

# *Excessive Hours, Unpaid Overtime and the Future of Work: An Update*

By Troy Henderson and Tom Swann  
Centre for Future Work at the Australia Institute

November 2017

## About The Australia Institute

The Australia Institute is an independent public policy think tank based in Canberra. It is funded by donations from philanthropic trusts and individuals and commissioned research. We barrack for ideas, not political parties or candidates. Since its launch in 1994, the Institute has carried out highly influential research on a broad range of economic, social and environmental issues..

## Our Philosophy

As we begin the 21st century, new dilemmas confront our society and our planet. Unprecedented levels of consumption co-exist with extreme poverty. Through new technology we are more connected than we have ever been, yet civic engagement is declining. Environmental neglect continues despite heightened ecological awareness. A better balance is urgently needed.

The Australia Institute's directors, staff and supporters represent a broad range of views and priorities. What unites us is a belief that through a combination of research and creativity we can promote new solutions and ways of thinking.

## Our Purpose – ‘Research That Matters’

The Institute publishes research that contributes to a more just, sustainable and peaceful society. Our goal is to gather, interpret and communicate evidence in order to both diagnose the problems we face and propose new solutions to tackle them.

The Institute is wholly independent and not affiliated with any other organisation. Donations to its Research Fund are tax deductible for the donor. Anyone wishing to donate can do so via the website at <https://www.tai.org.au> or by calling the Institute on 02 6130 0530. Our secure and user-friendly website allows donors to make either one-off or regular monthly donations and we encourage everyone who can to donate in this way as it assists our research in the most significant manner.

Level 1, Endeavour House, 1 Franklin St  
Canberra, ACT 2601  
Tel: (02) 61300530  
Email: [mail@tai.org.au](mailto:mail@tai.org.au)  
Website: [www.tai.org.au](http://www.tai.org.au)

## About the Centre for Future Work

The Centre for Future Work is a research centre, housed within the Australia Institute, to conduct and publish progressive economic research on work, employment, and labour markets. It serves as a unique centre of excellence on the economic issues facing working people: including the future of jobs, wages and income distribution, skills and training, sector and industry policies, globalisation, the role of government, public services, and more. The Centre also develops timely and practical policy proposals to help make the world of work better for working people and their families.

[www.futurework.org.au](http://www.futurework.org.au)

## About the Authors

Troy Henderson is a PhD candidate in the Department of Political Economy at the University of Sydney. He holds a Masters of Arts (Research), and tweets at @TroyCHenderson.

Tom Swann is a researcher with the Australia Institute.



# Table of Contents

Introduction and Summary .....	4
Hours of Work .....	7
Polarisation of Working Hours .....	11
Unpaid Overtime .....	14
The Costs of “Time Theft” .....	17
Special Focus: Disruptive Technology and the Future of Work-Life Balance.....	19
Background.....	19
What do Australians think? .....	20
How workers would like to share in the benefits .....	23
What do people think would happen in <i>their</i> workplace?.....	26
What kind of impact on your work?.....	30
Conclusion .....	35
Appendix A – Survey Questions.....	37
Appendix B – Sample Distribution.....	40
Bibliography.....	41

# Introduction and Summary

2017 marks the ninth annual **Go Home On Time Day** (GHOTD), an initiative of the Centre for Future Work at the Australia Institute intended to shine a spotlight on the incidence of overwork among Australians, including excessive overtime (often unpaid).

To investigate the prevalence of overwork and unpaid overtime, and other instances of “time theft”, the Australia Institute has commissioned annual opinion polls gathering original data on the incidence of overwork and Australian attitudes toward it. This year’s poll of 1421 Australians was conducted by Research Now between September 17-26, with a nationally representative sample by gender, age and state or territory.

Of the 1421 respondents, 877 (or 62 percent) were currently in paid work. That sub-sample was asked several questions regarding their hours of work, whether they wanted more work or less, and whether they worked unpaid overtime in their jobs. In addition, the sub-sample was also asked about their attitudes towards the impact of automation on the future of work in Australia.

This report summarises the results of that polling, and places it in the context of national labour force trends:

- There is growing evidence of an ongoing polarisation in Australian employment patterns, between those with full-time, relatively secure jobs, and a growing portion working part-time, casual, temporary, or insecure positions.
- In the survey, 56 percent were employed in standard full-time jobs, while 44 percent were employed as part-time, casual or self-employed workers. That broadly matches the breakdown in the overall labour market.
- In the survey, 27 percent of full-time workers said they would prefer to work fewer hours. In contrast, those in part-time or casual positions work far fewer and more uncertain hours, and many would prefer to work more – 45 percent of part-time workers and 60 percent of casual workers. This highlights the problems of underemployment and inadequate incomes experienced by the growing proportion of Australian workers in insecure jobs.
- On average, full-time workers reported performing 6 hours of unpaid overtime per week – including coming in early, leaving late, working at home or on weekends, and working through regular breaks and lunch hours. Part-time and casual employees work an average of 3.3 hours of unpaid overtime per week, while the self-employed work an average 6.3 hours of unpaid labour each week.

- Across all forms of employment, our respondents worked an average of 5.10 hours of unpaid labour per week (up from 4.64 hours in 2016). This unpaid labour represents between 14 percent and 20 percent of the total time spent working by Australian employees.
- The aggregate value of this “time theft” is large and growing. We estimate the total value of unpaid overtime in the national economy at about \$130.7 billion in 2016-2017, up from \$116 billion last year.
- It is painfully ironic that so many Australians in insecure jobs want and need more hours of paid employment – while many more, who currently work long hours, would like more time off. Redistributing work, reducing the incidence of unpaid overtime, and improving the stability of hours for part-time and casual jobs would thus improve conditions on both sides of Australia’s polarising labour market.
- There would be significant economic, social, and health benefits from providing workers with stronger protections against unpaid overtime, and finding ways to better share available work.
- There are growing public concerns about the impact of new technologies – including computer software, automation and robots, and new digital platforms for “gig” work – on the future of jobs in Australia. Our survey also polled Australian attitudes regarding technology and the quantity and quality of their work.
- Australians agree that there are significant potential benefits from new technology, and that those benefits could be experienced by businesses, consumers, and workers.
- Benefits of productivity-enhancing technology for workers can include higher incomes, shorter working hours, or a combination of the two. When asked which benefits they would prefer, Australians generally want to see both higher incomes and shorter working hours. 60 percent want to see higher incomes (either on their own, or in conjunction with shorter working hours), while 57 percent want to see shorter working hours (either on their own, or in conjunction with higher incomes). In sum, Australians clearly want to see a balance between a higher material standard of living, and more time off to enjoy that standard of living.
- However, when thinking about their own workplaces, Australians fear that employers will respond to new technology primarily by reducing employment levels (rather than by increasing incomes or reducing average working hours). 57 percent of workers think their employer will respond to new technology by reducing employment. Only 18 percent expect shorter working hours to be the outcome of technological change, and only 14 percent expect higher incomes.
- This suggests that while Australians see the potential of new technology to improve their lives, they worry that the implementation of new technology may not translate into gains for workers.

- Australians' attitudes toward new technologies in their workplaces are shaped by their experience of the present labour market. Those currently working too few hours of work, would like to see the benefits of new technology flowing mainly through higher pay rather than shorter hours. Conversely, those with more stable, full-time jobs place greater emphasis on shorter working hours rather than higher pay. Here, too, the benefits of attaining a better distribution of working hours, and reducing the insecurity that so many workers in precarious jobs are experiencing, are evident.

In summary, the jarring coexistence of overwork and underemployment, and the contradiction between Australians' optimism regarding the potential benefits of technology and their fears about what will happen in their specific workplaces, both suggest a need for more pro-active labour market strategies to share work across all groups of workers, and to enhance the security and stability of jobs. To translate the promise of new technology into concrete benefits for workers (both higher incomes and more leisure time) will require effective measures to limit overtime (including unpaid overtime), enhance the stability of work (especially for workers in the growing number of non-standard jobs), and give workers more say in how new technology is managed.

# Hours of Work

Table 1 summarises the employment status and normal hours of work reported by respondents to the poll. 62 percent of respondents were employed. This closely matches the average employment data reported by the ABS in its monthly labour force survey.<sup>1</sup> Of those employed, 55.7 percent worked in standard full-time positions, while the remainder (44.3 percent) worked in part-time (21 percent), casual (12.9 percent) or self-employed (10.4 percent) positions. This is also reasonably consistent with overall data regarding the extent of non-standard employment in Australia,<sup>2</sup> suggesting that our sample is indeed an accurate representation of the broader labour market. This breakdown also confirms the expansion of non-standard employment, which now (in one form or another) accounts for almost half of all jobs in Australia.

	<b>Employed</b>	<b>Not Employed</b>		
<b>Percent of Total Sample</b>	61.7%	38.3%		
	<b>Full-Time</b>	<b>Part-Time</b>	<b>Casual</b>	<b>Self-Employed</b>
<b>Percent of Employed</b>	55.8%	21.0%	12.9%	10.4%
<b>Average Hours/Week</b>	40.3	23.3	21.6	32.1
Source: Survey results as described in text.				

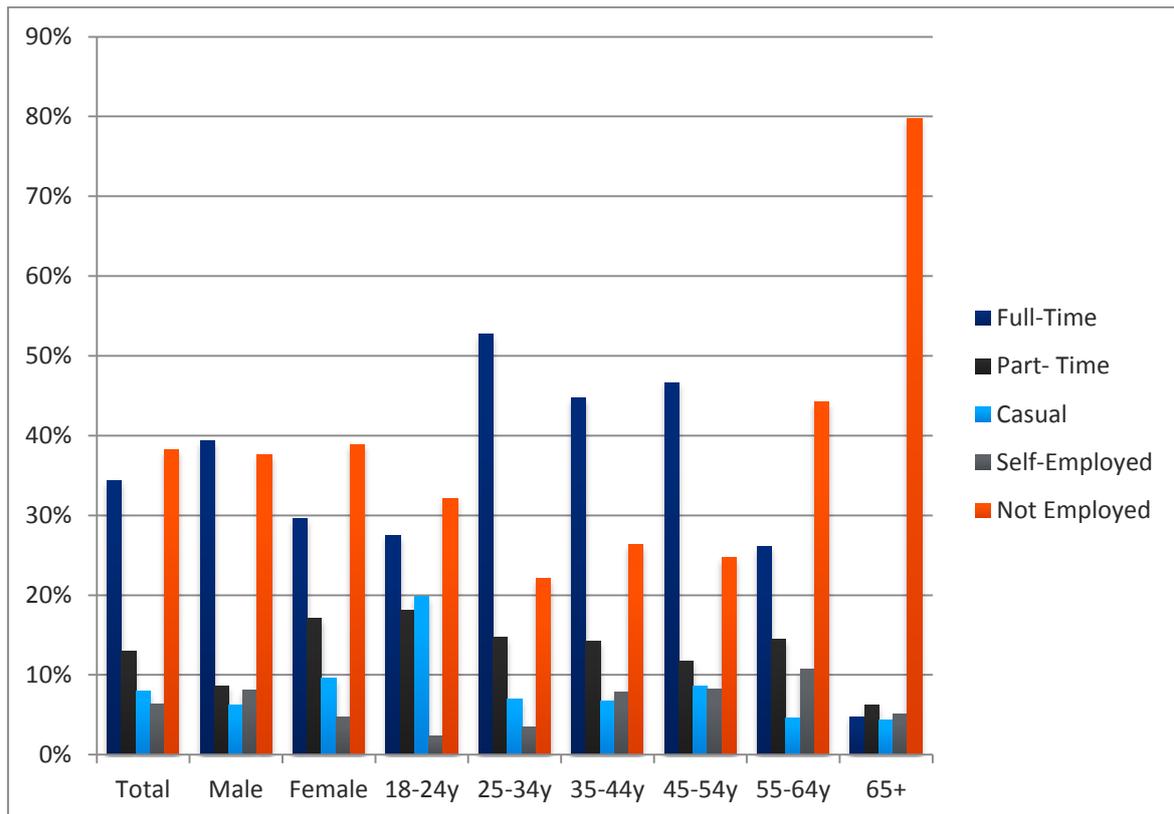
Full-time workers in the sample reported working an average of over 40 hours per week. Regular part-time workers worked an average of 23.3 hours per week, compared to 21.6 hours per week for casual workers and 32.1 hours per week for the self-employed.

<sup>1</sup> Seasonally adjusted employment to population ratio: 61.6 percent; see ABS Catalogue 6202.0 - Labour Force, Australia, September 2017.

<sup>2</sup> See Center for Future Work (2016).

Figure 1 describes employment status by gender and age. Women were far more likely to work in part-time or casual roles (27 percent of total sample) than men (15 percent). Those aged 18-24 were the most likely to be in part-time or casual work (38 percent) compared to less than 23 percent for all other age cohorts. 80 percent of those aged 65 and over were not in the workforce, compared to 44 percent for the 55-64 age bracket.

**Figure 1. Employment Status by Gender and Age Cohort.**



Source: Survey results as described in text.

Table 2 summarises differences in employment status by industry. There are stark differences between different sectors of the Australian economy in relation to employment status that reflect the polarisation of working conditions across the labour force. The trend towards non-standard forms of work is most clearly visible in Accommodation and Food Services (where 65 percent of work is part-time or casual) and Retail Trade (60 percent part-time or casual). Construction, Health Care and Social Assistance, and Education and Training, have between 35 percent and 40 percent of their workforce in part-time or casual positions. In contrast, our survey shows that over 70 percent of employees in the following five industry sectors worked full-time: Mining, Electricity, Gas, Water and Waste Services, Wholesale Trade, Information, Media and Telecommunications, and Public Administration and Safety. In these

sectors, employment still conforms more strongly to traditional patterns of full-time permanent jobs.

<b>Table 2</b>				
<b>Employment Status by Industry</b>				
<b>(percentage of employed persons)</b>				
<b>Industry</b>	<b>Full-Time</b>	<b>Part-Time</b>	<b>Casual</b>	<b>Self-Employed</b>
<b>Mining</b>	75%	5%	10%	10%
<b>Manufacturing</b>	66%	19%	6%	9%
<b>Electricity, Gas, Water and Waste</b>	79%	21%	0%	0%
<b>Construction</b>	45%	14%	23%	18%
<b>Wholesale Trade</b>	71%	13%	8%	8%
<b>Retail Trade</b>	36%	39%	21%	4%
<b>Accommodation and Food Services</b>	28%	44%	21%	8%
<b>Transport, Postal and Warehousing</b>	56%	19%	14%	12%
<b>Information, Media &amp; Telecom.</b>	79%	3%	6%	12%
<b>Financial and Insurance Services</b>	64%	20%	2%	14%
<b>Rental, Hiring and Real Estate Services</b>	54%	23%	8%	15%
<b>Professional, Scientific and</b>	68%	8%	8%	16%
<b>Administrative and Support Services</b>	57%	32%	3%	8%
<b>Public Administration and</b>	83%	8%	8%	0%
<b>Education &amp; Training</b>	59%	22%	14%	4%
<b>Health Care and Social Assistance</b>	53%	26%	14%	7%
<b>Arts and Recreation</b>	23%	12%	23%	42%

Source: Survey results as described in text.

Table 3 shows the percentage of employed persons broken down by political party affiliation. Nearly half (49 percent) of those supporting Pauline Hanson’s One Nation (PHON) were not in paid employment, nearly double the 25 percent figure for Greens supporters (GRN) and substantially higher than the percentage for Liberal National Party (LNP) and Labor (ALP) supporters (35 percent and 39 percent, respectively). The high percentage of PHON and other minor party supporters not in paid employment may suggest a link between disaffection with established political parties and job status; this is consistent with recent Essential Media polling research<sup>3</sup> on key federal election issues.

<b>Table 3</b>					
<b>Employment Status by Political Party Affiliation</b>					
<b>Political Party Affiliation</b>	<b>LNP</b>	<b>ALP</b>	<b>GRN</b>	<b>PHON</b>	<b>OTHER</b>
<b>Employed</b>	65%	61%	75%	51%	52%
<b>Not Employed</b>	35%	39%	25%	49%	48%
Source: Survey results as described in text.					

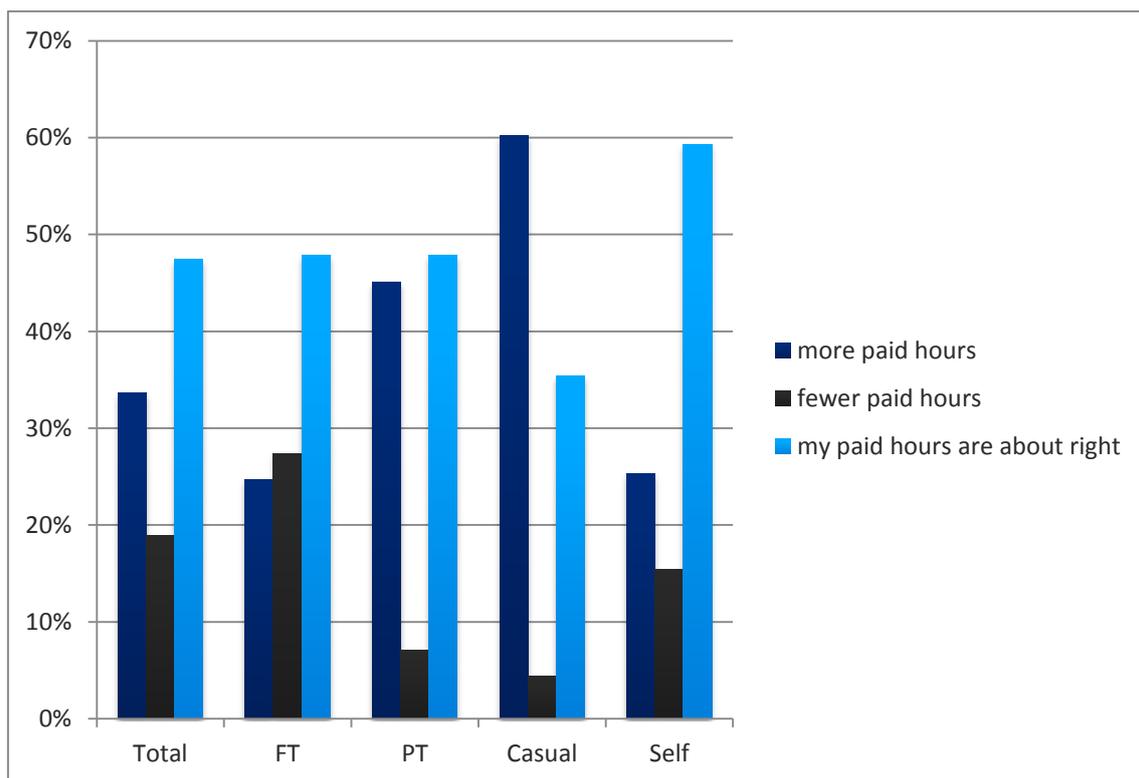
<sup>3</sup> Essential Research (March 2016).

# Polarisation of Working Hours

As described above, there are significant differences between the working hours of full-time, part-time, casual and self-employed workers. Not surprisingly, therefore, there are also major variations in their attitudes toward working hours. Full-time workers and the self-employed are more likely to want shorter working hours than longer. But many part-time and casual workers want more hours, not fewer. Across all employed respondents, just under half said their hours of paid work are “just about right.” Casual workers show the lowest satisfaction with their current working hours, while self-employed workers show the highest.

The large differences in attitudes toward working hours between full-time, part-time, casual and self-employed workers are illustrated in Figure 2.

**Figure 2. Hours of Paid Work Preferences.**



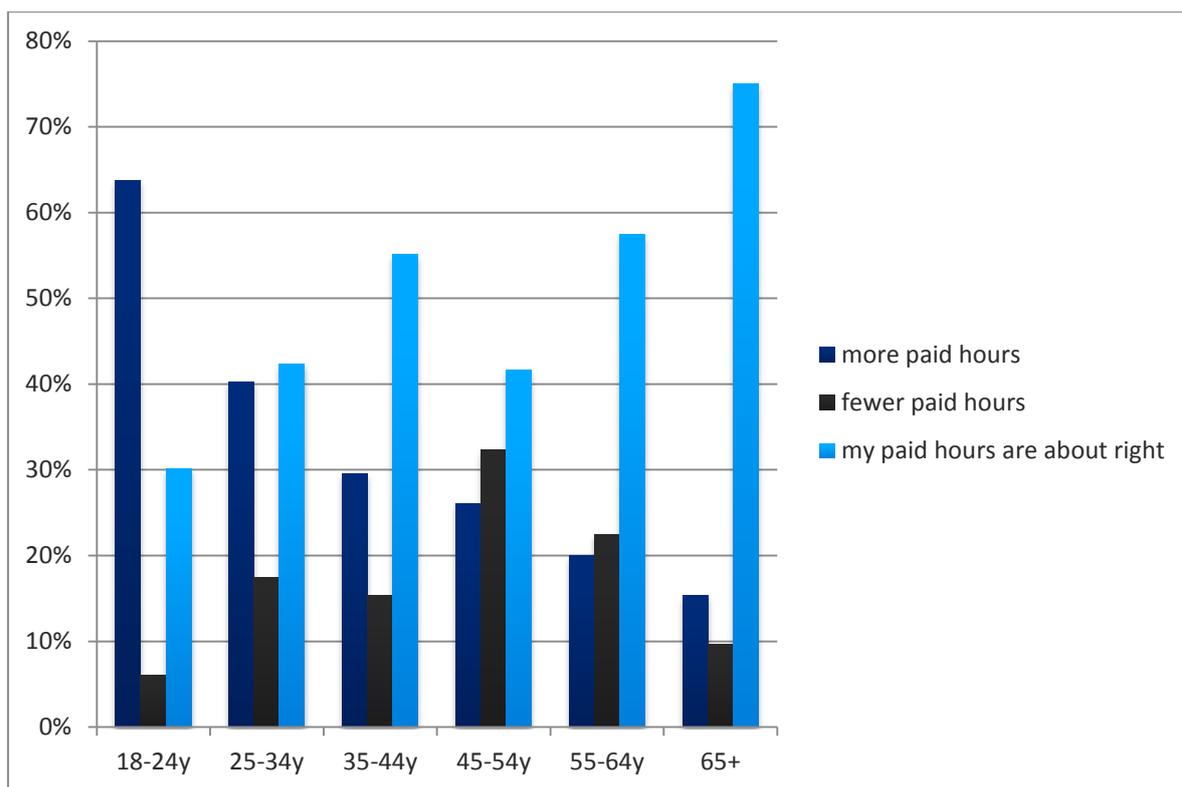
Source: Survey results as described in text.

People in full-time work were far more likely to indicate a preference for fewer paid hours of work (27 percent) compared to part-time (7 percent), casual (4 percent) and self-employed (15 percent) workers. On the other hand, part-time (45 percent) and

casual (60 percent) workers were much more likely to want to work more paid hours than full-time (25 percent) and self-employed (25 percent) workers.

Figure 3 shows there are also marked differences across age categories, in the number of workers who would prefer more or fewer paid hours of work. Unsurprisingly, younger workers, who are much more likely to be in casual and part-time work, were the most likely to want more paid hours. Nearly two-thirds of those age 18-24 and two-fifths of those in the 25-34 age bracket wanted more paid hours, while close to one-third of 45-54 year-olds wanted to reduce their hours of paid work. The fact that younger people and those in casual and part-time work expressed a strong preference for more hours of paid work reflects the widespread insecurity that is experienced by these workers in Australia’s increasingly precarious labour market. Unprecedented wage stagnation,<sup>4</sup> the high cost of housing, and the shrinking availability of permanent work all help to exacerbate this insecurity.

**Figure 3. Hours of Paid Work Preferences by Age Cohort.**



Source: Survey results as described in text.

A significant proportion of full-time workers would prefer shorting working hours, while a large proportion of part-time and casual workers want more work. This

<sup>4</sup> See Stanford (2017) for more detail on the absolute and relative erosion of labour incomes.

suggests a significant mismatch between preferred hours and actual hours of work, reflecting a bifurcated labour market in which significant levels of both overwork and underemployment coexist. While 30 percent of men and 11 percent of women work over 45 hours per week, underemployment has tripled from 3 percent to 9 percent of Australian workers since the 1970s.<sup>5</sup>

---

<sup>5</sup> Wooden (2017).

# Unpaid Overtime

Respondents were also asked about the number of hours they worked unpaid for their employer in the past seven days. This could include arriving at work early, staying late, working through breaks (such as tea or lunch breaks), working from home in the evenings and on weekends, taking calls or e-mails out of working hours, and other forms of unpaid labour.

Across all forms of employment, our respondents worked an average of 5.10 hours of unpaid labour for their employers in the preceding week (up from our survey estimate of 4.64 unpaid hours when we asked the same question in 2016). Unpaid overtime was most severe for full-time workers (who worked an average of 6 hours per week unpaid overtime) and self-employed workers (6.3 hours). But even among part-time and casual workers, who are anxious for more paid work, unpaid overtime is nevertheless common. Both part-time and casual workers reported working over 3 hours per week of unpaid overtime (see Table 4). Unpaid overtime represents about 15 percent of total working hours for paid employees, and about 20 percent of all working time for self-employed workers. This widespread “time theft” is both a valuable “gift” to employers, and a drain on the time available to Australian workers for other activities (such as rest, family responsibilities and recreation).

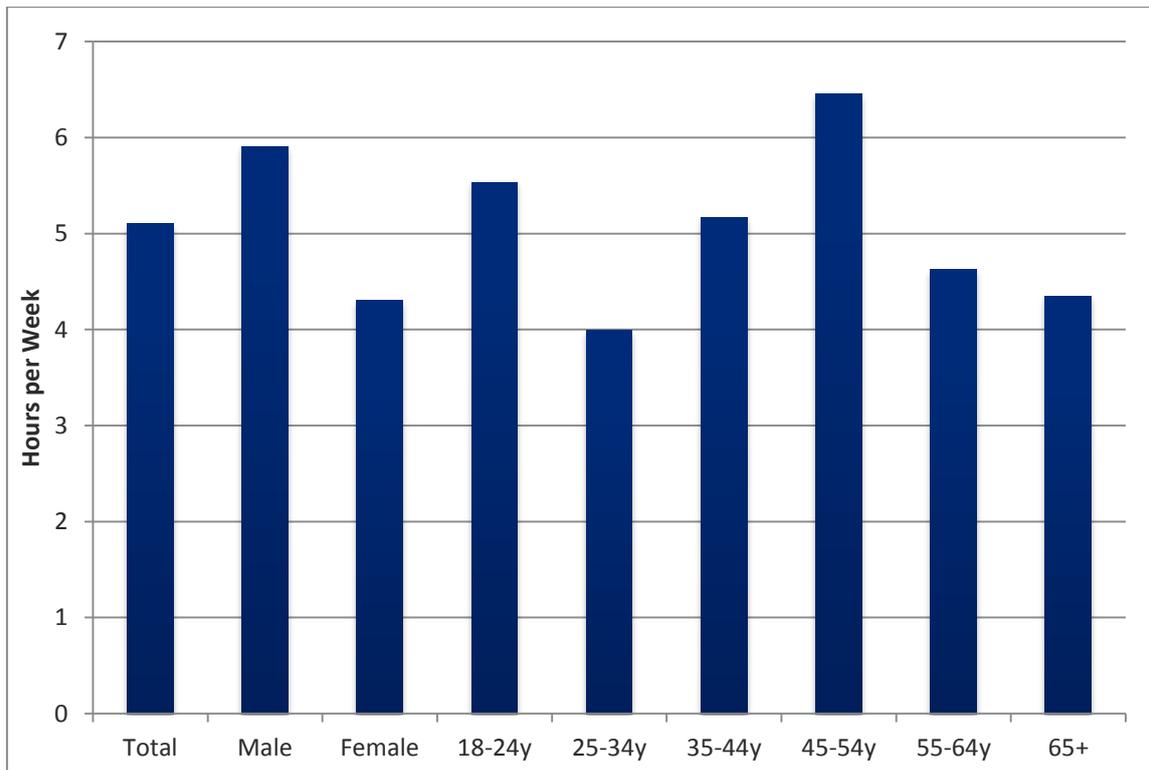
On an annualised basis (assuming a constant rate of unpaid overtime throughout the year), this translates into an annual average of 265 hours of unpaid overtime per year across all forms of employment. Based on a 40-hour workweek, this is equivalent to more than six weeks of unpaid work per worker per year.

	<b>Full-Time</b>	<b>Part-Time</b>	<b>Casual</b>	<b>Self- Employed</b>	<b>Total</b>
<b>Average Unpaid Overtime per Week</b>	5.98	3.29	3.32	6.31	5.10
<b>Share of Paid Hours Worked</b>	14.8%	14.1%	15.4%	19.7%	15.2%

Source: Survey results as described in text.

Figure 4 illustrates average unpaid work per week by gender and age cohort. Men perform an average of 5.9 hours of unpaid work per week compared to 4.3 hours for women. Both 18-24 year-olds (5.53 hours) and 45-54 year-olds (6.45 hours) perform significantly more unpaid work than the average for all employees in the sample.

**Figure 4. Unpaid Overtime (hours per week) by Gender and Age Cohort.**



Source: Survey results as described in text.

Table 5 reports the average amount of unpaid work by industry. In absolute terms, Mining (11.70), Manufacturing (7.06), Education and Training (6.82) and Arts and Recreation (6.58) had the highest reported levels of unpaid overtime among respondents. For these four industry sectors, unpaid working hours equate to between 19 percent and 25 percent of average total weekly working hours.

**Table 5**  
**Unpaid Overtime by Industry**

<b>Industry</b>	<b>Average Unpaid Over Time (hours per week)</b>	<b>Average Paid Work (hours per week)</b>
Mining	11.70	47.85
Manufacturing	7.06	37.56
Electricity, Gas, Water and Waste Services	5.21	38.11
Construction	4.80	36.14
Wholesale Trade	5.58	40.96
Retail Trade	3.90	27.88
Accommodation and Food Services	4.85	28.21
Transport, Postal and Warehousing	5.21	39.98
Information, Media and Telecommunications	5.27	38.85
Financial and Insurance Services	5.20	35.27
Rental, Hiring and Real Estate Services	5.15	33.23
Professional, Scientific and Technical Services	5.86	36.44
Administrative and Support Services	2.43	33.57
Public Administration and Safety	3.92	36.71
Education and Training	6.82	32.41
Health Care and Social Assistance	5.81	35.58
Arts and Recreation	6.58	31.62

Source: Survey results as described in text.

# The Costs of “Time Theft”

The combination of overwork and unpaid labour has numerous negative consequences for millions of Australian workers, their families and Australian society in general. Unpaid overtime means workers forego income that could ameliorate cost of living pressures and boost wages. This is particularly ironic at a time of stagnant wages growth, cuts to penalty rates for low-wage workers and Federal budget targets that are predicated on an assumed but unlikely acceleration of wages growth. Furthermore, “time theft” reduces the autonomy people have regarding the use of their own time. Unpaid overtime clearly also contributes to workplace injury and illness (including stress and mental illness), which is estimated to impose an annual cost to the Australian economy of \$60 billion per year.<sup>6</sup>

Table 6 quantifies the aggregate value of the unpaid overtime unwillingly “donated” by workers to their employers, by estimating the income that would have been received by workers if that unpaid labour had in fact been compensated.

<b>Table 6</b> <b>Value of Unpaid Overtime in the Australian Economy</b> <i>(fiscal 2016-17)</i>	
<b>Average Hours of Unpaid Overtime per Week</b>	5.10
<b>Total Employees</b>	.12.03 million
<b>.Total Unpaid Overtime (bil hrs)</b>	3.19
<b>.Total Labour Compensation (\$bil).</b>	\$821
<b>Total Hours Worked (bil hrs)</b>	20.04
<b>Compensation per Hour Worked</b>	\$40.97
<b>Value of Unpaid Overtime (\$bil)</b>	\$130.70
Source: Authors’ calculations as explained in text. Unpaid overtime from survey results. Employment and hours worked from ABS 6202.0, Tables 1 and 19. Total labour compensation from ABS 5206.0, Table 20.	

Our survey results indicate that employed workers perform an average of 5.10 hours of unpaid overtime per week (across all classes of employment). During fiscal 2016-

<sup>6</sup> Safe Work Australia (2017).

2017, some 12.03 million Australians were employed. This implies an aggregate total of 3.19 billion hours of unpaid overtime worked in the economy each year. Average labour compensation per hour in Australia can be estimated by dividing total labour compensation (just over \$820 billion for the same period, from ABS National Accounts data<sup>7</sup>) by the total number of hours worked in the economy. Average labour compensation is just under \$41 per hour. This implies that the total value of unpaid overtime in Australia that year was \$130.7 billion.

This estimate is conservative, in that it values overtime at average hourly wages – whereas in most cases (and certainly for full-time workers), overtime hours should normally be paid with an overtime penalty of 50 percent or more on top of regular ordinary time wages.

The value of this unwilling “donation” by Australian workers to their employers is enormous. It is equivalent to around 28% of total expenditure in the Commonwealth government’s 2017-2018 budget (\$464 billion). It is around double the total annual public expenditure on assistance to the aged (including the Age Pension), and close to four times total federal spending on education. It is around 13 times the \$10 billion spent annually assisting the unemployed through measures such as the inadequate Newstart Allowance.<sup>8</sup>

Even with a boom in avocado production<sup>9</sup> potentially lowering the cost of Australia’s favourite breakfast, the scale of “time theft” in Australia is hardly a loss workers can afford. Sluggish wages, soaring electricity prices and a sharp fall in home ownership among young people<sup>10</sup> make it all the more essential that Australians are paid for all the work that they do.

---

<sup>7</sup> Including wages, salaries, superannuation contributions and other supplementary forms of labour income.

<sup>8</sup> Elvery and Spraggon (2017).

<sup>9</sup> Nancarrow (2017).

<sup>10</sup> Jericho (2017).

# Special Focus: Disruptive Technology and the Future of Work-Life Balance

Public debate about the future of work is increasingly concerned with the disruptive impacts of new technologies. Software automation, online platforms and robotics are developing rapidly and could have far reaching consequences for workplaces, inspiring both techno-utopian visions of a future free of drudgery, and bleak predictions of a 'robot apocalypse' leading to job destruction on an unprecedented scale.

However, the consequences of these technological trends depend ultimately on how society responds and manages technological change, and this in turn depends on social attitudes toward these technologies and their impacts.

To this end, our survey research assessed Australian attitudes towards the impact of new technologies on work and work-life balance.

## BACKGROUND

---

Recent years have seen a resurgence of 'automation anxiety'. Some economists, tech entrepreneurs and futurists predict that automation and digitisation threaten the job prospects of workers across a range of industries. One regularly cited study by Frey and Osborne (2013) assessed the susceptibility of 702 occupations in the US to computerisation, and concluded that "about 47% of total US employment is at risk" (p. 1). A similar study in Australia found that "40 per cent of jobs in Australia have a high probability of being susceptible to computerisation and automation in the next 10 to 15 years."<sup>11</sup> Robert Reich, a prominent US economist, sees threats to jobs across many industries, including major employers like health and education. He argues (2016, p. 207):

"We are faced not just with labor-replacing technologies but with knowledge-replacing technologies. The combination of advanced sensors, voice recognition, artificial intelligence, big data, text mining, and pattern-recognition algorithms is a generation of smart robots capable of quickly learning human actions, and even of learning from one another."

---

<sup>11</sup> Durrant-Whyte, et al. (2015), p. 58.

Changes in the structure of business organisations – such as the ‘platform capitalism’ exemplified by Facebook, Uber, Instagram, and similar businesses – and associated forms of piecework in the “gig economy” will also exert powerful disruptive effects on work: both in their own right, and in interaction with other technologies.

While it is clear that technological change that increases labour productivity holds the potential of significant economic benefits, an equally important question is how those benefits (and any associated costs) are distributed. Importantly, Frey and Osborne (2013) stressed that their conclusions were not hard predictions; rather the “balance between job conservation and technological progress...to a large extent, reflects the balance of power in society, and how gains from technological progress are being distributed” (2013, p. 6). The speed and scope of potential disruption from emerging technologies may have profound impacts on workers in impacted industries, and in turn on social and economic well-being. But the ratio of job creation to job destruction, and the spatial and social distribution of gains and losses, depends both on technology and on the social choices we collectively make about how technology is applied and managed.

## WHAT DO AUSTRALIANS THINK?

---

All survey respondents were presented with the following information:

The [following] questions are about developments in new technology that may impact on work in coming years, like automation, robotics and software platforms.

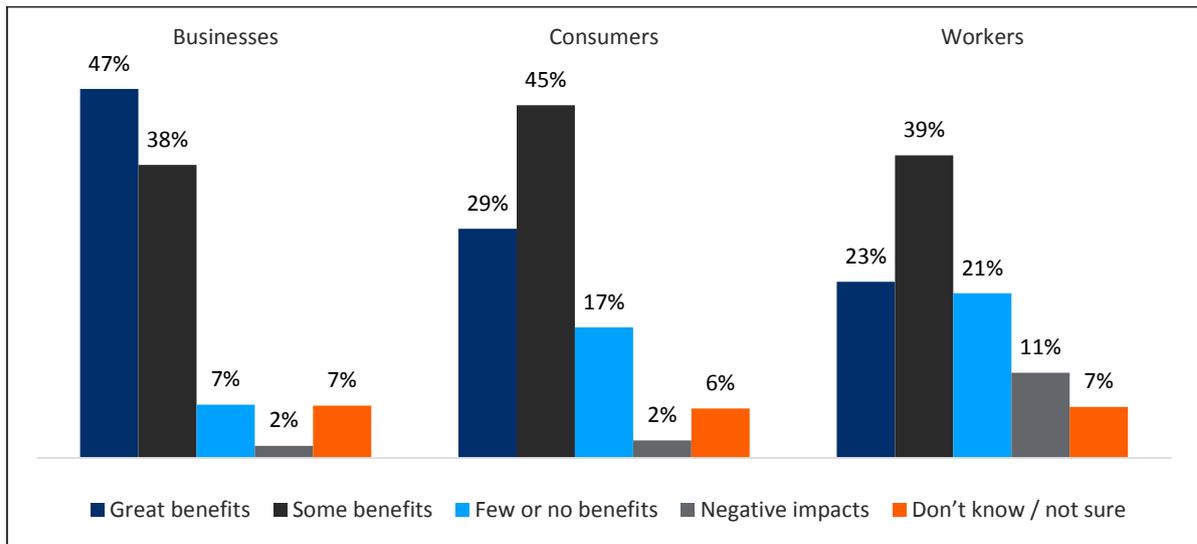
These technological trends could make some forms of labour more productive. This means more could be produced with one hour of labour, or less labour would be needed for the same level of production.

Then respondents were asked how these trends would impact on:

1. Businesses that own and use new technologies (through higher profits and/or lower costs)
2. Workers (through higher incomes and/or more leisure time)
3. Consumers (through more variety or lower prices)

While businesses, consumers and workers alike were expected to receive benefits from new technology, respondents were much more likely to see great benefits to businesses than to workers or consumers. In contrast, workers were most expected to receive the fewest benefits or experience negative impacts. This is illustrated in Figure 5.

**Figure 5. Who Will Benefit from New Technologies Increasing Productivity?**

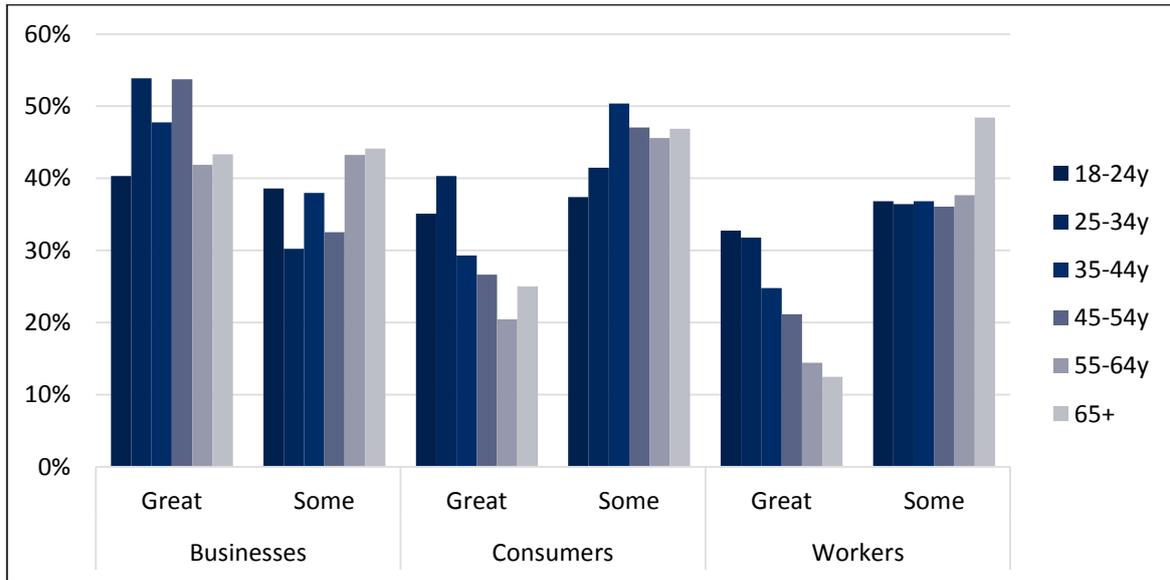


Source: Survey results as described in text.

A total of 84 percent respondents expected “businesses that own and use new technologies” to experience great or some benefits, including 47 percent who thought there would be great benefits to business, while only 9 percent thought there would be few or no benefits or negative impacts. By contrast, 66 percent thought consumers would experience benefits, including only 29 percent who thought the benefits would be great. 19 percent thought there would be few or no benefits to consumers – low, but still higher than for businesses. However, only 52 percent thought there would be great or some benefits to workers, and only 23 percent of respondents thought workers would experience great benefits. 32 percent said there would be few benefits or negative impacts for workers.

Younger respondents were more likely to think there would be benefits for workers and consumers, and to think those benefits were greater, compared with older respondents (Figure 6).

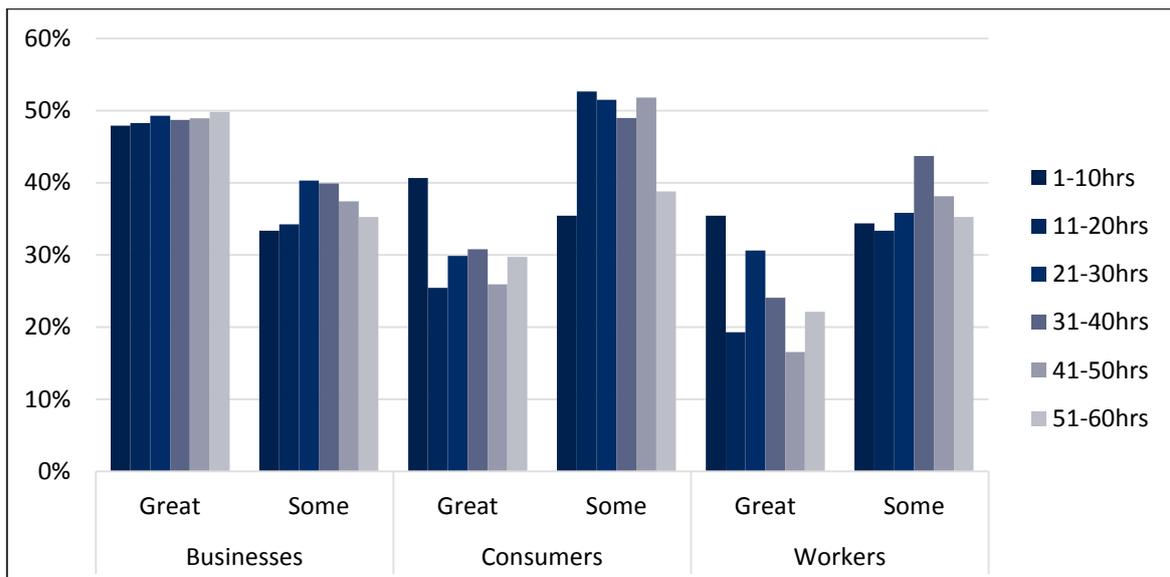
**Figure 6. Benefits Expected for Businesses, Consumers and Workers: By Age.**



Source: Survey results as described in text.

Views about the impacts of technological change also varied depending on the number of hours worked by respondents. A similar proportion of respondents in all hours of work categories expect benefits for businesses, but those who worked fewest hours were most likely to think consumers and workers would benefit. However, the variation on this basis was less pronounced than variation across age groups.

**Figure 7. Benefits Expected for Businesses, Consumers and Workers: By Hours Worked**



Source: Survey results as described in text.

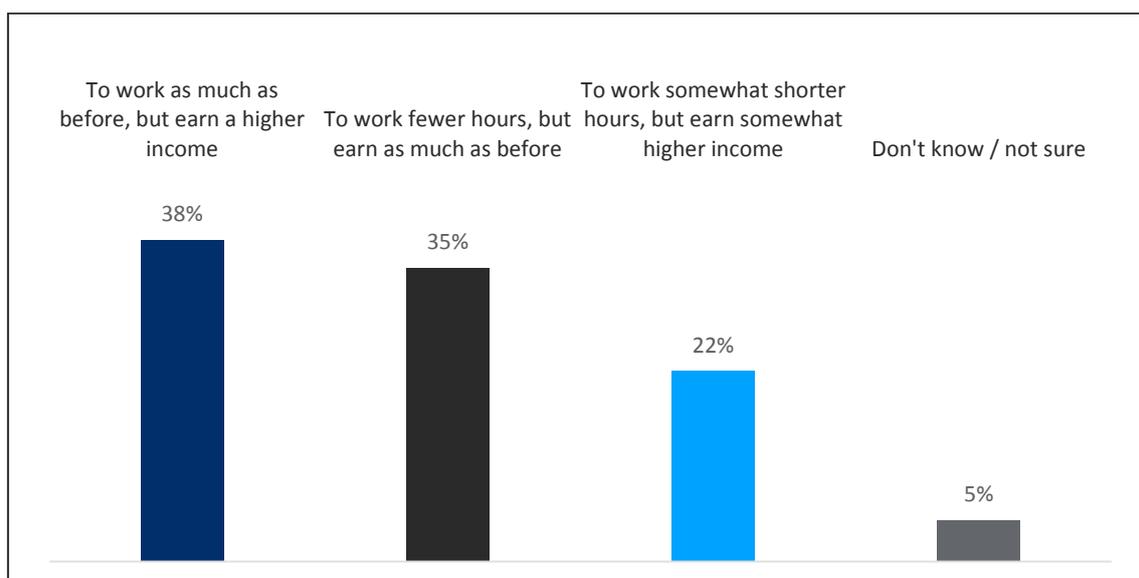
## HOW WORKERS WOULD LIKE TO SHARE IN THE BENEFITS

Workers can benefit from increased labour productivity in a number of ways (although those benefits are never automatic). Respondents who were in work were asked how they would most prefer to benefit from new technology that increased the productivity of their work. They could choose:

1. *To work as much as before, but earn a higher income*
2. *To work fewer hours, but earn as much as before*
3. *To work somewhat shorter hours, but earn somewhat higher income*

Workers indicated a broad level of support for both higher wages and shorter working hours. Results are shown in Figure 8.

**Figure 8. Workers' Preferred Benefits from New Technology.**



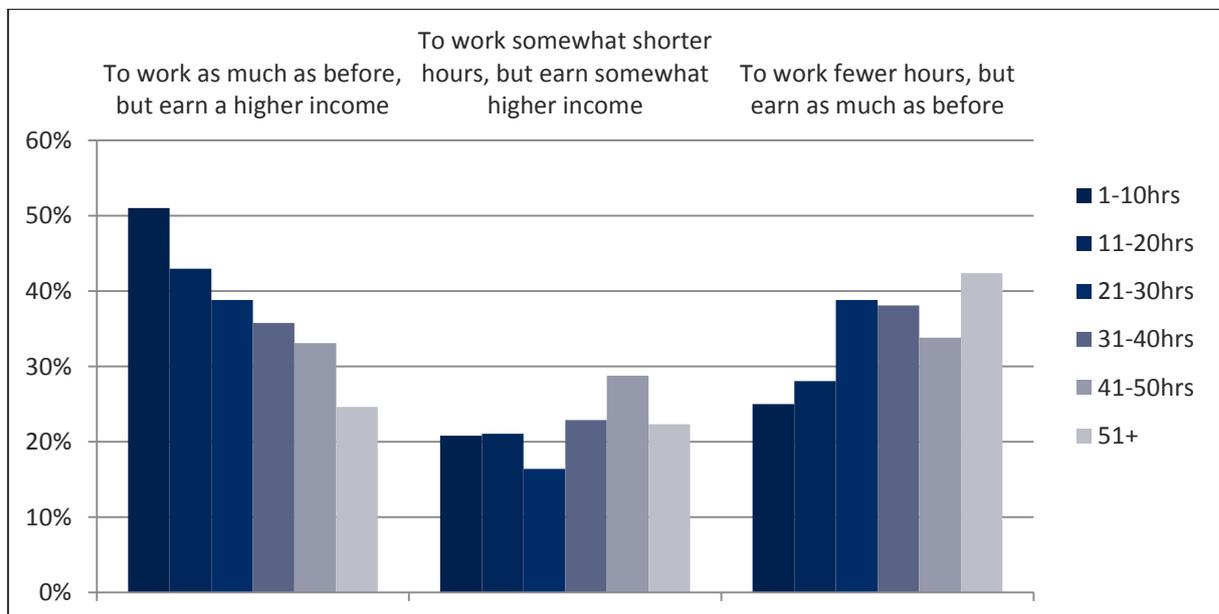
Source: Survey results as described in text.

Over one-third of respondents indicated their support for each of higher incomes (38 percent) and shorter working hours (35 percent) as their preferred outcome of technological change. Another 22 percent indicated their support for a combination of the two. That means that a clear majority of working Australians (60 percent) would like to see higher incomes (on their own, or in conjunction with shorter working hours), and a clear majority (57 percent) want shorter working hours (again, on their own or in conjunction with higher incomes). Australians are thus favouring a balanced approach to capturing the benefits of new technology. The survey indicates that the desire for shorter working hours is essentially as strong (within the margin of error) as

the demand for higher incomes. In the context of productivity-enhancing technological change, this is especially important, since reductions in working hours are an important policy lever for managing the potential labour-displacing effects of new technologies. Working-time issues have been given little attention in labour policy discussions in Australia in recent years; these results suggest that the topic should be elevated up the policy agenda, and quickly.

There were some interesting trends in attitudes toward new technology across type of work, hours worked and age. Those who currently have fewer hours of paid work were more likely to want higher pay for the same hours, while those in higher pay were more likely to want fewer hours for the same pay. Those on 40+ hours were slightly more likely to prefer a combination of the two benefits.

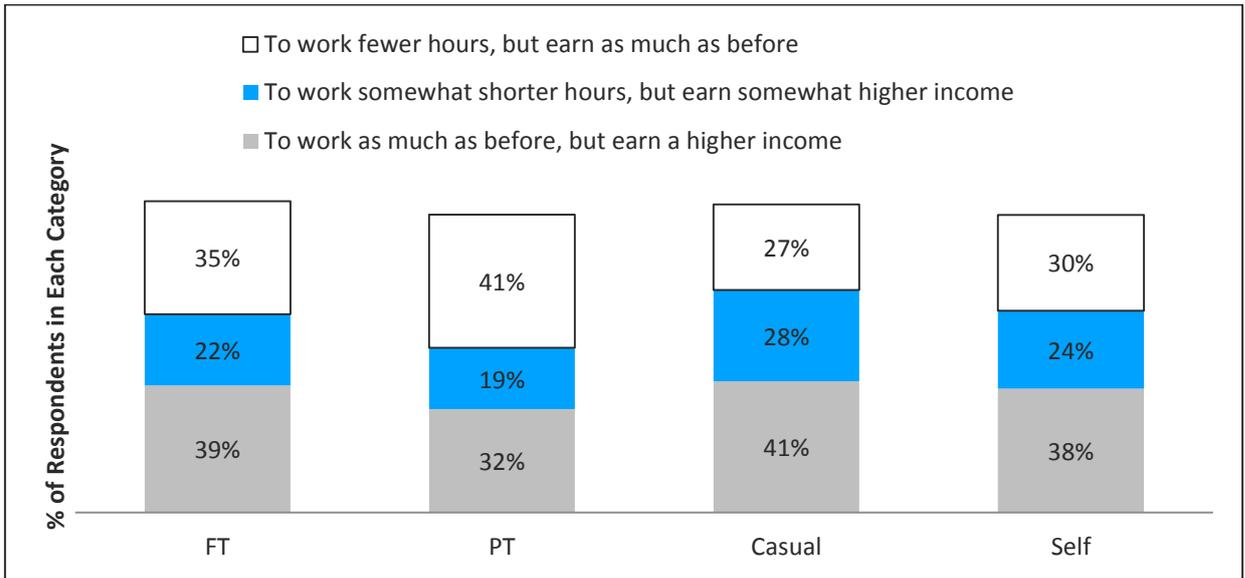
**Figure 9. Preferred Benefits of New Technology by Hours Worked.**



Source: Survey results as described in text.

There were also differences in attitudes across type of work. Those in part-time work were more likely to want the same pay and fewer hours than all other types of work, including those in casual work. This might reflect motivations for working part-time in the first place (such as trying to balance work and family responsibilities); it could also reflect a better level of job security among permanent part-time workers compared to casual workers. Majorities in all categories wanted at least somewhat fewer hours.

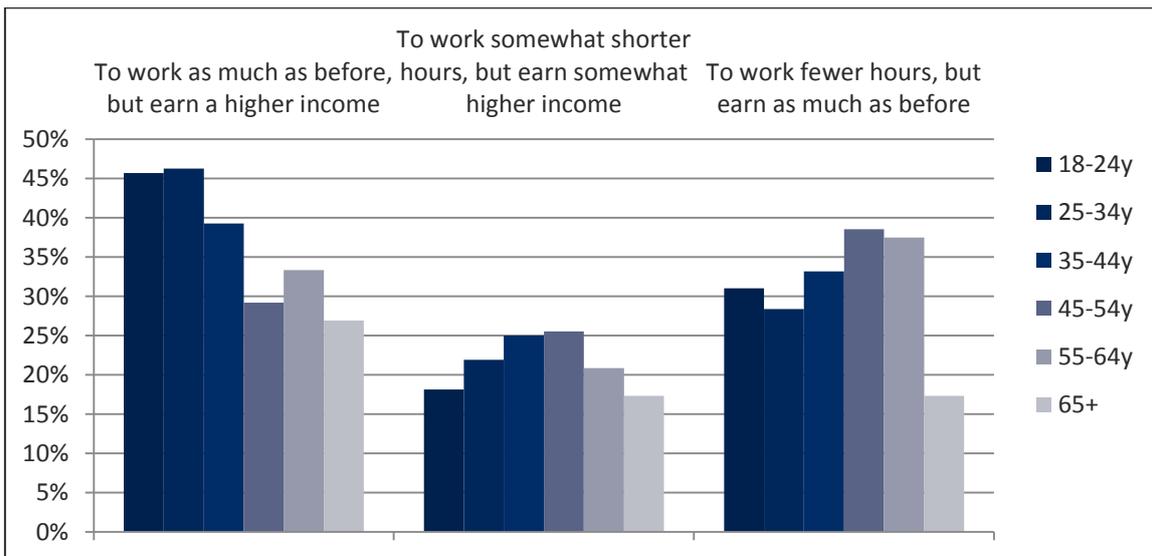
**Figure 10. Preferred Benefits of New Technology: By Type of Work.**



Source: Survey results as described in text.

Older respondents were more likely to want to take all of the benefits of technology in the form of fewer hours for the same pay, while younger respondents were more likely to want to work as much as before and receive higher incomes. Just as younger workers are more likely to currently have fewer hours, they are more likely to want to be paid more for it. Despite this trend, in all age groups, around half or more of respondents said they wanted fewer hours.

**Figure 11. Preferred Benefits of New Technology: By Age.**



Source: Survey results as described in text.

## WHAT DO PEOPLE THINK WOULD HAPPEN IN THEIR WORKPLACE?

While workers could benefit from productivity enhancing technology, the type, scale and distribution of these benefits are unclear. Respondents were asked:

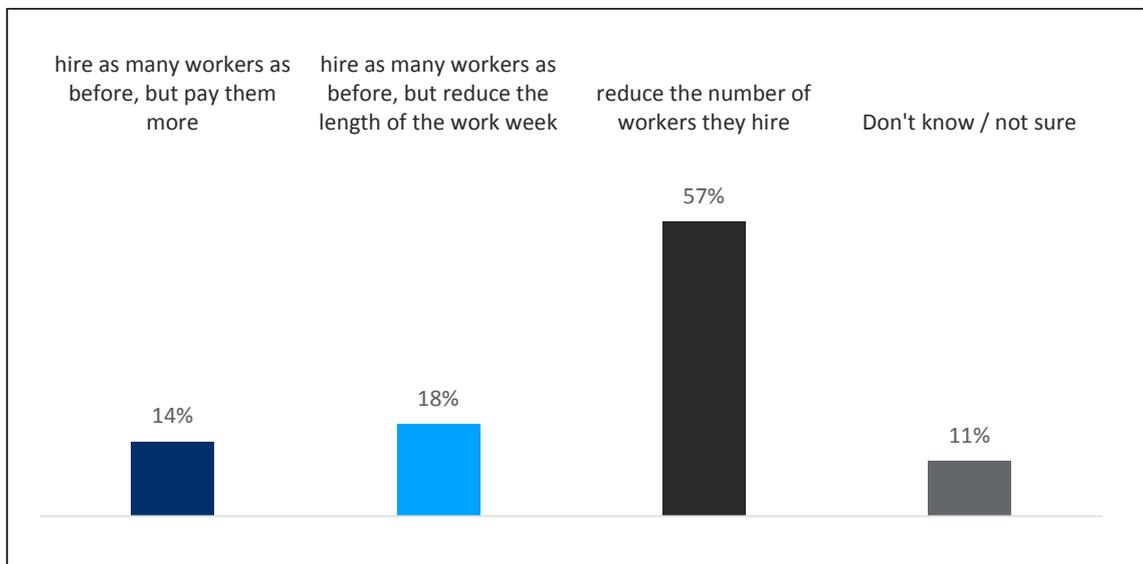
“If new technology made your work more productive, which of the following do you think is most likely to occur in your workplace?”

*Your employer would*

- 1. hire as many workers as before, but pay them more*
- 2. hire as many workers as before, but reduce the length of the work week*
- 3. reduce the number of workers they hire*

As reported above, most Australians think workers will benefit at least somewhat from new technologies (and most workers hope to benefit from technology through both higher incomes and shorter working hours). Yet most respondents also believe their own workplaces are most likely to respond to technology by hiring fewer workers – rather than either increasing pay or reducing work hours (Figure 12).

**Figure 12. How Would Your Employer Respond?**



Source: Survey results as described in text.

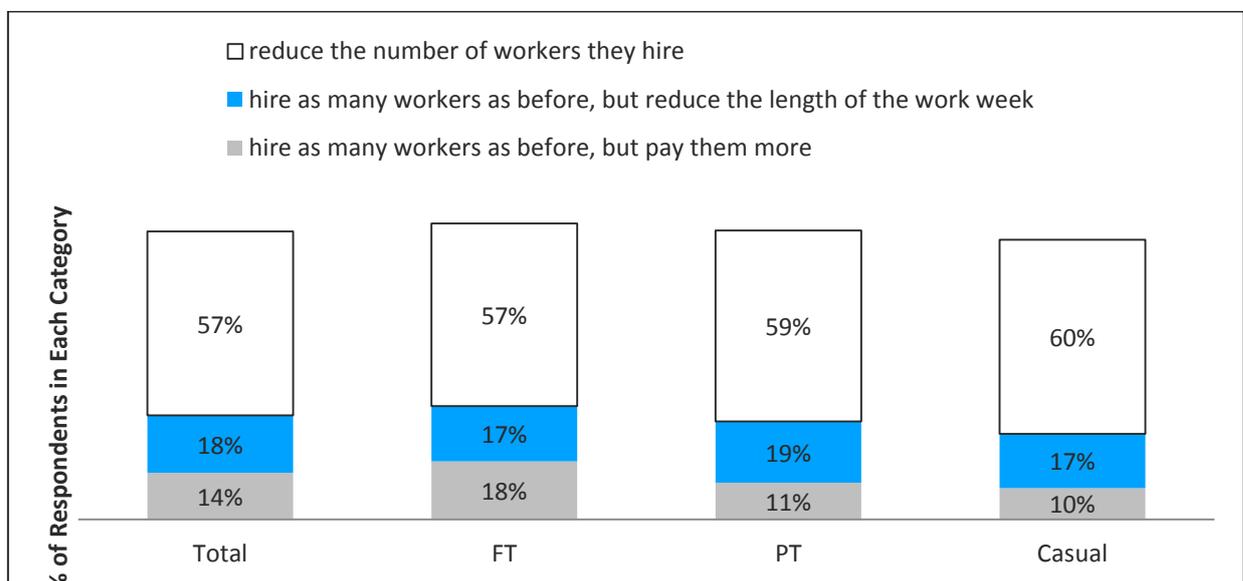
57 percent said their own workplace would most likely reduce the number of workers. Only 32 percent said workers would benefit: 18 percent through reductions in the length of the work week, and 14 percent through increased pay. This contrast between optimism regarding the potential benefits of technology, and what workers actually

think will happen in their workplaces, is striking – and reinforces the need for policy levers that give workers more say in how technology is applied in their workplaces.

It is important to note that these options are not exclusive, nor fully exhaustive of all possible economic decisions or outcomes. First, individual enterprises may not benefit at all from new technologies, but find themselves outcompeted or made redundant. Second, the available responses to our survey question did not include other ways workers could lose out: for example, through *lower* wages. Finally, while lower labour costs may contribute to increased production or creation of other job opportunities through economy-wide productivity increases, that these benefits will accrue workers is not guaranteed, nor are they instantaneous or evenly distributed. They may be delayed and may not be available to those who have lost employment, whether geographically or by nature of training and experience. Nevertheless, in sum our results clearly indicate that when considering their own workplace, people do not expect that benefits accruing to workers will be the first or main outcome of new technology.

Responses to this question were remarkably similar across the different forms of work (Figure 13).

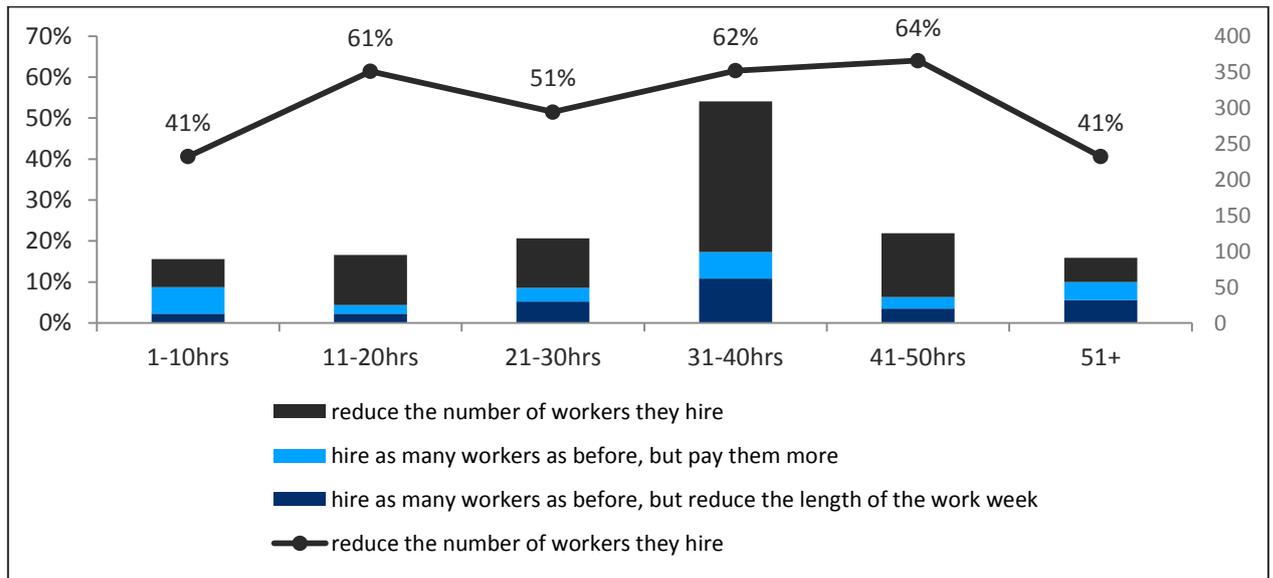
**Figure 13. How Would Your Employer Respond? By Job Type.**



Source: Survey results as described in text.

In contrast, responses varied across number of hours of work. This is shown in Figure 14, which shows the response rates (across hours of work categories) for those expecting reduced numbers of workers (line graph), and the total responses for each expectation (area graph).

**Figure 14. How Would Your Employer Respond? By Hours Worked**



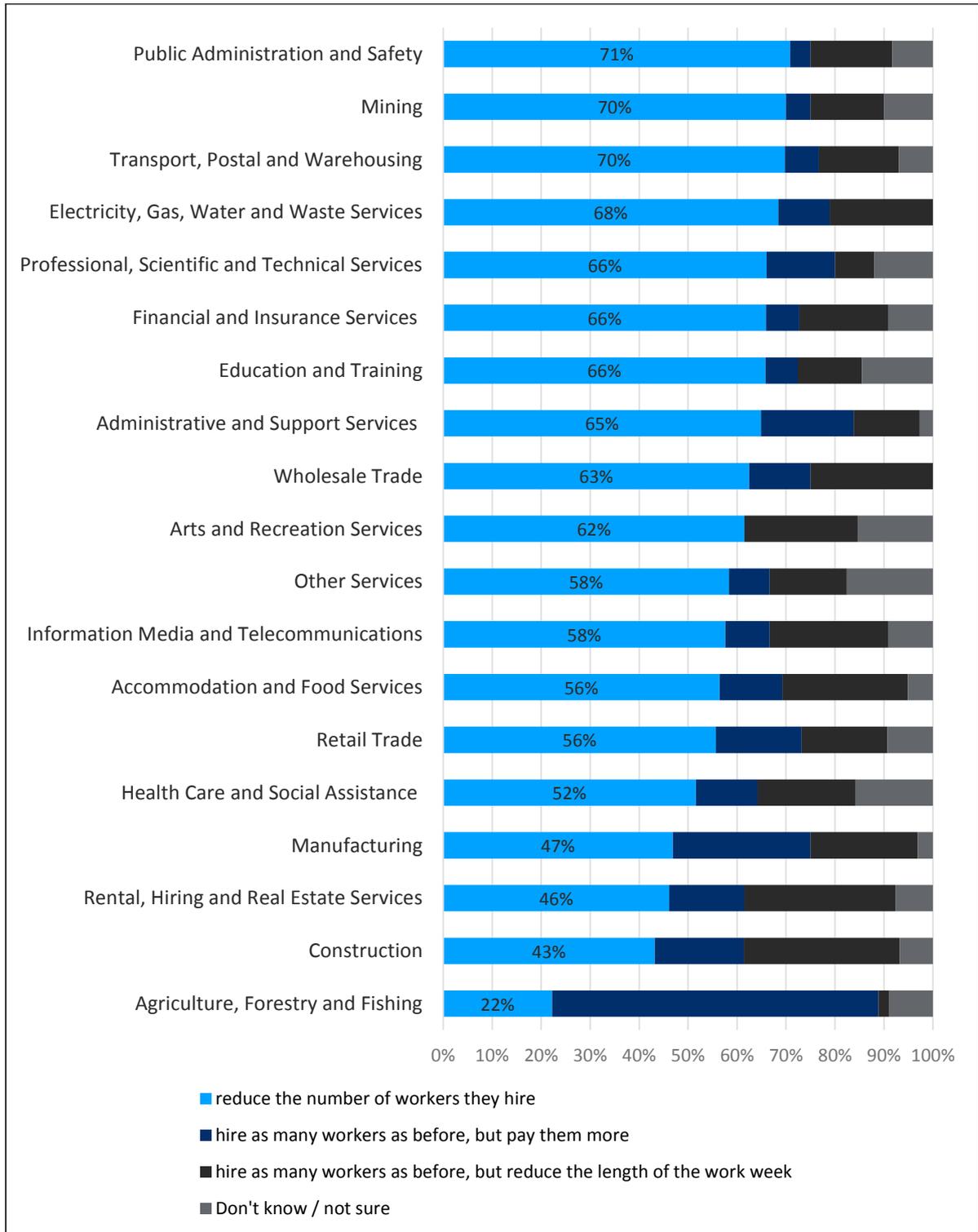
Source: Survey results as described in text.

Those working 31-50 hours a week were most likely to say their workplace would respond by reducing the number of workers; this group was around half the sample. (Those working 11-20 hours were similarly likely, although the smaller sample here means the result must be interpreted cautiously.) People working between 1-10 hours a week or 51 hours plus were least likely to think their work would hire fewer workers. Those on fewer hours were more likely to think workers would be paid more, while those on more hours were more likely to think the work week would be reduced.

Figure 15 below illustrates responses by industry. Note these results are suggestive only: the samples for most individual industries were small, with high margins of sampling error. However, the results strongly suggest that most workers in most industries expect their workplace would reduce employment levels as the major outcome of productivity-enhancing technological change.

The expectation that employers would reduce the number of workers as the main effect of technological change was the largest response in every single industry category other than agriculture. Over two-thirds of respondents expect reduced headcounts as the major outcome in 7 different industries, including both capital-intensive sectors (such as mining and utilities) and labour-intensive industries (such as public administration and education). The consistently strong response across industries suggests that worker concerns about future downsizing are not idiosyncratic to their industry, but rather are reactions to structural features of modern workplaces.

**Figure 15. How Your Employer Would Respond: By Industry.**



Source: Survey results as described in text.

## WHAT KIND OF IMPACT ON YOUR WORK?

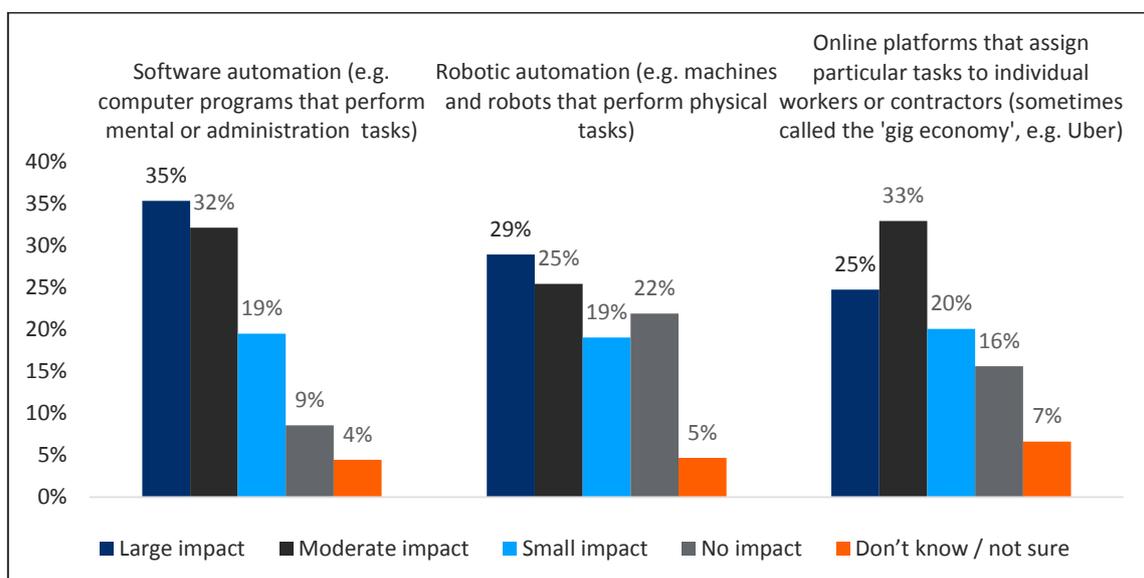
While the previous question addressed respondents' expectations *if* technology has an impact on productivity, the next question asked what scale of impact people thought *would* occur in their respective jobs.

Respondents were presented with a range of technologies:

1. Software automation (e.g. computer programs that perform mental or administration tasks)
2. Robotic automation (e.g. machines and robots that perform physical tasks)
3. Online platforms that assign particular tasks to individual workers or contractors (sometimes called the 'gig economy', e.g. Uber)

Respondents were then asked how likely they thought it would be that these technologies would impact on their work over the coming decade. Results are illustrated in Figure 16.

**Figure 16. How Likely are Different Technologies to Impact on Your Work over the Next Decade?**



Source: Survey results as described in text.

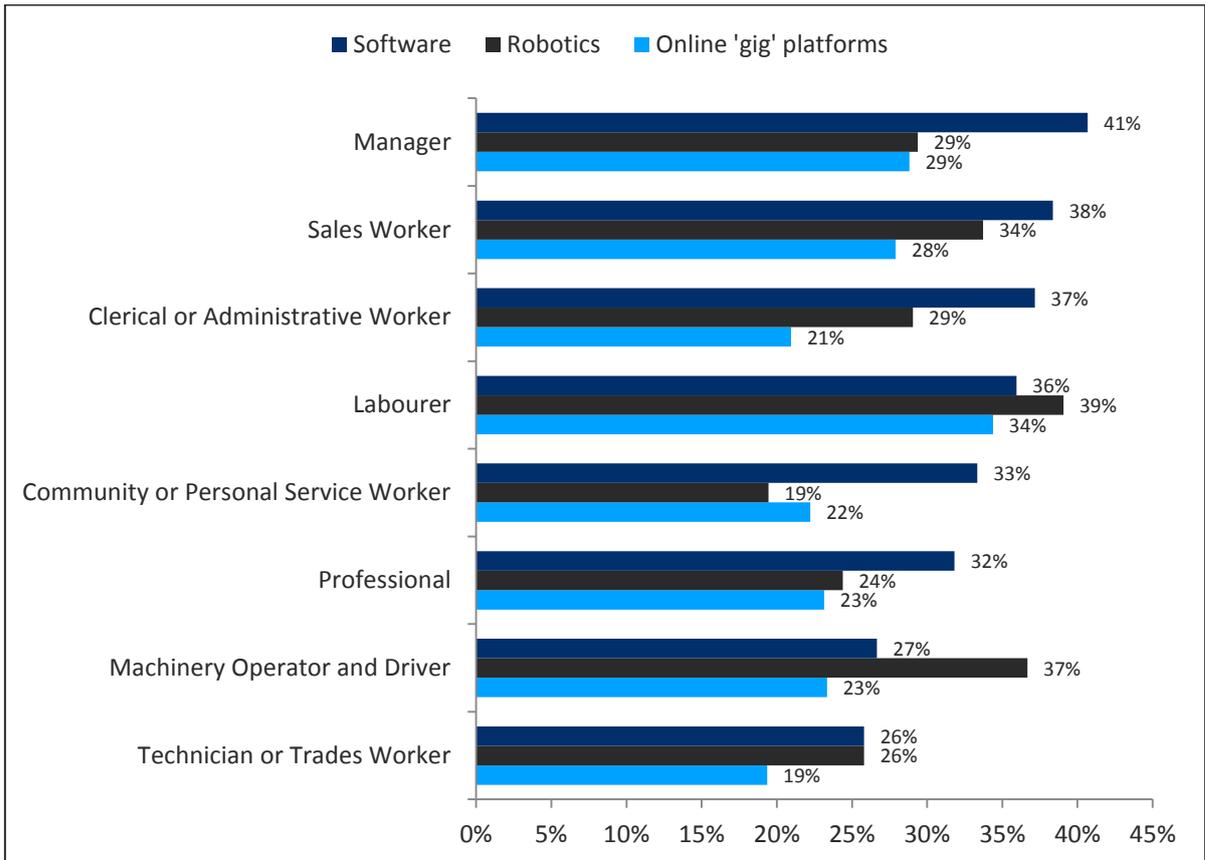
For each technology, at least half of the sample expected a large or moderate impact on their own kind of work, and between a quarter and a third foresaw a large impact.

- 67 percent saw a large or moderate impact from software automation (35 percent large, 32 percent moderate).

- 58 percent saw a large or moderate impact from online 'gig' platforms (25 percent large, 33 percent moderate);
- 54 percent saw a large or moderate impact from robotic automation (29 percent large, 25 percent moderate).

Figure 17 shows how workers in different occupations believe these different technologies will impact their kind of work.

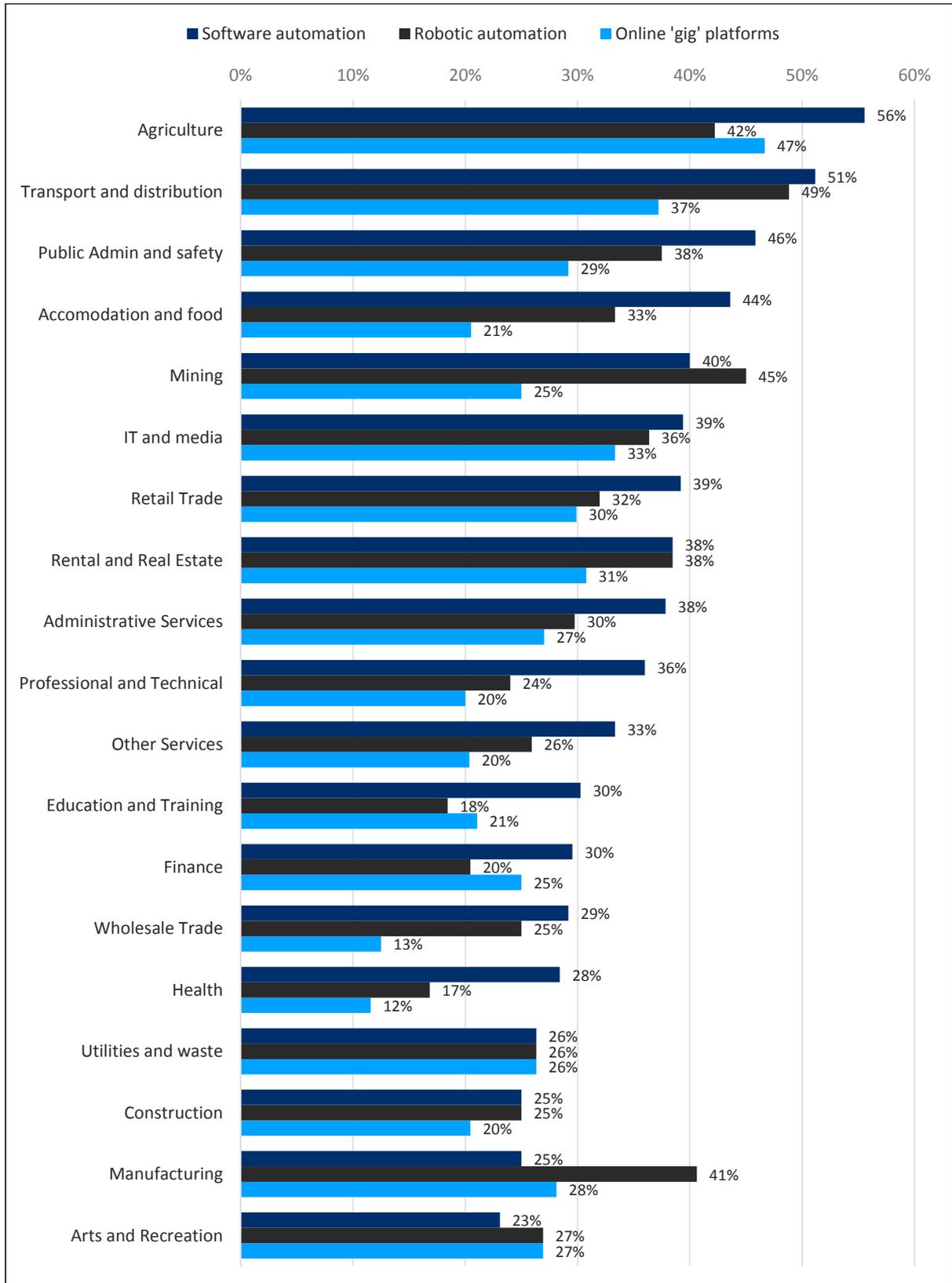
**Figure 17. Large Impacts from New Technology: By Occupation.**



Source: Survey results as described in text.

Figure 18 illustrates the variation in expectations regarding the impacts of technological change across different industries. While the sample sizes for many of the industries are small (and hence the results are only suggestive), the data show significant variation between industries. Overall, between a quarter and half in most industries thought each of the technologies would have a large impact.

**Figure 18. Large Impact on My Work: By Technology, By Industry.**

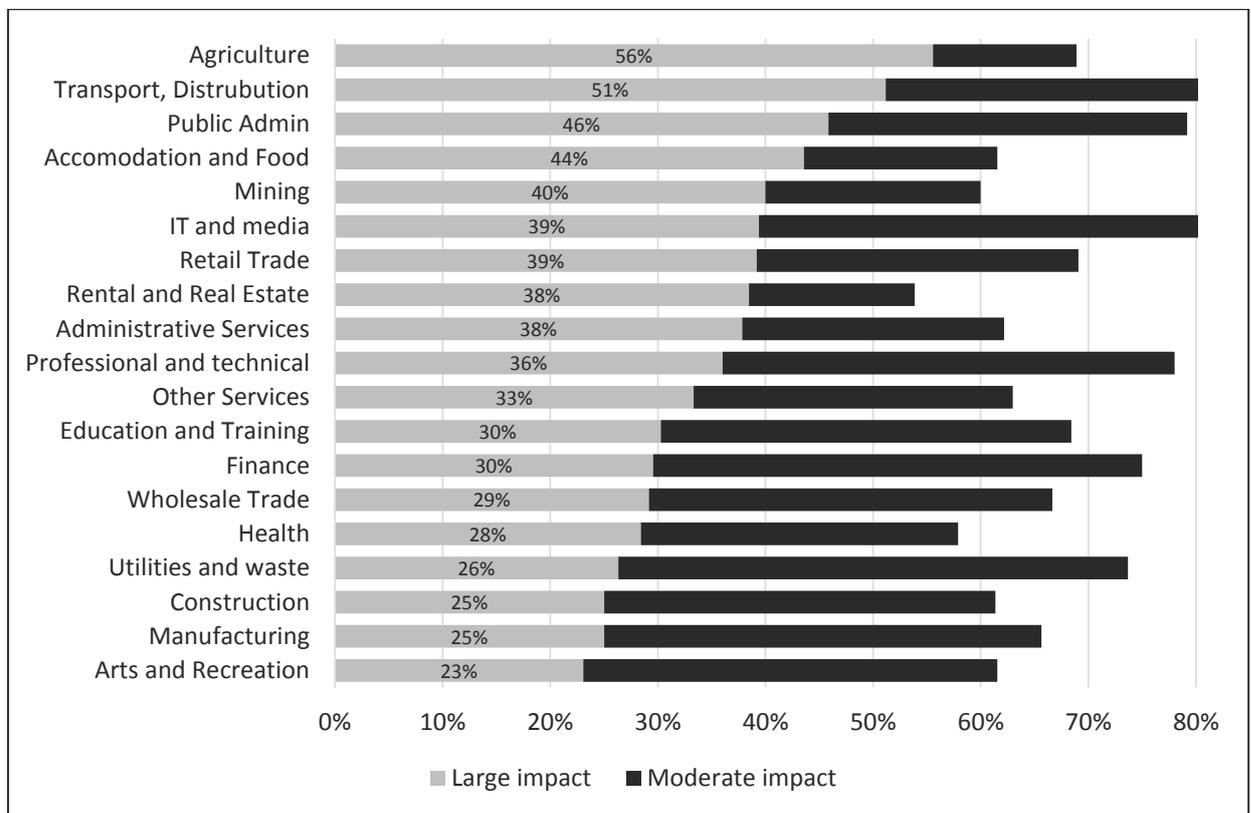


Source: Survey results as described in text.

Large impacts from software automation are most expected in agriculture, transport, public administration, accommodation and food, mining and IT and media. Large impacts from robotics are most expected in agriculture, transport, mining and manufacturing. Manufacturing workers are less likely to expect impacts from software or online platforms. Workers were least likely to expect impacts from gig platforms in mining, health, wholesale trade and – surprisingly – accommodation and food services.

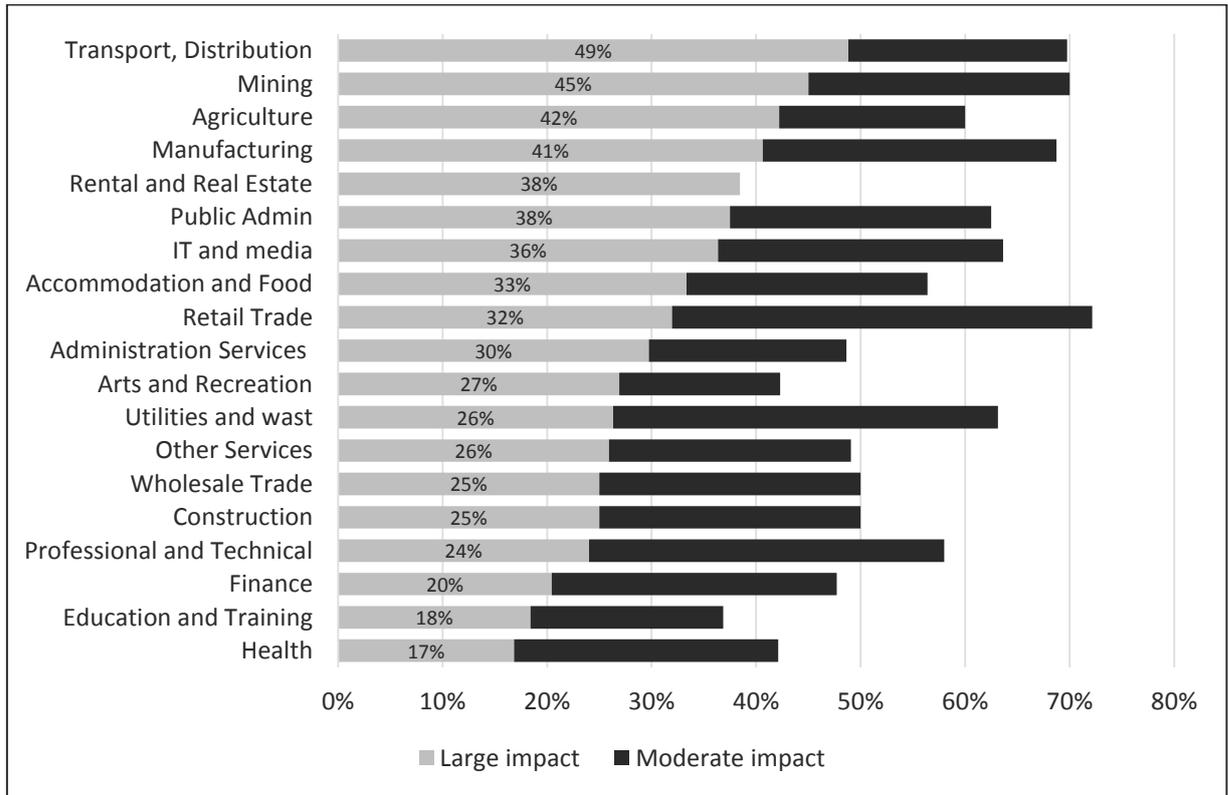
Even greater numbers of workers in each industry thought there would be at least moderate impacts on their kind of work. This is shown in the following Figures. For each kind of technology, most workers in most industries thought there would be at least moderate impacts on their kind of work from each kind of technology.

**Figure 19. Impacts on My Work over the Next Decade: Software Automation.**

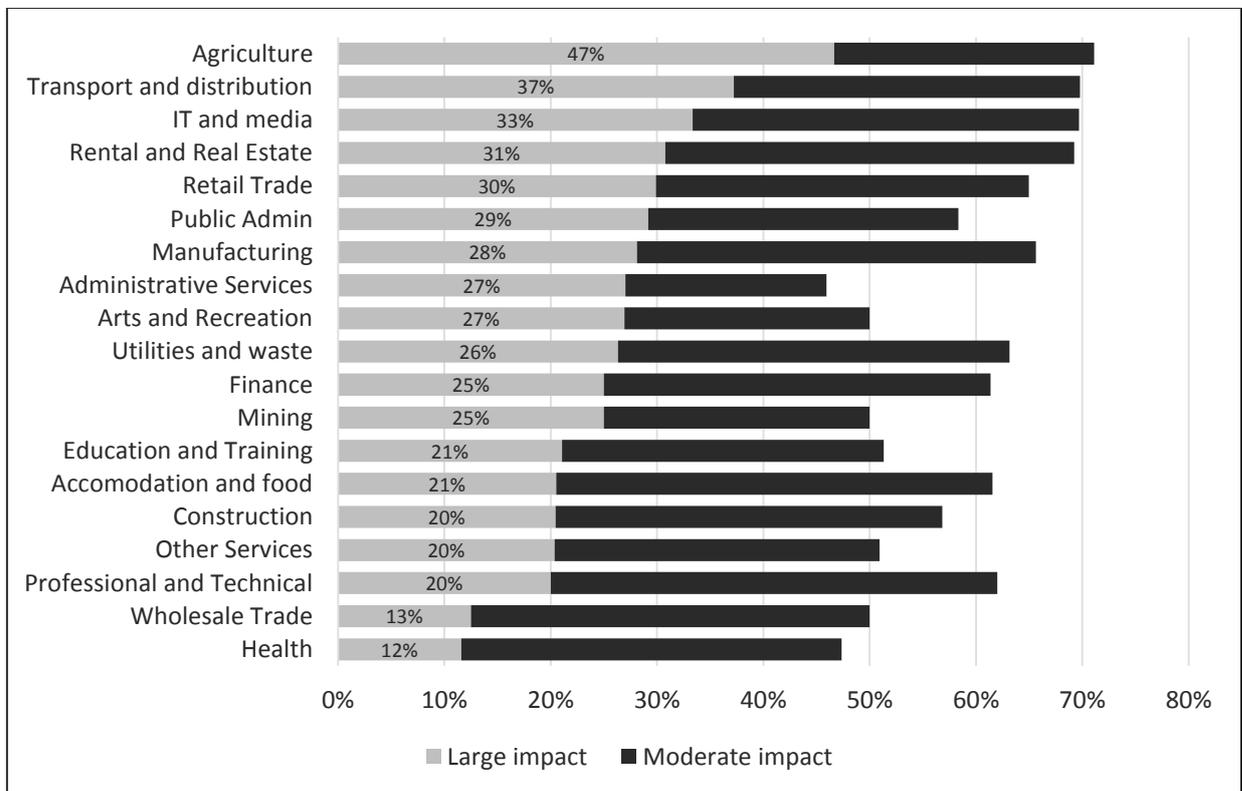


Source: Survey results as described in text.

**Figure 20. Impacts on My Work over the Next Decade: Robotic Automation.**



**Figure 21. Impacts on My Work over the Next Decade: Online 'Gig' Platforms.**



# Conclusion

This ninth annual Go Home on Time Day report demonstrates a continuing polarisation in working hours and conditions for Australians in paid employment. With 44 percent of employees in part-time, casual or self-employed positions it is not hard to understand why job security is such a high priority for Australians. This concern is reflected in the desire of most part-time and casual workers for more hours of paid work. At the same time, a large proportion of full-time workers would prefer to work fewer hours. The coexistence of underemployment among workers in insecure jobs, and overwork among those in permanent and full-time positions, is an increasingly important and damaging dimension of inequality in Australia's modern labour market.

Our data also confirm the increasing use of unpaid overtime as an endemic feature of employment. Ironically, even among part-time and casual workers, unpaid overtime represents a significant ongoing burden. For both full-time and non-standard employees, unpaid overtime represents around 15 percent of total work time, and reduces annual incomes by thousands of dollars per person. Employers are tapping into the insecurity of workers in the modern precarious labour market to expect regular and significant amounts of unpaid work as a "normal" feature of the employment relationship. Across Australia's economy, the value of unpaid overtime is enormous: estimated to exceed \$130 billion per year. At a time when concerns regarding wage stagnation and weak domestic purchasing power are being widely expressed, this loss of income is all the more damaging.

This expensive "gift" from Australian workers to their employers has several negative consequences. It undermines workers' capacity to meet their basic material needs, from housing costs to soaring electricity bills. The combination of reduced income and "time theft" that results from unpaid labour robs people of time that could be directed towards family responsibilities, social and personal interests, rest and recreation. Reducing the incomes of Australian workers at a time of record slow wages growth also reduces demand throughout the economy and undermines the fiscal position of governments.

Our report has also considered the evolution of working hours in light of public attitudes toward the impact of new technologies on jobs: including computer software, automation and robots, and new digital platforms for "gig" work. On one hand, Australians are optimistic about the potential of new technology to improve work and living standards. Most agree that there are significant potential benefits

from new technology that *could* be shared among businesses, consumers, and workers.

For workers, those benefits could include higher incomes, shorter working hours, or a combination of the two; Australians generally want to see progress on both of these indicators (higher incomes and shorter working hours) as new technology is implemented. 60 percent want to see higher incomes (either on their own, or in conjunction with shorter working hours), while 57 percent want to see shorter working hours (either on their own, or in conjunction with higher incomes). So Australians clearly seek a balance between higher material standard of living, and more time off to enjoy that standard of living.

However, when thinking about their own workplaces, this optimism is tinged by understandable concern about how technology will be implemented, and whether workers will be able to capture any of those potential benefits. Most Australians expect their own employers to use new technology primarily to reduce employment levels (rather than increasing incomes or reducing average working hours). 57 percent of workers think their employer will respond to new technology by reducing employment. Only 18 percent expect shorter working hours to be the outcome of technological change, and only 14 percent expect higher incomes. So while Australians see the potential of new technology to improve their lives, they worry that the implementation of new technology may not translate into gains for workers. This suggests the need for measures to give Australian workers more say in how technology is implemented into their workplaces, along with policy levers (including a renewed emphasis on reducing average working hours as a long-term policy goal) that would help labour markets adjust to the disruptive impacts of new technology. At the same time, how we respond to technology must also take account of the endemic insecurity that now affects almost half of all Australian workers: they need more work, and more secure work, at the same time as we are aiming to reducing average working hours across the labour market.

In summary, the ironic coexistence of overwork and underemployment, and the contradiction between Australians' optimism regarding the potential benefits of technology and their fears about what will happen in their specific workplaces, both suggest a need for more pro-active labour market strategies to share work across all groups of workers, and to enhance the security and stability of jobs. To translate the promise of new technology into concrete benefits for workers (both higher incomes and more leisure time) will require effective measures to limit overtime (including unpaid overtime), enhance the stability of work (especially for workers in the growing number of non-standard jobs), and give workers more say in how new technology is managed.

# Appendix A - Survey Questions

Q1. Are you currently in paid work?

1. Yes, full time
2. Yes, part time
3. Yes, casual
4. Yes, self-employed
5. No

Q2. How many hours a week do you generally work (e.g. the number of paid hours of employment)?

[NUMBER Open answer] \_\_hours

Q3. Would you like to work....?

1. more paid hours
2. fewer paid hours
3. my paid hours are about right

*Unpaid work may include things like arriving early, staying late, working through lunch or breaks, working at home, and so on.*

Q4. How many unpaid hours of work did you perform for your employer in the last 7 days (i.e. unpaid overtime)?

[NUMBER Open answer] \_\_hours

*Future of work*

*These questions are about developments in new technology that may impact on work in coming years, like automation, robotics and software platforms.*

*These technological trends could make some forms of labour more productive. This means more could be produced with one hour of labour, or less labour would be needed for the same level of production.*

Q5. Thinking about current economic trends and policy-making in Australia, if new technologies make labour more productive, how much do you think the following groups will benefit?

*Great benefits*

*Some benefits*

*Few or no benefits*

*Negative impacts*

*Don't know / not sure*

1. Businesses that own and use new technologies (through higher profits and/or lower costs)
2. Workers (through higher incomes and/or more leisure time)
3. Consumers (through more variety or lower prices)

Q6. If new technology made your work more productive, which of the following would you prefer?

*Please select one response only*

1. To work as much as before, but earn a higher income
2. To work fewer hours, but earn as much as before
3. To work somewhat shorter hours, but earn somewhat higher income
4. Don't know / not sure

Q7. If new technology made your work more productive, which of the following do you think is most likely to occur in your workplace?

Please select one response only

Your employer would

1. hire as many workers as before, but pay them more
2. hire as many workers as before, but reduce the length of the work week
3. reduce the number of workers they hire
4. Don't know / not sure

Q8. Thinking about the following technological trends, what kind of impact do you think they will have on your kind of work over the coming decade?

Large impact

Moderate impact

Small impact

No impact

Don't know / not sure

1. Software automation (e.g. computer programs that perform mental or administration tasks)
2. Robotic automation (e.g. machines and robots that perform physical tasks)
3. Online platforms that assign particular tasks to individual workers or contractors (sometimes called the 'gig economy', e.g. Uber)

Q9. What best describes the industry you work in?

1. Agriculture, Forestry and Fishing
2. Mining
3. Manufacturing
4. Electricity, Gas, Water and Waste Services
5. Construction
6. Wholesale Trade
7. Retail Trade
8. Accommodation and Food Services
9. Transport, Postal and Warehousing
10. Information Media and Telecommunications
11. Financial and Insurance Services
12. Rental, Hiring and Real Estate Services
13. Professional, Scientific and Technical Services
14. Administrative and Support Services
15. Public Administration and Safety
16. Education and Training
17. Health Care and Social Assistance

18. *Arts and Recreation Services*
19. *Other Services*
20. *Don't know / not sure*

Q10. *Which of the following best describes the kind of work you do?*

1. *Manager*
2. *Professional*
3. *Technician or Trades Worker*
4. *Community or Personal Service Worker*
5. *Clerical or Administrative Worker*
6. *Sales Worker*
7. *Machinery Operator and Driver*
8. *Labourer*
9. *Don't know / not sure*

## Appendix B - Sample Distribution

	N=	% sample
Total Employed:	877	100%
Male	439	50%
Female	438	50%
<b>Age:</b>		
18-24 years	116	13%
25-34 years	201	23%
35-44 years	196	22%
45-54 years	192	22%
55-64 years	120	14%
65 years or older	52	6%
<b>Job Category:</b>		
Manager	177	20%
Professional	242	28%
Technician or Trades Worker	62	7%
Community or Personal Service Worker	36	4%
Clerical or Administrative Worker	148	17%
Sales Worker	86	10%
Machinery Operator and Driver	30	3%
Labourer	64	7%
Don't know / not sure	32	4%
<b>Employment Status:</b>		
Yes, full time	489	56%
Yes, part time	184	21%
Yes, casual	113	13%
Yes, self employed	91	10%

# Bibliography

Australian Bureau of Statistics. (September 2017). *ABS Catalogue 5206.0 - Australian National Accounts: National Income, Expenditure and Product*, Jun 2017. Canberra: Australian Bureau of Statistics.

Australian Bureau of Statistics. (September 2017). *ABS Catalogue 6202.0 - Labour Force, Australia*, September 2017. Canberra: Australian Bureau of Statistics.

Australian Bureau of Statistics. (August 2017). *ABS Catalogue 6291.0.55.003 - Labour Force, Australia, Detailed, Quarterly, Aug 2017, Table 4*. Canberra: Australian Bureau of Statistics.

Centre for Future Work (2016). *A Portrait of Employment Insecurity in Australia: Infographic*, May, available at <http://www.futurework.org.au/a-portrait-of-employment-insecurity-in-australia-infographic>.

Durrant-Whyte, H., L. McCalman, S. O'Callaghan, A. Reid and D. Steinberg CEDA, (2015). *The impact of computerisation and automation on future employment. Australia's future workforce?*, Melbourne: Committee for Economic Development of Australia, [http://adminpanel.ceda.com.au/FOLDERS/Service/Files/Documents/26792~Futureworkforce\\_June2015.pdf](http://adminpanel.ceda.com.au/FOLDERS/Service/Files/Documents/26792~Futureworkforce_June2015.pdf)

Elvery, S. and B. Spraggon. (May 2017). Federal budget 2017: Where every dollar comes from, and how it's spent, *ABC News*, available at <http://www.abc.net.au/news/story-streams/federal-budget-2017/2017-05-09/federal-budget-2017-infographic-data-sliced-diced/8492204#spending/breakdown/2018/other-purposes>

Essential Research. (March 2016). Most important election issues. *Essential Report*, available at <http://www.essentialvision.com.au/most-important-election-issues-5>

Frey, C. B. and M. A. Osborne (2013). *The Future of Employment: How Susceptible are Jobs to Computersiation?*, Oxford: Oxford Martin School, available at [http://www.oxfordmartin.ox.ac.uk/downloads/academic/The\\_Future\\_of\\_Employment.pdf](http://www.oxfordmartin.ox.ac.uk/downloads/academic/The_Future_of_Employment.pdf)

Jericho, G. (August 2017). Damning evidence of wealth disparity highlights inequality across generations, *Guardian Australia*, available at <https://www.theguardian.com/business/grogonomics/2017/aug/02/damning-evidence-of-wealth-disparity-highlights-inequality-across-generations>

Nancarrow, T. (October 2017). Avocado lovers set to clean up as fruit numbers smash record, *ABC News*, available at <http://www.abc.net.au/news/rural/2017-10-31/consumers-set-for-avocado-win-as-production-record-nears/9099736>

Reich, R. B. (2016) *Saving Capitalism: For the Many, Not the Few*, New York: Vintage Books.

Safe Work Australia (2017). *Cost of injury and illness by occupation*, Safe Work Australia available at <https://www.safeworkaustralia.gov.au/statistics-and-research/cost-injury-and-illness-occupation>

Stanford, J. (January 2017). *Briefing Note: Labour Share of Australian GDP Hits All-Time Record Low*, Centre for Future Work, available at [https://d3n8a8pro7vhmx.cloudfront.net/theausinstitute/pages/1500/attachments/original/1497298286/Labour\\_Share\\_Hits\\_Record\\_Low.pdf?1497298286](https://d3n8a8pro7vhmx.cloudfront.net/theausinstitute/pages/1500/attachments/original/1497298286/Labour_Share_Hits_Record_Low.pdf?1497298286)

Wooden, M. (February 2017). Push for longer hours makes headlines, but more Australians want to work less, *The Conversation*, available at <https://theconversation.com/push-for-longer-hours-makes-headlines-but-more-australians-want-to-work-less-73341>