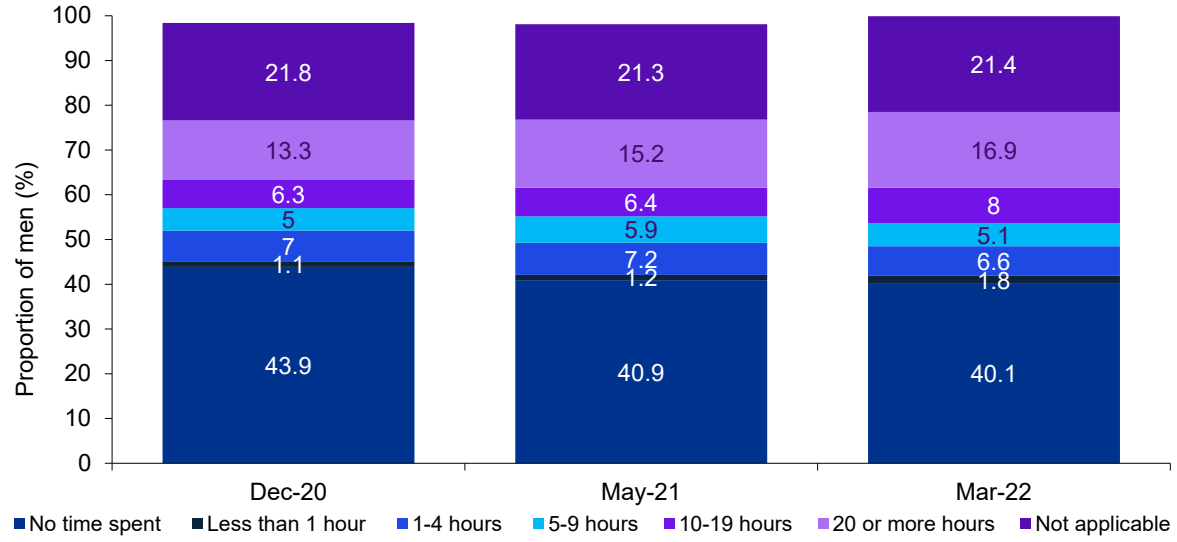
Unpaid care and work

The amount of unpaid work an individual performs is likely to impact the amount of time they are able to spend working for employment related purposes. Unpaid work is comprised of domestic activities, childcare, the purchasing of goods and services and voluntary work and care.

Evidence from the COVID-19 pandemic suggests that unpaid caring responsibilities disproportionately increased for women due to the transition to working and learning from home. Public health measures across Australia urged residents to stay home as much as possible, and even when schools and childcare centres remained open, many parents kept their children home to minimise the health risks.

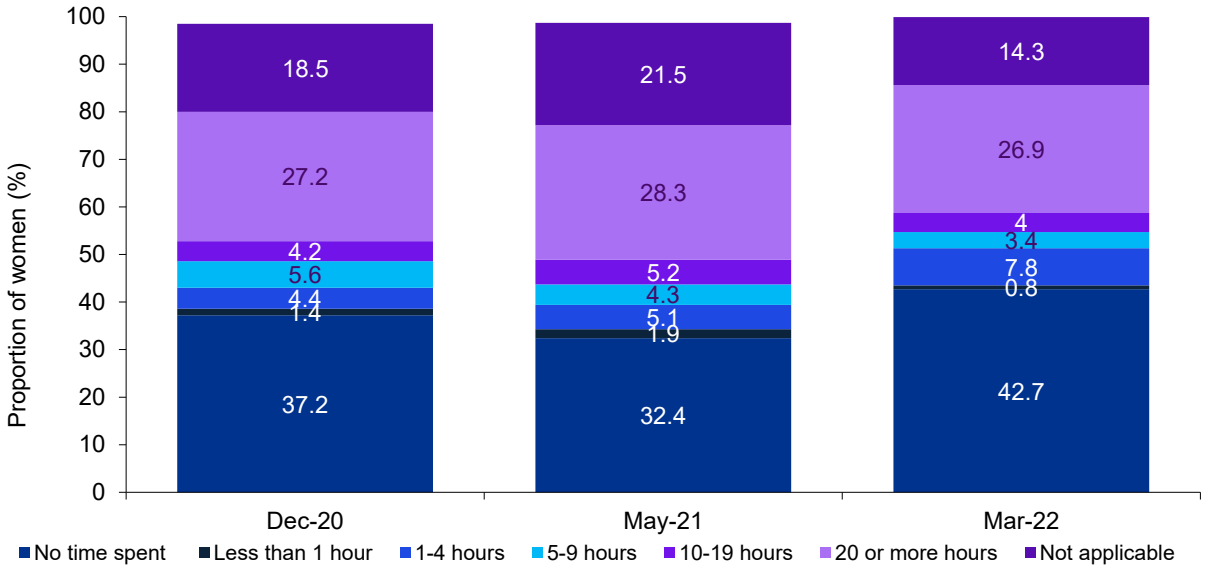
ABS data shows that throughout the pandemic, women were almost twice as likely as men to spend over 20 hours per week on unpaid caring responsibilities. In March 2022, however, as much of Australia emerged out of COVID-19 restrictions, the share of women spending over ten hours per week on unpaid caring responsibilities decreased while the share of men spending over ten hours per week on unpaid caring responsibilities increased.

Chart B-13: Hours spent by men on unpaid care or supervision of children in the last week, 2020-2022



Source: ABS Household Impacts of COVID-19 Survey, March 2022

Chart B-14: Hours spent by women on unpaid care or supervision of children in the last week, 2020-2022



Source: ABS Household Impacts of COVID-19 Survey, March 2022

Appendix C: Detailed approach

This appendix provides supporting information to the discussion of the approach in Section 3.

Overview

Consistent with KPMG's 2009, 2016 and 2019 reports, this report applies the Walby and Olsen technique, tailored for the Australian context, and updated with 2020 HILDA data.

This approach was originally developed and applied in the United Kingdom (UK). It estimates the factors that impact wages and simulates the changes that would arise if women's levels of these attributes were in line with men. The analysis assumes that wages are broadly equivalent to the value of a person's output.[160] The approach is documented across the following academic papers:

- Walby, S. (University of Leeds) and Olsen, W. (University of Manchester) 2004, *Modelling Gender Pay Gaps*;
- Cassells, R., Vidyattama, Y., Miranti, R. and McNamara, J., National Centre for Social and Economic Modelling (NATSEM) 2009, *The Impact of a Sustained Gender Pay Gap on the Australian Economy*; and
- Watson, I. Australian Journal of Labour Economics 2010, *Decomposing the Gender Pay Gap in the Australian Managerial Labour Market.*

The underlying rationale of the methodology is that it attempts to isolate the impact of gender discrimination (the target variable) by simulating the hypothetical changes needed to bring women's levels of these variables in line with those of men,[161] while controlling for as many other known external factors on differences between equivalent male and female employee's pay as is practical within the constraints of available published data.

The Walby and Olsen approach was applied through three steps:

Table C-1: Walby and Olsen Approach

Step	Description
Likelihood of being in the labour force	The first step involves modelling the probability of selection into the labour force, based on a range of potential explanatory variables and addressing for selection bias.
Factors affecting hourly wages	Estimates the factors that affect the hourly wages earned by a person in the workforce. A number of potential explanatory variables were included. Further, this analysis controls for approximately 40 variables, including (but not limited to) parental status, industry and educational attainment.

[160] It is important to note that the implication is *not* that women are currently paid less than men because they are not as productive and is in no way a reflection on the current contribution or value of the work of women. Instead, wages are used as a substitute for productivity, which is widely recognised as an acceptable proxy. See Walby, S. and Olsen, W., 2002, *The impact of women's position in the labour market on pay and implications for UK productivity*. Report to Women and Equality Unit, pp. 18-20.

[161] Olsen, W. and Walby, S., 2004, *Decomposing the Gender Pay Gap*, Working Paper No. 17, Manchester, UK: Equal Opportunities Commission, pp. 24.

Step	Description
Decomposition of the gender pay gap	To estimate the effect of the gender differences on pay, and the implications of this for broader economic output, the methodology established by Walby and Olsen (2002) was used to break down the contributors of the gender wage gap and estimate the gross effect of each underlying factor on the wage gap. This makes it possible to estimate the change in earnings that would occur 'if women's conditions changed to reflect the best or the average situation among men' (Olsen and Walby, 2004, p. 66).

The following sections discuss the data sources and steps taken to apply the above methodology.

Data

Overview – HILDA survey

KPMG used the 2020 wave of the HILDA Survey data to underpin the modelling in this study. The HILDA Survey is a household-based longitudinal survey which began in 2001 and is collected and published annually by the Melbourne Institute in conjunction with the Department of Social Services.

HILDA comprises a sample of over 9,500 households and over 23,000 individuals, with interviews conducted annually with all adult members of each household followed over time to enable longitudinal analysis.[162] The HILDA Survey is a favourable source of data for this study due to the extent of the sample size and granularity of indicators collected, which include:

- labour force status and individual characteristics;
- information on child care and caring responsibilities for individuals;
- family composition, including financially and non-financially dependent children (resident and non-resident), and information on labour force status of, and financial support from, the other parent;
- employment history and status information, including on labour market interruptions;
- information on working from home and other flexible workplace practices;
- detailed information on employment status, and reasons why individuals may work part-time hours (e.g. family or personal responsibilities, preferences etc);
- detailed information on the impact of COVID-19 on individuals, including any benefits received;
- job satisfaction and likelihood individuals will quit or be dismissed;
- employer industry, size, and characteristics; and
- educational history, current educational activities, and work related training opportunities.

Variable extraction

Given the scale of the HILDA dataset and the targeted nature of this study, a structured approach to identify and extract the necessary variables was undertaken prior to developing the statistical model.

[162] For more information see Summerfield, M., Garrard, B., Hahn, M., Jin, Y., Kamath, R., Macalalad, N., Watson, N., Wilkins, R. and Wooden, M., 2021, *HILDA User Manual – Release 20,* Melbourne Institute, Applied Economic & Social Research.

Using the list of variables referenced in the 2009, 2016 and 2019 KPMG Reports as basis, the following list of variables were identified and extracted.

Table C- 3: Variables tested in the 2009, 2016, 2019 and 2022 reports

Variable Name	HILDA Identifier
State	THHSTATE
Region	THHRA
Size of firm	TJBMWPS
Size of industry	TJBMEMSZ
Satisfaction with work flexibility arrangements	TJBMSFLX
Industry	TJBMI62
Occupation	TJBMO62
Trade union membership	TJBMTABS
Gender	THGSEX
Age	THGAGE
Education	TEDHISTS
Marital Status	TMRCURR
Number of 0-4 year old children	THH0_4
Number of 5-9 year old children	THH5_9
Number of 10-14 year old children	THH10_14
Country of Birth	TANBCOB
Whether the respondent has a long term health condition	THELTH
Whether the respondent has poor health	TGH1
Per cent of time spent in full time education last financial year	TCAPEFT
Per cent of time spent in part-time education last financial year	TCAPEPT
Number of years since left full-time education	TEHTSE
Years of work experience	TEHTJB
Whether employed part-time	TESDTL
Whether employed on a casual basis	TJBCASAB
Tenure with current employer in years	TJBEMPT
Usual hours of work in all jobs per week	TJBHRUC
Usual hours of housework per week	TLSHRHW
Number of years not in the labour force	TEHTO
Number of years unemployed	TEHTUJ
Entitlement to paid maternity/paternity leave	TJOWPPML

Variable Name	HILDA Identifier
Number of on the job training hours completed per week	TJTTHRS
Employer Type	TJBMMPLY
Weekly gross income	TWSCEI

Analysis was also done to consider new variables added to the 2020 iteration of the HILDA survey, specifically in relation to the COVID-19 pandemic. The following new variables were identified as being potential drivers of the pay gap, and thereby extracted in addition to the variables listed above.

Table C- 4: Additional variables tested in this report (not previously tested in 2009, 2016 or 2019)

Variable Name	HILDA Identifier
Whether as a result of the coronavirus, the respondent was required to take any paid leave	TCVPL
Whether as a result of the coronavirus, the respondent took a cut in their rate of pay	TCVCUT
Whether as a result of the coronavirus, the respondent kept working, but with reduced hours	TCVDCHR
Whether as a result of the coronavirus, the respondent had their employment terminated or was made redundant	TCVRD
Whether as a result of the coronavirus, the respondent was temporarily stood down without pay or required to take unpaid leave	TCVUL
Respondent's ability to do their job while working at home	TCVWFHBW
Whether the respondent personally received or employer claimed on their behalf, any JobKeeper payments	TCVJKHAV
Income normally received from paid employment increased or decreased because of the coronavirus or did it not change much	TCVIPE

Construction of model variables

Once key variables were extracted, an Excel ‘data dictionary’ was then constructed to inform the model how to interpret certain variables where the raw survey response cannot be directly applied.

For example, the raw response for the variable ‘Age’ can be directly applied as the response is in the form of a whole number, while the raw response for the variable ‘Employer Type’ contains a mixture of numbers and words and requires the use of a data dictionary to translate into a format compatible with the modelling application.

Within the construction process, a number of composite variables were created using data from the HILDA survey and other sources such as the ABS Labour Survey. The table below provides further details on the approach to construct each composite variable, as well as mapping of the final list of variables.

Table C- 5: Construction of model variables

Variable name	Constructed	Construction rationale	Variable mapping
Gender	No	N/A	Mapping not needed
Age	No	N/A	Mapping not needed
Age squared	Yes – multiplied every age data point by itself	This is standard practice in undertaking regression to model more accurately the effect of age	Mapping not needed
State	No	N/A	This is a control variable. Dummy variable = 1 for all states
Region	No	N/A	This is a control variable. Dummy variable = 1 for all Regions
Size of firm	No	N/A	This is a control variable. Dummy variable = 1 for all firm size responses
Industry Segregation	Yes – using HILDA variable TJBMEMSZ with ABS labour force data	This index uses the proportion of male employees per 100 employees as a proxy to quantify the extent of gender segregation with Australian industries.	Against each Australian and New Zealand Standard Industry Classification (ANZSIC) code, the percentage of men to total employees is calculated.

Variable name	Constructed	Construction rationale	Variable mapping
Occupation Segregation	Yes – using HILDA variable TJBMEMSZ with ABS labour force data	This index uses the proportion of male employees per 100 employees as a proxy to quantify the extent of gender segregation within specific occupations.	Against each Australian and New Zealand Standard Occupation Classification (ANZSOC) code, the percentage of men to total employees is calculated.
Satisfaction with work flexibility arrangements	No	N/A	This is a control variable. Dummy variable = 1 for all firm size responses
Trade union membership	No	N/A	Dummy variable = 1 if union member
Education	Yes – using HILDA variables TEDHISTS and TEDHIGH1	This index converts into numerical category the highest level of education completed.	Detailed mapping provided in a separate table below.
Marital Status	No	N/A	Dummy variable = 1 if married or de facto
Number of 0-4 year old children	No	N/A	Mapping not needed
Number of 5-9 year old children	No	N/A	Mapping not needed
Number of 10-14 year old children	No	N/A	Mapping not needed
Country of Birth	No	N/A	Dummy variable = 1 if born in 'Other' of 'Main English Speaking'
Whether the respondent has a long term health condition	No	N/A	Dummy variable = 1 if has long term health condition
Whether the respondent has poor health	No	N/A	Dummy variable = 1 if has poor health condition
Per cent of time spent in full time education last financial year	No	N/A	Mapping not needed
Per cent of time spent in part-time education last financial year	No	N/A	Mapping not needed
Number of years since left full-time education	No	N/A	Mapping not needed

Variable name	Constructed	Construction rationale	Variable mapping
Years of work experience	No	N/A	Mapping not needed
Whether employed part-time	No	N/A	Dummy variable = 1 if employed part-time
Whether employed on a casual basis	No	N/A	Dummy variable = 1 if casually employed
Tenure with current employer in years	No	N/A	Mapping not needed
Usual hours of work in all jobs per week	No	N/A	Mapping not needed
Usual hours of housework per week	No	N/A	Mapping not needed
Number of years not in the labour force	No	N/A	Mapping not needed
Number of years unemployed	No	N/A	Mapping not needed
Entitlement to paid maternity/paternity leave	No	N/A	Dummy variable = 1 if employee entitled to maternity leave in current job
Number of on the job training hours completed per week	No	N/A	Mapping not needed
Employer Type	No	N/A	Dummy variable = 1 if employer is government business enterprise, commercial statutory authority, other government organisation, private sector not-for-profit, or other non-commercial organisations
Hourly gross income	Yes – using HILDA variables TWSCEI and TJBHRUC	Weekly gross income divided by weekly total number of hours worked	Mapping not needed
Whether as a result of the coronavirus, the respondent was required to take any paid leave	No	N/A	Dummy variable = 1 if required to take paid leave

Variable name	Constructed	Construction rationale	Variable mapping
Whether as a result of the coronavirus, the respondent took a cut in their rate of pay	No	N/A	Dummy variable = 1 if took a cut in rate of pay
Whether as a result of the coronavirus, work hours were reduced	Yes	This combines whether the respondent kept working with reduced hours, was stood down without pay or required to take unpaid leave and whether the respondent lost their job into a single variable.	Dummy variable = 1 if kept working with reduced hours, stood down without pay, required to take unpaid leave, terminated or made redundant.
Less ability to work from home	No	N/A	Dummy variable = 1 if slightly worse or much worse ability to do job form home
Whether the respondent personally received or employer claimed on their behalf, any JobKeeper payments	No	N/A	Dummy variable = 1 if personally or employer received JobKeeper payments
Income increased as a result of the coronavirus	No	N/A	Dummy variable = 1 if increased

Step 1 – Addressing selection bias in the likelihood of an individual being in the labour force

Overview

Selection bias is a common challenge when drawing insights from survey responses. It is the notion that the sample (individual or group) could be selected in a way that proper randomisation is not achieved, as such does not provide an appropriate representation of the underlying population, and by association any inference drawn from the sample may lead to erroneous conclusions.

As such, it is important that a correction process is undertaken to minimise the impact of sample selection bias. KPMG has opted to apply the Heckman technique to correct this potential bias within the sample, this approach is underpinned by a pair of equations, explained in more detail below.

Equation estimated

The first equation had as the dependent variable a dummy variable equal to one if the person (of working age) was employed full or part-time, and equal to zero otherwise. The specification of the equation is given by:

$$\Pr(emp_i = 1 \mid Z) = \Phi(Z_\gamma) \qquad (1)$$

Where empi indicates the employment dummy variable, Z is a vector of explanatory variables, γ is a vector of unknown parameters, and Φ is the cumulative distribution function of the standard normal equation.

After the employment equation was estimated, the Inverse Mills Ratio, λ, was obtained by using the regression equation results to calculate the employment probability for every individual in the sample. This variable is included in the second stage to correct for self-selection into or out of employment.

Variable selection

Our approach in estimating the employment equation is consistent with previous studies and the underlying methodology, whereby a number of HILDA variables were selected via a generalised linear model following with a non-zero weekly gross income as the response variable, using a binomial distribution with a probit link function, to form the vector of explanatory variables.

In addition to the above, an approach to apply the HILDA to Australian population weighting was confirmed with The Melbourne Institute of Applied Economics and Social Research and applied in this test.

The following table outlines the variables used in the employment equation.

Table C- 6: Employment equation variables

Variable name
Gender
Age
Age squared
Region (remoteness)
Education scale
Marital status
Number of 0-4 year old children
Number of 5-9 year old children
Number of 10-14 year old children
Country of birth

Variable name
Whether the respondent has a long term health condition
Whether the respondent has poor health
Per cent of time spent in full time education last financial year
Per cent of time spent in part-time education last financial year
Number of years since left full-time education
Years of work experience
Years of work experience squared
Whether as a result of the coronavirus, the respondent was required to take any paid leave
Whether as a result of the coronavirus, the respondent took a cut in their rate of pay
Whether as a result of the coronavirus, work hours were reduced
Less ability to work from home
Whether the respondent personally received or employer claimed on their behalf, any JobKeeper payments
Income increased as a result of the coronavirus
HILDA to Australian population weighting - THHWTRP

Results and diagnostics

The following table outlines the diagnostic table of the GLM, and shows that the variables selected to estimate the likelihood of a respondent being employed are statistically significant, i.e. p-value of less than 0.05.

Table C- 7: Employment equation results

	Estimate	Std. Error	z value	Pr(>|z|)
(Intercept)	-3.4148	0.123815	-27.5799	1.94E-167
Gender	-0.04497	0.023976	-1.8755	0.06072348
Age	0.10064	0.006694	15.03527	4.31E-51
Age squared	-0.00169	6.98E-05	-24.2426	7.92E-130
Highest education level achieved including tertiary	0.100403	0.009163	10.9576	6.11E-28
Highest non-tertiary education achieved	0.076238	0.007455	10.22615	1.51E-24
Marital status	0.068903	0.028333	2.431916	0.01501919
Number of 0-4 year old children	-0.29144	0.023497	-12.4032	2.51E-35
Number of 5-9 year old children	-0.12579	0.023402	-5.37509	7.65E-08
Number of 10-14 year old children	-0.04156	0.022684	-1.83208	0.06693922
Country of birth	-0.00308	0.03255	-0.09475	0.92451378
Whether the respondent has a long term health condition	-0.34239	0.028922	-11.8385	2.47E-32

	Estimate	Std. Error	z value	Pr(>|z|)
Whether the respondent has poor health	-0.29439	0.038014	-7.74412	9.62E-15
Per cent of time spent in full time education last financial year	-0.00164	0.000493	-3.31865	0.00090455
Per cent of time spent in part-time education last financial year	0.002041	0.000641	3.181704	0.00146412
Number of years since left full-time education	-0.01285	0.003999	-3.21433	0.00130750
Years of work experience	0.047927	0.003764	12.73412	3.82E-37
Years of work experience squared	6.19E-05	7.59E-05	0.815965	0.41452029
Whether as a result of the coronavirus, the respondent was required to take any paid leave	0.786773	0.063933	12.30628	8.38E-35
Whether as a result of the coronavirus, the respondent took a cut in their rate of pay	0.505374	0.077728	6.501859	7.93E-11
Whether as a result of the coronavirus, work hours were reduced	0.023247	0.031412	0.740069	0.45925829
Less ability to work from home	0.563002	0.048164	11.68917	1.45E-31
Whether the respondent personally received or employer claimed on their behalf, any JobKeeper payments	0.277096	0.036887	7.511993	5.82E-14
Income increased as a result of the coronavirus	0.666991	0.057265	11.64741	2.37E-31

Step 2 – Factors affecting hourly wages

Overview

Once the first equation has been estimated, the Inverse Mills Ratio (IMR) is calculated for the vector of explanatory variables, designed to be included as an independent variable to correct for underlying sample selection bias. The IMR is then included in the vector of explanatory variables in the second step of two-step approach, to estimate the variables with a significant relationship with the hourly wage.

Equation estimated

The second step of the process involves estimating the wage equation. Here the dependent variable is the log of the hourly wage rate. The wage equation may be specified as:

$$w^* = X\beta + u \quad (2)$$

where w* is an underlying wage offer, which is not observed if the individual does not work.

The conditional expectation of wages given the person works is, as such, given by:

$$E[w \mid X, D = 1] = X\beta + E[u \mid X, D = 1] \quad (3)$$

based on the assumption that the error terms are jointly normal, the wage equation is expressed as:

$$E[w \mid X, D = 1] = X\beta + \rho\sigma_u \lambda(Z\gamma) \quad (4)$$

Where ρ is the correlation between unobserved determinants of the propensity to work, ε, and unobserved determinants of wage offers u, σ_u is the standard deviation of u, and λ is the Inverse Mills Ratio evaluated at Zγ.

If the IMR is not statistically significant, as in this case, 'one can conclude that the selection bias is not an important issue and modelling the earnings can proceed without the need for including the correction term'.[163]

Variables tested

The second GLM used is of negative binomial distribution with a log link function, and it is intended to estimate the effects of each explanatory variable on the hourly wage.

The following table outlines all variables tested as part of this GLM.

Table C- 8: Model variables tested

Variable name
Gender
Age
Age squared
Highest education level achieved including tertiary
Highest non-tertiary education achieved
Marital status
Number of 0-4 year old children
Number of 5-9 year old children
Number of 10-14 year old children
Years of work experience
Years of work experience squared
Whether employed on a casual basis
Whether employed part-time
Tenure with current employer in years
Usual hours of work in all jobs per week
Total time not in the labour force
Total time unemployed
Entitlement to paid maternity/paternity leave
Employer Type (government vs private)
Whether part of a union
Size of firm
Size of industry
Satisfaction with flexibility of work arrangements

[163] Watson, I, 'Decomposing the Gender Pay Gap in the Australian Managerial Labour Market', *Australian Journal of Labour Economics,* 13(1), p. 58.

Variable name
Industry
Industry segregation index
Occupation
Occupation segregation index
Hours of housework performed per week
Hours of on the job training received last year
Whether promoted at work last year
Inverse Mills Ratio derived from the employment equation
Whether as a result of the coronavirus, the respondent was required to take any paid leave
Whether as a result of the coronavirus, the respondent took a cut in their rate of pay
Whether as a result of the coronavirus, work hours were reduced
Less ability to work from home
Whether the respondent personally received or employer claimed on their behalf, any JobKeeper payments
Income increased as a result of the coronavirus

Results and diagnostics

The following table outline the diagnostic table of the GLM, and shows that the variables selected to estimate the likelihood of a respondent being employed are statistically significant, i.e. p-value of less than 0.05.

Table C- 9: GLM model results

	Estimate	Std. Error	t value	Pr(>|t|)
(Intercept)	2.449426	0.772508	3.170745	0.001525
Gender	0.09727	0.019052	5.105579	3.36E-07
Age	0.036418	0.006873	5.299031	1.19E-07
Age squared	-0.00019	0.0001	-1.84938	0.064434
Highest education level achieved including tertiary	5.79E-05	0.009582	0.006042	0.995179
Highest non-tertiary education achieved	0.061454	0.005764	10.66111	2.19E-26
Marital status	0.0639	0.018684	3.419999	0.000629
Number of 0-4 year old children	0.099531	0.018436	5.398673	6.88E-08
Number of 5-9 year old children	0.031215	0.015638	1.996157	0.045946
Number of 10-14 year old children	-0.02173	0.014757	-1.47261	0.140891
Years of work experience	-0.00468	0.003353	-1.39475	0.163124
Years of work experience squared	-0.00011	7.59E-05	-1.48037	0.138807
Whether employed on a casual basis	-0.02069	0.023411	-0.88362	0.376923

	Estimate	Std. Error	t value	Pr(>|t|)
Whether employed part-time	-0.10917	0.026595	-4.10498	4.08E-05
Tenure with current employer (years)	0.003883	0.001147	3.385651	0.000713
Usual hours of work in all jobs per week	-0.01497	0.000959	-15.61	2.99E-54
Total time not in the labour force	-0.01193	0.002965	-4.02429	5.76E-05
Total time unemployed	-0.04006	0.006053	-6.61902	3.81E-11
Entitlement to paid maternity/paternity leave	0.016566	0.017985	0.921099	0.357023
Employer Type (government vs private)	0.027258	0.020392	1.336744	0.181339
Whether part of a union	0.017611	0.021553	0.817106	0.413889
Size of firm	-0.04395	0.117923	-0.37269	0.709387
Size of industry	0.098615	0.017354	5.682605	1.37E-08
Satisfaction with flexibility of work arrangements	-0.00659	0.02159	-0.30506	0.760327
Industry	-0.26753	0.117211	-2.28246	0.022484
Industry segregation index	0.274673	0.046248	5.939108	2.97E-09
Occupation	0.044429	0.736711	0.060308	0.951912
Occupation segregation index	0.041594	0.04102	1.013978	0.310619
Hours of housework performed per week	-0.00142	0.000434	-3.2803	0.001041
Hours of on the job training received last year	0.004479	0.002882	1.554264	0.120155
Whether promoted at work last year	0.066152	0.025872	2.55692	0.010576
Inverse Mills Ratio derived from the employment equation	-0.29466	0.063983	-4.60525	4.17E-06[164]
Whether as a result of the coronavirus, the respondent was required to take any paid leave	-0.08293	0.029928	-2.77086	0.005602
Whether as a result of the coronavirus, the respondent took a cut in their rate of pay	0.024321	0.03517	0.691529	0.48925
Whether as a result of the coronavirus, work hours were reduced	-0.02533	0.019806	-1.27871	0.20103
Less ability to work from home	0.020928	0.025232	0.82943	0.406882
Whether the respondent personally received or employer claimed on their behalf, any JobKeeper payments	-0.00672	0.02193	-0.3063	0.759384
Income increased as a result of the coronavirus	-0.03984	0.032655	-1.22018	0.222427

[164] If the IMR is not statistically significant, as in this case, 'one can conclude that the selection bias is not an important issue and modelling the earnings can proceed without the need for including the correction term', Watson, I, 2010, 'Decomposing the Gender Pay Gap in the Australian Managerial Labour Market', *Australian Journal of Labour Economics,* 13(1), p. 58.

Step 3 – Decomposition of the gender pay gap

Overview

The purpose of the decomposition step is to estimate and isolate the effects of gender discrimination on the gender pay gap. A number of factors need to be taken into account when considering the most appropriate decomposition technique, two examples of this include:

- **Feedback effect**: where pre-labour market characteristics may come into play, including the different choices of education, career, family and market participation between men and women; and
- **Policy Relevance**: components of the wage gap should have practical policy relevance, to better inform the support policy responses to address the gender pay gap going forward.

A number of decomposition techniques were considered as listed in Section 3.1 of this report. Given the objectives of this study, the Walby and Olsen technique was selected, with the GLM outputs generated from Step 2 used as a key input.

Approach

The Walby and Olsen technique was selected due to a number of key reasons, including:

- it allows key factors of policy relevance to be brought into the limelight, while pushing control variables into the background;
- it minimises the effects of offsetting factors which are not centrally relevant; and
- it highlights the gender discrimination component of the pay gap, and enables comparison of this component with other components of gender pay gap.[165]

This approach involves simulating the hypothetical changes needed to bring women's levels of wage components into line with those of men.

In an example, in 2020, the mean years of tenure with their current employer for women was 6.5 years and for men this was 7.3 years, an increase of 0.8 years would be required in order to bring women's years of tenure with current employers in line with the level of men. This extra 0.8 years of tenure is then multiplied by the corresponding coefficient (reward) for every extra year of tenure, which according to the GLM undertaken in Step 2 is 0.00388 (0.4 per cent). This gives a simulated effect of 0.003104 (0.6*0.00388). This means that if women had the equivalent average amount of tenure as men, their wage rate would increase by 0.003104 (0.3 per cent).

Results

The results of the decomposition analysis form the main results are presented in Section 4 of this report.

Limitations

The modelling approach provides a point-in-time analysis of the gender pay gap. While there are acknowledged limitations to the approach, it represents one contribution to the evidence base around the issue of pay equity. Results should be considered alongside other analytical approaches for a more complete picture of the links between gender and pay.

The analysis within this report is based on the sample of respondents included within the HILDA dataset. The sample of respondents to the HILDA survey is expanded with each consecutive wave of the survey through both exits and entries from the underlying sample of respondents. The HILDA user manual[166] was used to apply appropriate weightings to control and adjust, to the extent permissible, for these sampling issues and to provide estimates for the Australian population.

The key limitations identified in undertaking this work are as follows:

[165] Olsen, W. and Walby, S., 2004, *Decomposing the Gender Pay Gap*, Working Paper No. 17, Manchester, UK: Equal Opportunities Commission, p. 24.

[166] Summerfield, M., et al. 2021, *HILDA User Manual – Release 20,* Melbourne Institute, Applied Economic & Social Research.

Measurement error

Any analysis that draws on survey data will be impacted by measurement error because respondents may not respond accurately to questions or there may be errors in how those open ended responses are coded. However, Uhrig and Watson (2014) analysed five waves of both the British Household Panel Survey and the HILDA survey and found that the effect of measurement error, where it could be corrected, on the comparison of men's and women's wages was small.[167]

Decomposition method

The data and methodology used for decomposition analysis impacts the results and different methodologies have strengths and weaknesses.[168] HILDA is the most appropriate data source for an Australian setting. This decomposition analysis is undertaken with the Walby and Olsen (2002) methodology, which is an established approach for the Australian context.[169] A key feature of this approach is its ability to highlight variables with 'practical policy relevance to reduce gender wage gaps' while controlling for a range of irrelevant variables that impact wages but not gender, such as geography.[170] The analysis attempts to capture the statistical association between the gender pay gap and key explanatory variables modelled, but this cannot be definitively attributed and needs to be considered in the broader context of available evidence and key developments.

The core list of variables included for decomposition was based on prior research cited in our 2009, 2016 and 2019 reports and is retained for consistency and to facilitate comparison (Table 3). Importantly, this includes working in the NGO or government sector which was statistically insignificant in 2017 and 2020 (in contrast to previous waves) but is retained for completeness. As the only statistically significant COVID-19 variable, the requirement to take paid leave has also been included in the decomposition, despite having a negative effect on the pay gap.

Impacts of other factors

There is a significant body of research on the financial differences between men and women such as the wealth gap, differences in lifetime earnings, and superannuation. These issues are outside the scope of this report.

Impact of the COVID-19 pandemic

While new variables have been included in Wave 20 of the HILDA survey which are specifically related to the effects of the COVID-19 pandemic, data has only been collected up to August 2020. Australia had its first case of COVID-19 in January 2020, however, severe restrictions and lockdown measures continued into late 2021 and early 2022. As such, the effects of some of Australia's longest lockdowns have not been captured in this iteration of HILDA data.

In addition, the COVID-19 pandemic has had complex implications across the economy and our communities. Although this analysis has sought to test whether any of the variables in Table 4 are significant in explaining the gender pay gap, it is acknowledged that each of these measures in isolation is not sufficient to measure or understand the implications of COVID-19 on the labour market, economic growth or within industry. Where possible, trends in drivers have been extrapolated using ABS and WGEA data, and further supplemented with relevant literature. However, insufficient data is available across drivers to draw detailed conclusions.

Use of HILDA and WGEA Gender Equality datasets

For many of the issues and factors considered in this report and our analysis, there are different measures available through different datasets. Invariably, different datasets can provide different figures and results due to differences in methodologies (such as census data compared with surveys and other sampling approaches), quality and robustness of responses, and granularity.

---

[167] Uhrig, SCN., and Watson, N., 2014, The impact of measurement error on wage decompositions: evidence from the British Household Panel Survey and the Household Income and Labour Dynamics in Australia Survey, ISER Working Paper Series, No. 2014-24, University of Essex, Institute for Social and Economic Research (ISER), Colchester.

[168] Cassells, R., Vidyattama, Y., Miranti, R. and McNamara, J., 2009. The impact of a sustained gender wage gap on the Australian economy Report to the Office for Women, Department of Families, Community Services, Housing and Indigenous Affairs. Available at: http://library.bsl.org.au/jspui/bitstream/1/1601/1/gender_wage_gap.pdf.

[169] Ibid.

[170] Ibid.

For the purposes of consistency and availability of the breadth of indicators required to be tested within our analysis of the gender pay gap, the HILDA survey dataset was utilised as the primary input to our analysis. As a panel survey, HILDA tracks the same people over time, and provides key information about incomes, labour dynamics and family life.

In addition to the HILDA data, the WGEA Gender Equality data collection also provides detailed information on promotion and Workforce Management Statistics that can be used to understand gender dynamics across industries such as industrial and occupational segregation. The management categories as defined by WGEA are listed in Table C- 11 below.

Table C- 11: Management category definitions

Manager category	Definition[171]
Key Management Personnel	In line with Australian Accounting Standards Board AASB124, KMPs have the authority and responsibility for planning, directing and controlling the activities of an entity, directly or indirectly. This includes any director (executive or otherwise) of that entity. A defining feature of KMPs is their influence is at the entity level. KMPs are likely to direct the strategic function of their section and are often functional heads, such as head of operations or head of finance. They represent at least one of the major functions of an organisation and participate in organisation-wide decisions. For corporate groups, KMPs will have authority and responsibility across the entire structure. This excludes CEOs and Heads of Business (HOBs).
General Manager	General Managers (other executives and general managers) are responsible for a department or business unit within an entity. In large organisations, they may not take part in organisation-wide decisions with the CEO. Alternatively, they may take part in those decisions to share expertise or develop projects, but not have the entity-level or corporate group authority that would make them a KMP.
Senior Manager	Senior Managers are responsible for one or more functions, departments or outcomes for an entity. They are more likely to take part in both the strategic and operational sides of management, including resourcing, budget and assets (capital expenditure). Some of their decisions need approval from a higher-level manager.
Other Managers	Other Managers are responsible for operational functions. They oversee day-to-day work, following and enforcing their entity's defined parameters. They may be responsible for strategies, policies and plans to meet business needs for their areas of work. They often manage time, financial and other resources, and assets such as facilities or IT infrastructure. They may also coordinate different functions or people. Line managers belong to this category, but supervisors do not.

HILDA collects information about the industry and occupation of employment by asking respondents to provide their current main job. This response is then coded by HILDA surveyors to the Australian and New Zealand Standard Classification of Occupations (ANZSCO) and Australian and New Zealand Standard Industry Classification (ANZSIC).[172] However, there are some acknowledged data quality issues associated with the coding of these variables[173] and the use of ANZSCO and ANZSIC categorisations can limit analysis at the industry level, due to a lack of granularity in industry and occupational definitions.

[171] WGEA, 2022. *Employer Portal.* Available at: https://client-portal.wgea.gov.au/s/article/How-do-I-categorise-managers-in-the-Workplace-Profile [Accessed May 27 2022]

[172] Summerfield, M., et al. 2021, *HILDA User Manual – Release 20,* Melbourne Institute, Applied Economic & Social Research.

[173] Watson, N., and Summerfield, M., 2009. Quality of the Occupation and Industry Coding in the HILDA Survey. *HILDA Project Discussion Paper Series.* 3(9)

Despite these limitations, industrial and occupational data from HILDA is widely used in academic research, including papers specifically examining gender pay gaps and remains a valid and important data source for this type of decomposition.[174, 175] For the purposes of this report, WGEA Gender Equality data has been used to supplement the findings of the HILDA data, particularly at the industry level.

The WGEA Gender Equality data collection includes data collected from all private businesses with more than 100 or more employees annually from 2013-14. This captures approximately 40 per cent of all employees in Australia. The WGEA Gender Equality data collection does not include public sector organisations, small businesses or any businesses with fewer than 100 employees.

While the WGEA Gender Equality data collection has not been utilised in the main statistical analysis due to data scope reasons, it has been drawn on in preparing our analysis and presented alongside the analytical results. Importantly, the WGEA and HILDA data (as well as other sources such as ABS), all show that gender pay gaps persist in Australia and that gender segregation is persistent across industries and occupations.

[174]Cassells, R., Vidyattama, Y., Miranti, R. & McNamara, J., 2009. The impact of a sustained gender wage gap on the Australian economy Report to the Office for Women, Department of Families, Community Services, Housing and Indigenous Affairs. Available at: http://library.bsl.org.au/jspui/bitstream/1/1601/1/gender_wage_gap.pdf [Accessed May 16 2022]

[175] Watson, I. 2010. *Decomposing the Gender Pay Gap in the Australian Managerial Labour Market.* Australian Journal of Labour Economics, 13(1), pp. 47-79.

Contact us

Steven Casey
Partner

+61 2 9455 9470
stevencasey@kpmg.com.au

Sarah Hunter
Partner

+61 2 9245 4754
sarahhunter@kpmg.com.au

James McAtamney
Director

+61 2 9455 9985
jmcatamney@kpmg.com.au

KPMG.com.au