KPMG

She's Price(d)less

The economics of the gender pay gap

Update Report prepared for Diversity Council Australia (DCA) and the Workplace Gender Equality Agency (WGEA)

October 2016

kpmg.com/au/paygap

Foreword

KPMG

Gary Wingrove

CEO KPMG Australia

Member of the Male Champions of Change and a WGEA Equal Pay Ambassador

Susan Ferrier

National Managing Partner People, Performance and Culture
KPMG Australia

Much attention has focused on increasing awareness of gender pay inequity. However, relatively little evidence has been developed on the factors driving the gap, how these have changed over time and how they can be addressed to close the pay gap.

KPMG has developed this report, *She's Price(d)less: The economics of the gender pay gap*, for Diversity Council Australia and the Workplace Gender Equality Agency. The report uses structured econometric modelling to determine the factors that underpin the gap, and to what extent they contribute to the issue.

This work, an update to analysis we initially conducted in 2009, shows that despite the endeavours of government and business, the size of the gap, and in particular the role of gender discrimination, has remained stagnant in the past seven years. The issues remain complex, but this evidence is critical in measuring progress and holding ourselves accountable for driving change.

KPMG is committed to contributing to the national conversation – sharing our experiences, our successes and our failures. With this in mind, we have taken the approach of producing two reports. This report details the rigorous modelling methodology and findings. The second is the Executive Companion designed to help you take the most effective step to move towards pay equity by leveraging the insights and initiatives of leading Australian companies (kpmg.com/au/paygap).

Organisations that commit to addressing pay equity see tangible benefits through employee engagement and loyalty. And most importantly these organisations attract the best talent because they have access to and take advantage of the whole talent pool.

We look forward to the conversations and actions this report will spark.

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International.
Liability limited by a scheme approved under Professional Standards Legislation.

Recent public debate reveals widespread lack of community understanding about pay equity – what it is, why it exists, and what can be done to address it – as well as a tendency to minimise or explain away the gender pay gap in Australia through reference to 'women's choices.'

This report makes a critical contribution to the conversation that we have to have in Australia to 'bust these myths'. Because, as the report demonstrates, pay inequity isn't just a social justice issue – it's an economic imperative.

This report also highlights the excellent work that Australian organisations are already doing to tackle pay inequality in their own teams, organisations and industry sectors.

DCA is proud to be part of this conversation and hopes that this report will be the impetus to bridging the divide, as soon as possible.

Lisa Aneese

CEO

Diversity Council Australia

The gender pay gap is an imperfect measure. It is difficult to land on a single figure that captures the scope and complexity of workplace gender inequality.

By the conventional measure based on difference in weekly earnings between full-time working men and full-time working women, men take home an average $260 a week more than women.

We also know that women are much less likely to work full-time than men. In fact three-quarters of part-time employees are women. Women are much more likely to take extended time out of the workforce due to unpaid caring and domestic responsibilities impacting their lifetime earnings, retiring on average with just half of men's superannuation.

Nevertheless, the gender pay gap is an important measure. It's a powerful symbol of lost potential – for individuals, for businesses and for the economy.

Australian women graduate from university in equal numbers to men, but they don't progress through the workforce at the same rate. Data collected by the Workplace Gender Equality Agency shows that just one in four key management personnel and one in eight CEOs are women.

As a society, we accept that talent doesn't reside only in employees of one gender or those without caring commitments. As an economy, we need to remove the barriers to women's full participation.

I welcome this research analysing the gender pay gap and its contributing factors – which include gender segregation across the workforce, time out for caring, as well as discrimination. This research adds to our depth of understanding and, most importantly, provides insights into the multifaceted response needed to close the potential gap.

Libby Lyons

Director

Workplace Gender Equality Agency

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

The Executive Companion for this Report is available at kpmg.com/au/paygap

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International.
Liability limited by a scheme approved under Professional Standards Legislation.

Contents

1 Introduction 3

1.1 Introduction 3

1.2 Purpose and scope 3

1.3 Structure of this Report 4

2 Background 5

2.1 Trends in the gender pay gap 5

2.2 Overview of key developments 6

2.3 Implications for this Report 7

3 Analytical approach 8

3.1 Introduction 8

3.2 Key data and information sources 9

3.3 Limitations 9

4 Results 10

4.1 Overview 10

4.2 The estimated gender pay gap 10

4.3 Factors contributing to an individual's pay 11

4.4 Factors contributing to the gender pay gap 12

Appendix A: Developments in the key drivers of the gender pay gap 15

Overview 15

Recent changes in the Australian labour force 15

Changing factors underlying the gender pay gap 17

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

Appendix B: Detailed approach 37

Overview 37

Approach summary 37

The Household Income and Labour Dynamics Survey 38

Variables tested 39

Equations estimated 42

Recent approaches to modelling the gender pay gap 43

Limitations 48

Appendix C: Case Studies 49

Inherent Limitations

This report has been prepared as outlined in the Scope Section. 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.

The findings in this report are based on a qualitative study and the reported results reflect a perception of Diversity Council Australia (DCA) and Workplace Gender Equality Agency (WGEA) but only to the extent of the sample surveyed, being DCA and WGEA's approved representative sample of stakeholders. Any projection to the wider stakeholders is subject to the level of bias in the method of sample selection.

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

KPMG has 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.

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.

The findings in this report have been formed on the above basis.

Third Party Reliance

This report is solely for the purpose set out in the Scope Section and for DCA and WGEA's information, 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 KPMG's engagement letter dated 1 September 2016. 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.

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

Key findings

The importance of reducing the gender pay gap transcends productivity gains and economic prosperity. Reducing the gap will improve equality in the workplace. This is – and continues to be – a shared responsibility of government, business, its leaders, and its workforce.

Despite significant advances in lifting women's participation in the labour force and women's pay across industries, and an increased recognition of the value of diversity in the workplace, the gender pay gap continues to persist. In Australia, the gender pay gap, based on full-time average weekly earnings, has fluctuated between 14 per cent and 19 per cent over the past 20 years, based on gender pay gap data published by the Australian Bureau of Statistics (ABS).

Based on the most recent statistics, the gender pay gap was 16.2 per cent in 2016 – down 2.4 per cent since a high of 18.6 per cent in 2014, however, it has remained relatively flat over the past 20 years.

Australia is not alone. Recently, the World Economic Forum estimated that at current rates, it would take another 170 years to close the global pay gap between men and women.[1]

Understanding the drivers of the gender pay gap is complex. They include a broad range of factors, including human capital and skills endowment, the level of educational attainment, on-the-job training and accreditation, work experience, and tenure. Critically, however, they also include labour market discrimination – where equally skilled individuals may face different earning potential and employment opportunities due to discrimination by gender, values, and culture.

A stronger focus on driving the value of human capital, while simultaneously addressing labour market rigidities will boost productivity, participation, and ultimately drive greater economic activity and prosperity for all Australians. As a result, it is imperative that there is coordinated and sustained effort in reducing the size of the gender pay gap, and the proportion is attributable to sex discrimination factors. This is a shared responsibility of business, business leaders, and the workforce more broadly – it is an issue that calls for social, cultural, and generational change.

Much attention has been dedicated to increasing awareness of gender pay inequity. However, relatively little evidence has been developed on the factors driving the gap and how these have changed over time. While the issues are complex, this evidence is critical in measuring progress and holding ourselves accountable in driving change.

In 2009, KPMG undertook a major study – *Understanding the Economic Implications of the Gender Pay Gap in Australia* for Diversity Council Australia (DCA) – to develop a more rigorous evidence base around the structural factors underlying the gender pay gap, the contribution of these factors to the

[1] World Economic Forum 2016, *Global Gender Gap Index 2016*.

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

gap, and the potential economic implications in terms of women's participation in the labour force along with broader economic productivity and growth.

KPMG's 2009 analysis was based on data from the 2007 *Household Income and Labour Dynamics in Australia* (HILDA) survey, and built on research undertaken in the United Kingdom (UK) by Walby and Olsen (2002).

KPMG's 2009 Report found that in 2007, of the hourly pay gap of $1.29 ($1.70 in today's dollars), approximately 35 per cent was potentially attributable to sex discrimination.

The study also suggested that introducing flexible work arrangements that enable women to reduce the length of time spent out of the workforce due to care-giving could reduce the gap between male and female earnings, potentially increasing economic activity by up to 9 per cent.

Similarly, implementing policies to reduce industry and occupational segregation could reduce the gender pay gap by up to 32 per cent.

Seven years on, KPMG's latest analysis of the 2014 wave of the HILDA survey indicates that the gender pay gap persists, and sex discrimination continues to account for the single largest component of the gap, and indeed has increased over this time.

Based on analysis of HILDA data, KPMG estimates that the gender pay gap, on an hourly basis, increased from $1.70 in 2007 to $2.41 in 2014 in today's dollars. It should be noted that the gender pay gap has fluctuated between 15 to 19 per cent over the last two decades, including increasing between 2007 and 2014, then reducing slightly between 2014 and 2016.[2]

- **Sex discrimination factors continue to be the single largest contributor** to the gender pay gap. Indeed, the component attributable to sex discrimination has actually increased, from 35 per cent in 2007 to 38 per cent in 2014. This includes direct discrimination as well as indirect factors such as unconscious bias.
- **Industrial and occupational segregation** continue to be among the most significant contributing factors to the gender pay gap. Together, these factors accounted for 28 per cent in 2007 and 30 per cent in 2014.
- There has been a significant decrease in the impact of **part-time employment** in contributing to the gender pay gap, from 14 per cent in 2007 to 4 per cent in 2014. It is possible that an increase in the number of women working part-time in higher income occupations could be contributing to this reduction.
- The largest change in contribution to the gap is from **years out of the workforce**. There are some limitations to the interpretation of this result due to the 2007 HILDA survey including 'access to unpaid maternity leave' as a factor, and subsequently omitting this in 2014 as a result of the introduction of a Government funded Paid Parental Leave scheme.

Focus, effort, and commitment are required to continue to close the gap – and in doing so, promote equality, unlock opportunity, and drive economic prosperity.

[2] The latest statistics from the ABS suggest that, from 2014 to 2016, the gap has reduced to approximately $2.02 in today's dollars.

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

1 Introduction

1.1 Introduction

In 2009, KPMG was engaged by Diversity Council Australia (DCA) to undertake a close examination of the gender pay gap, its underlying factors, and the potential implications of the observed gap in relation to Australia's overall economic growth and prosperity. The development of KPMG's 2009 Report, *Understanding the Economic Implications of the Gender Pay Gap in Australia* ('the 2009 Report') involved:

- a comprehensive literature review and examination of Australian data to understand the factors that comprise the gender pay gap;
- econometric analysis using 2007 *Household Income and Labour Dynamics in Australia* (HILDA) survey data to help quantify the relative impact of different factors on the gender pay gap and assess the implications of these findings on potential economic activity and growth; and
- case studies of employers that have implemented policies and programs that have helped to improve the employment experiences of women, and by doing so, improved and maximised growth opportunities and competitiveness.

Using the 2014 HILDA survey, this current Report provides an update of the modelling undertaken in KPMG's 2009 Report, and seeks to provide more detailed research and analysis into the social and economic factors that contribute to the gap.

1.2 Purpose and scope

KPMG has been engaged by DCA and the Workplace Gender Equality Agency (WGEA) to undertake an update of the 2009 KPMG Report. Given the significant public debate since the release of the original 2009 Report, this update is intended to further contribute to the current public discussion, and drive a deeper and more holistic understanding of the social and economic factors that contribute to the gender pay gap.

This updated Report intends to build on the understanding of the factors underlying the gender pay gap gained through the 2009 Report by updating the econometric model in the 2009 Report. The same analytical approach and methodology has been used with updated data to enable consistency and comparability of results. The approach has also been refreshed using the latest available data and information, along with recognition of the developments domestically and internationally in the evidence base and public discussion.

This Report reflects developments in the research and literature, and the broader understanding of the pay gap between 2009 and 2016. This is supported by changes in the average hourly pay gap from 2007 to 2014, noting that 2015 and 2016 data is not yet available.

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

1.3 Structure of this Report

This report is structured as follows:

- **Section 2** provides a background on the gender pay gap in Australia with a focus on the recent changes identified in data and the broader research and literature;
- **Section 3** provides a summary of the analytical approach to modelling the contribution of various factors to the gender pay gap in Australia;
- **Section 4** provides an overview of the results of the modelling, including changes in the components of the gender pay gap, and the implications of these changes for the Australia's workforce, productivity and economic output; and
- a set of appendices provide supplementary information to the main body of the Report:
  - **Appendix A** summarises the developments in the key drivers of the gender pay gap;
  - **Appendix B** provides a summary of the analytical approach and the associated limitations;
  - **Appendix C** provides detailed information on the data and methodology employed for the purposes of this update; and
  - **Appendix D** provides a series of case studies on different ways of addressing the gender pay gap.

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

2 Background

2.1 Trends in the gender pay gap

Despite significant advances in lifting participation and pay for women in the Australian labour force, the gender pay gap has persisted at around the same level since the 1980s.[3] The factors underlying the gender pay gap are shaped and influenced by a complex interplay of work, family, and societal factors, as well as the structure and dynamics of the labour market. The persistence of the gender pay gap in Australia continues to be a topic of significant discussion across government, business, and the workforce. As such, there is a critical need to continue to build the evidence base and better understand the social and economic factors that contribute to the gender pay gap.

KPMG's 2009 Report highlighted that there have been substantial improvements in the labour market conditions for women in Australia that have led to a narrowing of the gender pay gap over the past century. The 2009 Report also highlighted that the female participation rate had nearly doubled over the past 40 years, and women went from earning around half the wage of men in 1919 to approximately 84 per cent of the average male wage in 2009. However, the 2009 Report also showed that these positive trends, in terms of narrowing the pay gap, have lost momentum over the previous two decades. It also found that the persistence of the gender pay gap may have far reaching negative implications for the Australian economy – restricting competitiveness and opportunities for growth.[4]

The 2009 Report found that the overall size of the gender pay gap on an hourly rate basis, as supported by the 2007 HILDA survey, was $1.29 ($1.70 in today's dollars), with women earning an average hourly rate of $21.91 compared to an average hourly rate of $23.20 for men (equivalent to a pay difference of 5.6 per cent). The latest wave of HILDA data suggests that this gap increased to 7.7 per cent in 2014 on an hourly basis. These findings are consistent with findings from the WGEA, namely, that the gender pay gap, based on weekly earnings statistics published by the Australian Bureau of Statistics (ABS), increased over this time from 15.5 per cent to 18.6 per cent.

While the most recent HILDA data is not yet available for 2016, the latest ABS data suggests that between 2014 and 2016, the gender pay gap (as measured by weekly earnings) has decreased, and currently sits at 16.2 per cent, down from 18.6 per cent in 2014, a trend that will hopefully persist.[5]

[3] Workplace Gender Equality Agency (WGEA) 2016, *Gender pay gap statistics,* August 2016.
[4] DCA/KPMG 2009, *Understanding the Economic Implications of the Gender Pay Gap In Australia*, November 2009, p2.
[5] Workplace Gender Equality Agency (WGEA) 2016, *Gender Pay Gap Factsheet,* August 2016.

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

2.2 Overview of key developments

Changes in the legislative environment

Since the drafting of the 2009 Report, there have been a number of improvements in the policy and legislative environment in Australia. These improvements are evident particularly through continued legislative commitments to reduce workplace discrimination. For example -

- On 20 June 2011, amendments to the *Sex Discrimination Act (1984)* came into effect, providing protection against direct discrimination on the grounds of family responsibility, and increasing accommodation for breastfeeding mothers.[6]
- The *Fair Work Act (2009)* created a national workplace relations system which began on 1 July 2009. Under the Fair Work System, the right for employees to request flexible work was enshrined in law.
- In 2012, the *Workplace Gender Equality Act (2012)* replaced the *Equal Opportunity for Women in the Workplace Act (1999)*. The result is strengthened legislation aimed at improving and promoting gender equality for both women and men in the workplace.
- The *Workplace Gender Equality Act (2012)* established the WGEA, charged with promoting and improving gender equality in Australian workplaces.[7]
- Australia's first national Paid Parental Leave scheme was introduced on 1 January 2011, providing government-funded pay for eligible working parents when they take time off from work to care for a newborn or recently adopted child.

Stronger leadership and recognition

Gender equality is also being promoted across Australian workplaces through a number of key initiatives. 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)* and 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.

More broadly, there has been a push by many public sector agencies and private sector companies to tackle workplace discrimination. Notably, initiatives including the Male Champions of Change and WGEA Pay Equity Ambassador and Employer of Choice programs aim to prioritise reforming workplaces by challenging existing structures and ways of thinking that may drive inequality. For example, the Male Champions of Change, 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 a women's issue, but an economic and social issue. The 26 companies that form Male Champions of Change are responsible for over 400,000 employees, 170,000 of whom are women.

Growing awareness of the impact of family

Despite policy and legislative environment improvements that have sought to drive greater flexibility and gender equality in the workplace, the structural and systemic discrimination faced by women remains difficult to address.

A study carried out by Polachek and Xiang (2014) suggested that a significant cause of the discrepancy in return on investment is caused by a complex interplay of social factors and gender

[6] Sex and Age Discrimination Legislation Amendment Bill 2010 (Commonwealth).
[7] Workplace Gender Equality Act 2012 (Commonwealth) (https://www.wgea.gov.au/about-legislation/workplace-gender-equality-act-2012)

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

norms.[8] Notably, the study highlighted the variation in wage gap was highly linked to demographic characteristics such as marital status, children, and the spacing of children. The gap between single men and women was the smallest, at less than 10 per cent, while the gap between married men and women grew to approximately 40 per cent. Polachek and Xiang suggested that this is due to societal and familial expectations that women take the role as primary caregivers, thus reducing their capacity to dedicate to lifetime work, and the associated earnings growth. Notably, the wage gap grows most prominently during the period in which women generally have children, with the male wage profile growing most sharply at this stage, while the female wage profile tends to remain stagnant.

2.3 Implications for this Report

Understanding the drivers of the gender pay gap is complex. Much attention has been dedicated to increasing awareness of gender pay inequity, however, relatively little evidence has been developed on the factors driving the gap and how these have changed over time. While the issues are complex, this evidence is critical in measuring progress and holding ourselves accountable in driving change.

The developments outlined above underscore the need for a greater evidence base to better understand the contribution of different factors to the gap, and how these vary across different settings and over time. Requirements under the Workplace Gender Equality Act 2012 that non-public sector organisations with 100 or more employees must report on data relating to pay, workforce composition and employer action is contributing to a growing evidence base on workplace gender equality in Australia. Such evidence is a critical input to the policy and public discussion, alongside the various legislative, organisational, and community initiatives underway to close the gap.

The 2009 Report provided an important base of more detailed evidence around these issues, providing insight around the contribution of issues such as gender, industry and occupational structure, age, tenure, and work arrangements to the gender pay gap. The analysis largely followed the methodology used in Walby and Olsen (2002) to apportion the gender pay gap in the United Kingdom, with appropriate translation to apply this within the Australian context.[9]

Within the context of the significant public debate since 2009 around gender equity, diversity, and pay-equality, KPMG has updated the 2009 Report with the benefit of the most recent HILDA data, from the 2014 wave of the survey. This update is intended to further contribute to the current public discussion, and drive a deeper and more holistic understanding of the social and economic factors that may contribute to the gender pay gap in Australia.

The following Sections of this Report outline the analytical approach to updating the 2009 modelling, together with a summary of the key changes observed over the period from 2007 to 2014.

[8] Polachek S.W, Xiang J. 2014, *The Gender Pay Gap Across Countries: A Human Capital Approach* (Institute for the Study of Labor).

[9] Walby, S. and Olsen, W. 2002, *The Impact of Women's Position in the Labour Market on Current UK Productivity and Implications for Future Productivity Growth*, Report for the Department of Trade, Industry, Women and Equality Unit, London.

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

3 Analytical approach

3.1 Introduction

The analysis within this Report builds on the knowledge and the econometric model developed through the 2009 Report, and reflects the most recent data and information available, as well as the key developments in the research and literature since 2009. The analysis used total wages as a proxy for productivity. This is in broad alignment with previous approaches, including the 2009 Report, and given that it is not possible to obtain data on individual output by gender, wages are broadly considered to be equivalent to the value of a person's output.[10]

The approach involved:

- estimating a model to determine the factors that affect the probability of a person being in the labour force; and
- estimating the factors that affect the hourly wages earned by a person in the labour force.

Since the 2009 Report was conducted, there has been a significant body of research and literature that has further contributed to the growing evidence base around understanding the factors that contribute to the gender pay gap in Australia. Primarily, the range of approaches used to model these contributing factors are those which were developed prior to 2009, indicating a broad consistency in the techniques used since the 2009 Report.

As part of the development of the methodology update for this report, a review of the relevant literature was undertaken to ascertain and analyse the techniques and datasets utilised and results generated through varied approaches. These, together with further details on the methodology, key data and information sources, and limitations are summarised in Appendix B.

[10] 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.

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

3.2 Key data and information sources

A broad range of key data and information sources were considered in undertaking the modelling and analysis. The key sources include the following:

- DCA/KPMG 2009, Understanding the Economic Implications of the Gender Pay Gap In Australia, November 2009;
- Waves 7 (2007) and 14 (2014) of the HILDA survey data, published by the Melbourne Institute;
- labour force statistics published by the Australian Bureau of Statistics (ABS);
- gender pay gap statistics published by WGEA;
- National Centre for Social and Economic Modelling (NATSEM) 2009, *The Impact of a Sustained Gender Pay Gap on the Australian Economy*;
- Glassdoor 2016, *Demystifying the Gender Pay Gap: Evidence From Glassdoor Salary Data*, Research Report, March 2016;
- Watson, I. 2010, *Decomposing the Gender Pay Gap in the Australian Managerial Labour Market,* Australian Journal of Labour Economics 13(1), 49–79; and
- Bankwest Curtin Economics Centre (BCEC) 2016, *Gender Equity Insights 2016: Inside Australia's Gender Pay Gap.*

3.3 Limitations

There are a number of limitations associated with the approach that need to be taken into consideration when interpreting findings.

- It is noted that using wages as a proxy in examining the gender pay gap implies a point-in-time analytical framework for the development of this Report. Therefore, the consideration of wages at two separate points in time (primarily, 2007 and 2014) is not intended to provide a complete understanding of any and all potential changes and events, but rather provide a perspective on the extent to which change has occurred in the contributing factors.
- There is a significant body of research and literature on differences between men and women that span the lifetime of an individual in the labour force, such as the wealth gap, differences in lifetime earnings, and superannuation. These issues are not able to be systematically or reliably measured with the scope of available data and are outside the scope of this Report.
- 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. In undertaking this analysis, KPMG has worked in discussion with HILDA to apply appropriate weightings to control and adjust, to the extent permissible, for these sampling issues. However, notwithstanding this, it is important to note that the analysis may be impacted by the characteristics of the survey respondents and typical sources of sampling error and response bias.
- The analysis has sought to test a broad range of potential driving factors, however, it is important to recognise that in some cases, available data can only form a proxy for the factor attempting to be modelled.
- While the analysis within this Report attempts to capture the statistical association between the gender pay gap and the factors modelled, these cannot be definitively attributed and need to be considered in the broader context of available evidence and key developments.

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

4 Results

4.1 Overview

This Section discusses the results of the modelling and analysis of the gender pay gap in Australia, including the factors that contribute to the gap. The results are set out as follows:

- the overarching findings of the modelling and analysis;
- analysis of factors contributing to differences in pay; and
- analysis of the size and contribution of different factors to the gender pay gap.

The results have been presented with the intent of providing a comprehensive and holistic understanding of the various factors contributing to the gender pay gap, whilst also recognising the complexities and limitations in undertaking analysis of this nature.

4.2 The estimated gender pay gap

KPMG considered a number of data sources in estimating the gender pay gap. The most recent data available from the HILDA survey (Wave 14) showed that women earned $29.07 per hour, on average, in 2014, while men earned $31.48 on average. This represents an hourly wage gap of 7.7 per cent (or $2.41 per hour), and an increase from 5.6 per cent in 2007. Similarly, data published by the ABS showed an increase in the weekly full time wage gap over the same period, from 15.5 per cent to 18.6 per cent.

The most recent labour force statistics published by the ABS over the period from 2014 and 2016 suggest that the gap in average weekly earnings reduced significantly, to about 16.2 per cent in 2016. Taking these latest trends published by the ABS into consideration suggests that the hourly wage gap may have declined to 6.2 per cent in 2016. Applying this trend to the hourly wage gap estimated from the 2014 HILDA data suggests that the hourly pay gap may have fallen to $2.02 in 2016. These changes in the hourly pay gap are summarised in Table 4-1 below.

Table 4-1: Changes in the gender pay gap between 2007 and 2016

Factor	2007 *HILDA Survey Wave 7*	2014 *HILDA Survey Wave 14*	2016 *Estimated based on HILDA Survey Wave 14, taking into account trends in ABS data*
Hourly pay gap *(Absolute equivalent, $2016)*	$1.70	$2.41	$2.02

Source: *The Household, Income and Labour Dynamics in Australia Survey: Wave 14 (HILDA Survey)* and KPMG analysis.

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

4.3 Factors contributing to an individual's pay

The first step in understanding the gender pay gap involves undertaking statistical analysis, using the HILDA survey data, to understand the significance of different factors in determining hourly rates of pay for a given person with a particular set of individual and workforce participation attributes. This analysis is then used as a key input to the analysis in Section 4.4, which breaks down the contribution of specific factors to pay with the benefit of the statistical analysis outputs whilst also accounting for differences in characteristics between men and women working in different settings.

The factors contributing to an individual's pay, and differences in pay between individuals, are complex and multi-faceted. From the factors that may contribute to differences in pay for both men and women examined by KPMG, the main findings in 2014 are that, holding the effects of all other factors constant:

- **women earn on average 8.0 per cent less per hour than men** – this represents an increase from 7.4 per cent estimated in 2007. It is important to note that this does not imply that the size of the gender pay gap is 8.0 per cent, as the overall gap is the result of many factors and the relative contribution of each of these factors is outlined in the following Section;
- **each year of education has a positive impact on hourly income of around 3 per cent** – this represents a decrease from the 3.5 per cent estimated in 2007;
- **part-time workers earn on average 5.4 per cent per hour less than full-time workers** – this represents a decrease from the 9.7 per cent estimated in 2007;
- **interruptions to a person's work history reduces their income by varying degrees** – each year of full removal from the labour force – including for family and care-related reasons – reduces hourly pay by around 0.7 per cent, while each year of unemployment reduces income by approximately 2.3 per cent;
- **individuals working at large firms earn more than those working at smaller firms** – individuals working at large firms earn 6.5 per cent more than people working at medium sized firms (20 to 100 employees) and 11.2 per cent more than people working at small firms (fewer than 20 employees), representing a small increase from 2007;
- **individuals satisfied with the flexibility their job provides to balance work and non-work commitments do not earn materially more per hour than those unsatisfied** – previously it was found that pay is positively related to job flexibility satisfaction;
- **industries and occupations with a high representation of male employees have higher levels of pay** – controlling for specific industries and occupations, each 10 per cent increase in the ratio of men to women in an industry increases the average wage by 1.9 per cent, while each 10 per cent increase in this ratio in an occupation increases the average wage by 0.8 per cent; and
- **people living in regional areas earn less than those in cities, with the gap between 2.4 and 3.8 per cent** – this represents a decrease from the 5.5 to 7.4 per cent gap estimated in 2009.

It is important to note that these estimates were developed through the statistical analysis and hold the effects of all other factors constant, meaning that the estimates may vary relative to headline estimates developed based on the underlying, unadjusted data sources. It is also important to note that the above results do not account for differences in characteristics between men and women working in different settings and therefore do not constitute the underlying contribution of these factors to the gender pay gap. This analysis is provided in Section 4.4 below.

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

4.4 Factors contributing to the gender pay gap

In considering the gender pay gap, it is also critical to estimate the relative contribution of factors in driving the gap. This considers the significance of the various factors identified in driving the gap (as outlined in Section 4.3 above) whilst also taking into account the differences in characteristics between men and women working in different settings, whether they be structural issues, gender representation across industries and occupations, or representation in different types of working arrangements.

KPMG built on the outputs of the analysis outlined above, in line with the methodology from Walby and Olsen (2002), to break down the factors associated with the gender pay gap. In doing so, the decomposition of the factors impacting the gender pay gap have been refined since the 2009 Report to better account for the role of residual factors in driving the gap. This approach accounted for the inherent differences between men and women across the key explainable variables, such as human capital endowment and occupation and industry locations, to enable a deeper understanding of key parameters impacting the gender pay gap, and identify the proportion of the gap which is solely explained by sex discrimination. As highlighted above, the size of the hourly gender pay gap according to the HILDA survey data in 2014 was found to be $2.41 in today's dollars.

Table 4-2 below provides a breakdown of this pay gap by contributing factor.

Table 4-2: Decomposition of the gender pay gap, 2007 and 2014

Factor	2009 Report (2007 data)		2016 Report (2014 data)	
	% of effect	Absolute equivalent	% of effect	Absolute equivalent
Sex discrimination	35%	$0.45	38%	$0.88
Years not working (interruptions)	9%	$0.12	21%	$0.48
Industry segregation index	10%	$0.13	19%	$0.45
Occupational segregation	18%	$0.23	11%	$0.24
Age (experience, proxied by age, years)	8%	$0.10	6%	$0.14
Share in part time employment	14%	$0.18	4%	$0.08
Tenure with current employer (years)	3%	$0.04	1%	$0.03
Share working in government or NGOs	3%	$0.04	0.4%	$0.01
Total	**$1.29** ($1.70 in 2016 dollars)		**$2.32** ($2.41 in 2016 dollars)	

Note: The percentage figures above may be subject to minor rounding errors, and therefore may not add to 100 per cent.

Source: *The Household, Income and Labour Dynamics in Australia Survey: Wave 14*; KPMG analysis.

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

The factors that were found to be most significant in contributing to the gender pay gap in 2007 have continued to contribute to the gap to a substantial extent in 2014.[11]

The key components of the gender gap in 2014 are summarised below:

- **Gender discrimination continues to be the single largest factor contributing to the gender pay gap** – The analysis suggests that the proportion of the gender pay gap that is attributable to gender discrimination has worsened from 35 per cent in 2007 to 38 per cent in 2014. Labour discrimination occurs when equally skilled workers employed in the same job earn different incomes and have different employment opportunities. The research shows that systemic discrimination remains a persistent feature of the workforce, with variable levels of human capital endowment between men and women explaining only a small proportion of the gender pay gap.[12] Further, the proportion of the pay gap that can be attributed to differences in skills and education between men and women decreases each year, as women continue to close the gap in terms of education and labour participation.
- **Industrial and occupational segregation continue to be significant contributing factors to the gender pay gap** – Collectively, industrial and occupation segregation represent 30 per cent (or $0.69 per hour) of the gap, suggesting that the representation of men in particular industries (i.e. mining and construction) and in particular occupations (i.e. automotive and engineering trade workers, and construction trade workers) continues to have an effect on wages, with earnings in occupations and industries with a larger share of males being higher than wages for female dominated industries and occupations. Between 2007 and 2014, there appears to have been some success in addressing the gap attributable to occupational segregation, however, industry segmentation has increased. This may provide guidance when attempting to address the gender pay gap. Labour force statistics also suggest the increase in industrial segregation as a contributing factor may be due to industrial sectors that are dominated by men historically attracting higher wages than sectors with a high ratio of female workers, with male representation further increasing in these sectors since 2009. Furthermore, female representation has increased in the health care and social assistance industry since 2009, an industry that traditionally attracts lower incomes. Addressing the impact of industrial segregation on the gender pay gap will require a concerted response by policy makers, industry and the broader community.
- **There has been a significant decrease in the impact of part-time employment** – The share in part-time employment accounts for only four per cent of the gender pay gap, down from 14 per cent in 2007, representing a decrease of ten percentage points, or $0.10 per hour. One possible explanation for this is that between 2007 and 2014, across both genders, the largest increase in share of part-time employees was in women within higher income quintiles.
- **The impact of tenure with current employer on the gender pay gap has reduced** – The 2014 results indicate that women have worked with their current employer for six and a half years, which is half a year longer than was found in 2007. The impact of tenure with an employer on the gender pay gap has reduced from 3 per cent in 2007 to 1 per cent in 2014. The 2014 results also indicate that women in the workforce are, on average, slightly older than men in the workforce, however the impact of age difference on the gender pay gap has reduced from 8 per cent in 2007 to 6 per cent in 2014.
- **There has been a decrease in the impact of employer type on the gender pay gap** – The impact of employer type on the gender pay gap has reduced from 3 per cent in 2007 to 0.4 per cent in 2014. However, in both the public and private sectors, men occupy a significantly larger proportion of higher income earning groups.
- **The largest changing factor having a significant impact on the gender pay gap is years not working** – career and work interruptions are responsible for 21 per cent of the proportion of the gender pay gap in 2014 compared to 9 per cent in 2007. However, this result must be interpreted with caution, noting that the 2007 HILDA survey included 'access to unpaid maternity leave' as a

[11] These findings are also broadly in line with analysis conducted in March 2016 by Glassdoor that decomposed over 500,000 salaries shared anonymously using the Oaxaca-Blinder decomposition method.[11] The report published by Glassdoor found the unexplained pay gap to be 33 per cent.
[12] Glassdoor 2016, *Demystifying the Gender Pay Gap: Evidence from Glassdoor Salary Data.*

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

factor, which was subsequently omitted in 2014 as a result of the introduction of a Government funded Paid Parental Leave scheme. Having said this, in both reports it is clear that interruptions in work history continue to play a role in explaining the gender pay gap.

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

Appendix A: Developments in the key drivers of the gender pay gap

Overview

This Section of the Report provides an overview of the developments regarding the key drivers of the gender pay gap, and presents the latest data and information around the Australian labour force, including overarching trends in skills differentials and labour market rigidities.

Recent changes in the Australian labour force

While there have been significant changes in labour force participation over the last couple of decades, level of educational attainment, and total earnings for women over the last few decades, these changes have been less marked in the Australian labour force since 2009. Nonetheless, these factors – along with a broader range of contributing factors – have continued to shape the labour force experiences of women in Australia, and the evidence suggests that the gender pay gap continues to persist across sectors and occupations.

In Australia, labour force participation for all persons decreased marginally from 65.3 per cent in November 2009 to 64.8 per cent in July 2016.[13] However, trends in labour force participation over the same period differed between males and females – labour force participation for males decreased marginally from 72.2 per cent to 70.5 per cent in July 2016, while labour force participation for women increased from 58.5 per cent in November 2009 to 59.4 per cent.[14]

Overall, women comprise 46.2 per cent of all employees in Australia.[15] However, the increase in labour force participation for women has not had significant impacts on employment type - women continue to constitute:

- a greater proportion of part time work (71.6 per cent);
- a greater proportion of casual work (54.7 per cent); and
- a smaller proportion of the total full-time workforce (36.7 per cent).[16]

Similarly, while labour force participation has increased for women, average wage growth continues to be stronger for men. Data from the HILDA survey shows that mean weekly earnings of full-time employees increased by 24.1 per cent for males and by 18.4 per cent for females between 2001 and 2014.[17] In terms of hourly earnings of part-time employees, the mean increased by 16 per cent for males compared to just 13.4 per cent for females. On the other hand, the most recent data from the

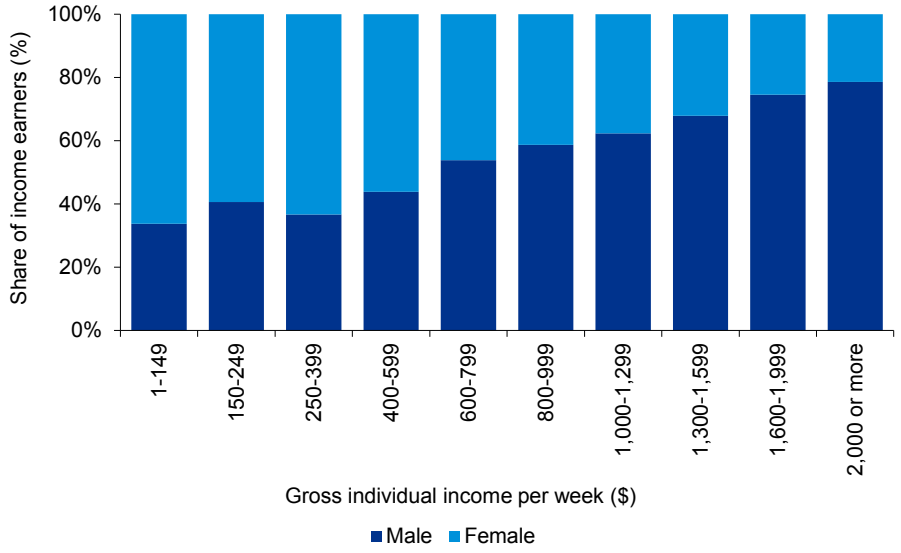
[13] Australian Bureau of Statistics (ABS) 2016, *Labour Force, Australia*, July 2016, cat.no. 6202.0.
[14] Ibid.
[15] Australian Bureau of Statistics (ABS) 2016, *Labour Force, Australia*, July 2016, cat.no. 6202.0.
[16] Australian Bureau of Statistics (ABS) 2015, *Characteristics of Employment Australia*, August 2014, cat. no. 6333.0.
[17] Melbourne Institute of Applied Economic and Social Research 2016, *The Household, Income and Labour Dynamics in Australia Survey: Selected Findings from Waves 1 to 14*.

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

ABS shows that the trend growth in female earnings is triple that for male earnings (1.9 per cent compared to 0.65 per cent).[18]

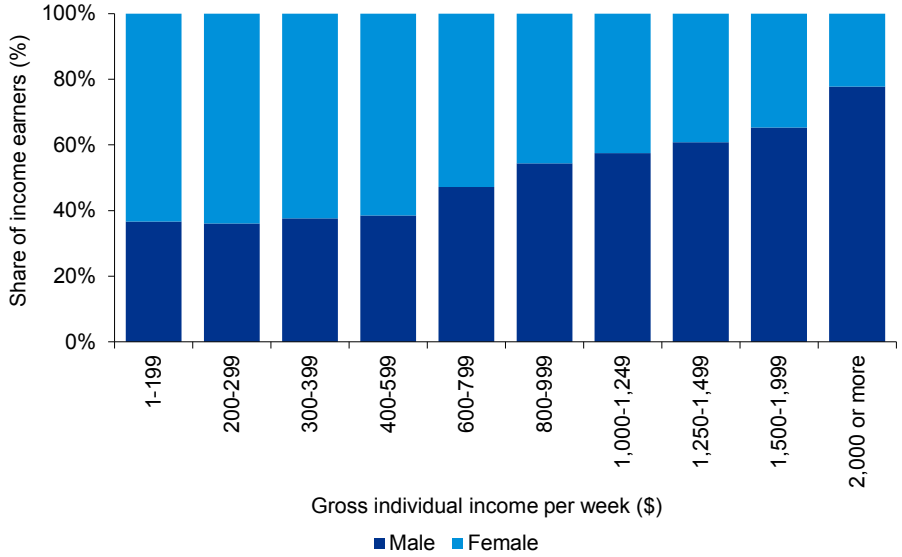
The nature of the gender pay gap is clearly visible in Figure A-1 and Figure A-2, which illustrate the distribution of men and women across income brackets in 2006 and 2011 based on ABS Census data. From both of these graphs, it is evident that there is a much larger proportion of women in the lower income earning workforce, while men dominate the higher income brackets. Between 2006 and 2011, the percentage of men in the second highest income bracket fell by 9 per cent and the percentage of men in the lowest income bracket rose by almost 3 per cent. However, the proportion of males in the highest income bracket remained relatively unchanged at 77.8 per cent.[19]

Figure A-1: Income distribution by gender, 2006



Source: Australian Bureau of Statistics (ABS) 2006, *Census of Population and Housing*

Figure A-2: Income distribution by gender, 2011



Source: Australian Bureau of Statistics (ABS) 2011, *Census of Population and Housing*.

[18] Australian Bureau of Statistics (ABS) 2016, *Labour Force, Australia*, September 2016, cat.no. 6202.0.

[19] Australian Bureau of Statistics (ABS) 2006 and 2011, *Census of Population and Housing*.

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

Changing factors underlying the gender pay gap

As explored in detail in the 2009 Report, there are a number of complex and interrelated factors that contribute to the gender pay gap. Understanding the changes in these factors over time will be critical to underpinning a stronger understanding of the gender pay gap, and how labour market structures can shape the gender pay gap. The analysis undertaken by Walby and Olsen (2002) to understand the gender pay gap suggests that the pay gap can be attributable to two broad factors, namely:

- **skills differentials** – females may experience lower levels, returns and access to education and training; and
- **labour market rigidities** – there may be labour force segregation by gender, insufficient flexibility and support to allow work life balance, negative impacts of policy and legislation, and broader gender discrimination.[20]

These two factors are examined in greater detail below, with specific detail around the Australian labour market context and the key developments between 2009 and 2016.

Skills differentials

Trends in skills endowment for men and women

Education	• Women under the age of 30 continue to pursue non-school education at a higher rate than men, with 38 per cent of women in the 18 to 24 years age bracket obtaining non-school qualification, compared to 33.5 per cent of men.[21] • Given the lag in returns to education (i.e. career and wage increases over time), as well as the complexities around direct attribution, there are challenges to estimating the direct effect of education on wages for women.
Employer-based training	• There has been an increase in the relative participation of women in employer-based training compared with men. In fact, 2013 data from the ABS suggests that women are now more likely to participate in on-the-job training (37 per cent compared with 33 per cent). • 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.[22] • While women are more likely to participate in on-the-job training in general, they are also – in some instances – overrepresented in part-time employment, and work in other contexts where access to and availability of on-the-job training may be lower.

[20] 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.
[21] Melbourne Institute of Applied Economic and Social Research 2016, *The Household, Income and Labour Dynamics in Australia Survey: Selected Findings from Waves 1 to 14*.
[22] Ibid.

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

Work experience	• The 2009 Report indicated that women tend to have fewer years of work experience due to disruptions in work histories often due to their dual positions as primary carers. However, data from 2014 indicates that the difference in average years' work experience between male and female wages across almost all age groups has reduced, albeit moderately.[23] • Women in the labour force have, on average, 2.9 fewer years of work experience than men, down from 3.5 years in 2007. • The gap between the male and female average years of work experience between 2014 and 2007 has reduced from 6.7 per cent to 5.4 per cent, with the greatest reductions found for those in the older age categories.[24]
Tenure	• Tenure with an employer also makes a positive contribution to an individual's human capital, as productivity is likely to increase when individuals acquire higher levels of firm-specific knowledge, expertise, and skills. • The 2009 report found that women typically have fewer years of tenure with their current employer. However, results indicate that women have worked with their current employer for six and a half years, which is half a year longer than was found in 2007. The biggest reduction in this measure has been the number of all women in the workforce with less than one year with their current employer, which has reduced by four per cent, whilst the reduction in men in this category has been approximately one per cent.

Overview

The difference between men and women's pay is often attributed to differing levels of skill and experience. As a population, women have marginally lower levels of non-school education then men, at 57 per cent and 60 per cent respectively,[25] and less experience and tenure, with tenure being the number of years with the current employer. Given the positive relationship between skills and earnings, the lower level of skills (on average) for women may translate into lower earnings relative to men over time.

There are three potential factors that may contribute to skills differentials between men and women, namely:

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

These factors are discussed in greater detail below, together with the differences in the returns to skills endowment earned by men and women.

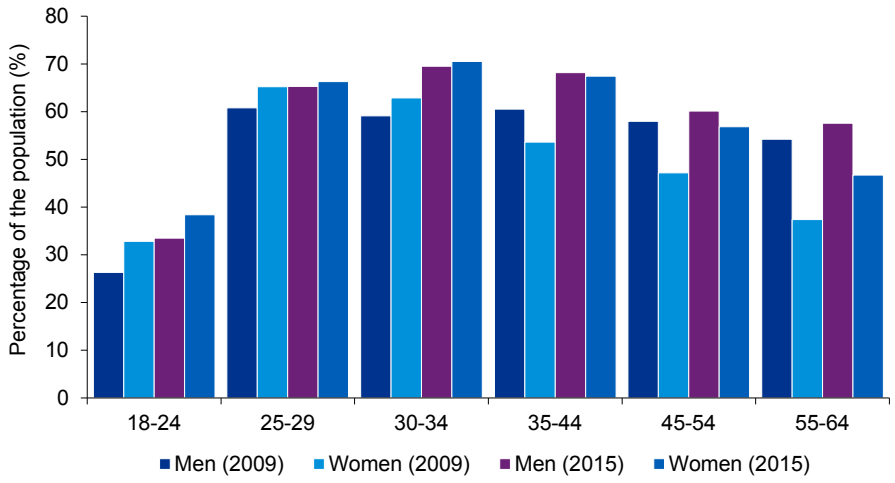
Educational qualifications

Education represents one of the key investments in human capital, and the returns on education are typically lagged and associated with career and wage advancement over time. The proportion of individuals seeking non-school education has increased for both men and women in recent years. Since 2009, the proportion of younger women pursuing non-school education has increased at a faster rate, with 38 per cent of women in the 18 to 24 years age bracket obtaining non-school qualifications, compared to 33.5 per cent of men within the same age bracket (Figure A-3).

[23] Melbourne Institute of Applied Economic and Social Research 2016, *The Household, Income and Labour Dynamics in Australia Survey: Selected Findings from Waves 1 to 14*.
[24] It is important to note that for the purposes of the modelling exercise and as a result of data limitations, age has been used as a proxy for experience. However, while work experience and age are intrinsically linked, they are also distinct and need to be considered within the appropriate context.
[25] Non-school education is comprised of: qualifications which exceed a secondary school qualification. ABS 2015, *Education and Work Australia*, May 2015 (Cat No. 6227).

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

Figure A-3: Share of the population with non-school qualifications, by age (2009 and 2015)



Source: Australian Bureau of Statistics (ABS) 2016, *Gender Indicators*, Australia, August 2016.

Further, as shown in Table A-1 below, while a larger proportion of men hold certificate qualifications, a greater proportion of women have higher levels of educational attainment, including bachelor degrees and diplomas. If the current growth in non-school qualifications for women is maintained, women may become more qualified than men in the next few years.

Table A-1: Share of population with non-school qualifications, by gender (2006 and 2015)

Non-school qualification	Share of male population 2006 (%)	Share of female population 2006 (%)	Share of male population 2015 (%)	Share of female population 2015 (%)
Postgraduate degree	2.8	2.0	6.9	6.2
Graduate diploma or certificate	1.0	1.6	3.1	5.4
Bachelor degree	9.7	11.5	15.3	18.4
Advanced diploma or diploma	5.7	7.4	8.4	11.4
Certificate	21.2	9.8	26.0	17.9
Total	**40.4**	**32.3**	**59.6**	**59.4**

Source: Australian Bureau of Statistics (ABS) 2006, *Census of Population and Housing* and Australian Bureau of Statistics (ABS), *Qualifications and Work*, Australia 2015 (Cat. No. 4235.0).

On-the-job training

Skills endowment can also be increased through employer-based training. Data from the ABS in 2013 suggested that 27 per cent of the population undertook on-the-job training, with the highest level of participation for individuals between the ages of 25 and 54.[26] In addition, a larger proportion of

[26] Australian Bureau of Statistics 2013, *Work-Related training and Adult Learning, Australia* (Apr 2013), Cat. No. 4234.

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

women undertook on-the-job training, with 36.9 per cent of women participating, compared to the 32.5 per cent of men in the same age bracket of 15 to 74 years.[27]

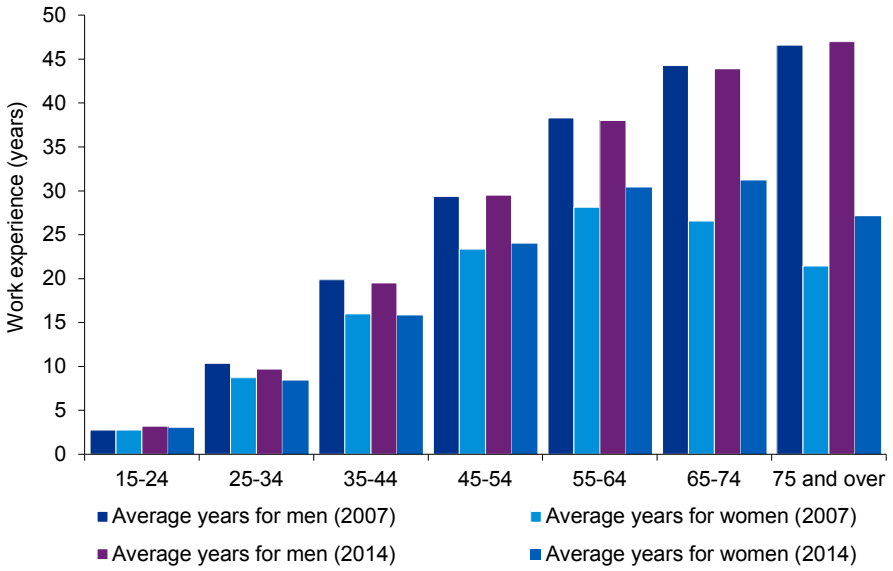
However, the ABS statistics also showed that participation in on-the-job training was lower for individuals who were employed part-time, worked in smaller organisations, operated at a lower occupational level, or worked in the private sector.[28] Therefore, while women are more likely to participate in on-the-job training in general, they are also – in some instances – overrepresented in part-time employment, and work in other contexts where access to and availability of on-the-job training may be lower.

Tenure and experience

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 show that the average number of years of work experience is often lower due to disruptions in work histories as a result of motherhood and their roles as the primary carer.[29]

Figure A-4 below indicates that the difference in average years of work experience between men and women across almost all age groups changed marginally. Overall, it appears that the average years of work experience for women has increased across most age groups, particularly for women above 45. This may reflect changes in the structure of the Australian labour market over the seven years between the two HILDA waves under consideration, or changes in the broader environment that may have better enabled women to build their work experience.

Figure A-4: Average years of work experience for men and women by age (2007 and 2014)



Source: Melbourne Institute 2007 and 2014, The Household Income and Labour Dynamics in Australia (HILDA) Survey, Waves 7 and 14.

Table A-2 shows that across all levels of educational attainment, women have fewer years of work experience than men, and this is consistent across the 2007 and 2014 data. Within the 2014 data, the biggest gap in average years of work experience between men and women was for individuals with less than Year 12 education, or those with a technical qualification, where women had on average nine years less work experience than men.

[27] Ibid.
[28] Ibid.
[29] 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

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

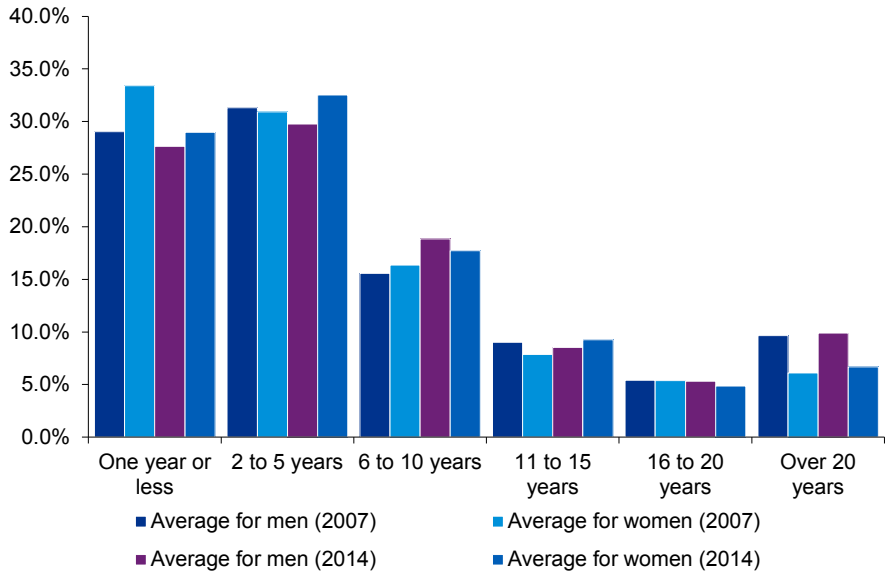
Table A-2: Average years of work experience, by education and sex (2007 and 2014)

Education level	Women (2007)	Women (2014)	Men (2007)	Men (2014)
Postgraduate qualification	20.3	19.8	24.9	24.7
Bachelor degree	17.0	17.5	17.7	21.1
Certificate, advanced diploma or diploma	18.6	19.6	27.8	26.8
Year 12	13.1	12.3	9.9	14.1
Less than Year 12	19.6	18.2	30.0	22.3

Source: Melbourne Institute 2007 and 2014, The Household Income and Labour Dynamics in Australia (HILDA) Survey, Waves 7 and 14.

In the 2009 Report, it was found that women also typically have fewer years of tenure with their current employer, however, this gap appears to be converging, based on the data examined from 2007 and 2014. Results from the HILDA 2014 survey indicate that on average, women have worked with their current employer for six and a half years, which is half a year longer than was found in 2009, though this has been consistently one year less than men in both 2007 and 2014. Figure A-5 below shows that the number of all women in the workforce with less than one year with their current employer has reduced by 4 per cent between 2007 and 2014, whilst the reduction in men in this category has been around 1 per cent. By contrast, the difference between male and female tenure with a current employer has remained relatively similar for those who have been with the same employer for over five years.

Figure A-5: Years of tenure with current employer, by sex (2007 and 2014)



Source: Melbourne Institute 2007 and 2014, The Household Income and Labour Dynamics in Australia (HILDA) Survey, Waves 7 and 14.

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

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 males and females with different educational qualifications (without controlling for other differences) suggests that for all educational levels, women earn less income than men on average. Figure A-6 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. Since 2007, the wage gap for women holding certificate level education or lower has increased from 42 per cent in 2007 to 45 per cent in 2014. Overall, while the percentage difference is more marked for women with lower levels of educational attainment, the data also shows that average individual income for women has worsened between 2007 and 2014 across all levels of educational attainment.

Figure A-6.1: Average individual income for women and men, by educational attainment (2007)

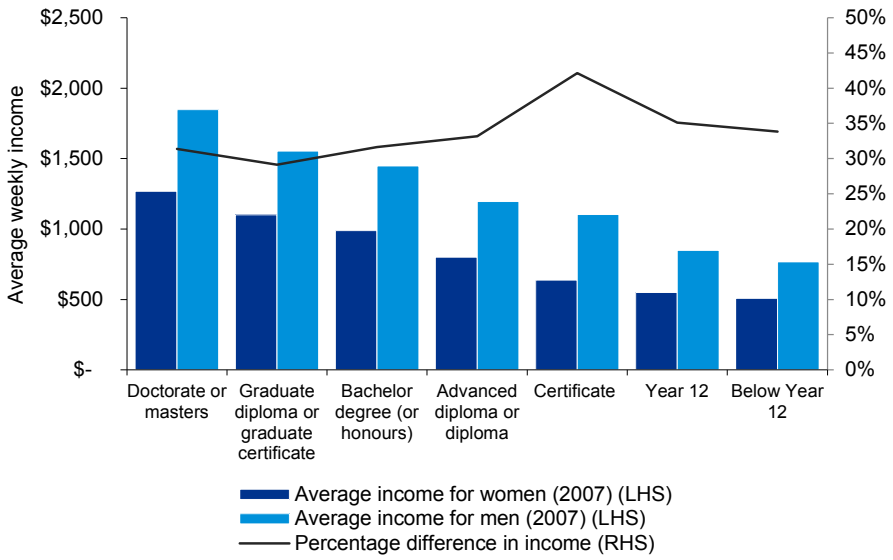
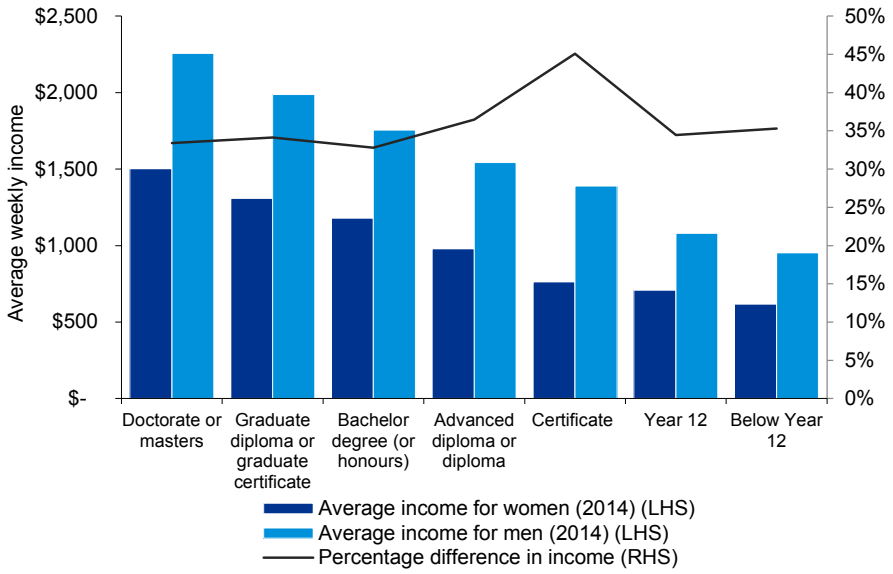


Figure A-6.2: Average individual income for women and men, by educational attainment (2014)



Source: Melbourne Institute 2007 and 2014, The Household Income and Labour Dynamics in Australia (HILDA) Survey, Wave 7 and 14.

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

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. Figure A-7 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.

Comparing the labour market status for women across 2007 and 2014, there was a larger proportion of women in full time employment across all educational levels in 2007. However, this trend was also observed for men. Additionally, for higher educational levels, there appears to be an increase from 2007 to 2014 in the proportion of women who are employed part time.

Figure A-7.1: Labour status of women and men by highest educational qualification (2007)

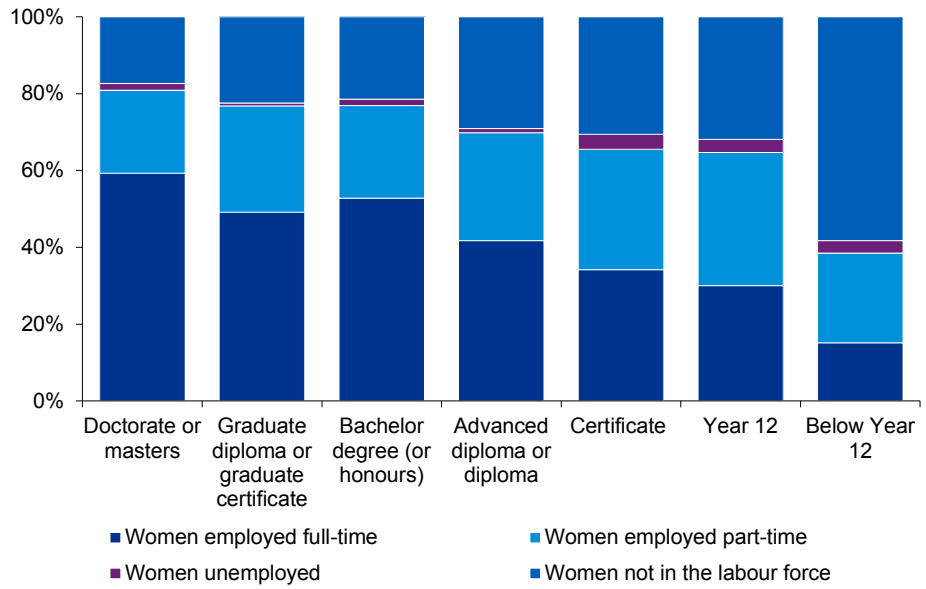
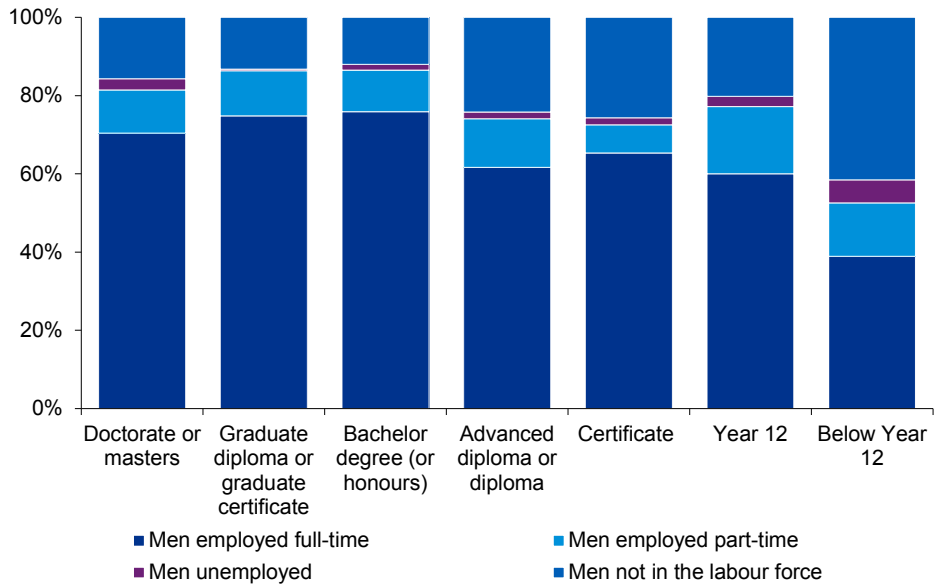


Figure A-7.2: Labour status of women and men by highest education qualification (2014)



Source: Melbourne Institute 2007, The Household Income and Labour Dynamics in Australia (HILDA) Survey, Wave 7.

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

Figure A-8.1: Labour market status of women by highest educational qualification (2014)

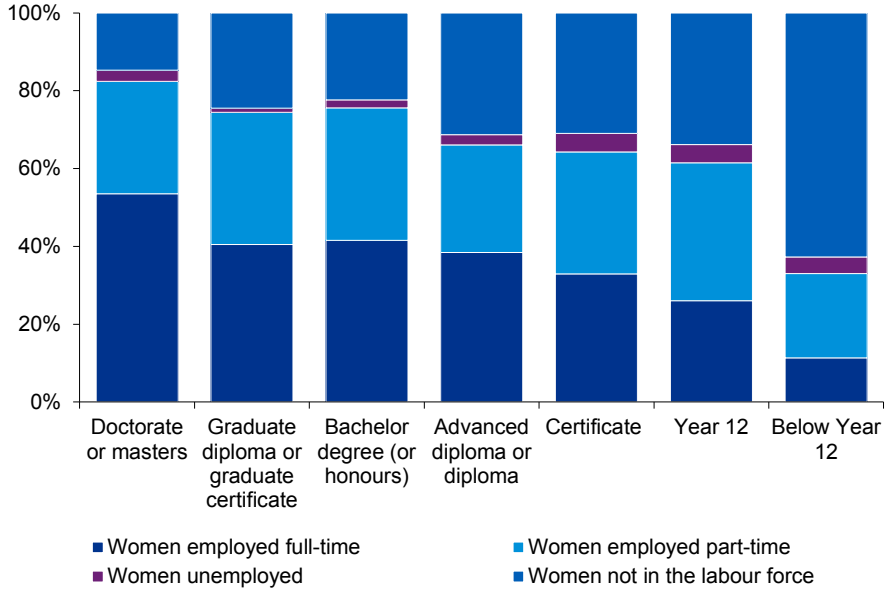
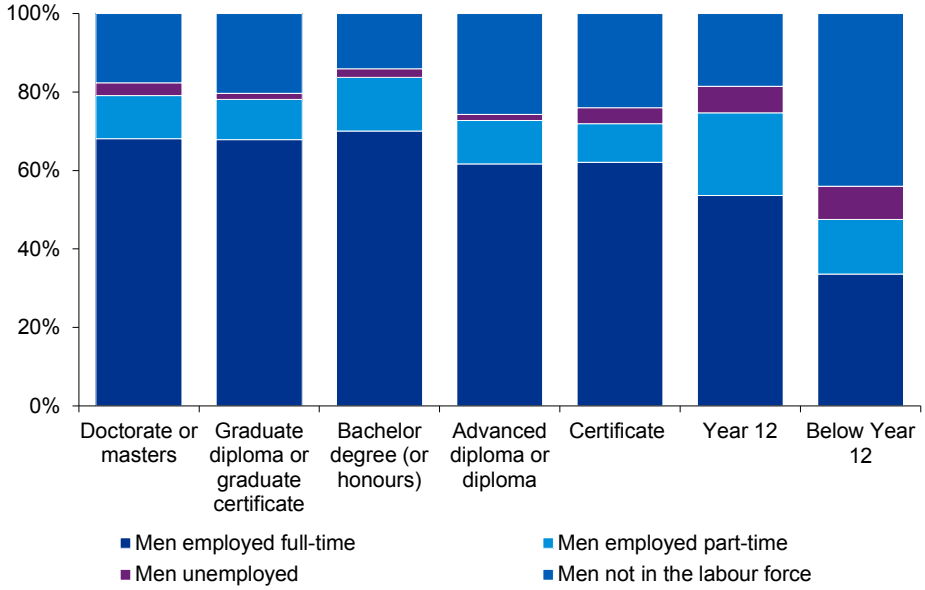


Figure A-8.2: Labour market status of men by highest education qualification (2014)



Source: Melbourne Institute 2014, The Household Income and Labour Dynamics in Australia (HILDA) Survey, Wave 14.

Despite women reaching higher levels of educational attainment, there has not been an associated decrease in the pay gap between women and men. A study carried out by Solomon W. Polachek and Jun Xiang (2014) suggested that a significant cause of the discrepancy in the return on investment for education is linked to the complex interplay of social factors and gender norms.[30] Notably, the study highlighted the variation in the wage gap depending on demographic variables such as marital status, children, and the spacing of children. The gap between single men and women was the smallest, at less than 10 per cent, while the gap between married men and women grew to approximately 40 per cent. Polachek and Xiang suggest that this growth is due to the expectation and reality that women take the role as primary caregivers, thus reducing their capacity to dedicate to lifetime work, and the associated earnings growth. This is because the wage gap grows most prominently during the period in which women generally have children. Men's wage profile grows most sharply at this stage, while women's wage profile remains stagnant. Thus, despite women's educational qualifications increasing,

[30] Polachek S.W, Xiang J. 2014, *The Gender Pay Gap Across Countries: A Human Capital Approach* (Institute for the Study of Labor).

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

there is still a significant and maintained difference in the tenure and experience of women, resulting in a sustained wage gap.

Labour market rigidities

	Trends in labour market rigidities
Labour discrimination	• Labour discrimination occurs when equally skilled workers employed in the same job earn different incomes and have different employment opportunities. • Systemic discrimination, evident primarily through wage gap decomposition studies, appears to have remained steady since the release of the 2009 Report. • Systemic discrimination remains a persistent feature of the workforce. However, variable levels of human capital endowment between men and women explain only a 'trivially small' proportion of the gender pay gap.[31] • Further, the proportion of the pay gap that can be attributed to differences in skills and education between men and women decreases each year, as women continue to close the gap in terms of education and labour participation.
Labour market segmentation	• Labour market segmentation refers to the division of labour into discrete groups with differing skills, attributes or specialisation. The 2009 Report found that segmentation is a pervasive rigidity of the labour market, and that segments of the labour market where there are larger numbers of women than men are often categorised by lower rates of pay, compared to segments with larger numbers of male workers. • Since 2009, levels of segmentation have remained relatively persistent. Key variables in relation to segmentation that contribute to the gender pay gap include part-time work, industry segregation, occupational segregation, and employer type.
Part-time employment	• Women continue to be over-represented in part-time employment compared to men, with half of all employed women work part time, compared with 19 per cent of men, representing a slight increase from 2007. This indicates little change to patterns of part-time employment as a contributing factor to the gender pay gap. • It is worth noting that of women working part-time, the proportion falling under higher income brackets has increased since 2009.
Occupational and industry segregation	• Occupational segregation refers to the percentage of women and men in major occupational groups. Occupational segregation has remained decreased slightly since 2009, with women still having high representation in clerical and administrative, community and personal service, and sales occupational classes. Of note, 22.4 per cent of woman worked in administrative positions, compared to 7.3 per cent of men. Men still dominate the technicians and trades, machinery and labour, and STEM (science, technology, engineering, and mathematics) related occupational classes. Different occupational classes are also associated with varying rates of pay, with occupations historically dominated by women typically being lower paid. • Industry segregation refers to the percentage of women and men in major industry sectors. Industry segregation has increased since 2009. Men continue to occupy an array of positions in higher paid industry divisions, and male representation has, in fact, increased in these divisions since 2009. Further, female representation has increased in the health care and social assistance industry since 2009, an industry that traditionally attracts lower incomes. • Disparity in gender representation in managerial roles across sectors continues to persist. In 2014, 19.5 per cent of men worked in managerial positions compared with 11 per cent of women. This has increased marginally from 15.8 per cent of men and 9.1 per cent of women in 2007.[32]

[31] Glassdoor (2016). *Demystifying the Gender Pay Gap: Evidence From Glassdoor Salary Data*
[32] Melbourne Institute 2007 and 2014, The Household Income and Labour Dynamics in Australia (HILDA) Survey, Wave 7 and 14.

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

Trends in labour market rigidities

Employer type segmentation	• The 2009 Report found that the gender pay gap varies distinctly between the private and public sectors, with the gap being lower in the public sector. According to the most recent ABS statistics on full-time ordinary time earnings, the gap between female and male earnings was $311.00 in the private sector, compared to $209.80 in the public sector.[33] • Women continue to be over-represented in government and non-government organisations (NGOs), with 37 per cent of employed women working in government or NGOs, compared with 20 per cent of men. • However, in both the public and private sectors, men do occupy a significantly larger proportion of higher income earning groups. The gender pay gap in both sectors has remained largely consistent since 2009.
Interruptions to work history	• Interruptions in work history refers to individuals changing their workforce status, occupation, or industry. • The 2009 Report found that impacts of interruptions in work history affect women more acutely than men. Women are affected by interruptions particularly through combining work with child rearing or caring responsibilities. • Since the 2009 Report, research into interruptions in work history has continued to highlight the pressure faced by women over men, particularly in relation to the decreased level of accumulated superannuation and wealth over their lifetimes.
Legislative environment	• There have been a number of improvements in the policy and legislative environment in Australia since 2009. • These improvements are evident particularly through continued legislative commitments to reduce workplace discrimination. For example, on 20 June 2011, amendments to the *Sex Discrimination Act 1984* came into effect, providing protection against direct discrimination on the grounds of family responsibility, and increasing accommodation for breastfeeding mothers.[34] • The *Fair Work Act 2009* created a new national workplace relations system which began on 1 July 2009. Under the Fair Work System, the right for employees request flexible work was enshrined in law. • In 2012, the *Workplace Gender Equality Act (2012)* replaced the *Equal Opportunity for Women in the Workplace Act (1999).* The result is strengthened legislation aimed at improving and promoting gender equality for both women and men in the workplace. The *Workplace Gender Equality Act (2012)* established the Workplace Gender Equality Agency, which is charged with promoting and improving gender equality in Australian workplaces[35]. • Australia's first national Paid Parental Leave scheme was introduced on 1 January 2011 providing government-funded pay for eligible working parents when they take time off from work to care for a newborn or recently adopted child.

[33] Australian Bureau of Statistics (ABS) 2016, *Average Weekly Earnings, Australia, May 2016* (Cat. No. 6302.0).
[34] Sex and Age Discrimination Legislation Amendment Bill 2010 (Cth).
[35] https://www.wgea.gov.au/about-legislation/workplace-gender-equality-act-2012

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

Other initiatives	• There has been a push by many public sector agencies and private sector companies to tackle workplace discrimination. Notably, the Male Champions of Change, an organisation established in 2010, aims to reform workplaces to challenge inequality. It challenges the notion that gender equality is reliant on 'women's activism' by engagement men to drive and accelerate the change on what is not a women's issue, but an economic and social issue. The 26 companies that form Male Champions of Change are responsible for over 400,000 employees, 170,000 of whom are women. Partners to this organisation include public agencies such as the Office of the Sex Discrimination Commissioner and the WGEA. • 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 and 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.

The 2009 Report considered the following contributing sources to the labour market rigidities in the Australian workforce:

- labour market discrimination;
- labour market segmentation, which includes:
  - part-time work;
  - occupational segregation;
  - industrial segregation; and
  - employer type.
- interruptions to women's careers; and
- the policy and legislative environment.

Labour market 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.[36] 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.[37]

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

[36] Boras, G.J. 2008, *Labor Economics*, McGraw-Hill/Irwin, 4th edition.
[37] Langford, M. 1995, *The Gender Wage Gap in the 1990s*, Australian Economic Papers, Vol. 34 (64). pp. 62-85.

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

systemic discrimination.[38] This is supported by a recent study conducted by Glassdoor which highlighted that the variable levels of human capital endowment between men and women explain only a 'trivially small' part of the gender pay gap, which was consistent across all countries examined.[39] The Glassdoor study argues that simply because the pay gap between the genders declines when worker characteristics are controlled, this does not mean the gap is not real or is not caused by unfair barriers women face in the workplace.[40] The report goes on to say that:

> *"…if women are systematically excluded from certain occupations, or encouraged to work only in certain industries, or discouraged from pursuing particular college majors, these factors can statistically "explain" the gender pay gap but still represent social biases against women that most observers would consider unfair and worthy of criticism."*[41]

The Glassdoor study also found that the proportion of the pay gap that can be explained by differences in skills and education is actually decreasing each year as women have closed the gap in rates of higher education and labour force participation. Instead, the report found the vast majority of the explainable gender gap today is caused by the sorting of men and women into systematically different occupations and industries throughout the economy. The data indicated that the type of occupation and industry explains between 28 per cent and 54 per cent of the gender pay gap across the five countries examined. In every country, occupation and industry sorting was the largest contributing factor to the explained gender pay gap— exceeding the effect of worker characteristics.[42]

Labour market segmentation

Gender segregation in the context of labour market segmentation refers to differences in the share of males and females in segments of the labour market. The 2009 Report identified segmentation as a pervasive rigidity in the labour market, particularly given that women tend to occupy segments of the labour market that are typically lower paid. The following section elaborates on the key segmentations in the labour market, which were identified as key variables that contributed to the gender pay gap under the modelling and analysis carried out in the 2009 Report. These segmentations include part-time work, industry segregation, occupational segregation, and employer type.

Part-time work

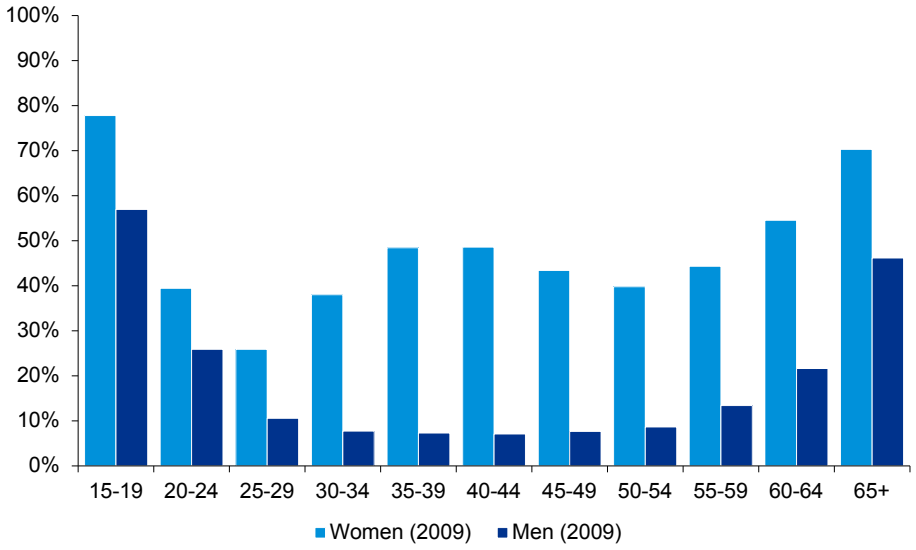
In keeping with the changes in other variables, the share of employed persons in part-time work by gender has remained largely consistent. Figures A-9 and A-10 below highlight that these percentages remain largely consistent across the time periods, indicating little change in the patterns of part-time employment as a factor that contributes to the gender pay gap. In addition, the following points were noted:

- The number of females employed on a part time basis is consistently higher than the number of males employed on a part time basis across all age ranges;
- The biggest differential between male and female part-time employment occurs between the ages of 35 and 44, which was consistent across both time periods;
- The percentage of employed females who work on a part-time basis is slightly lower in the 25-29 age range, but slightly higher in the 30-34 age range in 2016, compared to 2009;
- The percentage of employed females across other age ranges remains largely consistent across 2009 and 2016; and
- The percentage of employed male persons of all ages working part-time remains largely consistent across 2009 and 2016.

[38] Standing Committee on Legal and Constitutional Affairs 2008, E*ffectiveness of the Sex Discrimination Act 1984 in eliminating discrimination and promoting gender equality*, Department of the Senate, Australia.
[39] Ibid.
[40] Dr. Andrew Chamberlain 2016, *Demystifying the Gender Pay Gap, Evidence From Glassdoor Salary Data*, March.
[41] Ibid.
[42] Ibid.

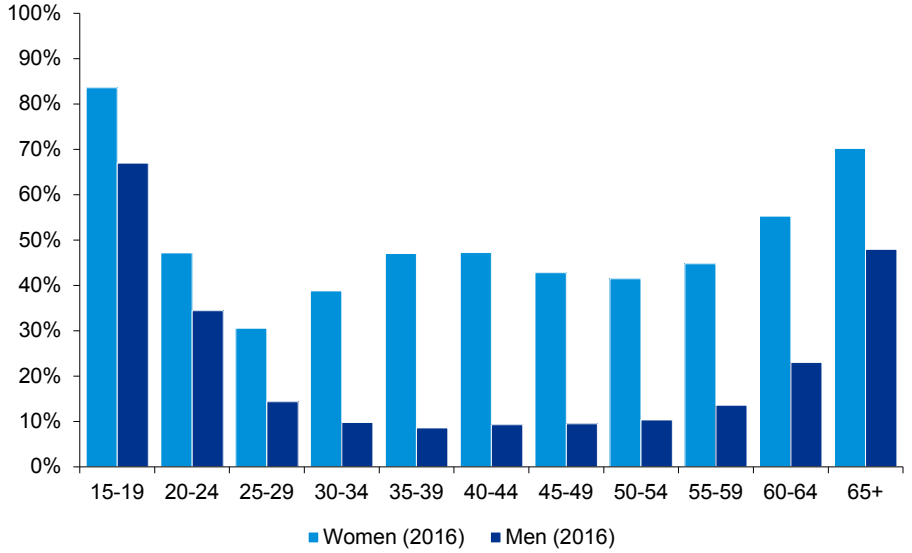
© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

Figure A-9: Share of employed persons working part-time, by age and sex (2009)



Source: Australian Bureau of Statistics (ABS) 2016, *Labour Force Survey Detailed*, Electronic Delivery, Cat. No. 6291.0.55.001.

Figure A-10: Share of employed persons working part-time, by age and sex (2016)

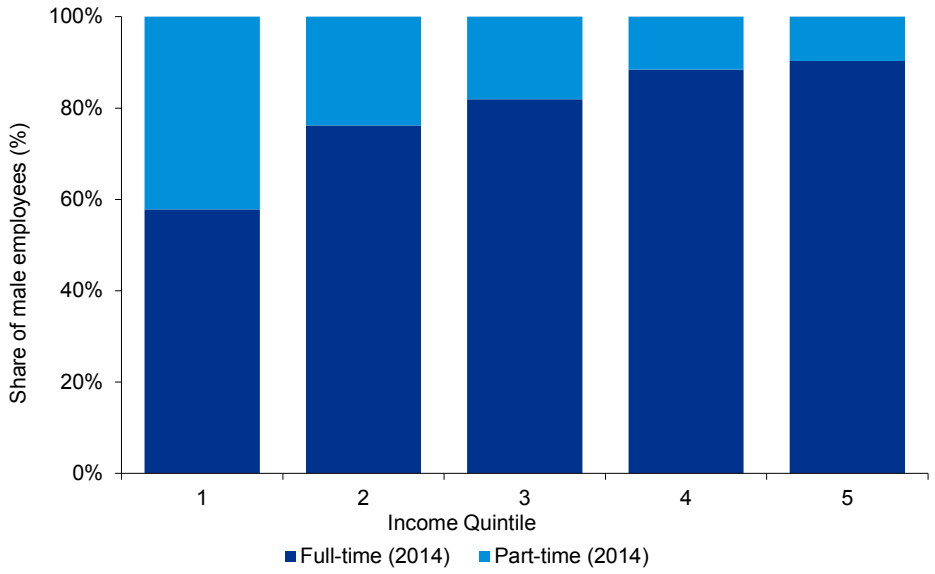


Source: Australian Bureau of Statistics (ABS) 2016, *Labour Force Survey Detailed*, Electronic Delivery, Cat. No. 6291.0.55.001.

As discussed in the 2009 Report, the difference in the returns to part-time work and full-time work was identified as a factor that contributes to the gender pay gap in Australia, as supported by the findings of the modelling undertaken as part of the 2009 Report, which also aligned with the findings of a number of studies undertaken in Australia and internationally. The impact of part-time employment on income was therefore found to be consistent across time periods, as demonstrated in Figure A-11 and Figure A-12. However, it was found that between 2007 and 2014, across both genders, the largest increase in share of part-time employees was in women belonging to higher income quintiles.

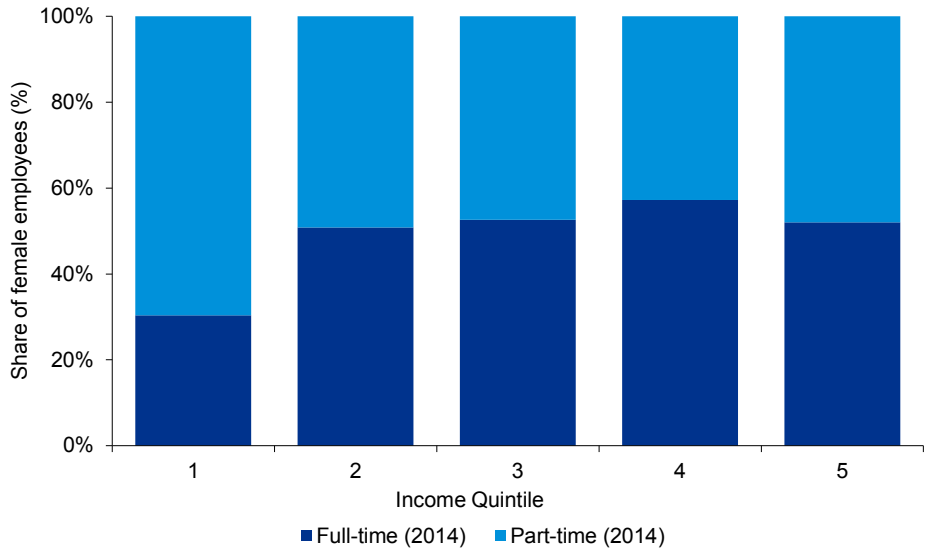
© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

Figure A-11: Distribution of male employees in full-time and part-time work across income quintiles, 2014



Source: Melbourne Institute 2014, The Household Income and Labour Dynamics in Australia (HILDA) Survey, Wave 14.

Figure A-12: Distribution of female employees in full-time and part-time work across income quintiles, 2014

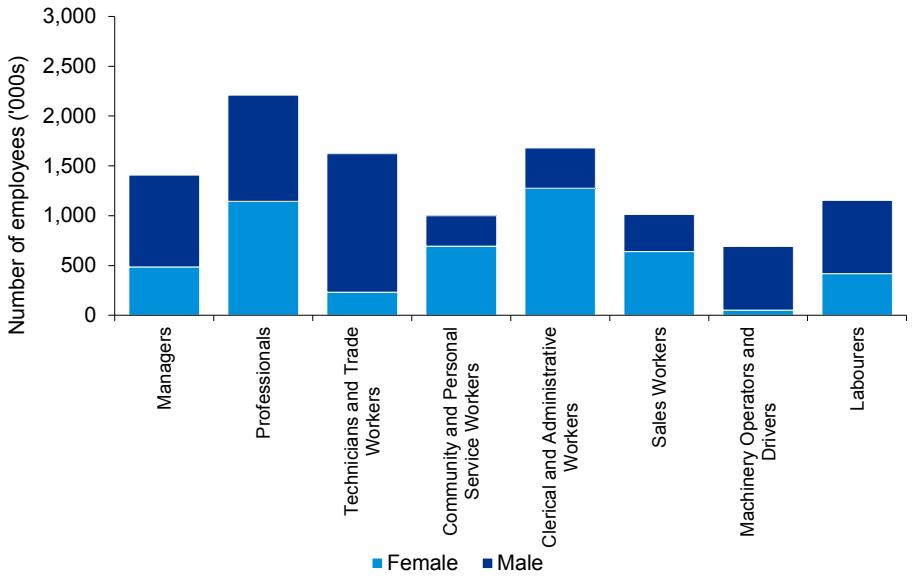


Source: Melbourne Institute 2014, The Household Income and Labour Dynamics in Australia (HILDA) Survey, Wave 14.

Segregation by occupation is another labour market rigidity that has been found to contribute to the gender pay gap. Figure A-13 shows there is a clear difference in male and female employment by occupation.

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

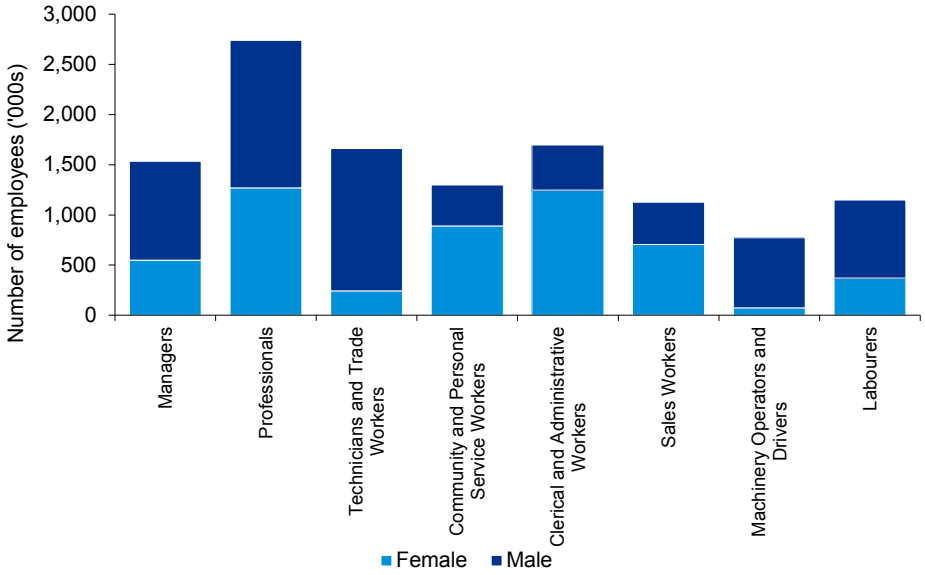
Figure A-13: Number of persons employed by occupation, May 2009



Source: Australian Bureau of Statistics (ABS) 2016, *Labour Force Survey Detailed*, Electronic Delivery, Cat. No. 6291.0.55.001.

Relative to the 2009 findings, females still dominate the clerical and administrative, community and personal service, and sales occupational classes. Males continue to dominate the technicians and trades, machinery operators and drivers, and labourer occupational classes.

Figure A-14: Number of persons employed by occupation, May 2016



Source: Australian Bureau of Statistics (ABS) 2016, *Labour Force Survey Detailed*, Electronic Delivery, Cat. No. 6291.0.55.001.

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 relatively large, and reflects the impacts of gender discrimination and stereotyping in the labour force.[43]

[43] Wooden, M. 1998, *Gender Pay Equity and Comparable Worth in Australia: a Reassessment*. A paper prepared for the NSW Pay Equity Inquiry, Industrial Relations Commission of NSW, March.

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

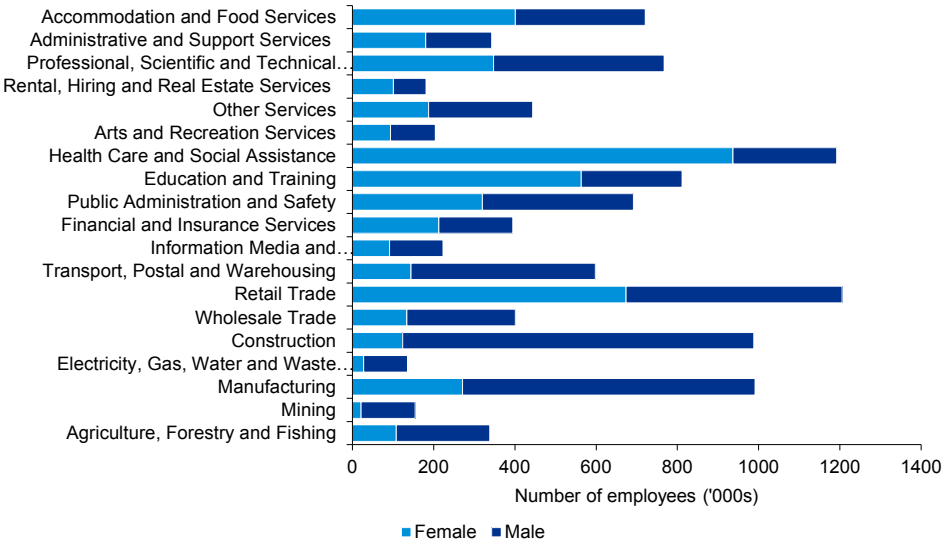
Disaggregation of occupations by earnings based on 2009 ABS data show that females are more heavily concentrated in the lower income brackets than males across all occupations. This is particularly pronounced within the occupation of clerical and administrative workers, community and personal service, and sales workers. This suggests, even in the occupations where females dominate in quantum, there are challenges around negotiating higher levels pay that are often linked to underlying perceptions regarding gender norms.

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.[44] 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.

Industry segregation

Industry segregation occurs when females and males are more concentrated in different industry sectors. This is a significant a factor underlying the gender pay gap, particularly when women's employment is concentrated in lower paid sectors. Figure A-15 below shows that in 2009 males dominated an array of higher paid sectors including the transport, postal and warehousing, construction and mining sectors, whilst women comprised the majority of the health care and social assistance, and education and training sectors, which traditionally attract lower incomes.

Figure A-15: Number of persons employed by ANZSIC division, May 2009



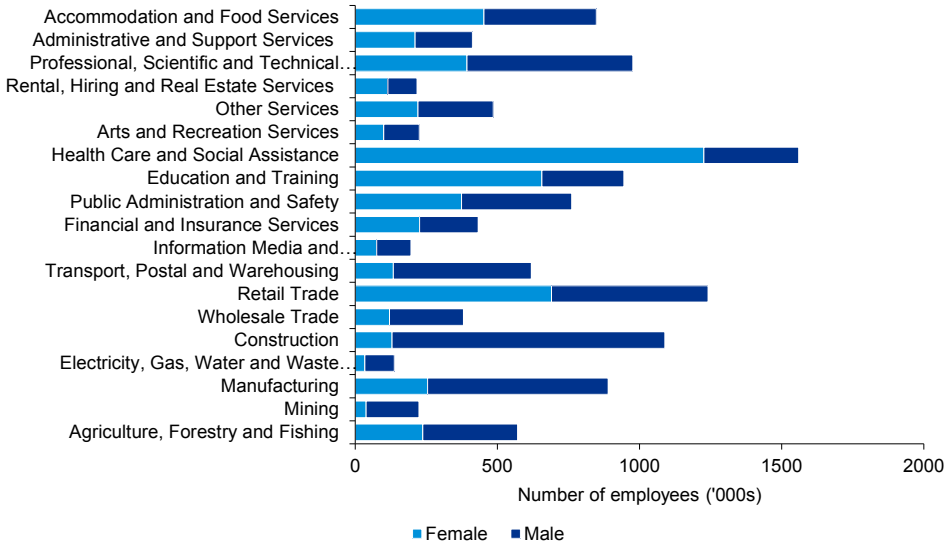
Source: Australian Bureau of Statistics (ABS) 2009, *Labour Force Survey Detailed*, Electronic Delivery, Cat. No. 6291.0.55.001.

Figure A-16 below shows that in 2016, males continue to dominate an array of higher paid sectors including the transport, postal and warehousing, construction and mining sectors. Male representation across these sectors have increased relative to 2009. Women still make up the majority of the health care and social assistance, and education and training sectors. These sectors traditionally attract lower incomes. Female representation in the health care and social assistance sector has markedly increased relative to 2009.

[44] Kifle, T. and Kler, P. 2006, *Op cit* p. 24

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

Figure A-16: Number of persons employed by the industry sector, May 2016



Source: Australian Bureau of Statistics (ABS) 2016, *Labour Force Survey Detailed*, Electronic Delivery, Cat. No. 6291.0.55.001.

ABS data across 2009 and 2016 shows that in Australia, the industries with the largest gender pay gaps included the mining; transport, postal and warehousing; finance and insurance, and health and community services sectors. The industries where the gap between male and female earnings is the smallest are the accommodation and food services, retail trade, and public administration and security sectors.[45]

Taking the mining industry as an example of industry segmentation, we see that in 2009 women accounted for approximately 18 per cent of the mining workforce, compared to 42 per cent of the total Australian workforce.[46] In 2016, women accounted for 17 per cent of the mining workforce, compared to 47 per cent of the total Australian workforce.[47] The numbers of women in operational roles is particularly low, with women comprising only seven per cent of the technical professional workforce and three per cent of the site-based workforce. With regard to remuneration, a considerable gender pay gap currently exists for mining technical professionals at all levels of responsibility.[48]

Despite the Australian mining sector experiencing significant growth in that period, the following barriers to women's employment and advancement in the sector were identified in a 2009 Report[49]:

- the tendency for some senior male managers to promote people more like 'themselves';
- that females are subject to overt sexual harassment and sexist verbal put-downs at work;
- the perception by some that females may leave when they have children and therefore it was a risk to invest in their professional development;
- the perception by some that women overall are less competent in senior roles;
- some males resenting the idea of reporting to a female manager; and
- a perception that women underselling themselves in their careers.

[45] Australian Government 2005, *Equal Opportunity for Women in the Workplace Agency*, March.
[46] AusIMM The Minerals Institute 2008, *Remuneration and Employment Survey 2008*.
[47] Ibid.
[48] Ibid.
[49] Australian Institute of Mining and Metallurgy 2009, *Gender Pay Equity and Associated Issues for Women in Mining – Survey Report*. p. 10

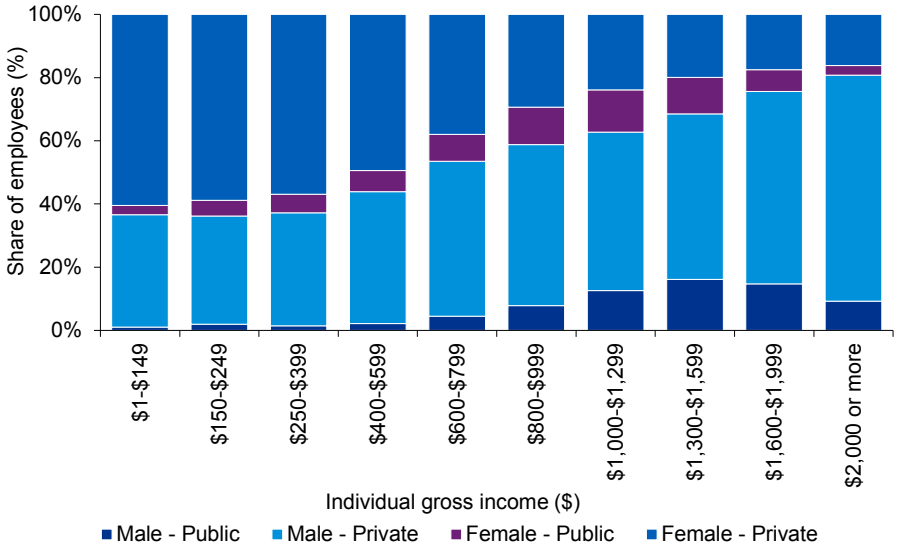
© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

Employer type – private sector, government and non-government organisations

The gap between male and female pay also varies distinctly between the private sector, government and non-government organisations (NGOs). Today, males continue to comprise a significantly larger proportion of higher income earning groups. A larger share of men in the public and private sectors fall into the higher income earning brackets than women.

Figure A-17 below shows that in the public sector in 2006, 36 per cent of men earned over $1,300 a week, compared with only 16 per cent of women in the public sector. The share of women earning higher incomes is considerably smaller in the private sector, with only eight per cent of women employed by private companies earning over $1,300 a week in 2006. By comparison, 22 per cent of men in the private sector earned over $1,300 a week in 2006.

Figure A-17: Share of public and private sector employees, by individual gross income, by sex (2006)

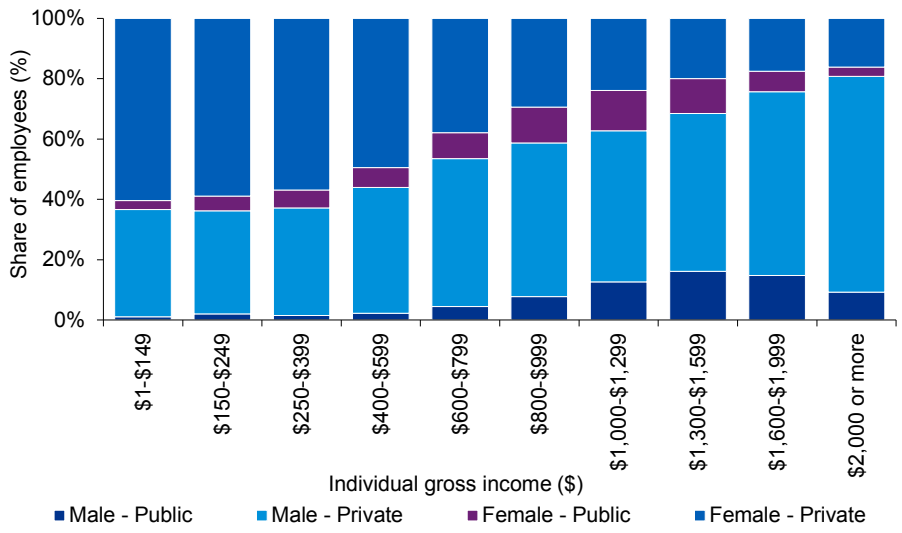


Source: Australian Bureau of Statistics (ABS) 2006, *Census of Population and Housing*.

Figure A-18 below shows that the proportion of men and women earning greater than $1,300 a week is unchanged. In fact, the distribution of public and private sector earnings between men and women is identical to distribution in 2006.

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

Figure A-18: Share of public and private sector employees, by individual gross income, by sex (2011)



Source: Australian Bureau of Statistics (ABS) 2011, *Census of Population and Housing*.

Therefore, the findings in 2006 and 2011 reinforce the existence, and indeed, persistence of a 'glass ceiling' effect which is more prevalent in the private sector. The gender pay gap is wider at the top of the wage distribution and where women face a barrier to further advancement beyond a certain level.

Interruptions to career

The 2009 Report outlined the negative effects on individuals of changing their workforce status, occupation or industry due to labour market rigidities. These effects are felt more acutely by women, who are forced to change the characteristics of their engagement in the workforce, particularly through combining balancing work with child rearing or caring responsibilities which overwhelmingly continue to be taken on by women rather than men.

Enhancing women's workforce participation by reducing labour market rigidities is of increasing importance to Australia's economic positioning. The existence of constraints and the degree of workforce mobility faced by women, particularly around child bearing and rearing time, has the potential to represent a significant market failure and contributing factor to the gender pay gap. Since the 2009 Report, research into interruptions in career continues to highlight the additional pressure faced by women in this respect, in particular, in relation to the decreased ability to accumulate superannuation during extended leave to rear and care for children including maternity leave and carers leave. In addition, the research has shown that the introduction of flexible working arrangements for both men and women - as is the case in Sweden – may also enable families to have more choices in considering the role of primary caregiving.

Policy and legislative environment

Since 2009 there has been continued legislative commitment to reduce workplace discrimination. On 20 June 2011, amendments to the *Sex Discrimination Act* came into effect which provided protection against direct discrimination on the grounds of family responsibility and increasing accommodation for breastfeeding mothers.[50] These changes are extremely important as they have the potential to reduce the impact of women being disproportionately categorised and labelled with being primary caregivers, as well as employees.

The *Workplace Gender Equality Act 2012* (Act) replaced the *Equal Opportunity for Women in the Workplace Act 1999*. The new, strengthened legislation aims to improve and promote equality for both women and men in the workplace.

The principle objects of the Act are to:

[50] Sex and Age Discrimination Legislation Amendment Bill 2010 (Cth).

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

- 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, in recognition of the disadvantaged position of women in relation to employment matters
- promote, amongst employers, the elimination of discrimination on the basis of gender in relation to employment matters (including in relation to family and caring responsibilities)
- foster workplace consultation between employers and employees on issues concerning gender equality in employment and in the workplace
- improve the productivity and competitiveness of Australian business through the advancement of gender equality in employment and in the workplace.

The *Workplace Gender Equality Act 2012* requires non-public sector employers with 100 or more staff to submit a report to the Workplace Gender Equality Agency that includes information on their gender equality policies and practices[51].

The Workplace Gender Equality Agency 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* and 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. Criteria for the citation cover leadership, learning and development, gender remuneration gaps, flexible working and other initiatives to support family responsibilities, employee consultation, preventing sex-based harassment and discrimination and targets for improving gender equality outcomes. Criteria are strengthened each year to reflect best practice[52].

In addition to these legislative changes, there has been a renewed push by many public sector agencies and private sector companies to tackle workplace discrimination. Notably, several large private sector companies have created the organisation 'Male Champions of Change' which aims to prioritise reforming their workplaces to ones that challenge inequality. The 26 companies that form the Male Champions of Change are responsible for over 400,000 employees, 170,000 of whom are women. Partners to this organisation include public agencies such as Office of the Sex Discrimination Commissioner and the Workplace Gender Equality Agency.

[51] https://www.wgea.gov.au/about-legislation/workplace-gender-equality-act-2012
[52] https://www.wgea.gov.au/employer-choice-gender-equality/what-wgea-eocge-citation

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

Appendix B: Detailed approach

Overview

In line with the 2009 Report, the analysis within this updated Report has considered the implications of the gender pay gap in terms of impacts to national productivity and economic growth. This enables a tangible link between the gender pay gap and the broader implications for the Australian economy to be created, and also recognises and assesses women's contribution to the labour market in terms of wages, output and productivity levels, and overall economic performance.

The approach to the modelling was to update the econometric model developed in the 2009 Report. This approach was developed to retain comparability to the 2009 Report, and included (but was not limited to) undertaking the following:

- a preliminary review of the methodology in the 2009 Report to examine the underpinning data sources;
- a literature scan of recent approaches to modelling the gender pay gap in Australia to provide comparative studies to test, refine, and strengthen the current approach; and
- development of the revised approach, following testing processes undertaken as part of the econometric modelling.

Approach summary

To understand the gender pay gap and the implications of this gap on Australia's economic growth, KPMG has used total wages as a proxy for productivity. This is in broad alignment with previous approaches, including the 2009 Report, and given that it is not possible to obtain data on individual output by gender, wages are broadly considered to be equivalent to the value of a person's output.[53] The approach is summarised below.

Step 1: Estimate a model to determine the factors that affect the probability of a person being in the labour force

In the first step, a model to determine the factors that affect the probability of a person being in the labour force was estimated. A number of potential explanatory variables were included, including gender, educational attainment and current education participation, demographic characteristics (age, marital status, number of dependent children, whether a person is a migrant from an English speaking or non-English speaking background, health), years of work experience and time since that person has left full-time education, or whether they are currently undertaking full-time or part-time education, and location (urban, regional or remote).

[53] 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.

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

Step 2: Estimate the factors that affect the hourly wages earned by a person in the labour force

The second step involved estimating the factors that affect the hourly wages earned by a person in the workforce. A number of potential explanatory variables were included, including gender, education and training, length of employment, interruptions due to family care and unemployment, segregation including industry and occupation of employment, part-time and casual work, sector of employment, job characteristics (hours of work, size of employer, union membership, satisfaction with pay, and flexible work arrangements); demographic characteristics (age, marital status, number of dependent children); and state and location (urban, regional or remote).These variables broadly fall into two categories: those variables that are expected to be factors associated with the gender pay gap and the control variables.

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 gender wage gap and estimate the gross effect of each underlying factor on the wage gap.

The Household Income and Labour Dynamics Survey

In this study KPMG has used the Household Income and Labour Dynamics in Australia (HILDA) Survey data, a dataset that is collected and published by the Melbourne Institute in conjunction with the Department of Social Services. The HILDA Survey is a household-based longitudinal survey which began in 2001, with data collected annually. It pays particular attention to family and household formation, income and work.

KPMG utilised the most recently published data, which is from the 2014 wave of the survey. HILDA has the following features:

- it collects information about economic and subjective well-being, labour market dynamics and family dynamics;
- each wave includes special questionnaire modules, such as the wealth module included in the 2002, 2006, 2010 and 2014 surveys which has detailed information on household wealth;
- a sample of over 9,500 households and over 23,000 individuals; and
- interviews are conducted annually with all adult members of each household and the panel members are followed over time, so changes to individual and household circumstances and characteristics can be monitored and tracked.[54]

This dataset is the best available for the purposes of the gender pay decomposition as it has:

- detailed information on the labour force characteristics of individuals for a large sample of Australian adults;
- information on child care and caring responsibilities for individuals;
- family composition, including financially and non-financially dependent children both resident and non-resident, and information on the 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;

[54] For more information see Summerfield, M. (ed) (2015) *HILDA User Manual – Release 14*, Melbourne Institute of Applied Economic and Social Research, University of Melbourne.

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

- detailed information on employment status, and reasons why individuals may work part-time hours (e.g. family or personal responsibilities, preferences etc);
- 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.

Variables tested

The variables used in the analysis are detailed in Table B-1 along with the description of the HILDA code, and the type of variable. Table B-2 provides more detail on how the education index was constructed, and the assumptions underlying the scale variable. The dataset used included all potential employees – that is all people of working age, whether they were in the labour force, marginally attached, or not in the labour force at the time of the survey. Self-employed persons were included in the sample.

Table B-1: Variables used in analysis

Variable name	HILDA code	Type of variable
Sex	NHGSEX	Dummy variable = 1 if male
Age	NHGAGE	Age as at 30 June 2014 (years)
Education	NEDHISTS NEDHIGH1	• Highest education completed for school (unfinished primary school through to Year 12), and highest post-school education completed (postgraduate masters or doctorate, graduate diploma or certificate, bachelor or honours, advanced diploma or diploma, Certificate III or IV, Certificate I or II, Certificate undefined). Education index variable constructed based on assumptions set out in Table B-2
Marital status	NMRCURR	Dummy = 1 if married or de facto
Number of children 4 years and under	NHH0_4	Number of children aged 0 to 4 years in household
Number of children 5 to 9 years	NHH5_9	Number of children aged 5 to 9 years in household
Number of children 10 to 14 years	NHH10_14	Number of children aged 10 to 14 years in household
Migrant ESB	NANBCOB	Dummy = 1 if born overseas and English is their first language
Migrant NESB	NANBCOB	Dummy = 1 if born overseas and English is not their first language
Long-term health condition	NHELTH	Dummy = 1 if has a long-term health condition
Poor health status	NGH1	Dummy = 1 if self-assessed health status is fair or poor
Household income	NHIFEFP	Household financial year gross income (imputed, weighted topcode) positive values only
Attending full-time education	NCAPEFT	Per cent of time spent in full-time education in last financial year
Attending part-time education	NCAPEPT	Per cent of time spent in part-time education in last financial year
Years since left full-time education	NEHTSE	Time since full-time education (years). Calculated as sum of time in paid work, time not looking and looking for work, time not working or looking for work.
Work experience	NEHTJB	Time in paid work (years)
Employed casually	NJBCASAB	Dummy = 1 if employee is a casual worker (i.e. not entitled to paid holiday or sick leave)
Employed part-time	NESDTL	Dummy = 1 if currently employed part-time

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

Variable name	HILDA code	Type of variable
Tenure with current employer (years)	NJBEMPT	Number of years worked at current employer
Usual hours of work in all jobs (per week)	NJBHRUC	Hours per week usually worked in all jobs
Total time not in the labour force	NEHTO	Total time spent not working and not looking for work (years)
Total time unemployed	NEHTUJ	Total time spent unemployed and looking for work
Entitled to paid maternity/paternity leave	NJOWPPML	Dummy = 1 if employee entitled to paid maternity leave in current job
Employed in government or non-government organisation	NJBMMPLY	Dummy = 1 if employer is government business enterprise, commercial statutory authority, other government organisation, private sector not-for-profit organisation or other non-commercial organisation
Union member	NJBMJABS	Dummy = 1 if union member
Employer has < 20 employees	NJBMWPS NJBMEMSZ	Dummy = 1 if there are less than 20 people employed at place or work, or with the employer in locations throughout Australia
Employer has 20-100 employees	NJBMWPS NJBMEMSZ	Dummy = 1 if there 20 to 99 people employed at place or work, or with the employer in locations throughout Australia
Satisfaction with flexibility of work arrangements	NJBMSFLX	Dummy = 1 if satisfied with the flexibility the job provides to balance work and non-work commitments (satisfaction is defined as > 5 on a scale of 0 to 10)
Industry sector		
Agriculture, forestry and fishing	NJBMI61	Dummy = 1 if current main job is in the agriculture, forestry and fishing sector (ANZSIC division A)
Mining	NJBMI61	Dummy = 1 if current main job is in the mining sector (ANZSIC division B)
Manufacturing	NJBMI61	Dummy = 1 if current main job is in the manufacturing sector (ANZSIC division C)
Electricity, gas water and waste services	NJBMI61	Dummy = 1 if current main job is in the electricity, gas, water and waste services sector (ANZSIC division D)
Construction	NJBMI61	Dummy = 1 if current main job is in the construction sector (ANZSIC division E)
Wholesale trade	NJBMI61	Dummy = 1 if current main job is in the wholesale trade sector (ANZSIC division F)
Retail trade	NJBMI61	Dummy = 1 if current main job is in the retail trade sector (ANZSIC division G)
Accommodation and food services	NJBMI61	Dummy = 1 if current main job is in the accommodation and food services sector (ANZSIC division H)
Transport, postal and warehousing	NJBMI61	Dummy = 1 if current main job is in the transport, postal and warehousing sector (ANZSIC division I)
Information media and telecommunications	NJBMI61	Dummy = 1 if current main job is in the information media and telecommunications sector (ANZSIC division J)
Financial and insurance services	NJBMI61	Dummy = 1 if current main job is in the financial and insurance services sector (ANZSIC division K)
Rental, hiring and real estate services	NJBMI61	Dummy = 1 if current main job is in the rental, hiring and real estate services sector (ANZSIC division L)
Professional, scientific and technical services	NJBMI61	Dummy = 1 if current main job is in the professional, scientific and technical services sector (ANZSIC division M)
Administrative and support services	NJBMI61	Dummy = 1 if current main job is in the administrative and support services sector (ANZSIC division N)
Public administration and safety	NJBMI61	Dummy = 1 if current main job is in the public administration and safety sector (ANZSIC division O)
Education and training	NJBMI61	Dummy = 1 if current main job is in the education and training sector (ANZSIC division P)
Healthcare and social assistance	NJBMI61	Dummy = 1 if current main job is in the healthcare and social assistance sector (ANZSIC division Q)

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

Variable name	HILDA code	Type of variable
Arts and recreation services	NJBMI61	Dummy = 1 if current main job is in the arts and recreation services sector (ANZSIC division R)
Other services	NJBMI61	Dummy = 1 if current main job is in the other services sector (ANZSIC division S)
Index of industrial segregation	NJBMI62	Index constructed from HILDA variables and ABS *Labour Force, Australia, Detailed, Quarterly, May 2009* Cat. No. 6291.0.55.003
Occupation		
Managers	NJBMO61	Dummy = 1 if current main job is as a manager (ANZSCO Group 1)
Professionals	NJBMO61	Dummy = 1 if current main job is as a professional (ANZSCO Group 2)
Technicians and trades workers	NJBMO61	Dummy = 1 if current main job is as a technician or trade worker (ANZSCO Group 3)
Community and personal service workers	NJBMO61	Dummy = 1 if current main job is as a community or personal service worker (ANZSCO Group 4)
Clerical and administrative workers	NJBMO61	Dummy = 1 if current main job is as a clerical or administrative worker (ANZSCO Group 5)
Sales workers	NJBMO61	Dummy = 1 if current main job is as a sales worker (ANZSCO Group 6)
Machinery operators and drivers	NJBMO61	Dummy = 1 if current main job is as a machinery operator or driver (ANZSCO Group 7)
Labourer	NJBMO61	Dummy = 1 if current main job is as a labourer (ANZSCO Group 8)
Index of occupational segregation	NJBMO62	Index constructed from HILDA variables and ABS *Labour Force, Australia, Detailed, Quarterly, May 2009* Cat. No. 6291.0.55.003
Location		
New South Wales	NHHSTATE	Dummy = 1 if lives in NSW
Victoria	NHHSTATE	Dummy = 1 if lives in Victoria
Queensland	NHHSTATE	Dummy = 1 if lives in Queensland
South Australia	NHHSTATE	Dummy = 1 if lives in South Australia
Western Australia	NHHSTATE	Dummy = 1 if lives in Western Australia
Tasmania	NHHSTATE	Dummy = 1 if lives in Tasmania
Australian Capital Territory	NHHSTATE	Dummy = 1 if lives in ACT
Northern Territory	NHHSTATE	Dummy = 1 if lives in Northern Territory
Urban location	NHHRA	Dummy = 1 if lives in urban area as defined in the ABS *Australian Standard of Geographical Classifications* (ASGC)
Inner regional location	NHHRA	Dummy = 1 if lives in inner regional area as defined in ASGC
Outer regional location	NHHRA	Dummy = 1 if lives in outer regional area as defined in ASGC
Remote/very remote	NHHRA	Dummy = 1 if lives in a remote or very area as defined in ASGC
Hourly income	NWSCEI NJBHRUC	Current weekly gross individual weekly wages and salaries, all jobs, imputed, weighted topcode, divided by total number of hours usually worked in all jobs

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

Table B-2 Education index assumption details

Level of education	Index points in education scale
Postgraduate masters or doctorate	18
Graduate diploma or graduate certificate	17
Bachelor degree, including with honours	16
Advanced diploma or diploma	15
Certificate III or IV	14.5
Certificate I or II	14
Certificate not defined	13.5
Year 12	13
Year 11	12
Year 10	11
Year 9	10
Year 8	9
Year 7	8
Primary school	7
Did not complete primary school	6

Equations estimated

A pair of equations was estimated using the two-step Heckman approach. 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:

$$\Pr(emp_i = 1 \mid Z) = \Phi(Z_\gamma) \tag{1}$$

Where emp_i 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. In the model we estimated, the following independent variables were included: years of education; gender; age and age squared; marital status; number of children 0 – 4 years, 5 – 9 years and 10 – 14 years; migrant from an English or non-English speaking background; health status and long-term health conditions; whether attending full-time or part-time education; years since left full-time education; years of work experience and experience squared; and location by inner regional, outer regional; or remote/very remote.

After the employment equation is estimated, the Inverse Mills Ratio, λ, is 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.

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:

$$w^* = X\beta + u \tag{2}$$

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:

$$E[w \mid X, D = 1] = X\beta + E[u \mid X, D = 1] \tag{3}$$

Based on the assumption that the error terms are jointly normal, we can express the wage equation as:

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

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

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 $Z\gamma$.

The independent variables in the wage equation were: age and age squared; education; marital status; number of children 0 – 4 years, 5 – 9 years and 10 – 14 years; whether employed casually; whether employed part-time; years of work experience and experience squared; years of tenure with current employer; usual hours of work per week in all jobs; total number of years not in the labour force; total number of years unemployed; whether entitled to paid or unpaid maternity/paternity leave at work; employed in government or non-government organisation; whether is a union member; employer size; satisfaction with flexibility to balance work and non-work commitments; industry sector; index of industrial segregation; occupation; index of occupational segregation; state of residence; and location by inner regional, outer regional; or remote/very remote.

Recent approaches to modelling the gender pay gap

Since the 2009 Report was conducted, there has been a significant body of research and literature that has further contributed to the growing evidence base around understanding the factors that contribute to the gender pay gap in Australia.

As part of the development of the methodology update for this report, a literature scan was undertaken to ascertain and analyse the techniques and datasets utilised and results generated through varied approaches. A number of sources were considered, a selection of which is outlined in the table below.

Primarily, the range of approaches used to model these contributing factors are those which were developed prior to 2009, indicating a broad consistency in the techniques used since the 2009 Report.

Recent studies	Approach and key findings
WGEA 2016, *Gender Pay Gap Statistics,* August 2016	• The *Gender Pay Gap Statistics* report used ABS' Full-Time Adult Average Weekly Ordinary Time Earnings (AWOTE) Trend data from the Average Weekly Earnings Survey in order to determine the gender pay gap. Based on this data, WGEA found that the gender pay gap in August 2016 was 16.2 per cent, a decrease of 1.7 per cent from May 2015. • The ABS AWOTE data calculates the full-time adult average weekly ordinary time earnings before tax, not taking into account factors such as overtime and part-time employment. Where data from this survey was unavailable, WGEA used data from the ABS Employee Earnings and Hours employer survey and WGEA's own gender pay gap data. • This report considers the gender pay gap from a national perspective, and also from a State and Territory perspective. From a national perspective, the pay gap decreased since 2015, increased in Tasmania and the Northern Territory, and decreased in all other States and Territories except South Australia, which recorded an identical pay gap to the previous year.

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

Recent studies	Approach and key findings
National Centre for Social and Economic Modelling (NATSEM) 2009, *The Impact of a Sustained Gender Pay Gap on the Australian Economy*	• The NATSEM Report used ABS' Labour Force Survey and HILDA Wave 7 data, and adopted a similar method to Walby and Olsen 2002 and 2004. • This Report found that men earned on average around $28 per hour while women earned on average $25 per hour, which translates to an hourly wage gap of 11 per cent. • Further, this report found that factors associated with being female (including sex discrimination) accounted for 60 per cent of the gender pay gap, and that industry segregation accounted for 25 per cent of the gap.
Glassdoor 2016, *Demystifying the Gender Pay Gap: Evidence From Glassdoor Salary Data*, Research Report, March 2016	• The Glassdoor Report examined the gender pay gap using a dataset compiled through hundreds of thousands of salaries shared anonymously by employees on the Glassdoor website. Glassdoor included statistical controls for job titles and company names. • The Glassdoor Report highlighted that variable levels of human capital endowment between men and women explains only a very small proportion of the gender pay gap, suggesting that systemic discrimination plays a large role in determining the pay gap. • Glassdoor estimated the gender pay gap in five countries: the United States, the United Kingdom, Australia, Germany, and France. Glassdoor estimated the pay gap was the largest in the United States, where on average the pay gap was 24.1 per cent. The country with the lowest pay gap of those examined by Glassdoor was France, with an average pay gap of 14.3 per cent. The Australian pay gap fell between these two numbers at 17.3 per cent. • Further, the Glassdoor Report found that type of occupation and industry explains between 28 and 54 per cent of the gender pay gap. Location of occupation and industry is heavily impacted by gender norms and expectations.
Watson, I. 2010, *Decomposing the Gender Pay Gap in the Australian Managerial Labour Market,* Australian Journal of Labour Economics 13(1), 49–79	• Watson used eight waves of HILDA data, and also adopted a similar method to Walby and Olsen to estimate the gender pay gap. • This article analysed the gender pay gap at the managerial level in Australia between 2001 and 2008, and found that female managers earned on average 27 per cent less than their male counterparts. • Further, the article found that this pay gap was largely attributable to gender discrimination, and that having dependent children worsened the pay gap.
Bankwest Curtin Economics Centre (BCEC) 2016, *Gender Equity Insights 2016: Inside Australia's Gender Pay Gap*	• This report analysed gender pay gap differences across industry sectors and occupational seniority, and found that despite advances in educational attainment and workforce participation the gender pay gap remains a persistent feature of the Australian labour market. • The report used data reported to the WGEA by Australian businesses.

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

A comparison between the range of sources and methods used between the 2009 and 2016 reports, and the manner in which they were addressed or considered in the methodology, is detailed below.

Consideration	KPMG (Nov 09)	NATSEM (Nov 09)	Additional information
Data sources			
HILDA – Wave 7	Included observations: 6121	Total population of wage earners equal to 6,137	Both used the same Wave of HILDA dataset.
ABS Labour Force Survey	Used to calculate the percentage of males in industry and occupational segregation indices.	Used to calculate the percentage of males in industry and occupational segregation indices.	Possible difference in the magnitude used – NATSEM: multiplied by 10.
Methodology			
Walby and Olsen 2002 and 2004.	Used Walby and Olsen 2002. KPMG report calls this the "Heckman two step method".	Used Walby and Olsen 2002 and 2004. NATSEM calls this the "gross decomposition method/simulation" technique.	Allows gender discrimination to be measured or proxied.
Heckman, 1979	Appears similar from available information.	Appears similar from available information.	Used to remove the selection bias in an individual's labour force participation decision.
Part 1: Variables in the employment participation equation	• Work experience squared (time in paid work years) • Age and age squared • Education scale • Children: 5-9, 10-14 • Casual, part time, and usual hours of work per week • Time not in labour force • Time unemployed • Entitlement to parental leave • <20 or 20-100 • Satisfaction with work flexibility State, inner region, outer region, remote	• Education: bachelor, vocational • Children: 0-4, 5-14 • Hours per week: 1-35, 35-40, 41-49 • Regular work schedule • Rural and other urban area • Tenure in current occupation • Firm size: 100-500, 500+ • Has long term health condition	KPMG: All variables significant except migrants from a non-english speaking background.
Data population exclusions	All potential employees captured in data set, i.e. all people of working age, whether they were in the labour force, marginally attached, or not in the labour force at the time of the survey. Self-employed persons were included in the sample.	Excluded people still at school, self-employed, people under 21, people over 65, people with unusually high (>$260 per hour) or unusually low wages (<$5 per hour).	

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

Consideration	KPMG (Nov 09)	NATSEM (Nov 09)	Additional information
Key variables (considered and omitted)			
Control variables	• Location • Household income • Firm size • Trade union membership • Job characteristics as controls, these being: hours of work, size of employer, union membership, satisfaction with flexibility of work arrangements, and flexible work arrangements • Includes industry and occupation dummy variables as controls • Age and age squared, marital status, number of dependent children (four years or under, five to nine years, and 10 to 14 years), state, and location (urban, regional or remote)	• Marital status • Regional control variables (metro vs non-metro; state; remoteness) • Health status • Children 4 or under • Children 5-14	
Demographic characteristics	To control for differences in demographic characteristics that may affect an individual's earnings, we included the following controls: age and age squared, marital status, number of dependent children (four years or under, five to nine years, and 10 to 14 years), state, and location (urban, regional or remote).	Olsen and Walby also choose to exclude from their decomposition the effects of factors that are 'female-advantaging' (those that help to decrease the wage gap), factors that do not change, and those that they consider to be controls only and not relevant to gender wage gaps, however relevant in estimating wages – for example, geographical variables. Whilst removal of these components could be considered to produce biased estimates, or in fact an overestimation of the wage gap, their justification for this approach is that the variables considered are ones with policy relevance to the gender wage gap. (Olsen and Walby 2004, p.63).	

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

Consideration	KPMG (Nov 09)	NATSEM (Nov 09)	Additional information
Regression results and key findings			
Hourly wages from HILDA and size of gender pay gap	Female average: $21.91 per hour Male average: $23.20 per hour **Gap: $1.29** *(2009 $)* 5.6% hourly wage gap	Female average: around $25 per hour Male average: around $28 per hour **Gap: $3.13** 11% hourly wage gap 17% using AWE data	
Percentage contribution of variables to gender pay gap	Sex discrimination and other factors: 35% Occupational segregation: 18% Work part-time: 14% Industry segregation: 10% Work interruptions: 9% Age (proxy for work experience): 8% Tenure with current employer: 3% Types of employers (NGO and govt): 3%	Female: 60% Industry segregation (male proportion x 10): 25% Vocational qualification: 5% Tenure in occupation (years): 4% Time in paid work (years): 3% Firm size: 100-500 employed: 2% 500+ employed: 1% Tenure in current employment (years): 0%	Results from Walby and Olsen 2002: Factors associated with being female: 29% Years of full time work experience: 26% Interruptions: 15% Segregation: 13% Years of part time work experience: 12% Education: 6%

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

Limitations

There are a number of limitations associated with the approach that need to be taken into further consideration. Firstly, it is noted that using wages as a proxy in examining the gender pay gap implies a point-in-time analytical framework for the development of this Report. This is an important consideration, given the intent of this Report is to demonstrate the changes over time. The consideration of wages at two separate points in time (primarily, 2009 and 2016, subject to the data and information available) is not intended to provide a complete understanding of any and all potential changes and events within the two time periods. Rather, this approach seeks to provide a perspective on the extent to which change has occurred in the factors contributing to the gender pay gap.

Secondly, there is a significant body of research and literature on differences between men and women that span the lifetime of an individual in the labour force, such as the wealth gap, differences in lifetime earnings, and superannuation – all of which are outside the scope of this Report.

Thirdly, a further limitation relates to the sampling approach adopted. The analysis of this report is based on the sample of respondents included within the HILDA dataset. This sample is expanded with each consecutive wave of the HILDA survey delivery.

Where possible, the methodology has sought to control and adjust for sampling issues through the use of weights, however, it is important to note that the analysis may be impacted by the demographic and economic characteristics of the survey respondents, as well as typical sampling error.

Fourthly, the definition and measurement of potential contributing factors is another limitation of the approach. The analysis has sought to test a broad range of potential driving factors, however, it is important to recognise that in some cases, available data can only form a proxy for the factor attempting to be modelled.

Lastly, in relation to the attribution of impacts, while the analysis within the report attempts to capture the statistical association between the gender pay gap and the factors modelled, these cannot necessarily be definitively attributed. Further, their associations need to be considered in the broader context of available evidence and key developments to ensure that they are appropriately interpreted and applied.

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

Appendix C: Case Studies

In order to 'bring to life' initiatives being implemented by leading organisations around Australia in addressing the gap, Diversity Council Australia and Workplace Gender Equality Agency have collated a suite of case studies which address different factors underpinning the gap – we thank all parties involved for sharing their experiences.

AECOM

INDUSTRY: Engineering

EMPLOYEES: 3,200

INITIATIVE: Graduate Recruitment 50:50 Gender Split

Our CEO, Lara Poloni and the Executive team strive for an outstanding and diverse business and in February 2016 set targets for females into graduate roles and transformed the process for Graduate Recruitment.

AECOM brought on approximately 120 graduates across Australia and New Zealand in 2016 with just under 30% female and have since set a target of 50/50 gender split. To achieve this result, a more strategic approach was required and the latest gamification tools were leveraged as part of the short listing process and AECOM's on campus profile was elevated.

There is still a real challenge to achieve the 50/50 split based on the number of female students attending university for some areas of STEM, but it is achievable. One of the best outcomes has been getting such buy-in and commitment from the business. They support the fact AECOM wants the best and most diverse business. The next undergraduate recruitment strategy is in planning and the company continues to develop strong relationships with student female societies as well as hosting in-house women in STEM events.

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

AGL

INDUSTRY: Electrical Distribution

EMPLOYEES: 3,000

INITIATIVE: Remuneration Tool

'R.Review' is AGL's remuneration tool, a robust system to review, manage and deliver market-competitive and performance-based remuneration across all employee levels, including direct reports to the Chief Executive Officer. Used by leaders during the annual performance review the tool delivers gender pay equity analytics and insights.

Implemented six years ago, the reporting tool has enabled People and Culture to analyse and compare gender pay equity across the organisation, including distribution of performance and development ratings, and fixed and variable remuneration increases by gender. The real-time reporting alerts leaders if they have any unexpected and potentially gender-biased outcomes.

AGL has also implemented Unconscious Bias Training for all leaders and Remuneration Training educates leaders about the need to consider pay equity when they are making remuneration decisions.

The tool has enabled leaders to be aware of potential gender bias at early stages of the remuneration cycle. Leaders can be surprised by report findings, however anomalies are able to be rectified in a timely manner. Such insights also support targeted conversations about gender pay equity at calibration meetings that leaders and executives attend.

ANZ

INDUSTRY: Financial Services

EMPLOYEES: 45,000

INITIATIVE: Financial Inclusion for Women

ANZ is taking the lead on addressing the imbalance of women's superannuation in comparison to men by paying an additional annual $500 lump sum contribution to permanent and fixed-term female employees in Australia who are on our payroll in January each year.

ANZ also pays superannuation during the unpaid portion of parental leave, and the Long Service Leave policy covers up to 24 months for employees in Australia. These changes to parental and long service leave will benefit both male and female employees.

The biggest challenge for ANZ was convincing stakeholders and decision makers of the need for action – explaining the facts and root causes of gender imbalances and to indicate the changes required. ANZ also had to obtain a formal exemption from the New South Wales Anti-Discrimination Board which approved the payment of additional superannuation to female employees.

Although there was some negative sentiment from men and some women about the 'positive discrimination' – ANZ learnt the importance of continually articulating the reality of the gender pay gap and therefore the need for these types of 'disruptive' solutions. The bank continues to focus on increasing the participation of women in leadership roles and in different occupations within the bank – because this is a key cause of the gender pay gap.

Following the announcement of ANZ's Equal future campaign in July 2015, the Senate Economics Committee announced an inquiry into the economic security of women in retirement. ANZ made a submission to the inquiry and gave evidence at its first public hearing which was held in Adelaide. The senate subsequently adopted five out of seven recommendations from ANZ's submission.

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

Caltex

INDUSTRY: Fuel Supply and Convenience Retailing

EMPLOYEES: 3000+

INITIATIVE: BabyCare Package inc 3% bonus

Caltex benefits from experienced and skilled employees returning to work and continuing to contribute to the company's business success. To address the issue of a low parental return-to-work rate, the BabyCare Package was introduced in 2012. The initiative was launched because many working parents found the practical and financial challenges when transitioning back to work made it challenging to achieve their goal of balancing their careers and family.

Up until the baby's second birthday, the BabyCare Package offers a 3% bonus each quarter (a total of 12% per year on base salary inclusive of superannuation) to a primary carer once they return to work to help offset additional costs, particularly childcare. Access to Dial-an-Angel mothercraft nurses or carers is available for up to five times each year until the child turns two, as well as a specialist service helping parents identify longer-term childcare solutions. There is also a Parental Transition Group to provides opportunities for parents and parents-to-be to network.

Caltex has had 132 employees take part in the BabyCare Package and our analysis shows a 25% increase (at the end of 2015) in the number of women successfully transitioning back to work.

GHD

INDUSTRY: Engineering

EMPLOYEES: 3000+

INITIATIVE: Return to Work Pay Review

Following a detailed pay equity review which found that pay gaps can emerge particularly for people who take parental leave or return to work part-time, GHD enhanced its return to work practices.

In 2015, the program was updated so that everyone returning from parental leave has their salary reviewed within six months of their return to work. The annual remuneration review process also now includes parity reviews for people working part-time.

To facilitate a successful return to work, GHD also encourages people to keep in contact with their manager and colleagues. As part of this program people are teamed with 'parental leave buddies' to share organisational and team news and support the person's return to work. As well as 'keeping in touch days' during paid parental leave, there is the option to work casually while on unpaid parental leave, as well as training for managers to support people and teams who wish to work flexibly.

The return to work program recognises that working parents need flexible and responsive support to make their transition back to work easier, including flexible start and finish times, opportunities to work part-time or casually, and working from home. As a result, in the 2015-2016 reporting period, fewer than 1% of people on parental leave at GHD did not return to work.

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

Henry Davis York (HDY)

INDUSTRY: Law

EMPLOYEES: 350

INITIATIVE: Working Fathers Forum

The Working and Parenting Program for women was established in 2014, focusing on helping women combine work and parenting.

Based on their own positive experience, participants in the program suggested broadening the offering to men. Facilitated by an external consultant the Working Fathers Forum aimed to understand the challenges faced by working fathers, to discuss flexibility and to uncover what type of support working fathers would value to assist them in combining work and family successfully.

One of the interesting findings from the Working Fathers session was the men felt that the support of their immediate manager/partner was the most critical in making formal and informal flexibility work. The significant challenges articulated by this group included juggling client expectations with expectations on the home front and the desire to spend more time with family/children. The perception still exists in the minds of this group that requests for formal flexibility could be viewed as a lack of commitment to their career.

These programs have provided the opportunity for working parents (male and female) to discuss tangible and practical ideas and solutions. In turn these programs have provided valuable feedback to inform new gender equality initiatives – including enhanced paid parental leave for primary and secondary carers and an investment in improved remote access to facilitate flexible working.

K&L Gates

INDUSTRY: Law

EMPLOYEES: 492

INITIATIVE: Women in Leadership Strategy

Since 2007, K&L Gates Australian has had a strategy to improve the gender balance of partners within the firm and in 2012, established a Women in Leadership Strategy.

Nick Nichola, Managing Partner Australia, led the initiative to increase the participation of women in partnership. He recognised the only way to effect change was for all partners to create a culture that inspires women to aspire to partnership. To achieve this, all partners need to be actively involved in career planning with a focus on identifying potential future leaders early in their career to ensure that active sponsorship is in place.

The firm has deployed a number of initiatives focused on creating equal opportunities for women and men, focusing on mentoring, sponsorship and development for women, as well as firm targets to measure and track progress.

In the first three years of the strategy, the firm increased its representation of women in partnership roles from 19% to 22%. In 2016, 50% of partnerships were awarded to women.

Women in senior associate and special counsel roles has also increased over the past three years, with a number of women appointed to partnership and special counsel roles while on maternity leave. The increase in women in leadership is also a result, in part, of initiatives such as paid parental leave, flexible working and specialist professional development programs.

K&L Gates is now aiming for 30% of leadership roles to be held by women by 2018.

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

King & Wood Mallesons

INDUSTRY: Law

EMPLOYEES: 1127

INITIATIVE: Blind Recruiting

Part of the King & Wood Mallesons business commitment is to regularly analyse each key 'people milestone' across the employment life cycle. Identifying and addressing biases is one core element of that analysis and from that came the 'blind CV' initiative for graduate and clerkship campaigns.

Critical to its success has been transparency with candidates about what the process is, why the company is doing it and giving an insight into the firm's values. The company has also worked with its recruitment committees and key decision makers around bias and stereotyping.

From a process point of view the approach has been simple - manually redacting all key identifiers out of applications including name, gender, age, address and school. Once de-identified, applications then go through a 'double read' where each is read by two different reviewers and ultimately to a diverse interviewing panel.

This approach has been taken firm-wide using National Graduate Recruitment Diversity Principles. The most recent campaign also incorporated the RARE contextual recruiting system to provide an even more holistic process.

Blind recruiting forms just one component of the overall approach to diversity and inclusion which includes being conscious of the way the company designs its strategy, committees, processes, education, decision-making and teams, so they actively seek out and promote differences to further equality.

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

KPMG

INDUSTRY: Professional Services
EMPLOYEES: 6,000+
INITIATIVE: Monitoring and Addressing Gender Pay Equity

KPMG first began seeking to understand gender pay in 2010. In the first few years, we built up capability for understanding what was happening in the remuneration of our people and in 2012 we produced a comprehensive report for our National Executive Committee. This report demonstrated the criticality of taking action and has led to significant, sustained commitment across the firm to addressing the gap.

Actions identified from this report included the need for:

- Improvement in usable analytics and reporting to monitor and address gender pay issues;
- Investment in Diversity & Inclusion (both financial and time investments);
- Talent interventions (retain and engage senior women); and
- Specific reporting for the National Executive Committee – including highly detailed reporting through remuneration review.

Since that time KPMG has successfully:

- Developed a comprehensive analytics reporting tool which enables us to track performance and remuneration results by gender in real time;
- Implemented detailed gender pay equity reporting at all levels up to the National Executive Committee;
- Promoted the importance of gender equity from our senior leaders both within the firm and externally to our peers and the broader business community (CEO Gary Wingrove is a Male Champion of Change, and a WGEA Pay Equity Ambassador); and
- Invested in a multi-faceted approach to addressing gender equity. This approach includes targeted interventions within each Division to improve female representation; senior leadership development program for high potential women; education programs to help both raise awareness of gender equity issues and to actively address unconscious bias in decision making.

In relation to gender pay equity, we now have an extremely robust process that allows us to provide guidance before decisions are made, enable managers to monitor decisions as they are made, and provide informed challenge where required. This includes:

1. **Robust approach to performance reviews**: Independent representatives from HR participate in business unit performance review meetings to monitor and challenge decisions on performance, promotion and pay at the point decisions are made.
2. **Detailed analysis of outcomes and challenge where required**: Data is captured on ratings and remuneration outcomes and included in a tool which provides real time quantitative data on the gap between comparable roles across the firm. This data provides a platform to enable both HR and decision makers to ensure outcomes are fair, and, to challenge outcomes on an individual level where needed. In areas where a potential gap has been identified, decision makers are required to explain the variance or make changes to outcomes. As a result of this process around 20 individual remuneration outcomes were changed during our latest remuneration review cycle.
3. **Front and center executive involvement**: The CEO and the National Executive Committee receive detailed reporting outlining initiatives and controls in place, explicit data on performance and remuneration results, and the outcomes of these processes as part of our formal sign off.

We believe that this rigorous analysis and continual development has helped KPMG to make significant strides in our approach and that we are now at the 'review and refine' stage of WGEA's six-step process to addressing pay equity.

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

National Australia Bank

INDUSTRY: Banking

EMPLOYEES: 30,000+

INITIATIVE: 12 week paid parental leave for non-birth parents

In recognition of changing family dynamics, in 2015, NAB made its 12-week paid parental leave entitlement accessible to non-birth parents to help increase the number of men taking time to help raise their children.

NAB employees can now take paid primary carers' leave anytime within the first twelve months of a child's life – previously only available to the primary carer for 12 weeks upon the birth or adoption of a child (or 24 weeks at half pay). Up to 40 weeks of unpaid parental leave is recognised for long service leave accrual. Superannuation contributions on the unpaid portion of a primary carer's leave up to a maximum of 40 weeks is paid upon return to work. Employees returning from parental leave also receive a remuneration review and this has been included as a firm commitment under the Enterprise Agreement.

A comprehensive childcare strategy offers quality, cost-effective childcare options and NAB also offers a wide range of flexible working options – from job sharing, to working from home and extended leave. The 2016 global employee engagement survey shows that 85.9% of people work flexibly, including 84% of female staff and 88.1% of male staff.

St Barbara Ltd

INDUSTRY: Mining

EMPLOYEES: 950

INITIATIVE: Gender Pay Gap Analysis

St Barbara set a number of diversity targets in 2011, including reducing the company's overall gender pay gap and has developed a strategy to ensure that all new and existing employees are remunerated equally using benchmarked data.

Since 2011 the company has been analysing data each month to identify where women were underrepresented and the overall pay gap. The progress is reported monthly to the executive leadership team and regularly reported to the board. There are also targets in place to ensure that all new roles have an equal representation of men and women.

Over time the company has seen the overall pay gap reduce significantly from the original 43% in 2007 to the current 15% as at end of June 2016.

Over the last few years, St Barbara has been reviewing like-for-like roles and variances are checked to ensure that any anomaly is justified based on qualification/experience and the company has set a new target of 0% pay gap for like-for-like roles.

We will also continue to focus exploring ways to increase the pipeline of women in professional and leadership roles.

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

TAL

INDUSTRY: Insurance

EMPLOYEES: 1,521

INITIATIVE: Gender Pay Gap Analysis

TAL is very proud to report they have closed the gender pay gap. They started their journey in August 2013 where, at an organisational level, they reported an 82% gender pay equity position. As at 1 April 2016 they had closed this gap and can now report that women at TAL earn the same as their male counterparts in like for like roles. This success has included taking a holistic approach to promoting gender equity; understanding where the gaps exist and why, securing senior leadership commitment, measuring and reporting regularly to their executive team and board, changing processes and procedures which perpetuate gaps, and raising awareness through education.

TAL conducts an organisational wide pay gap analysis at least twice a year. The controls they look at focus on checking direct correlation between outcomes of reward and performance ratings for males and females across multiple lenses to ensure consistency. This includes analysing gender pay equity by function, job family, by job band, and employment type to ensure they uncover any unintended discrimination and are able to target specific actions to create pay equity in like for like roles.

This, coupled with their new initiative paying super contributions to employees throughout the first 12 months of primary parental leave, is a great outcome for the women who work at TAL. Although TAL have closed the gender pay gap the key thing for them is that the journey on gender pay equity is not over. They understand it requires ongoing attention and focus to ensure they continue to build best in class practices into their organisational norms.

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International. Liability limited by a scheme approved under Professional Standards Legislation.

Contact us

Susan Ferrier
National Managing Partner
People, Performance & Culture
+ 61 (2) 9346 5669
sferrier@kpmg.com.au

Steven Casey
Director
Policy, Programs & Evaluation
+ 61 (2) 9455 9470
stevencasey@kpmg.com.au

kpmg.com/au/paygap

The information contained in this document is of a general nature and is not intended to address the objectives, financial situation or needs of any particular individual or entity. It is provided for information purposes only and does not constitute, nor should it be regarded in any manner whatsoever, as advice and is not intended to influence a person in making a decision, including, if applicable, in relation to any financial product or an interest in a financial product. Although we endeavour to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

To the extent permissible by law, KPMG and its associated entities shall not be liable for any errors, omissions, defects or misrepresentations in the information or for any loss or damage suffered by persons who use or rely on such information (including for reasons of negligence, negligent misstatement or otherwise).

© 2016 KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved.

The KPMG name and logo are registered trademarks or trademarks of KPMG International.
Liability limited by a scheme approved under Professional Standards Legislation.