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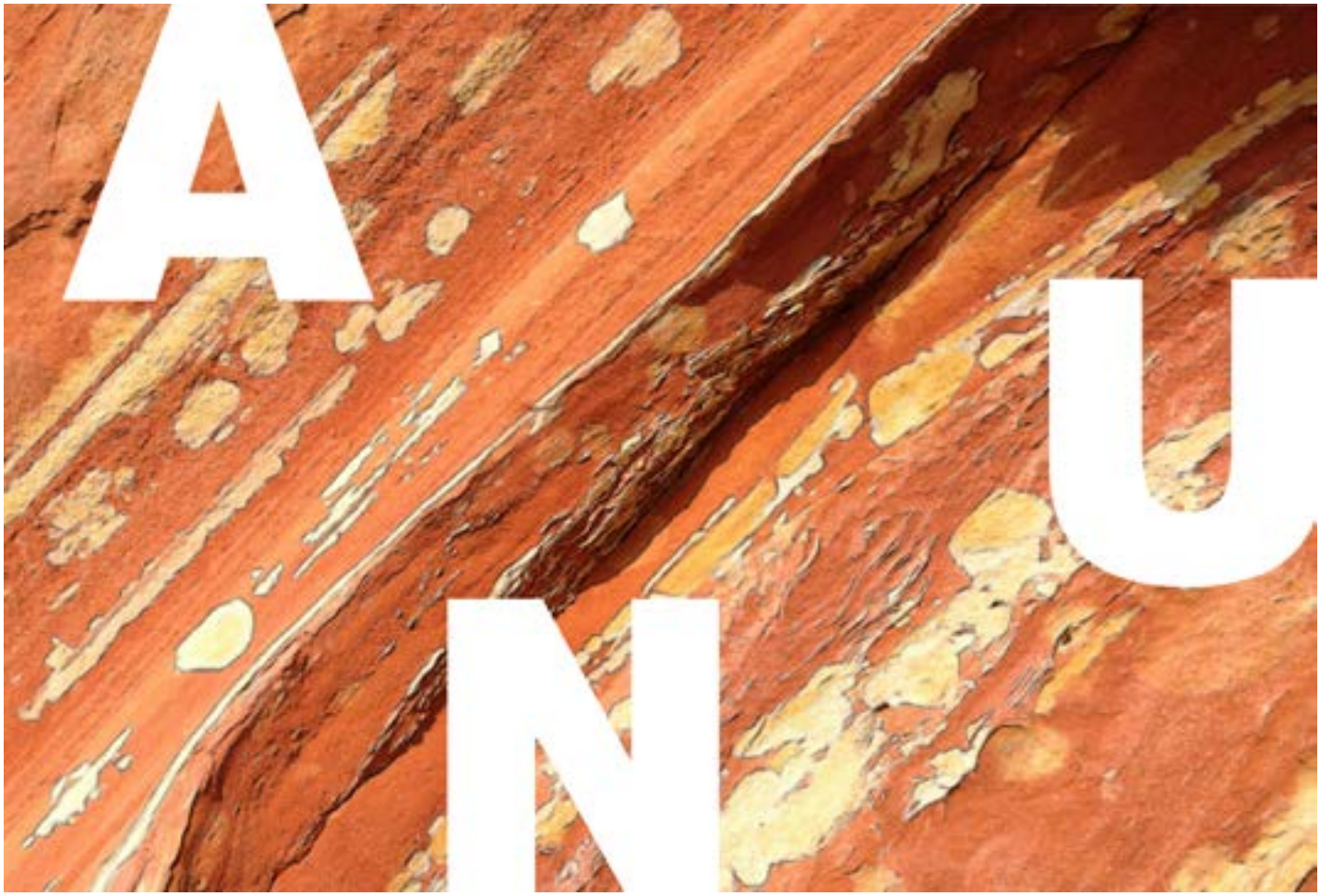

UNPACKING THE INCOME OF INDIGENOUS AND NON-INDIGENOUS AUSTRALIANS: WAGES, GOVERNMENT PAYMENTS AND OTHER INCOME

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Unpacking the income of Indigenous and non-Indigenous Australians: Wages, government payments and other income

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Abstract

This paper compares the level and source of income for Indigenous and non-Indigenous Australians using data from the 2011 wave of the Household Income and Labour Dynamics in Australia (HILDA) survey. Three sources of income are considered: wages and salaries; government benefits; and income from businesses, investments and other private transfers. Consistent with many previous studies, Indigenous Australians have, on average, lower total income than non-Indigenous Australians, with this difference being largest for those who are full-time employed. The difference is also larger for males than females. In terms of non-wage income, Indigenous men and women receive a much smaller proportion of income from other sources than their non-Indigenous counterparts (primarily business and investment income). This is particularly the case for those who are not in the labour force (NILF). Correspondingly, government benefits constitute a higher proportion of income for the Indigenous population than for the non-Indigenous population. This is true for both males and females, and for all labour force statuses, although the difference is largest for part-time employed and those who are NILF. Given that Indigenous people are also more likely to be unemployed than non-Indigenous people, they are more likely to be dependent solely on government payments as a source of income at any one time. The implications of these findings are discussed, as well as directions for future research.

Keywords: personal income, wages, government payments, Indigenous employment, labour market segmentation

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This paper uses unit record data from the Household, Income and Labour Dynamics in Australia (HILDA) survey. The HILDA project was initiated and is funded by the Australian Government Department of Social Services (DSS) and is managed by the Melbourne Institute of Applied Economic and Social Research (Melbourne Institute). The findings and views reported in this paper, however, are those of the authors and should not be attributed to either DSS or the Melbourne Institute.

Acronyms

ANU	Australian National University
CAEPR	Centre for Aboriginal Economic Policy Research
HILDA	Household Income and Labour Dynamics in Australia
NILF	not in the labour force

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Tables and figures

Introduction

It has been well established that Indigenous Australians have, on average, a much lower income than non-Indigenous Australians. For example, according to the National Aboriginal and Torres Strait Islander Health Survey 2012–13 and the Australian Health Survey 2011–2013, the median gross weekly personal income of the Indigenous adult population was 55 per cent of that of the non-Indigenous population (SCRGSP 2014).

Although there are a substantial amount of data available on the income levels of Indigenous Australians, until recently, there have been little data on the different sources of income, such as wages and salaries, public transfers, and investment and business income. The only large-scale representative, publicly available detailed data on sources of income for the Indigenous population have been the 1994 National Aboriginal and Torres Strait Islander Survey,[1] and gaps in the data have been partly filled by the Household Income and Labour Dynamics in Australia (HILDA) survey.[2] The ability of HILDA to provide data on Indigenous Australians has been increased by the addition of a top-up sample in the 2011 wave, which boosted the number of Indigenous respondents to a sufficient number to allow statistically valid estimates.[3]

This working paper uses data from the 2011 wave of HILDA (wave 11) to analyse income by source for Indigenous and non-Indigenous Australians. The paper examines differences in income and source of income according to labour force status. Thus, it provides information on the role that differences in labour force status have in explaining the lower income of the Indigenous population compared with the non-Indigenous population.

The focus of this paper is on personal income. Although there have been some analyses of personal (individual) income of Indigenous Australians,[4] much of the literature has focused on income measured at the household level, which considers questions of financial living standards, poverty and related concepts (e.g. Hunter 2012). The focus on personal income is important for several reasons. First, it is at the individual level that many policies primarily operate (e.g. labour market and education policies). Second, the income received by an individual is often in recognition of their behaviour (e.g. productivity in the workplace), endowments (e.g. personal assets), or individual family and social circumstances. It is important to understand the various sources of personal income to understand economic behaviour.

There are several reasons why it is useful to have data about sources of income. It is important information to have when attempting to understand the reasons for the lower average income level of the Indigenous population and, therefore, identifying possible ways to narrow the income gap. It is also necessary for understanding the economic incentives for a range of behaviours, including labour supply decisions, decisions about investments in education, geographic mobility and fertility decisions. From an economic perspective, the hourly wage is particularly important, because this variable is used in many economic models that involve choices about the amount of time spent in paid employment.

The HILDA survey has three key strengths for estimating source of income for the Indigenous population. First, it has detailed income data. Second, the large non-Indigenous sample allows comparisons between Indigenous and non-Indigenous populations. Third, the survey is longitudinal, which will allow the first longitudinal analysis of sources of income for the Indigenous population. However, the HILDA survey does have two key limitations—the Indigenous sample is relatively small (460 Indigenous respondents aged 15–64 years at wave 11) and it excludes remote areas (which hold approximately 25% of the Indigenous population).

This paper includes background literature, and describes the HILDA dataset before analysing the different components of individual income in some detail. The final section reflects on the implications of the findings for future research.

Background

There is an extensive literature about the determinants of each source of income. This section discusses some of the key factors from the literature.

Personal income tends to increase with age until around the age of 45–54 years, after which income starts to decrease (e.g. ABS 2013a). For Indigenous Australians there is evidence that personal income peaks at 35–44 years (SCRGSP 2014). There are many reasons for this, including productivity in the labour market (age is a proxy for labour market experience) and capital accumulation that generates an income stream. In this paper, when comparing the income of Indigenous and non-Indigenous people, differences in the age structure of the Indigenous and non-Indigenous populations are controlled for by age-standardising income.

Income level and source of income will differ according to labour force status (i.e. whether employed, and number of hours worked if employed). This paper therefore provides information on income by source of income and labour force status. Part-time and full-time employment are analysed separately. The Australian social security system is designed so that many people in part-time employment will continue to receive income-support payments (e.g. Parenting Payment, Newstart Allowance), and many people in part-time and full-time employment will receive payments such as the Family Tax Benefit, the Child Care Benefit and the Child Care Rebate (although the amount received decreases as income increases).

An additional reason for distinguishing between part-time and full-time employment is that they tend to involve different labour markets, with part-time jobs tending to be in the secondary labour market, which has poorer employment conditions than the primary labour market (see e.g. Leontaridi 1998). Important differences exist on the demand side, which imply differences in wages between jobs that are not explained by individual workers' characteristics. One issue is that career paths in particular firms and a relatively long tenure in the current job are likely to be more prominent among those employed in the primary labour market. Other research that is potentially relevant in this regard is from Lazear (1979), who developed a model of remuneration where employers highly value long-term relationships with workers to facilitate the firm-specific capital in those workers (also see Farber 1999). Even labour economists who do not necessarily subscribe to the notion of labour market segmentation believe that it is important to distinguish between the wages of people working part-time and full-time (Oi & Idson 1999).

Distinguishing by race and gender in empirical studies of income differences is also common (e.g. Altonji & Blank 1999). Studies have also found that gender is strongly associated with personal income. This partly reflects the impact of child bearing and rearing on a woman's labour market participation. Studies of the Australian population have found substantial differences in the source of income for men and women (Headey, Marks & Wooden 2005; Jefferson & Ong 2010).

Data

The HILDA survey

The HILDA survey is a longitudinal survey of the Australian population that started in 2001, with interviews conducted each year. The survey covers a broad range of social and economic topics. The sample began with around 15,000 people at wave 1, almost half of whom have participated in each subsequent year. In 2011, a general top-up sample of 2,153 responding households was added to the sample. The top-up sample allowed the inclusion of four groups of respondents who could not have been included in the wave 1 sample (i.e. immigrants arriving in Australia after 2001, long-term visitors arriving since 2001, Australians not in Australia in 2001 and the Australian-born children of these groups). The top-up sample also increased the number of respondents in other groups, including Indigenous respondents.

The analysis here is restricted to the working-age population (15–64 years). In wave 11 of HILDA, there were 460 Indigenous respondents and 14,200 non-Indigenous respondents.[5] Although this is a large enough sample to allow a broad analysis of the Indigenous population, the ability to use the HILDA data to look at subgroups (e.g. by location, education and occupation) is limited.

Income measures

In this paper, income from the following sources is examined: wages and salaries; government benefits; and business and investment income, and private transfers (termed 'other income').

The HILDA survey collects information on income for the most recent financial year (the 2010–11 financial year for wave 11). In this paper, the main overall income measure used is annual gross income. Even if a person is not in paid employment at the time of the survey, they may have been working at some point during the year, and this income is captured by the HILDA survey. For people who were employed at the time of the interview, hourly wages are derived from information on weekly wages and hours worked per week. However, for people who are not employed at the time of the interview, information on hours worked in previous jobs is limited, so meaningful wage rates cannot be calculated.

Missing income data have been imputed by the HILDA survey, and the imputed income variable is used in this paper. Government benefits are also imputed. See Summerfield et al. (2012) for details of the imputation process and the construction of the measure of the value of government benefits received.

Labour force status

The measure of labour force status is based on the individual's situation the week before the interview. Full-time employment is defined as working 35 hours or more per week. A person is defined as being unemployed if they were not employed and looked for paid work in the four weeks before the interview.

Table 1 provides information on labour force status by gender and Indigenous status. The HILDA data are benchmarked against the 2011 Census, using data for non-remote areas. The distribution of labour force status estimated from HILDA is broadly comparable to the census, although the differences between HILDA and the census are larger for Indigenous than non-Indigenous Australians. This is not surprising given the relatively small Indigenous sample in HILDA.

The proportion of Indigenous men and women in full-time employment is much lower than that of non-Indigenous men and women. The part-time employment proportion of Indigenous men is slightly lower than that of non-Indigenous men, but Indigenous women are much less likely to be employed part-time than are non-Indigenous women.

Indigenous unemployment rates are about 4.5 times higher than non-Indigenous rates, regardless of gender. A higher proportion of Indigenous people are also not in the labour force (NILF). Indigenous employment is correspondingly lower than the non-Indigenous estimates for workers employed both part-time and full-time.

TABLE 1. Labour force status, by gender and Indigenous status, 2011

	Male		Female	
Labour force status	Non-Indigenous	Indigenous	Non-Indigenous	Indigenous
HILDA data				
Employed FT (%)	68	45	35	19
Employed PT (%)	13	10	34	19
Unemployed (%)	4	13	4	14
NILF (%)	15	32	27	48
Total people	6,836	191	7,428	269
2011 Census data				
Employed FT (%)	62	38	35	23
Employed PT (%)	14	11	31	20
Unemployed (%)	5	12	4	9
NILF (%)	19	40	31	49
Total people	6,090,264	113,625	6,282,594	121,974

FT = full-time; NILF = not in the labour force; PT = part-time

Notes: Data include people aged 15–64 years. Census figures refer to people living in non-remote areas only. The HILDA estimates are weighted using the enumerated person weights (for more information, see Summerfield et al. 2012).

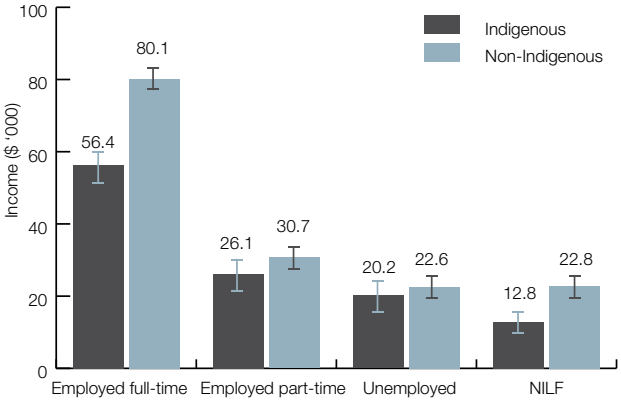
Source: HILDA, 2011; ABS (2011a).

Total personal income

Income level

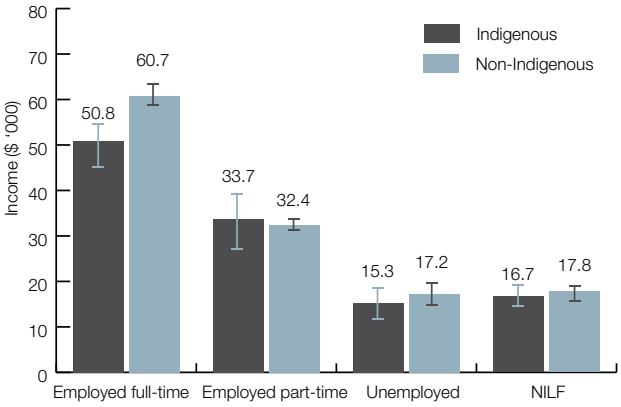
According to the HILDA data, the total personal gross annual income of Indigenous men was $34,500, substantially lower than the income of $62,600 for non-Indigenous men. For Indigenous women, the average income was $26,200 compared with $37,400 for non-Indigenous women. Figs 1 and 2 show total income by labour force status and Indigenous status for men and women, respectively.

FIG. 1. Total personal gross mean income per year, by Indigenous status, men, 2011



NILF = not in the labour force
Notes: Bars indicate 95% confidence intervals. If the endpoints of these bars overlap, the difference between the Indigenous and non-Indigenous groups is not significant. For instance, employed full-time and NILF incomes are statistically significantly different between Indigenous and non-Indigenous groups, whereas employed part-time and unemployed are not.
Source: HILDA, 2011.

FIG. 2. Total personal gross mean income per year, by Indigenous status, women, 2011



NILF = not in the labour force
Notes: Bars indicate 95% confidence intervals. If the endpoints of these bars overlap, the difference between the Indigenous and non-Indigenous groups is not significant.
Source: HILDA, 2011.

Although the personal income for Indigenous men and women is lower than that of their non-Indigenous counterparts for all labour force statuses, the size of the gap differs according to labour force status. For full-time workers, the difference is substantial, with Indigenous incomes being around $23,700 and $9,900 lower for men and women, respectively. In addition, Indigenous men who are not in the labour force had an income that was around $10,000 lower than that of non-Indigenous men. However, for the remainder of the labour force categories, the income difference between Indigenous and non-Indigenous people is much less substantial.

Source of income

This section provides estimates of income by source for the Indigenous and non-Indigenous population. Figs 3 and 4 show the composition of personal income by source of income for men and women, respectively. Complete data are provided in Table A1 in Appendix A.

For non-Indigenous men employed full-time, 86 per cent of their personal income is from wages, 12 per cent from other sources and just 2 per cent from government benefits. For Indigenous men employed full-time, a higher proportion of their income is from the labour market (95%), a similar proportion from government benefits and a much smaller proportion from other sources (3%).

For non-Indigenous men employed part-time, a smaller proportion of their income comes from wages compared with full-time employed men (67%) and a much higher proportion comes from other sources (25%), with 8 per cent coming from government benefits. Part-time employed Indigenous men derive a similar proportion of their personal income from wages as do part-time employed non-Indigenous men, and receive only a small proportion of their income from other sources (4%).

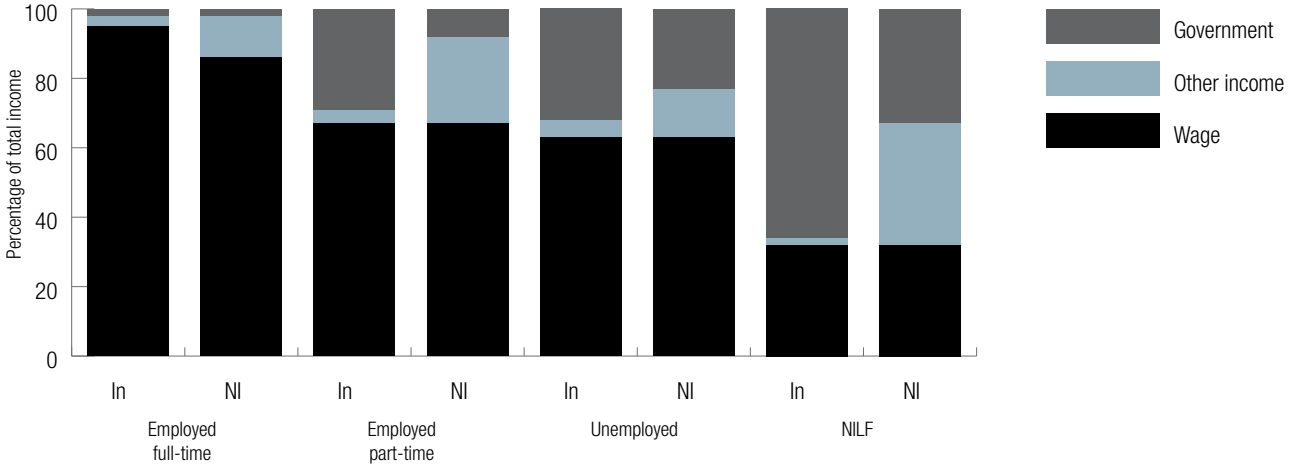
For those who were unemployed at the time of the interview, both Indigenous and non-Indigenous men receive 63 per cent of their income from wages (reflecting the fact that many of those who were unemployed at the time of the survey had been employed during the previous 12 months). The main difference in source of income between Indigenous and non-Indigenous men who are unemployed is that Indigenous men receive a higher proportion of their income from government benefits and a lower proportion from other sources.

For both Indigenous and non-Indigenous men who are NILF, only around 32 per cent of their income is from wages and salaries. Similar to other labour force categories, the main difference is that non-Indigenous men have a much higher proportion of their income from other sources than Indigenous men (34% vs. 2%) and a correspondingly lower proportion of their income from government benefits (32% vs. 66%).

For women, the overall pattern is generally similar to men, but there are differences in the proportion of income from different sources. Indigenous women who are not in paid employment (unemployed and NILF) obtain a much lower proportion of their income from paid work than non-Indigenous women. Correspondingly, Indigenous women who are unemployed and NILF obtain a much higher proportion of their income from government payments than non-Indigenous women.

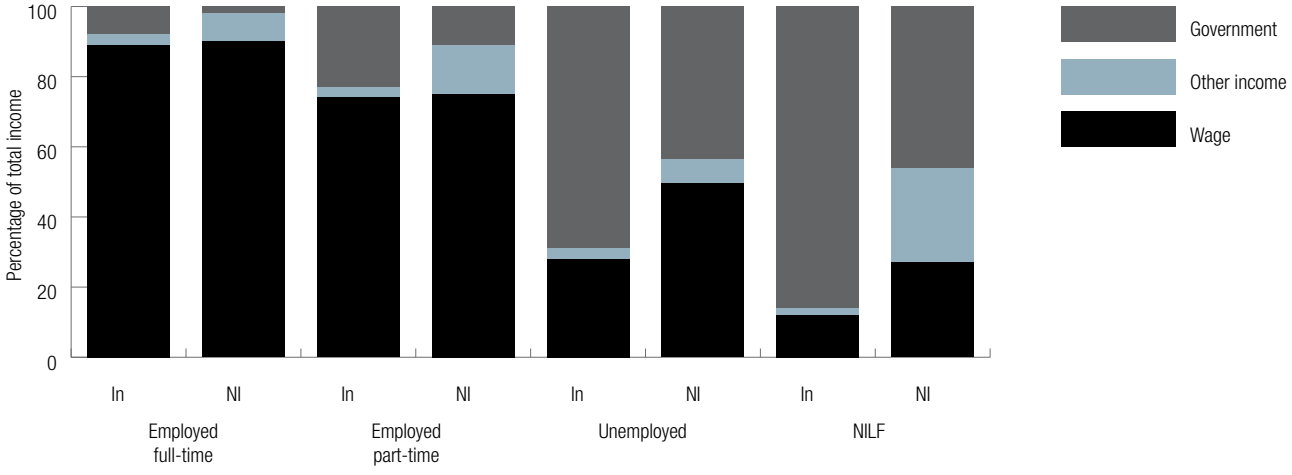
Although the proportion of total income from other private sources is similar for both Indigenous men and women regardless of labour force status, the level of other income for non-Indigenous men is substantially higher than for women across all labour force statuses. For example, non-Indigenous men who are NILF obtain 34 per cent of their income from other private sources, compared with 26 per cent for women.

FIG. 3. Source of personal income by labour force status and Indigenous status, men, 2011



In = Indigenous; NI = non-Indigenous; NILF = not in the labour force
Source: HILDA, 2011.

FIG. 4. Source of personal income by labour force status and Indigenous status, women, 2011



In = Indigenous; NI = non-Indigenous; NILF = not in the labour force
Source: HILDA, 2011.

In summary, several main observations can be made. As one would expect, for both employed Indigenous and non-Indigenous Australians, the major contributor to income is wages, and the proportion of income from wages decreases as people spend less time in the labour force. In terms of non-wage income, government benefits constitute a higher proportion of income for the Indigenous population than for the non-Indigenous population. This is true for men and women, and for all labour force statuses. However, the difference is largest for part-time employed and those NILF, and lowest for full-time employed and unemployed. Indigenous men and women receive a much smaller proportion of income from other sources (primarily business and investment income) than their non-Indigenous counterparts. This is particularly the case for those NILF. For non-Indigenous Australians, income from other sources is particularly important for part-time workers and those NILF, where it constitutes 15–35 per cent of all income. It is also worth noting that more than 50 per cent of income for unemployed men comes from wages, whereas for women it is lower, especially for Indigenous Australians.

Income from wages

Hourly wages

This section examines different aspects of wage income received by Indigenous and non-Indigenous Australians. Table 2 provides information on wage rates received, working hours, number of weeks worked per year and annual wage income in 2011 for men and women, by Indigenous status.

In terms of the wage rate, the pattern across the genders is broadly similar, with non-Indigenous wage rates consistently higher than Indigenous rates. Overall, employed Indigenous men have an hourly wage of $23.3, around 18 per cent lower than the average hourly wage of employed non-Indigenous men of $28.3. Average hourly wages of women are slightly lower than for men, and are lower for Indigenous women ($22.6) than for non-Indigenous women ($26.1). Given the well-known disparities in level of education and other human capital between Indigenous and non-Indigenous people, this difference in wage rate at the aggregate level is not surprising. Hunter and Yap (2014) use census data on personal income in urban areas to argue that wage differences remain, even after we take into account educational attainment, although the remaining differential is diminished.

For men, there is a similar difference (in percentage terms) between Indigenous and non-Indigenous people in full-time and part-time employment. For women, the hourly wages of full-time employed Indigenous and non-Indigenous women are very similar ($25.3 and $26.3, respectively). However, part-time employed Indigenous women have a substantially lower hourly wage than part-time employed non-Indigenous women ($20.0 compared with $25.8). This may be because women are more likely than men to work part-time for all occupations, and so there is a high proportion of higher-income-earning non-Indigenous women working part-time. One explanation for this observation is that, irrespective of occupational status, mothers might choose to work part-time immediately after the birth of their children as a means of combining the work and family aspects of their lives (ABS 2011b).

Working hours and number of weeks worked

The total income from wages earned during a year depends not only on the wage rate received, but also on the number of hours worked per week and the number of weeks worked per year.

On average, Indigenous men worked 24 weeks during the past year, substantially less than the 33 weeks worked by non-Indigenous men (Table 2). Similarly, Indigenous women worked 17 weeks during the past year, compared with 28 weeks for non-Indigenous women.

For each labour force status, Indigenous men and women work between one and three weeks less per year than their non-Indigenous counterparts. This difference is much smaller than the total differences in weeks worked between the Indigenous and non-Indigenous populations. This is largely due to differences in labour force status rather than a lower number of weeks worked per year for each labour force status.

The number of weeks worked during the past year is higher among the full-time and part-time employed, but the unemployed and those NILF, on average, had spent a number of weeks employed during the past 52 weeks. For example, unemployed Indigenous people had spent 13 weeks during the past 52 weeks employed, and unemployed non-Indigenous people had spent 15.5 weeks of the past 52 weeks employed.

When they are working, Indigenous people work around the same number of hours, if not more, per week as non-Indigenous people. This is despite spending less time in paid employment than non-Indigenous people during the year. In particular, Indigenous men work three hours more per week on average than non-Indigenous men.

Annual labour market earnings

Table 2 also shows the annual income from wages earned in 2011. Full-time employed Indigenous men have an average annual income from wages of $53,400, compared with full-time employed non-Indigenous men, who have an annual income from wages of $69,200. Similarly, Indigenous women employed full-time have an annual income from wages of $45,800, compared with $55,300 for full-time employed non-Indigenous women. The higher annual incomes for full-time employed non-Indigenous people than for full-time employed Indigenous people reflect higher hourly wages and numbers of weeks worked per year.

However, there is no significant difference between the annual wages of part-time workers. For men, this is a combination of the lower hourly wage and longer average hours worked by part-time employed Indigenous men compared with non-Indigenous men. For part-time employed women, Indigenous women have a lower hourly wage rate than non-Indigenous women, but there is no significant difference in the number of weeks worked per year or hours worked per week.

For those not in paid employment at the time of the survey, non-Indigenous Australians generally had higher incomes from previous jobs. Non-Indigenous people who were not in the labour force earned around twice as much during the year as Indigenous people, which is probably a combination of higher wage rates and more time spent working.

Indigenous Australians, on average, receive a lower wage rate than non-Indigenous Australians. They are also more likely to be unemployed, more likely to be out of work for longer periods of time and more likely to change jobs than non-Indigenous people. In addition to Indigenous people spending more time out of the labour force, those currently in work have been with their current employer for a shorter time than non-Indigenous people. Indigenous people are thus more exposed to financial stress at times when there is no regular wage income. We now investigate to what extent other sources of income play a role in helping to shield people from potential spells of unemployment.

Other non-wage income from private sources

Income from private sources other than wages includes rent, interest payments, dividends, royalties and regular private transfers, such as child support payments and other intrafamily transfers.[6] Availability of income from non-wage sources has been found to have an impact on labour supply decisions (Cai 2010; Taylor & Gray 2010). Non-wage private income is also important in alleviating financial stress while an individual is out of a job.[7]

Figs 5 and 6 show non-wage private income by labour force status for men and women, respectively. Non-wage private income is substantially higher for the non-Indigenous population than for the Indigenous population. For example, full-time and part-time employed non-Indigenous men had $9,600 and $7,500 in non-wage private income in 2011, respectively, which is more than five times that of employed Indigenous men.

The biggest difference is between those who are NILF. Although the level of privately sourced, non-wage income for non-Indigenous people who are NILF is on par with the working non-Indigenous population ($7,800 men and $4,600 for women), Indigenous people who are NILF receive a negligible amount from this source.

For non-Indigenous part-time workers, especially men, the amount of non-wage income is substantial in absolute value terms and also as a proportion of total income. Referring to Fig. 5, non-wage income constitutes almost 25 per cent of income for non-Indigenous men who are working part-time, and around 15 per cent of the income of female part-time non-Indigenous workers. It is possible that this access to reasonable amounts of non-wage private income is influencing non-Indigenous labour supply decisions.

The lower non-wage income of Indigenous Australians could also be linked to their historically lower income from wages. If Indigenous Australians are earning a lower salary, they have fewer resources and opportunities to invest in other ways of earning income, such as in real estate or the share market. As such, Indigenous people may be more susceptible to financial stress at times of economic downturn, as they do not have as wide a range of income sources as non-Indigenous people.

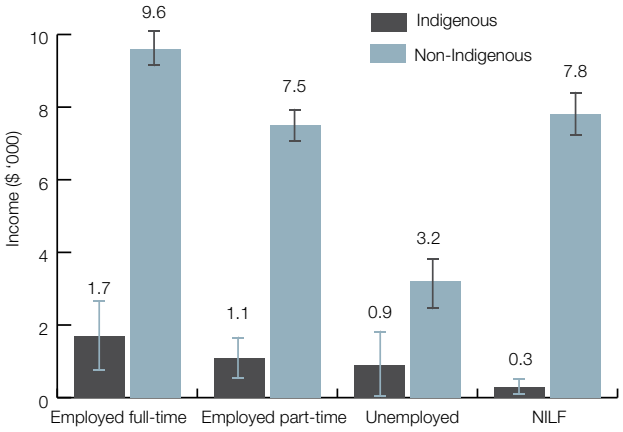
TABLE 2. Average weeks of work, hours per week and labour force status in current job, by gender and Indigenous status, 2011

Labour force status	Hourly wage ($)		Hours of work per week		Weeks in work		Annual wages ($'000)	
	Indigenous	Non–Indigenous	Indigenous	Non–Indigenous	Indigenous	Non–Indigenous	Indigenous	Non–Indigenous
Men								
Employed FT	24.5 (1.6)	29.5 (0.3)	46.5 (1.4)	46.2 (0.2)	38.4 (2.4)	39.3 (0.3)	53.4 (4.2)	69.2 (0.8)
Employed PT	18.2 (2.5)	22.0 (0.9)	21.1 (1.8)	18.3 (0.3)	32.8 (4.7)	33.8 (0.8)	19.4 (4.3)	20.6 (1.2)
Unemployed	–	–	–	–	13.0 (3.5)	15.5 (1.1)	12.7 (4.2)	14.2 (1.6)
NILF	–	–	–	–	5.1 (1.6)	6.6 (0.5)	4.1 (1.6)	7.6 (1.0)
Average	23.3 (1.4)	28.3 (0.3)	41.6 (1.5)	46.2 (0.2)	24.0 (2.5)	33.0 (0.4)	28.7 (3.4)	51.3 (0.9)
Women								
Employed FT	25.3 (1.2)	26.3 (0.3)	42.3 (1.3)	42.3 (0.2)	37.0 (3.1)	39.5 (0.4)	45.8 (4.0)	55.3 (0.7)
Employed PT	20.0 (2.0)	25.8 (0.7)	19.7 (1.0)	19.6 (0.2)	34.1 (3.2)	36.1 (0.5)	24.8 (4.0)	24.2 (0.5)
Unemployed	–	–	–	–	9.1 (2.6)	11.9 (1.2)	4.7 (1.4)	8.5 (1.0)
NILF	–	–	–	–	3.8 (1.0)	5.8 (0.3)	2.0 (0.7)	5.2 (0.4)
Average	22.6 (1.2)	26.1 (0.4)	30.9 (1.4)	31.2 (0.20)	17.0 (2.0)	28.0 (0.4)	15.1 (2.1)	29.4 (0.6)

– = not applicable; FT = full-time; NILF = not in the labour force; PT = part-time
Note: Standard errors are in parentheses.
Source: HILDA, 2011.

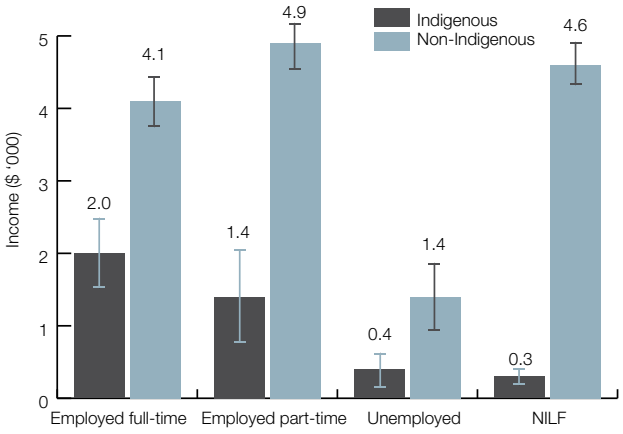
Another avenue for the effect of such income on wage outcomes is that the additional resources associated with that income could be used for longer periods of job search and, hence, result in finding better jobs that are well matched to the skills of the individual (Hunter & Gray 2006). It is probably not a coincidence that the greatest difference between the non-wage private income of Indigenous and non-Indigenous estimates in Figs 5 and 6 is for men employed full-time. Indeed, it may itself form part of the explanation for the fact that the average hourly wage for that group was higher than for any other group reported in this paper.

FIG. 5. Average non-wage private income per year, men, 2011



NILF = not in the labour force
Notes: Bars indicate 95% confidence intervals. If the endpoints of these bars overlap, the difference between the Indigenous and non-Indigenous groups is not significant.
Source: HILDA, 2011.

FIG. 6. Average non-wage private income per year, women, 2011



NILF = not in the labour force
Notes: Bars indicate 95% confidence intervals. If the endpoints of these bars overlap, the difference between the Indigenous and non-Indigenous groups is not significant.
Source: HILDA, 2011.

Government payments

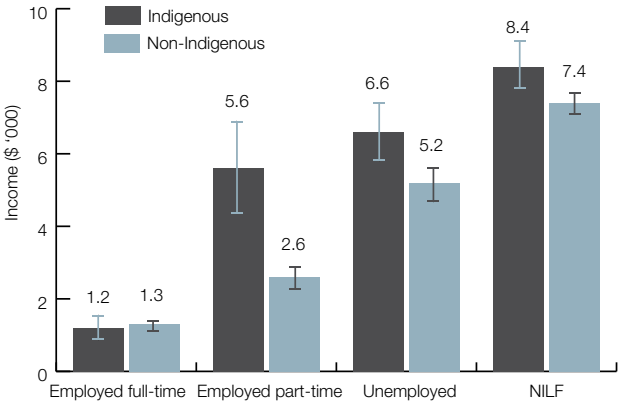
The final source of income considered in this paper is government payments (also termed public transfers). Government payments include income support payments (e.g. unemployment, parenting, carer and disability-related payments) and allowances such as Family Tax Benefit payments related to having dependent children, and mobility and carer allowances.

Figs 7 and 8 show total government payments by labour force status. On average, government payments are higher for women than for men, irrespective of Indigenous status. This reflects a combination of factors, including the fact that women are more likely to have dependent children and therefore receive the Family Tax Benefit and child care–related payments. Women are also more likely than men to receive a Carer Payment, which is paid at a higher rate than unemployment-related payments, and a Parenting Payment Single, which in 2011 was paid at a higher rate than the unemployment-related benefits.

Government payments are generally higher for Indigenous people, irrespective of gender and labour force status. The differences are most substantial for the female population; for example, Indigenous women who are NILF receive, on average, more than $6,000 more in government payments than their non-Indigenous counterparts. However, for the male population, differences by Indigenous status are smaller and not significant (except for those working part-time). The substantial difference in government payments for women could be due to the fact that, on average, Indigenous women are more likely to have more children than non-Indigenous women, and are also more likely to be a carer (Yap and Biddle 2012) and hence receive higher benefits.[8] On the other hand, the difference in the number of children between Indigenous and non-Indigenous men is not as high, so there is not such a difference in the amount of government benefits received.

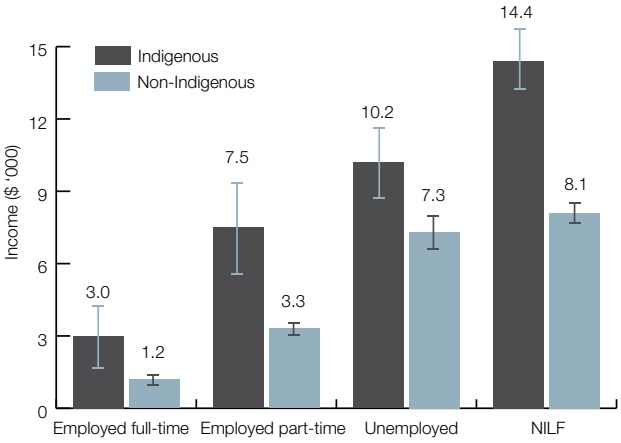
Government payments are relatively high for Indigenous men and women who are employed part-time, at $5,600 and $7,500, respectively. These figures are more than twice those for non-Indigenous part-time workers. The payments are also substantially higher than those received by Indigenous people working full-time, and are actually more similar to benefits received by those not in paid employment. It may be the case that the availability of government benefits is affecting workers' decisions about how much labour to supply. If available benefits are relatively high, a person may choose to work less than they otherwise would in the absence of benefits (Doiron 2004; Hu 1999).

FIG. 7. Average income per year from government payments by Indigenous status, men, 2011



NILF = **not** in the labour force
Notes: Bars indicate 95% confidence intervals. If the endpoints of these bars overlap, the difference between the Indigenous and non-Indigenous groups is not significant.
Source: HILDA, 2011.

FIG. 8. Average income per year from government payments by Indigenous status, women, 2011



NILF = **not** in the labour force
Notes: Bars indicate 95% confidence intervals. If the endpoints of these bars overlap, the difference between the Indigenous and non-Indigenous groups is not significant.
Source: HILDA, 2011.

A wider variety of public transfers are available to the Indigenous population. For example, ABSTUDY provides help for Indigenous Australians who are studying or undertaking an apprenticeship. There is also an income supplement available to those participating in the Community Development Employment Projects scheme. This means that, all other things being equal, Indigenous Australians are more likely to be receiving public transfers than non-Indigenous Australians. However, all other things are not equal, and Indigenous Australians have lower wages and other private sources of income, meaning that they are generally in more need of support payments. Although government payments are higher for the Indigenous population, it is important to note that total income is still generally higher for non-Indigenous people, irrespective of labour force status.

Government payments are important because they are essentially independent of the market economy. Australia's welfare system is one of the most targeted systems in the Organisation for Economic Co-operation and Development, and these transfer payments tend to provide support to those most in need—recipients who are out of work temporarily, or permanently in the case of those with a disability or long-term illness (Whiteford 2005). Government payments are particularly important as a source of income for Indigenous people, because they are more likely to be unemployed and more likely to be out of work for longer, and have very little non-wage income to support them.

Role of age-related factors

As previously explained, income and wages are related to basic demographic factors such as age and gender. In this section, we age-standardise the income to account for substantial age differences between the 'raw' income data for Indigenous and non-Indigenous people. Age differentials may have been particularly important for the NILF comparisons, especially to the extent that a particular group has access to superannuation as they approach retirement age. However, a similar point can be made for any Indigenous to non-Indigenous comparisons, given the substantial age differences between the two populations irrespective of labour force status (see Table 3). Note that the largest age differential between non-Indigenous and Indigenous people is for men who are NILF, with an average age difference of 12.4 years. These observations are consistent with the substantially lower life expectancy of Indigenous Australians, especially Indigenous men, relatively few of whom are expected to reach retirement age (ABS 2013b). Table 3 shows that, not only are the overall age distributions very different for Indigenous and non-Indigenous populations, but age distributions are different even when disaggregated by labour force status.

To standardise the non-Indigenous estimates, we used the Indigenous age distribution in the 2011 Census, disaggregated by labour force status and gender, and for non-remote areas only. For each labour force status and gender, the proportion of Indigenous people in each five-year age group between ages 15 and 64 years was used to weight the HILDA estimates of average non-Indigenous income estimated separately for each five-year age group. The resulting age-standardised

TABLE 3. Average age by labour force status, gender and Indigenous status, non-remote Australia, 2011

	Average age men (years)		Average age women (years)	
Labour force status	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous
Employed FT	34	40	35	39
Employed PT	29	34	32	38
Unemployed	27	31	28	30
NILF	26	39	33	41

FT = full-time; NILF = not in the labour force; PT = part-time
Source: HILDA, 2011.

estimates can be interpreted as the average amount of income non-Indigenous people of a particular labour force status would have received if they had the same age distribution as the Indigenous population. To make direct comparisons between the Indigenous and non-Indigenous results, we also age-standardised Indigenous estimates using the appropriate census distribution.

In general, the age-standardised results show very similar patterns to the non-standardised estimates discussed in earlier sections (see Table A2 in Appendix A). The main effect of the age-standardisation was to lower the average income received by non-Indigenous Australians, as more weight is given to the younger age groups, who often earn lower wages and do not have potential income from superannuation. However, total income, wages and other private sources still remain substantially higher for non-Indigenous Australians than for Indigenous Australians.

Discussion

It will surprise few that Indigenous Australians generally have lower total income than other Australians; however, this differential is particularly pronounced among those who are employed full-time. This is partly because, on average, Indigenous Australians earn a lower wage than non-Indigenous Australians. The economic reasons for this wage differential are associated with the relatively low-level human capital and qualifications among Indigenous Australians, as well as less access to jobs—especially 'good' jobs—and, potentially, discrimination (Biddle et al. 2013).

This paper also demonstrates that Indigenous Australians have significantly less income from other private sources than other Australians. This could be partially because of relatively poor employment prospects experienced by Indigenous people during a long period, or because Indigenous Australians have probably received lower average wages since Australia was colonised and the first monetary-based labour market was established. Whatever the extent of contemporaneous discrimination in the labour market, it is inevitable that historical discrimination and disadvantage mean that Indigenous people have fewer resources and capital to invest in other private ventures to increase their overall wealth. This may limit the ability of Indigenous people to participate in the labour market as workers, but it also places a constraint on the ability of Indigenous people to start their own businesses (Hunter 2013).

As a consequence of lower income from private sources, a greater proportion of Indigenous income comes from government payments. Given that Indigenous people are more likely to be out of work than non-Indigenous people, they are more likely to be dependent solely on government payments as a source of income at any one time.

This paper has shown that differentials in income and source of income are only partially explained by conditioning on basic demographic variables and labour force status. Given the importance of wage and other incomes in driving the incentives for labour supply, or even providing resources for individuals to start and sustain an Indigenous business, future research should attempt a more refined analysis of the HILDA data. Perhaps, if future waves of HILDA retain a sufficient size, HILDA could be used to conduct a multivariate longitudinal analysis. This is a particularly exciting prospect, as it will allow the use of panel data techniques that attempt to control for unobserved heterogeneity within the data. Hence, hypothesis tests can be more refined than the descriptive analysis presented in this paper.

Future regression analysis could include examination of determinants of earnings based on the theory of labour supply and demand-side factors identified above (e.g. Killingsworth 1983; Lazear 1979). Although the existing analysis of Indigenous income is limited, labour market analysis has identified a range of cultural and behavioural characteristics that also need to be taken

into account in understanding the monetary gap between Indigenous and other Australians (e.g. living in homelands, engages in substance abuse, including excessive alcohol consumption, has been arrested and is discriminated against) (Hunter 1999). Unfortunately, some of these factors are not collected in many datasets, especially in surveys based on the whole Australian population.

The HILDA sample of the Indigenous population in non-remote areas is broadly representative, but it is still not clear whether the sample size will support multivariate analyses, especially after attrition rates are taken into account. Given the likely insights that such analysis might yield, it is crucial that the organisation of HILDA data collection facilitates the retention of Indigenous respondents. To that end, the Longitudinal Study of Indigenous Children may provide an example of how to retain a considerable Indigenous sample across several waves (Dodson, Hunter & McKay 2012).

Notes

1. Subsequent National Aboriginal and Torres Strait Islander Social Surveys have collected information on income on source. However, this information has not been released to researchers by the ABS. The census does not collect information on income by source.
2. The National Australian Aboriginal and Torres Strait Islander Health Survey 2012–13 collected data on income by source of income (as reported by household spokesperson). However the publicly available data only provides income from the main source and not income from each source. This limits the value of the publicly available data for the type of analysis undertaken in this paper.
3. One of the advantages of the Household Income and Labour Dynamics in Australia (HILDA) data compared with the publicly released data from the 1994 National Aboriginal and Torres Strait Islander Survey is that HILDA releases continuous data on income.
4. For example, Daly (1995), Daly and Hunter (1999), Daly and Liu (1997), Nepal and Brown (2012), and Biddle (2013).
5. The HILDA survey has a disproportionately low representation of Indigenous Australians, partly because it is only conducted in non-remote areas and partly because the re-interview rate for this group is relatively low.
6. It is worth noting that royalties do not make up a significant part of private income for Indigenous people surveyed in HILDA. Although royalties are an important source of income for Indigenous Australians living in remote areas, the HILDA survey covers only non-remote areas.
7. Income flows from rent, interest payments and dividends will be related to the level of wealth held, but a given level of wealth can generate very different flows of income at a point in time depending on the nature of the asset held and the way in which the wealth holdings are structured. Non-realised increases in wealth (capital gains) are not reflected in the income flows at a point in time. In other words, the size of these other non-wage private incomes provides an indirect indication of the size of holdings of wealth, but they are not measures of wealth itself. HILDA does collect information on net value of assets, but these data were not collected in wave 11 of HILDA.
8. A further explanation is the impact of partner's income being included in the means test for many government benefits.

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Appendix A: Additional data

TABLE A1. Breakdown of total income sources, by gender, labour force status and Indigenous status, 2011

Indigenous men	Wages (%)	Other income (%)	Government benefit (%)
Employed FT	94.8	3.1	2.1
Employed PT	74.3	4.2	21.5
Unemployed	62.8	4.5	32.8
NILF	31.9	2.4	65.7
Indigenous women			
Employed FT	90.2	3.8	6.0
Employed PT	73.6	4.1	22.2
Unemployed	30.5	2.8	66.6
NILF	12.1	1.6	86.4
Non-Indigenous men			
Employed FT	86.4	11.9	1.6
Employed PT	67.1	24.5	8.4
Unemployed	63.0	14.0	23.0
NILF	33.3	34.3	32.4
Non-Indigenous women			
Employed full-time	91.2	6.8	2.0
Employed part-time	74.9	15.0	10.1
Unemployed	49.6	8.0	42.5
NILF	29.0	25.7	45.2

FT = full-time; NILF = not in the labour force; PT = part-time
Source: HILDA, 2011.

TABLE A2. Age-standardised wages, other private income and government payments, 2011

Income source and labour force status	Men, $ per year		Women, $ per year	
	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous
Wages				
Employed FT	57,000 (13,913)	65,238 (2,111)	48,798 (10,791)	54,222 (1,972)
Employed PT	20,550 (5,148)	21,608 (3,591)	27,575 (8,585)	22,931 (1,343)
Unemployed	13,627 (2,226)	14,919 (4,461)	4,012 (2,948)	8,236 (2,718)
NILF	3,815 (3,083)	9,141 (3,315)	1,887 (1,415)	5,330 (1,091)
Other income				
Employed FT	1,932 (3,041)	8,390 (1,697)	2,110 (1,662)	3,912 (886)
Employed PT	801 (364)	6,995 (2,126)	1,500 (1,806)	4,208 (911)
Unemployed	824 (824)	2,148 (1,592)	612 (452)	1,403 (1,140)
NILF	345 (345)	5,076 (2,022)	980 (883)	3,226 (796)
Government payments				
Employed FT	1,235 (625)	1,272 (117)	2,546 (1,646)	1,289 (195)
Employed PT	4,735 (1,454)	2,848 (544)	6,605 (3,224)	3,393 (345)
Unemployed	6,803 (1,524)	5,514 (1,035)	9,998 (2,421)	7,574 (1,417)
NILF	10,399 (1,800)	7,378 (827)	14,398 (2,785)	7,759 (595)

FT = full-time; NILF = not in the labour force; PT = part-time
Notes: Standard errors are in parentheses.
Source: HILDA, 2011.

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