At the beginning of 2011, publicly funded leave to care for newborn children became a reality through the new *Paid Parental Leave Act 2010*. The provision of public funding to support working parents taking time out of the workforce to have a child has been generally welcomed since the policy announcement. Introduction has been long overdue—our New Zealand neighbours have benefited from such a scheme since 2001—and goes part of the way to addressing the previously inequitable provision of paid leave among employees.

Prior to the introduction of *Paid Parental Leave* (PPL), a legislated guarantee of 12 months unpaid maternity leave ensured that women could return to their job following leave. During this period of unpaid leave, women potentially received some financial support via paid maternity leave through their employment conditions and/or an accumulation of other leave, such as holiday and long service leave. The introduction of PPL now provides 18 weeks of financial support during this time.

Access to the means-tested PPL payment paid at the minimum wage is dependent on a parent having been employed for 10 of the 13 months prior to taking the leave. The scheme has delivered immediate benefits for a majority of workers who previously did not have access to paid maternity leave as part of their employment conditions. The scheme will make payments to the primary carer—in most cases the mother, as she is generally the parent who takes longer periods of parental leave, including time for maternal recovery following birth.

Although the payment of parental leave addresses the previous inequality of access to paid maternity leave for working women, existing Australian data indicate that a majority of women who take leave to care for a newborn child experience the inequity of a future wage penalty. This wage-penalty effect manifests as lower wage growth. Analysis of the Household, Income and Labour Dynamics in Australia (HILDA) survey reported in this paper, reveals evidence of a wage-penalty effect in Australia.
for mothers taking leave following childbirth. Although there are some limitations in using the HILDA survey, as it has not been designed to specifically examine leave taken around childbirth, the availability of longitudinal data permits an analysis of this behaviour over time and the effect it has on earning capacity.

The first part of the paper looks at who is likely to benefit most from the introduction of PPL. The potential implications of PPL is then examined for women who return to work within the available 12-month period of unpaid maternity leave—in light of the evidence of a pre-existing wage penalty experienced by women who take leave around childbirth. Finally, some consideration is given to what might be done to address this wage-penalty effect.

Who benefits from Paid Parental Leave?

Before the introduction of PPL, the working conditions of Australian women had increasingly included paid maternity leave, though this trend was not evenly distributed across the labour force. The combination of PPL and other forms of leave is expected to increase the average length of leave taken following childbirth by around ten weeks (Australian Government, 2009, p. 4).

Increased access

The Productivity Commission (2009) previously found that access to paid maternity leave has been increasing for female employees. Analysis of data from the longitudinal HILDA survey, outlined below, confirms this finding.

By 2009, the total number of women of childbearing age (17–49 years) with access to paid maternity leave as part of their employment conditions had reached 39%, or more than 1.3 million women. Although access had been increasing, there remained a disparity in levels of access between full- and part-time employees. Full-time employees (35 hours or more) were almost 60% more likely to have access to paid maternity leave as part of their working conditions.

Alongside the influence of the number of hours a woman was employed, the occupational category in which they worked also affected the availability of leave. The proportion of women reporting access to paid maternity leave by occupation in 2009 is presented in Table 1.

While approximately four out of every ten women of childbearing age in the workforce reported having access to paid maternity leave in 2009, there were significant differences between occupations. Professional women enjoyed the highest level of access (62%), yet represented fewer than three out of ten working women. In comparison, almost four out of ten women were employed as clerical and administrative workers or community and personal service workers, but only a third of these women had access to paid maternity leave. Women employed as sales workers reported the lowest access, with fewer than one in five of these women having access to paid maternity leave prior to the introduction of PPL.

In addressing this inequality, however, PPL has, to an extent, entrenched the disparity by paying PPL in addition to existing employment-based paid maternity leave. This situation maintains

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Proportion with access to paid maternity leave</th>
<th>Proportion employed in this occupation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professionals</td>
<td>62%</td>
<td>28%</td>
</tr>
<tr>
<td>Clerical and administrative workers</td>
<td>38%</td>
<td>24%</td>
</tr>
<tr>
<td>Machinery operators and drivers</td>
<td>38%</td>
<td>1%</td>
</tr>
<tr>
<td>Managers</td>
<td>35%</td>
<td>8%</td>
</tr>
<tr>
<td>Community and personal service workers</td>
<td>29%</td>
<td>14%</td>
</tr>
<tr>
<td>Technicians and trades workers</td>
<td>29%</td>
<td>5%</td>
</tr>
<tr>
<td>Labourers</td>
<td>21%</td>
<td>6%</td>
</tr>
<tr>
<td>Sales workers</td>
<td>19%</td>
<td>14%</td>
</tr>
<tr>
<td>Total</td>
<td>39%*</td>
<td>100%</td>
</tr>
</tbody>
</table>

Note: n = 1,081. * Proportion of respondents answering “don’t know” was 0.2%. Source: HILDA
existing inequalities, as some women will be able to receive two maternity leave payments, one from the government and one from their employer. This inequality may not persist, though, if employment-based paid maternity leave provisions are removed in the longer term, following the introduction of PPL. It is yet to be seen how the introduction of PPL may affect existing leave provisions.

Length of leave

Leave length was an important consideration of the Productivity Commission during its inquiry into a suitable PPL scheme for Australia. In its final report (Productivity Commission, 2009), it was stated that there is compelling evidence of the benefits accruing to child health and wellbeing from “exclusive parental care in the first six months” and that “longer periods of nine to 12 months may also be beneficial” (p. 2.44).

This correlates with earlier Australian research that found the point at which most Australian women are satisfied with their return to work following leave to care for a newborn child is between nine and 12 months (Whitehouse, Hosking, & Baird, 2008). A preference for returning within 12 months matches the availability of unpaid maternity leave employers are required to offer. It is predicted that the addition of PPL will increase the average length of leave taken by most women from about 16 weeks to six months (Australian Government, 2009).

There may, however, be unexpectedly negative outcomes from these reforms. There is an extensive body of research in psychology and behavioural economics that has found that when people need to make a choice or decision, it is common for them to be influenced by the existence of a default option (Samuelson & Zeckhauser, 1988). Because the lives of most people are busy, requiring attention to be focused on many things, the status quo is likely to be maintained unless deliberate intervention occurs. Therefore, sometimes the existence of a default position, whether formal or otherwise, is interpreted as implying that it is advisable or recommended.

Although women are entitled to 12 months of unpaid maternity leave, many return earlier than this; in some cases following the expiry of available paid leave. Previous Australian research has found that women who take only paid leave tend to return to work sooner (Baxter, 2008b). The extension of dedicated PPL leave to the majority of women employees may inadvertently result in more women returning to work when they run out of available paid leave, so it is possible that the expanded provision of paid leave may see fewer women taking a full 12 months of leave. However, the potential effect of a default leave period is less likely to affect women who have access to both PPL and employment-based leave, as they will have a longer combined period of paid leave. Therefore, if a default effect does eventuate, it will further exacerbate the inequality between workers who only have access to paid leave through PPL and those who, as a result of PPL, now receive dual maternity leave payments.

Money matters

The financial pressures of taking time out of the workforce are a major influence on decisions made about the length of leave taken. This pressure was identified in an evaluation of the New Zealand leave scheme, which found that although payment ameliorated financial pressures while a woman was on leave, it was not sufficient to provide financial security (Department of Labour, 2007). The Australian Bureau of Statistics (ABS; 2006) found that almost three-quarters of women cited financial pressures as being their reason for returning to work after having a baby.

Similarly, it has been found that financial motivations are the main influence behind the timing of a return to work for two-thirds of women (Baxter, 2008a). An earlier return to work is more likely where a woman earned less than $700 or more than $1,400 per week prior to taking leave (Productivity Commission, 2009, p. 3.1). A woman’s occupation has also been found to influence the timing of a return to work, with women in managerial and professional roles citing the harm to their career of taking extended leave (Baxter, 2008a). This finding is interesting given the greater availability of paid maternity leave among these occupation categories (see Table 1). It may eventuate that although women in these occupational categories may meet the means-tested criteria, career pressures may limit the take-up of PPL. Such an outcome would offset the inequality of dual maternity leave payments.

Previous Australian research has found that many women, both those with access to paid leave and those without, would elect to take longer leave from work if they had access to “some or more” paid maternity leave. In comparison, only a small number of women indicated that they would have taken longer if they had access to some or more unpaid maternity leave (Whitehouse et al., 2008). Women who take a combination of paid and unpaid leave are “significantly more likely” to say they returned for financial...
reasons; however, the reasons why are not clear (Baxter, 2008a, p. 147). The influence of financial consideration on the length of leave taken is greatest among women who take between three and nine months' leave. Among those who return to work within three months, the significance of financial pressure is lower, a circumstance that has been attributed to the likely correlation with the duration of paid leave they had available to them (Baxter, 2008b).

This relationship between the amount of paid leave available and the total length of leave taken suggests that the provision of PPL may result in women who were previously taking between three and nine months' leave now taking a longer period of time. It will be interesting to see whether the introduction of PPL results in extended lengths of leave due to increased financial support, or whether the opposite occurs as a result of the default effect discussed above influencing an unofficial cap on leave lengths.

**Returning to work after taking leave**

International research has shown that taking leave around childbirth can have a negative effect on a woman’s future wage growth (for example, Saint-Martin & Venn, 2010). This lower wage growth among women taking extended leave around the birth of a child is referred to as a wage-penalty effect. Analysis of HILDA survey data finds evidence of such a wage-penalty effect in Australia. While financial support through PPL is expected to extend the length of leave that can be taken without incurring any further financial stress, the new policy does not address the potential longer term financial disadvantage of taking leave from the workforce that is reported in this paper.

Returning to fewer hours of work following maternity leave is a popular choice for many Australian women. The ABS (2006) reported that more than eight in every ten women (82%) who returned to work after the birth of a child did so on a part-time basis. A similar pattern exists in New Zealand where, on their return to employment, most women changed their working arrangements, with reduced hours being a common adjustment (Department of Labour, 2007). Consistent with this research, analysis of the HILDA survey shows that between 2002 and 2009, seven in ten women (69%), on average, returned to fewer hours of employment in the first year back at work.

Despite the preference of most women to return to reduced hours of employment, this decision can be perceived by women as being damaging to their careers and detrimental to future career opportunities (Whitehouse et al., 2007). More generally, the Australian Human Rights Commission (AHRC, 2001) reported that more than half of all women who take “maternity leave” believe that their careers suffer, with three in ten stating that their “careers take a backward step”. A similar number reported that they “sacrificed their careers when they gave birth” (AHRC, 2001, para. 6). However, analysis of HILDA data shows the wage-
penalty effect of maternal leave to be lower among women who return to fewer hours of work following leave (see Table 2).

Lower wages

How women experience the reported negative impact of motherhood on their careers differs. Yet available evidence shows that for many women, lower wage growth is experienced after taking an extended absence from the workplace to care for a newborn baby. The degree of this wage-penalty effect varies between studies.

In the UK, it has been found that for every year a woman spends away from employment “to carry out family caring work”, there is an average wage penalty of one per cent and an extended effect on longer term earnings (Government Equalities Office, 2010). A wage penalty of between 5% and 7% per child has been identified in the US (Budig & England, 2000; Manchester, Leslie, & Park, 2008), but the penalty was lower for women returning to their previous position (Manchester et al., 2008). German research has also found that the wage penalty increases with the duration of leave, and has identified a penalty of around one per cent for every month taken over and above the legislated length of paid maternity leave (Schönberg & Ludsteck, 2007). This finding has particular relevance for the theory that PPL may result in a default period of leave around childbirth being established as a result of the new PPL scheme. Whereas most studies find small but persistent effects, some research has detected wage-penalty rates of between 10% and 15% (Anderson, Binder & Krause, 2002; Buligescu, de Crombrugghe, Mentesoglu, & Montizaan, 2009).

In an attempt to examine the likely incidence of a wage-penalty effect in Australia, an analysis of HILDA survey data was undertaken. The sample was restricted to women of childbearing age (17–49 years) who returned to work within 12 months of taking leave around the birth of their first child. This restriction was applied to ensure a focus on women demonstrating a strong commitment to the labour market and to remove any residual wage-penalty effects from previous absences around childbirth. Analysis was based on the reported hourly wage received and hours worked for the year, for both before leave was taken and the three years following a return to work. An aggregated sample of HILDA survey respondents provided relevant data for the three consecutive years after having a child, as well as for the year prior, except where leave was taken in 2007 or 2008, in which case data are only available up until 2009. Analysis of the HILDA sample found, as with the countries discussed earlier, evidence of a wage-penalty effect in Australia.

On average, women returning to work within 12 months of taking leave suffered a wage penalty during the first year back at work of almost 7%, increasing to almost 12% the following year. This disparity is maintained in the third year back at work. Previous Australian research has found that a wage disparity continues for 10 years after childbirth, or even longer if a

### Table 2 Wage growth in the first three years following a return to work within 12 months of having a baby

<table>
<thead>
<tr>
<th>Relative wage growth a</th>
<th>First year back</th>
<th>Second year back</th>
<th>Third year back</th>
</tr>
</thead>
<tbody>
<tr>
<td>HILDA sample</td>
<td>–6.9% (n = 141)</td>
<td>–11.8% (n = 114)</td>
<td>–12.0% (n = 74)</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school</td>
<td>–9.5% (n = 45)</td>
<td>–9.2% (n = 34)</td>
<td>–11.4% (n = 20)</td>
</tr>
<tr>
<td>Post–high school</td>
<td>–5.2% (n = 96)</td>
<td>–13.1% (n = 80)</td>
<td>–11.6% (n = 54)</td>
</tr>
<tr>
<td>Work experience</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to 10 years</td>
<td>–5.5% (n = 65)</td>
<td>–12.5% (n = 53)</td>
<td>–11.6% (n = 36)</td>
</tr>
<tr>
<td>11 to 20 years</td>
<td>–10.2% (n = 64)</td>
<td>–12.5% (n = 52)</td>
<td>–12.9% (n = 32)</td>
</tr>
<tr>
<td>More than 20 years</td>
<td>Sample size too small for analysis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hours of work on return from leave</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fewer hours</td>
<td>–4.7% (n = 97)</td>
<td>–13.3% (n = 65)</td>
<td>–11.1% (n = 42)</td>
</tr>
<tr>
<td>Same or more hours</td>
<td>–8.7% (n = 44)</td>
<td>–13.6% (n = 47)</td>
<td>–12.3% (n = 32)</td>
</tr>
</tbody>
</table>

Note: a “Relative wage growth” refers to the wage growth reported in the HILDA survey by women returning to work following the birth of a child, compared to wage growth for all women recorded by the ABS. The sample size decreases due to the lack of survey data for cohorts taking leave from 2007 onwards.

Source: HILDA
woman has subsequent children (Chapman, Dunlop, Gray, Liu, & Mitchell, 2000). This suggests that, at best, there is only a slowing in the wage-penalty effect in the medium term.

If the new PPL scheme had been available in 2008, women who took leave would have been able to access 18 weeks' pay at the minimum wage, which increased in July 2008 to $543.78 a week. However, according to the HILDA sample, in 2009 women returning to work within 12 months experienced a wage penalty averaging $1,566 per annum. This equates to what would have been approximately three weeks of PPL payments. Applying population weighting to the HILDA sample reveals that, in 2008, 80,725 women stopped work to have their first child before returning to work within 12 months. It can be estimated that these women missed out on $126 million in earnings in the year they returned to work. This finding excludes women who did not return to work within the entitled period of unpaid leave and is, therefore, expected to be an underestimate of the potential wage penalty for all women aged 17–49 years.

Do some women experience a lower wage penalty?

Reduced wage growth is indicative of the career impact of taking leave to care of an infant that many women report. However, the extent of depressed wages growth is not the same for all women returning from leave. Education attainment and work experience are recognised as key determinants of a person's income level and have been found to influence the degree of wage penalty women experience on returning to work.

Table 2 shows that the wage-penalty effect is greatest in the first two years back at work and in some categories begins to decline in the third year. The greatest effect is experienced by women with only a high school education (though they fare better in their second year back) or with more than ten years of work experience. It can be seen that younger women and women with a post-high school education are in a better position, both in the first year back and, notionally, in the third year; however, there is no significant change evident in any sub-group or the overall sample in the third year back at work.

Interestingly, the decision to return to fewer hours of work does not initially exacerbate the wage-penalty effect; in fact, the opposite is the case in the first year back at work. However, the effect is only temporarily delayed as there is a sizable decrease in relative wage growth in the second year back at work, at which time both cohorts are equally disadvantaged.

A primary determinant cited for causing lower wage growth following an extended absence from the workforce is that it effects a depreciation of workplace skills. Australian research has concluded, however, that the impact of skill depreciation is second to the forgone accumulation of work experience (Chapman et al., 2000).

“Signalling” is another factor that has been cited as a determinant of the wage-penalty effect. This is the assumption that employers perceive women who take maternity leave as having a “lower career commitment”, especially those who take advantage of longer periods of leave. However, analysis finds that women who return to fewer hours of work actually experience a lower wage penalty than those who return to the same (or more) hours of work as they had prior to taking leave. This finding casts doubt on the importance attributed to the influence of signalling when women take advantage of unpaid maternity leave entitlements.

The new PPL scheme does not include any measures to address the potential longer term effect that taking leave might have on wages growth. As part of its forthcoming review of PPL, the government needs to establish a measurement of the wage-penalty effect experienced by parents taking leave around the birth of a baby.

Recognising the wage-penalty effect

There is little public discussion in Australia about the long-term costs incurred by women as a result of taking leave around childbirth. Because of this, the reasonably abstract concept of a wage penalty is unlikely to figure prominently alongside personal financial circumstances and employment contexts when...
people make decisions about the duration of leave they take. It may be that the provision of PPL payments and their immediate benefit further reduces the consideration given to the effect that taking leave might have on future earning capacity than it is presently.

The government has given the Institute for Social Science Research, based at the University of Queensland, the task of evaluating the PPL scheme. The evaluation is to assess whether PPL will achieve its long-term objectives, and it will be the starting point for a government review in 2013.

This evaluation process is well-positioned to establish a method for analysing the wage-penalty effect experienced by women returning from leave following childbirth. The effect on average leave duration should also be considered to examine whether an extension to six months is realised or whether a default effect is the actual outcome. Measuring the wage-penalty effect would guide the future policy development necessary to address the evident shortfall in wage growth experienced by women who take maternity leave.

Conclusion

There is no doubt that in the short term, Australian employees and their families benefit from the introduction of PPL, particularly those who did not have access to leave previously and those on minimum wages. Before 2011, the availability of workplace paid maternity leave was greater among full-time employees and was disproportionately available to women working in professional occupations. Some disparity will continue to prevail, as publicly funded PPL may be paid alongside paid leave that is provided as part of an individual’s working conditions.

The role of financial factors on the duration of leave that women take suggests that for many women PPL will extend the length of leave taken to care for a newborn baby, with a predicted extension of the average length of leave out to 26 weeks. There is, however, the potential that the provision of 18 weeks of paid leave will result in a perception that this is the default length of leave, affecting the length of leave people take. Only in reviewing actual leave periods in forthcoming years will the effect of PPL on leave duration be known.

What is known is that women who take up to 12 months leave around childbirth, both paid and unpaid, suffer negative future wage growth. This wage-penalty effect has been identified internationally, and its presence in Australia has been reported in this paper. Women returning to work within 12 months of taking leave experience an average wage penalty of more than 7% in the first year back...
at work. In 2008, this equated to $126 million in missed income.

The preference of most women to return from leave to fewer hours of employment does not influence the size of wage penalty experienced in the first year. The influence of education level and years of work experience does have an impact in the first two years back at work, but by the third year back, most women experienced a similar wage penalty effect. The average wage penalty was 12% three years after returning to work.

The presence of a wage-penalty effect in Australia should be examined as part of the government’s review of the PPL legislation, alongside an analysis of the effect it has on average lengths of leave. Measuring the wage-penalty effect will allow the inequitable outcomes of taking leave to be further addressed.

Endnotes
1 This paper uses unit record data from the HILDA survey. The HILDA project was initiated and is funded by the Australian Government Department of Families, Housing, Community Services and Indigenous Affairs (FaHCSIA) 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 author and should not be attributed to either FaHCSIA or the Melbourne Institute.
2 This age cohort was selected as it most closely matched the Australian Bureau of Statistics (ABS) definition of “childbearing age” as being 15 to 49 years (ABS, 2010). The HILDA survey only introduced data categories for ages 15 and 16 in 2006.
3 Aggregated wages data were adjusted using the seasonally adjusted ABS Labour Price Index. Where leave was taken after 2006 there are less data because HILDA survey data are only available up to 2009.

References

David Baker is a Research Fellow at The Australia Institute. This paper uses unit record data from the HILDA survey. The findings and views reported in this paper, however, are those of the author and should not be attributed to either FaHCSIA or the Melbourne Institute.