

Return to Work Credits

Ideas for efficient and equitable parental leave
following child-birth

IdeaPITCH No.2

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Executive Summary

This report examines policy options for parental leave and evaluates them from an economics perspective. It finds that:

1. The goal of parental leave policy is to facilitate a frictionless transition between work/career activities and home/parental activities.
2. There are several potential market failures that could be generated that mean that private decisions with regard to parental leave do not reflect their social counter-parts. The sources of these market failures are liquidity constraints and indivisibilities in work and home tasks. The consequences may be an under-provision of parental leave from a child development perspective as well as a sub-optimal allocation of workers to jobs and firm-specific training as a result of gender-based discrimination.
3. A combination of policies can be used to mitigate these market failures. These include:
 - 3.1. **Minimum-wage parental leave**, paid for by the government, for one parent (for 3 to 6 months). This element is to cover the social security element of having children and would provide incentives for parental leave to be taken in contrast to existing payments such as the baby bonus which do not. This leave could be means-tested.
 - 3.2. **Income-contingent loans**, secured by the government, based on previous and future household income (for 3 to 6 months). This would address the liquidity issue associated with taking parental leave. It would promote child development but would have a minimal fiscal impact on tax-payers. Consequently, it is equitable in contrast to schemes that involve lump-sum government hand-outs.
 - 3.3. **Return to work tax credits**, paid for by the government to employers who have employees take parental leave and then return to work (for a minimum period). These payments would be made contingent upon criteria that demonstrated re-integration of the employee with their career in the firm.

About

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About the Author

Joshua Gans is an economics professor at Melbourne Business School in Australia. His research focuses on microeconomics, competition policy and innovation. He is the author of several textbooks and policy books, as well as numerous articles in economics journals. In August, 2008, New South will be publishing *Parentonomics* which looks at parenting issues through an economist's lens. Gans received a Bachelor of Economics (Honours) and the University Medal from the University of Queensland before going to Stanford University to study for his Ph.D. in Economics. He graduated from Stanford in 1995 and moved to Melbourne Business School in 1996 as an Associate Professor and became a full Professor in 2000. In 2007, Gans received the inaugural young economist award from the Economic Society of Australia. This is an award given every two years to the best economist working in Australia, who is aged under 40.

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Introduction

The Productivity Commission are currently undertaking an inquiry into *Paid Maternity, Paternity and Parental Leave*. This report is intended as a submission to that inquiry. It examines the policy options from an economics point of view. First, I ask what the goal of parental leave policy should be? Second, I examine potential market failures that arise in parents' decisions to take parental leave including the amount of leave and the allocation of that leave amongst parents. Finally, I examine a set of policy options and evaluate whether they alleviate the potential market failures. This leads me to a proposed set of policies that should be considered in more detail by the Federal Government.

What is the Goal of Parental Leave Policy?

The starting point for any analysis of parental leave policy is to ask: if economics were not an issue, what would we want our parental opportunities and activities to look like? In my examination of public discussions of parental leave it appears that what parents would like is to be able to move between work and home lives in a *frictionless* manner. Specifically, following the birth of a child, one or both parents would like to be able to 'pause' their work life, take time off to spend with the baby (perhaps between 6 and 12 months) and then to 'resume' their work life where they left off prior to the birth.

There are barriers beyond the economic to a frictionless movement between work and home life around the birth of a child. First, if the period of leave is long enough, a parent's human capital may depreciate. Second, a parent's attitudes towards their career may change when a child is born and the parent may not wish to resume work at the same level of intensity as before. Third, parental 'pauses' may be disruptive to the workplace. Teams may be broken up, skilled replacements may be difficult to find and uncertainty may be created.

Thus, it may be that the goal of parental leave policy is to create a frictionless ability and incentive for parents to engage in a pause/resume of work around the time of childbirth but some costs or frictions may be inevitable. From this perspective, the first best -- or economically efficient outcome -- will arise if the benefits accrued when a certain level of parental leave is taken outweighs the costs.

So what are the social costs that arise when parents take leave? First of all, a parent gives up any job satisfaction for that period of time. Second, to the extent that there is depreciation in human capital or workplace disruptions, there is a loss in productivity. Thus, some of the costs are felt by the parent making the leave decision while some are incurred by their employer and co-workers. Finally, there are costs associated with caring for a child. However, to a large extent, it is the decision to have that child that creates those costs and not the leave choice itself.

What of the benefits? First, there is the raft of benefits that parents get from spending time with their children. And to the extent that there are developmental benefits to the child, the parents feel that benefit too. Second, it may be that, like the benefits of education, the benefits associated with child development also spillover to the rest of society. That is, there could be positive externalities that are not captured by the parents.² However, we must take care in understanding these benefits. After all, many of the child development benefits can be achieved without specific parental involvement. Indeed, parental involvement is likely not necessary all of the

² Note, however, that if you argue this then you are arguing that parents would not, of their own accord, make decisions on child development that would be sufficient for society. This is a notion that many people appear to be uncomfortable with.

time. Non-parent child carers can do the job and in some cases, may do things better because they have more experience and formal training. Even with breast-feeding there are technological options that reduce the need for 24/7 maternal availability making the private ability to engage in breast-feeding easier (or at least no harder).

Thus, the goal of parental leave policy is to ensure that leave, or additional leave, is taken where the benefits outweigh the costs and not otherwise. However, because some of these elements are incurred or bestowed on agents other than the parents, there is a potential for a market failure.

What are the Possible Market Failures?

A market failure arises when the social decisions and private decisions do not match up. In the case of parental leave, the private decision involves what parents choose to do given their negotiations with their employers. The decisions centre around who will take leave, for how long and what the return to work conditions are.

Clearly, many of the benefits and costs associated with parental leave are internalised in the private decision of the parents. For instance, they will internalise some of the child development benefits and their own pleasure in spending time with their children. In addition, they will internalise some of the costs felt by employers through terms and conditions they accept for continuing employment.

However, even in these cases, there may be some constraints on a parent's ability to make the optimal decision.

- **Liquidity constraints:** a parent may wish to take leave for the purposes of enhancing child development but may not have access to the income to support themselves during the time of leave. In theory, parental leave is one activity that has some but not a lot of impact on lifetime income. In a world with perfect capital markets, parents could borrow money to support themselves during the time they wish to take parental leave. However, for some households, particularly, low income households, that liquidity may not be available. Imperfections in capital markets caused by information asymmetry (namely, the commitment to earning income post-child rearing) may mean that income support is unavailable. This is very similar to the income constraints that may make it difficult for students to obtain loans to support themselves while obtaining higher education.
- **Indivisibilities:** parents may wish to share responsibilities for parental leave but may be constrained because of indivisibilities associated with a job or career. This is the idea that some jobs cannot easily be broken up into smaller bits whether it be on a day by day, week by week or career basis. It is career indivisibility that presents a problem because it says that workers who are away from their jobs for long periods or who cannot commit to long work weeks may be less productive than those who do. Productivity includes here working with teams, the demands of a firm's customers (e.g., this is particularly salient for legal partnerships) and the potential depreciation of training and job-specific skills. Put simply, it may not be possible for one or both parents to scale back their jobs easily. Indeed, indivisibilities may exist within the home, making it costly to outsource some child-care while maintaining parental involvement in others. This means that 'market size or demand' effects can matter and there may be gains to trade from one parent specialising in child rearing in the household.

These factors may mean that parents undertake a suboptimal amount of leave or allocate it suboptimally between the parents relative to what might be socially desirable.

Each of these factors gives rise to flow on effects or externalities and may lead to an under-provision of parental leave in a pure market environment. First, there may be *externalities associated with child development*. This may be health related or involve some social and intellectual issues. To the extent that there are liquidity

constraints that may make it difficult for parents to take the requisite amount of leave, then there is a case for subsidising that leave to ensure that it is actually taken.

Second, there is the *potential for discrimination*; not just on the basis of gender but on the basis of any preference to spend more time with one's children. Consider an employer who has one of those jobs that requires full attention. Suppose also that the employer has to invest in the worker for that job. If you were that employer and you faced candidates from identifiable groups (say, a man versus a woman) who have differing statistical likelihoods of wanting to scale back at some point who are you going to take a bet on? And if every employer decides the same way, what does that do to the statistics? The answer: it reaffirms them and you have gender roles and a pay differential between genders. And the inefficiency here is that the wrong people may be ending up in the wrong jobs (see Box 1 for a model).³

And this discrimination can take many forms. The fact that when a baby arrives, maternity leave is taken more than paternity leave may be because of stereotyping that constrain fathers who would like the reverse to be true. It is not an unreasonable hypothesis that one of reasons that fathers are not taking time off is that the discrimination against them is far worse than against mothers. They potentially face greater stigma and far greater harm from signaling their family-oriented preferences relate to norms. These add up to greater costs associated with staying at home.

Box 1: A Model of Discrimination

Suppose that there are equal numbers of men and women in an economy and that salaries are related to a worker's productivity to the firm. A given firm can choose to engage in firm-specific training for a worker, at a cost C , and increase their marginal productivity to V . If that worker should take parental leave, it costs the firm an additional amount, c . It is assumed that $V > C > V - c$. That is, if a firm knew with certainty that a worker would take leave, they would not train that worker.

Men and women form themselves into households. Suppose that they will at some point have a single child. One or the other or both might take leave to care for that child. The decision rests solely on the wages each would forgo. It is assumed that the lowest productivity household member takes leaves unless both are of equal productivity in which case they randomly take leave or divide it equally. We assume that employers cannot observe the productivity of their worker's partner.

The first candidate equilibrium involves an equal probability that a man or a woman will take parental leave. Then, so long as $V - c/2 > C$, then all firms will train all workers. Note that no firm will refuse to train a worker as this will just benefit the firm the worker's partner is employed at. If $V - c/2 < C$, one possibility is that no worker will be trained. However, in this case, by training a worker, the firm knows that worker will not take leave and so will find training worthwhile. In this situation, some fraction $(2(V-C)/c)$ workers will not be trained.

But there are other equilibria possible. Suppose that all men are trained and women are not. Note that, in this case, men are earning more than women and so will never take parental leave. If a firm chooses to train a woman, then this will only be worthwhile if $V - c/2 > C$ and so the discrimination equilibrium is not sustainable. Otherwise, such training is never worthwhile and discrimination persists. There is an identical equilibrium involving all women receiving training and men taking parental leave.

As configured, the discrimination equilibrium when $V - c/2 < C$ actually involves more trained workers than the non-discrimination equilibrium. Of course, this is an artifact of the model's simplicity. If we imagine that there is heterogeneity amongst workers then the most productive women may not receive training while the least productive men would. That misallocation of training can result in lower productivity than training the most productive of each gender.

³ For an example of a model that generates this type of discrimination see Patrick Francois, "Gender discrimination without gender difference: theory and policy responses," *Journal of Public Economics*, 68, 1998, pp.1-32.

Thus, there are theoretical candidates for market failure with regard to a parent's decision to take leave. The two consequences may be a sub-optimal amount of parental leave and also a misallocation of that leave between parents.

Evaluating Policy Options

I now turn to consider various policy options and how effective each is in correcting the potential market failures identified above.

Mandated Leave Entitlements

What Australia has at the moment is mandated unpaid parental leave for up to 12 months. It isn't available to everyone (e.g., the self-employed and those who have not been in their job long enough) but it does give a right to return to work at roughly the same position you left. And it is available for one of the parents.

This mandate increases the incentive to take parental leave by removing one barrier: the ability to return to one's job. To that extent, it serves to hit the indivisibility issue and by allowing more leave to be taken than might otherwise be the case, it serves to mitigate any externalities associated with child development. That said, there is little concrete evidence that parental leave mandates are associated with improved maternal or child health.⁴

Mandated leave is chiefly criticised because it does not deal with liquidity constraints and so there is a muted incentive to take leave because it is unpaid — something that some employers negotiate away.

But there is another problem: by making leave a mandated entitlement, it increases discrimination towards those who are statistically or have revealed themselves to have a preference to actually take that leave. This is because employers face costs of temporary worker turnover (something that is more likely to be an issue for smaller than larger firms) and so, in choosing which workers to hire, promote and train, there will be a commercial bias towards the non-family oriented (see Box 2). Moreover, to the extent that women are identified as most likely to be family-oriented, this mandate will disadvantage them relative to men in the labour market.

There is some evidence that supports such consequences. Parental leave mandates have been found to be associated with greater employment of women but lower relative wages.⁵ But there is evidence that such mandates do improve the chances women will not quit their jobs and return to their pre-birth employers.⁶

Box 2: Discrimination and Policy

In Box 1, it was demonstrated that if $V - c/2 < C$, then there exists equilibria involving gender discrimination. There is also an equilibrium with no discrimination where a fraction $(2(V-C)/c)$ of workers will not be trained.

In evaluating the impact of policy, any policy that serves to increase c will support the stability of a discrimination equilibrium and also reduce the level of training in any non-discrimination equilibrium. c will rise with the ease with which parents can choose to take parental leave. Any incentive to take parental leave (including greater mandated entitlements or government pay during leave) will likely increase the length of time leave is taken and so raise c .

In contrast, policies that reduce the impact of leave on firms will reduce c as a firm cost or offset it. Consequently, such policies will increase the level of firm-specific training and will undermine the stability of any gender bias in labour markets.

⁴ Michael Baker and Kevin Milligan, "Maternal Employment, Breastfeeding and Health: Evidence from Maternity Leave Mandates," *Working Paper* No.W13188, NBER, June 2007.

⁵ Christopher J. Ruhm, "The Economic Consequences of Parental Leave Mandates: Lessons from Europe," *Quarterly Journal of Economics*, 113 (1), 1998, pp.285-317; and Rebecca Edwards, "Maternity Leave and the Evidence for Compensating Wage Differentials in Australia," *Economic Record*, 82 (258), 2006, pp.281-297.

⁶ Michael Baker and Kevin Milligan, "How Does Job-Protected Maternity Leave Affect Mothers' Employment and Infant Health?" *Working Paper*, No.W11135, NBER, February 2005.

Paid Parental Leave

To alleviate liquidity constraints, there are calls for paid parental leave (as exists in many other countries). The pay may be for some fraction of the parent's income and for a certain period of time.

Issue No.1 is, of course, the obvious. Mandate paid leave and require employers to pay, like we do for annual leave, and this creates a disincentive to hire workers likely to take that leave. So the rationale is for any paid leave to be funded by government.

Issue No.2 is that another government entitlement that involves a private benefit accrued by some people means a cross-subsidy from those not receiving the benefit. To be clear, we have all sorts of things that involve this type of cross-subsidy. But most of them can be rationalised on the basis of social risk bearing, e.g., we do not know who will be disabled or unemployed, so we agree before the fact to a payment from the winner to the loser in the game of life. The decision to have children is under the control of parents and cannot be characterised as a clear-cut losing proposition in any case. So on a social contracting basis, there is no rationale for a cross-subsidy.

That said, when you have a child, your costs of living goes up. So to the extent that there is social security, there is an incentive for greater payments to low income households for social insurance reasons. **Targeting paid parental leave on the basis of income — say, by capping it at the minimum wage — has a strong case.** Indeed, to have unemployment benefits available for unemployment but not for parental leave seems inconsistent.

Thus, we must move on to the externality issue. We might be concerned that too few parents are taking the requisite time during the first six months to take care of their babies. Again, this has to be relative to the child care option, as we are targeting a parent's role here. This brings us to issues of breast-feeding (for which there are technological things that can assist) and bonding (which involves both parents). Reducing the income cost

Box 3: The Perry Proposal

There has been some public discussion regarding the proposal from Julia Perry (Productivity Commission Submission No. 8) that advocates for Australia to adopt a paid parental leave scheme that allows for 28 weeks paid maternity leave, 4 weeks paid paternity leave and 4 weeks pay to employers for replacement employees. That proposal is for this to be on full pay. The baby bonus would remain in place. It is proposed that this scheme will be funded by a payroll levy on employers of 0.5% and a levy on employees of 0.5%.

The first thing to note is that the division of taxes between employers and employees is arbitrary and more costly, in terms of collection, than a tax on one or the other. So we are really talking about a 1 percent increase in income taxes or payroll taxes.

Secondly, there are a number of distortions that this scheme would introduce into private decision-making: (a) there is an incentive to raise employee wages during pregnancy (especially in the last trimester) as every dollar increase during that time is a two dollar benefit to the employee; (b) there is a large incentive for parents to delay having children by many years until their income is higher and, hence, they can receive a bigger financial benefit from the government; and (c) the calculations in the Perry proposal assume that 20 percent of new mothers will not avail themselves of the scheme. This appears to be over-stated given the strong incentives to do otherwise.

What this proposal demonstrates is how hard it is to enact a system of paid parental leave. In this case, it is a large tax on the non-parents and also on the lower-income segments of society. For example, if you have a 50 year working life with an average pay of 100,000 per annum and have two children amount to 1 of those years coming back for free that is a \$50,000 tax in return for \$100,000 of payment. The difference is coming from the non-parents, spouses and somewhere else. This means that it involves a much greater cross-subsidy than schemes based on social insurance (e.g., low income and unemployment benefits).

associated with exercising parental leave options will either mean (a) more parents will take leave or (b) employers will pay parents more not to take leave. But let's be clear, only (a) reduces the externality.

The issue is with (b). Offer parents only a fraction of their wage, paid by government, and there is less chance the leave will be taken. Hence, the push for a larger fraction to be paid. But doing this raises the set of incentive issues (see Box 3). Now we can solve this by capping total pay that can be made but this will mean that some parents will not take leave (but let's face it, taking all child development opportunities as equal, the parents who have less attractive employment prospects — i.e., those with low wages — are the best households to fund to engage in near-birth parental leaves).

But we can't get around the discrimination issue: the greater the ability and the incentive to take parental leave, the greater the costs on employers from temporary replacement of the employee and the greater the level of discrimination that will be observed (Box 2).

Income-Contingent Loans

Chapman, Higgins and Lin⁷ have proposed using income-contingent loans to fund a system of paid parental leave. This would involve parents taking leave for a certain duration and being able to borrow from the Federal government a certain fraction of their pre-birth salary to be paid back when the parent returns to the workforce. The Chapman et.al. proposal targets only women and their salaries. However, to me this seems distortionary and it would be better to base the scheme on household decision-making and allow either or both parents to access the scheme. To allow for such gender neutrality in leave decisions, the income that forms that basis for loan repayments would have to be household based.

What is very attractive about this proposal is that it directly alleviates a potential source of market failure -- liquidity constraints -- and then enables parents to take leave based on what is good for the child. Moreover, because individual households fund their own leave, there is no cross-subsidy issue or an issue of taxation on the economy. Hence, it is very low cost in economic efficiency terms making it far superior to schemes that directly fund paid parental leave.

Income contingent loans have been established as being practically viable. In Australia, they are most renowned in higher education funding (through the HECS arrangement).

Of course, it continues to suffer from the same discrimination possibilities associated with any scheme that creates an incentive to take leave — although in this case it is a muted incentive given that it is a loan rather than a payment.

Return to Work Payments

The above discussion suggests that there is a fundamental conflict between policies that create an incentive to exercise parental leave opportunities and discrimination in terms of employers having incentives to favour employees who are less likely to exercise that option. Indeed, to reduce discrimination, policies need to concentrate on reducing the costs faced by employers when their employees under-take parental leave (Box 2).

This suggests an alternative way of using government expenditure to promote parental leave. Instead of paying employees who take leave, employers could receive a subsidy or tax concession. The idea would be that should an employee take leave for some minimal period (say, three months), then the employer would receive a tax credit (perhaps in the order of 150 - 200%) on the wages paid to that employee for a pro-rata basis related to the length of leave taken and whether the returning employment is full or part-time. The rationale for a tax credit

⁷ Bruce Chapman, Tim Higgins and Ying Lynnette Lin, "Paid Maternity Leave and Income Contingent Loans," *mimeo.*, ANU, 2008.

rather than a once-off payment is that it ensures that parent does actually return to work in a longer-term capacity. However, it is the concept rather than the specific implementation details that I am considering here.

What would a return to work (RTW) payment do? First, it would create an incentive for employers to get employees back to work following parental leave and to give them the employment conditions that would make it happen. This includes flexible arrangements for on-going child care and family issues as well as meaningful work conditions and career prospects. Second, it would create an incentive for employers to encourage their employees to take parental leave. And to the extent that giving them paid parental leave is the way to do that, the employer can transfer the payment from the government to the employee. Thus, it is an indirect way of achieving a paid parental leave system but without the potential cost associated with an increase in discriminatory outcomes. Third, it would create an incentive for employers to encourage more highly paid employees to take parental leave. So to the extent that it pays men more than women, there is a large incentive to get men to take that leave. All of these factors have the potential to change workplace culture and attitudes; something that, in my experience, is a large factor in driving appropriate work-life balances.

That said, unlike income contingent loans, this is not potentially self-funding. Instead, like paid parental leave, this will involve direct government expenditures. The key aspect here is that the expenditure is funding something with potential work productivity benefits and externalities of their own. Moreover, it does so in a way that serves to break down rather than reinforce discriminatory outcomes in labour markets. Put simply, this type of policy will subsidise the ability of family-oriented individuals to compete in the labour market.

Moreover, it can be conceived that, even if we don't give employees who have been working for a firm for a short period of time a right to parental leave, there is no reason why this payment cannot be made should they be permitted to take and then return to work. That allows labour markets to function more smoothly; something that is generally considered a favourable outcome.

That said, as I have stated the scheme, the ROW payment would be available only to employers who are attracting back their pre-birth employees. Conceivably, a ROW payment could be made to any employer who hired a worker following parental leave. This would be attractive to parents but, in reality, it would not appear to address the issues of discrimination that rely on firm-specific investments in worker productivity. Consequently, there is much to be said for a ROW payment exclusively to pre-existing employees.

In addition, it may be asked, why should the payment be made upon return to work (or following it)? Why not during parental leave itself as some have suggested (see Box 3)? The concern here is to eliminate moral hazard -- that is, accepting a payment and encouraging leave from employees that a firm might wish to dismiss or limit in their career prospects. To create an incentive that will change workplace culture and attitudes requires that **the payment be made to firms who successfully re-integrate parents into the workforce following parental leave**. Hence, the payment needs to be after this fact rather than in expectation of it.

Conclusion

To deal with the set of conflicting market failures that may exist with regard to decisions to take parental leave, a combination of policies is likely to be desirable. These would include:

- **Minimum-wage parental leave**, paid for by the government, for one parent (for 3 to 6 months). This element is to cover the social security element of having children and would provide incentives for parental leave to be taken in contrast to existing payments such as the baby bonus which do not. This leave could be means-tested.
- **Income-contingent loans**, secured by the government, based on previous and future household income (for 3 to 6 months). This would address the liquidity issue associated with taking parental leave. It would promote child development but would have a minimal fiscal impact on tax-payers. Consequently, it is equitable in contrast to schemes that involve lump-sum government hand-outs.
- **Return to work tax credits**, paid for by the government to employers who have employees take parental leave and then return to work (for a minimum period). These payments would be made contingent upon criteria that demonstrated re-integration of the employee with their career in the firm.

This combination of policies would allow for social insurance, allow for parental leave that promotes child development and work to improve workplace culture and labour market outcomes in ways that will improve gender equality.