Staff Paper 2015

Analysis of Replacement Rates from 2010 to 2015

Irish Government Economic and Evaluation Service

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Glossary of terms

AW	Average Wage
BTWFD	Back to Work Family Dividend
CSO	Central Statistics Office
DPER	Department of Public Expenditure and Reform
DSP	Department of Social Protection
ECCE	Early Childhood Care and Education
ESRI	Economic and Social Research Institute
IQC	Increase for Qualified Child
JA	Jobseekers Allowance
JB	Jobseekers Benefit
OECD	Organization for Economic Co-Operation and Development
NMW	National Minimum Wage
PRSI	Pay Related Social Insurance
RR	Replacement Rates/Ratios
USC	Universal Social Charge

Abstract/Summary

Replacement rates are used to measure a person's financial incentive to work. They compare a person's in-work income with out-of-work income. There have been significant changes in tax and welfare policy and entitlements over the course of the recent recession. It is timely to review the impact of these changes on the replacement rates for various hypothetical family types at different income levels. This paper looks at how replacement rates have evolved over the period 2010 and 2015. It was prepared in advance of Budget 2016 and therefore does not reflect tax and welfare changes contained therein. However, the measures in Budget 2016 will have implications for the rates next year which will merit further study and oversight. The discussions around the increase in the National Minimum wage will be an obvious factor in analysing replacement rates.

Summary of key findings

- **Over the period 2010-2014 there was relatively little change in replacement rates – suggesting that the impact of tax increases and welfare reductions during the crisis largely cancelled each other out in terms of incentives to work.**
- **The hypothetical household types which have had high replacement rates (over the internationally accepted 70% threshold), were couples (one earner) with 2, 3 and 4 children (only in the National Minimum Wage and 67% Average Wage income groups).**
- **2015 has seen replacement rates for all categories fall below the risk threshold of 70%. These include single earning couples with more than one child. Specifically, it can be seen that the Back to Work Family Dividend (BTWFD) introduced in Budget 2015 has had a significant positive impact on Replacement Rates for families.**
- **Lone Parents have low replacement rates when Rent Supplement is excluded. With the transition to Housing Assistance Payment (HAP) for long term recipients we will come back to analysis of this group when HAP is fully rolled out. Their replacement rates rise when rent supplement is included. However only 16% of Lone Parents claim Rent Supplement.**
- **However, it is acknowledged that there are other factors including childcare availability, costs and logistical issues which are not encompassed by replacement rates analysis which may act as a disincentive in taking up work for these cohorts.**

Contents

Introduction

This paper presents the trends in replacement rates/ratios between 2010 and 2015. It will analyse how the replacement rates have varied for a number of household types such as singles with no children, single earning couples with no children, single earning couples with 1-4 children and lone parents. These groups have been selected for analysis as they are the groups which are the most at risk of high replacement rates. Two earning couples aren't the focus of analysis as the replacement rate for these family types are typically quite low. For example, two in work incomes versus two out of work incomes tend to produce replacement rates which are not above the internationally accepted threshold of 70%. This is the threshold where disincentives to work become quite strong. This point is covered further in the paper for comprehensive purposes. Findings from an analysis of current hypothetical replacement rates are presented and related issues discussed.

Section 2 introduces replacement rates as a concept, describes why they matter, what can be considered a high replacement rate and how we should interpret them with caution. This section will also look at the main international literature in the area.

The third section of the paper analyses how replacement rates have changed between 2010 and 2015 for the various Household types mentioned above.

The final section offers conclusions and policy perspectives.

Context

Replacement rates are used to measure a person's financial incentive to work. They compare a person's in-work income with out-of-work income. International bodies such as the OECD use replacement rates in international policy debate whilst many bodies such as the ESRI and the Nevin Economic Research Institute use it in the Irish context. Replacement rates are the most commonly used single measure of the incentive to be in work. Replacement rates are in widespread use both in empirical studies and in theoretical models of the labour market.

In a recent ESRI paper, *Making Work Pay More: Recent Initiatives*[1], the authors concluded that more than eight out of ten of the cohort of unemployed in receipt of Jobseeker's Benefit or Jobseeker's Assistance would see their income increase by at least 40 per cent upon taking up employment. PublicPolicy.ie[2] also suggest that despite a relatively generous welfare net and the costs associated with working, most of the evidence suggests that the majority of unemployed people would be better off in a job in Ireland. It is argued by various sources[3][4] that spells out of the labour market have, on average, a negative impact on the wages which can be commanded when they return to employment. The longer the period out of work the more attractive Social Welfare benefits can become which in turn can worsen Replacement rates.

Other work carried out in the Replacement Rates area include a recent ESRI analysis which looked at the effect of various factors on Replacement rates such as Medical cards and the GP Visit card. They analysed the amount of people with certain characteristics within certain Replacement rate categories (i.e. with replacement rates greater than 70, 80, 90 or 100). Further detail on the distribution of replacement rates in Ireland in 2015, as reported by the ESRI using their Switch model, is included at Appendix Two.

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[1] Savage, M., Colgan, B., Callan, T. & Walsh, J.R. (2015) Making Work Pay More: Recent Initiatives. *Budget Perspectives 2016.* ESI Conference, Paper 2, June.
[2] O'Meara, G. (2013) Evidence on the Incentive to Work http://www.publicpolicy.ie/evidence-on-the-incentive-to-work-2/
[3] Arulampalam, W. (2001). "Is Unemployment Really Scarring? Effects of Unemployment Experiences on Wages" *Economic Journal*, Royal Economic Society, vol. 111(475), pages 585-606, November.
[4] Gregory, M. and Jukes, R. (2001). "Unemployment and Subsequent Earnings: Estimating Scarring among British Men 1984-94" *Economic Journal*, Royal Economic Society, vol. 111(475), pages F607-25, November.

What are Replacement rates and how are they calculated?

Replacement rates, or replacement ratios (Replacement rates), are used to measure unemployment traps. An unemployment trap occurs when a person's net income when unemployed compares favourably with his/her net income when employed and so results in a disincentive to work. The higher the ratio, the greater the disincentive to work.

$$\text{Replacement Rate} = \frac{\text{Net Income when Unemployed}}{\text{Net Income when Employed}}$$

Why do Replacement rates matter?

General labour market economic theories support the view that high replacement rates act as disincentives to work while evidence from empirical studies is mixed but on balance shows a link between replacement rates and duration of unemployment.

What is a high replacement rate?

Given the individual nature of the decision to work there is no specific cut-off level of replacement rate that constitutes a disincentive. It is generally prudent to pay particular attention to replacement rates of 70% or more given the basis of the calculations in this analysis. Trends in replacement rates should also be monitored.

Approach to compilation of replacement rates

For the purposes of this analysis, replacement rates are presented for a number of household structures with and without children, including a single person household and couple households with one- earners being the main focus. The Replacement rates for two earners are low, as the difference in work income for two adults versus income for two adults out of work is quite large, even at the National Minimum Wage level. The highest rate in 2014 was 65% for two earner couples with 3 children and following the trend in 2015, with BTWFD included, this would be even lower.

In-work income levels used are National Minimum Wage (NMW), 67% of Average Wage (AW), Average Wage. The figures used in determining replacement rates are based on the latest available CSO AW data at the time the replacement rates were compiled.

Included in the calculation of in-work income are the following:

- Income from employment
- Taxation (couples treated as married)
- Pay Related Social Insurance (PRSI)
- Universal Social Charge (USC)
- Spouse's entitlement to Jobseekers Allowance (Spousal JA) for a couple with no children
- Family Income Supplement (FIS) or Spousal JA for a couple with children, depending on which payment is more beneficial and Child Benefit.
- The Back to Work Family Dividend has been added to the 2015 calculations in line with Budget 2015 as a reform measure introduced to 'make work pay'.

Out-of-work income includes the main Social Welfare payment (maximum rate payable of Jobseeker's Allowance), One Parent Family Payment, if applicable, Fuel Allowance and Child Benefit. We have included Rent Supplement for Lone Parent analysis to demonstrate the impact it has on replacement rates for the 16% of lone parents in receipt of it but generally it is excluded as only 1 in 6 lone parents are in receipt of the payment.

Replacement rates should be interpreted with caution

Replacement rates can vary significantly depending on what is included in in-work and out-of-work income, the family types chosen, level of in-work income, the timing and duration of unemployment etc., as such they should be interpreted with caution. In drawing conclusions it is, therefore, important to look beyond the headline replacement rate figure and take account of the assumptions underlying the analysis.

Many issues that affect a person's decision to take up work cannot be easily quantified. These include the following:

- The wariness of any potential loss of medical card, perceived values of same etc.
- Additional / increased childcare costs

- Additional travel costs incurred from travelling to and from work, which in a rural context may be significant.

These factors are personal to the individual, vary in significance from one person to the next and are beyond the scope of replacement rate analysis.

However, research from agencies such as the World Health Organisation[5] have concluded that the positive psychological effect of labour market participation, even when Replacement rates are high, can be a key driver in lessening the impact of an unemployment trap on an individual.

In terms of the potential loss of a medical card, recent reforms have been implemented to address the disincentive to work losing it may have. People who participate on certain Government Employment and Education Schemes, for example, will retain their entitlement to a Medical Card for the duration of the scheme (examples include Back to Work Allowance, Community Employment Schemes, Back to Education Allowance, etc.). Also, people who have been unemployed or in receipt of One Parent Family Payment for a minimum of 12 months will retain their Medical Card for a period of 3 years if they commence employment.

In relation to childcare, according to a recent report published by the OECD, Ireland has the highest childcare costs in its membership. It goes on to explain that across the European Union, childcare costs around 12% of a family's income, but in Ireland, it accounts for 35%. This clearly acts as a disincentive to work as the associated cost with childcare can significantly diminish disposal income levels. A key objective of one year free childcare scheme (ECCE) for children of pre-school age has been to alleviate income hardship for families with children.

[5] Health and Ageing: World Health Organisation Discussion Paper
http://apps.who.int/iris/bitstream/10665/66682/1/WHO_NMH_HPS_01.1.pdf

Analysis

Introduction

This section looks at the trends in replacement rates between 2010 and 2015 for various household types such as singles, one earning couples with and without children. It will also briefly discuss the challenges in interpreting replacement rates for one parent family types and two earning couples.

Calculating the Replacement Rate

An example of how the replacement rates for a hypothetical couple with one child in 2015 is calculated is illustrated in the table below.

Table 1: Calculation of Replacement Rates for Sample One Earner Couple Households with One Child

	Couple + 1CD (one earner)	NMW	67% AW	AW
In-work	Gross	17542.20	24249.69	36193.56
	Weekly	337.35	466.34	696.03
	Tax	0.00	0.00	28.44
	USC	7.19	16.19	32.27
	Pay Related Social Insurance	0.00	18.65	27.84
	Family Income Supplement	105.50	44.70	0.00
	Back To Work Family Dividend	29.80	29.80	29.80
	JA Means	166.41	232.61	364.91
	Spousal JA	176.19	109.99	0.00
	CB	31.15	31.15	31.15
	Net weekly	*€567.31*	*€602.43*	*€668.43*
Out-of-work	Long Term Jobseekers Allowance	342.60*	342.60	342.60
	Fuel Allowance	10.00	10.00	10.00
	Smokeless	0.00	0.00	0.00
	CB	31.15	31.15	31.15
	Net weekly	*€383.75*	*€383.75*	*€383.75*
	Replacement Rate	***68%***	***64%***	***57%***

Source: Authors Calculations * Personal Rate=€188 + IQA=€124.80 + IQC=€29.80

- The in work calculations include weekly income minus taxes plus Family Income Supplement or Spousal JA (whichever is greater), BTWFD, and Child Benefit. In respect of the BTWFD, it is assumed that those entitled to the payment avail of it.
- Out of work income is calculated by adding Long Term Jobseekers Allowance with fuel allowance and Child benefit.
- The in work income of €567 divided by the out of work income, €383, giving a replacement rate of 68%.

These calculations have been carried out for the range of household types included in this analysis to derive their respective rates.

Period of Analysis

As indicated earlier, replacement rates give policy makers an indication of the labour market incentives for the unemployed adult in a household. The purpose of this analysis is to examine how replacement rates evolved over through the economic crisis from 2010 to 2015.

In response to the deepening financial crisis in 2010 Government committed to a period of fiscal retrenchment as part of the Troika bailout agreement which involved a range of expenditure reductions in the social welfare space coupled with revenue raising measures which impacted on in-work income. See table below by way of illustration.

Table 2: Main Welfare reductions and Tax increases 2010-2014

Welfare	Tax
Child related payments	USC
Jobseeker Payments	Income Tax Increases
Employment supports	Local Property Tax
Respite Care Grant	VAT
Basic Supplementary Welfare Allowance	CGT, CAT
Fuel Allowance	Excise & Stamp Duty
Weekly Payments	DIRT

More recently, due to stabilisation of the public finances, some limited expansionary measures have been possible.

Key welfare features included in the calculation that have changed from 2014:

- Increase in child benefit of €5 per month
- Back to Work Family Dividend (BTWFD)[6] to help lone parent and long-term unemployed families return to work – additional €1,550 per child to be made available in first year of employment or self-employment

Key tax features included in the calculation that have changed from 2014 are shown below:

Table 3: Universal Social Charge

The standard rates of Universal Social Charge are:			
2011 - 2014	**Rate**	**2015**	**Rate**
On the first €10,036	2%	On the first €12,012	1.5%
On the next €5,980	4%	On the next €5,564	3.5%
On the balance	7%	On the next €52,468	7%
		On the balance	8%

Source: Revenue

Other changes were to the threshold that the higher rate of income tax paid and minor rate band changes.

The changes to tax and welfare policy over this key period and, most importantly, their interaction at any given time, affect the replacement rate faced by a given household. The analysis which follows examines how this has evolved over the last six years.

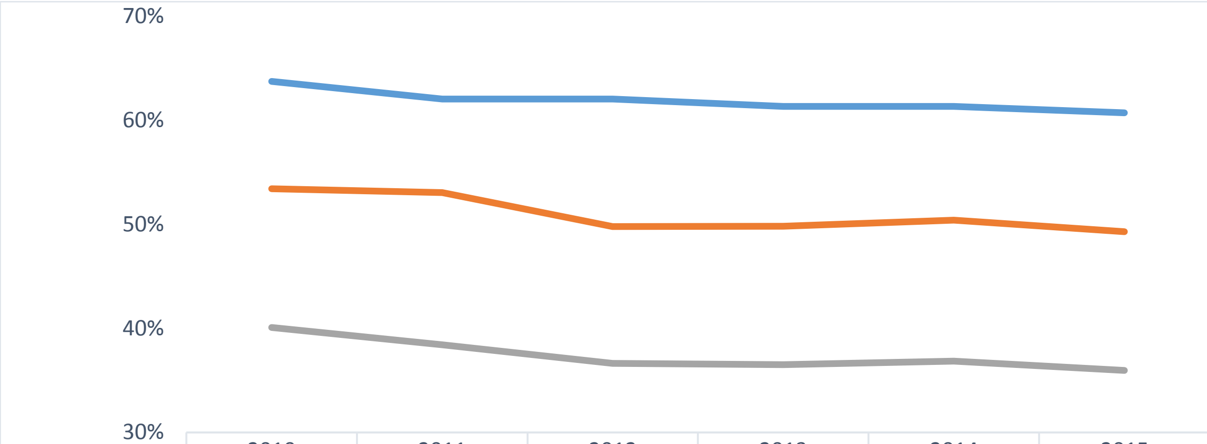
[6] The BTWFD is available to people with qualified children who are in or take up employment or self-employment and, as a result, stop claiming a jobseeker's payment or a one-parent family payment on or after 5 January 2015. Those qualifying for the scheme will get a weekly payment for up to 2 years. The equivalent of any Increases for Qualified Children that were being paid on a person's jobseeker or one-parent family payment (up to a maximum of 4 children) will be paid for the first year in employment. Half that amount will be paid weekly for the second year. BTWFD is based on the standard Increase for a Qualified Child (IQC) rate of €29.80. Those receiving a half-rate IQC with a payment will get a standard rate BTWFD. There is a ceiling of €119.20 per week (4 children).

Single Person

Figure 1 below shows the trend of replacement rates between 2010 and 2015 for single people at various income levels. At each income level we see that the replacement rate has fallen steadily.

The highest replacement rate was for a person at NMW in 2010 at 64%. The rates in 2015 are all lower than their corresponding rates in 2010. This points to an improvement in the financial incentives to work for this cohort over this period. There have been 3-4% decreases in replacement rates in each group between 2010 and 2015 with the Average Wage cohort seeing the largest reduction.

Figure 1: Replacement Rates for Single Earner Households 2010-2015



	2010	2011	2012	2013	2014	2015
NMW	64%	62%	62%	61%	61%	61%
67% AW	53%	53%	50%	50%	50%	49%
AW	40%	38%	37%	37%	37%	36%

Source: Authors Calculations

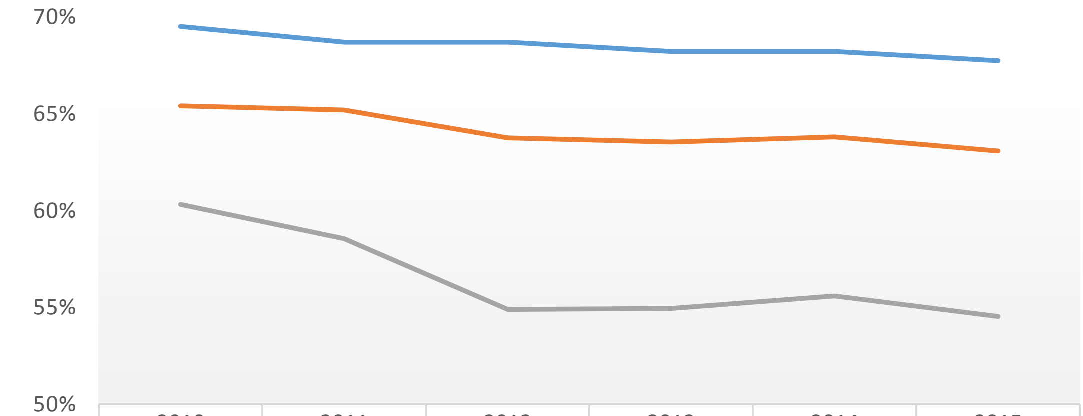
Overall, therefore, the data supports the conclusion that there are strong financial incentives to work for single persons on JA and JB.

One Earner Couples without Children

Figure 2 below shows the replacement rates for one-earner couples without children at various income levels. We find that the Replacement rates for the national minimum wage group stood at the key 70% threshold level in 2010, suggesting that this category of household faced one of the lower levels of financial incentive to work. However, we see that this reduced slightly to 68% by 2013 and has broadly remained at that level since.

Replacement rates for the higher income categories fell well below the 70% threshold over the period. The average wage replacement rate reduced from 60% in 2010 to 55% in 2015 with the sharpest decline between 2011 (59%) and 2012 (55%), a 4% drop. The decline in welfare rates in the period was the main driver of this.

Figure 2: Replacement Rates for Couples without children 2010-2015



	2010	2011	2012	2013	2014	2015
NMW	70%	69%	69%	68%	68%	68%
67% AW	65%	65%	64%	64%	64%	63%
AW	60%	59%	55%	55%	56%	55%

Source: Authors Calculations

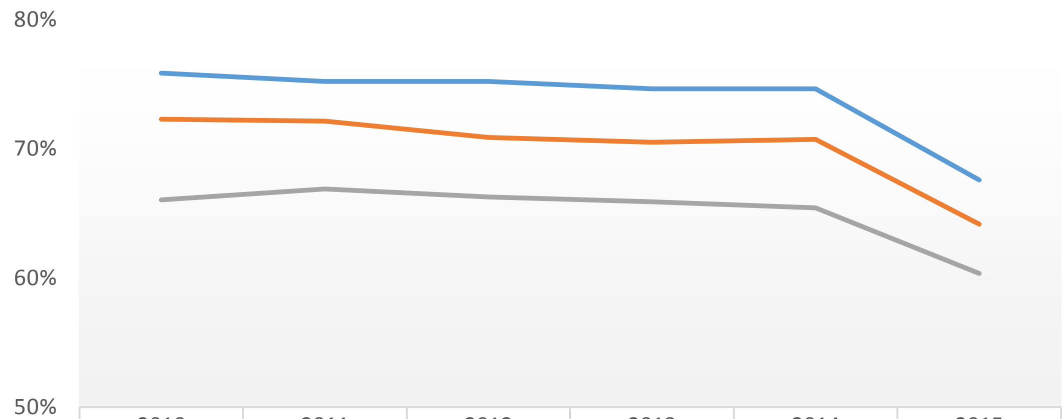
There have been reductions of between 2-5% since 2010 in replacement rates for all scenarios presented. Incentives to stay out of work were largely reduced during the period of fiscal retrenchment as structural reforms and cuts to welfare schemes were introduced. However, in parallel increased income taxes, USC, PRSI etc. will have worked to reduce in work income. Overall, the tax and welfare changes seem to have acted to offset each other to some extent and, as in the case of the NMW example, caused replacement rates to remain more or less static over the period.

One Earner Couples with Children

Figures 3 shows the replacement rates for one earner couples with two children. Similar illustrations in respect of one earner couple households with 1, 3 or 4 children are provided at Appendix 1. At each income level below, we see very little change in replacement rates between 2010 and 2014 with a significant decline between 2014 and 2015.

The decline here is due to the impact of the BTWFD. Significantly, the replacement rate for a one earner couple with 2 children on the NMW drops from being firmly in the problematic area above the 70% threshold (at 75% in 2014) to below that threshold at 68%, a fall of 7% in one year. The reduction for other household types is even larger. For example, the largest reduction was for the families with 4 children with declines of between 12 and 14%.

Figure 3: Couples (one earner) with 2 Children



	2010	2011	2012	2013	2014	2015
NMW	76%	75%	75%	75%	75%	68%
67% AW	72%	72%	71%	70%	71%	64%
AW	66%	67%	66%	66%	65%	60%

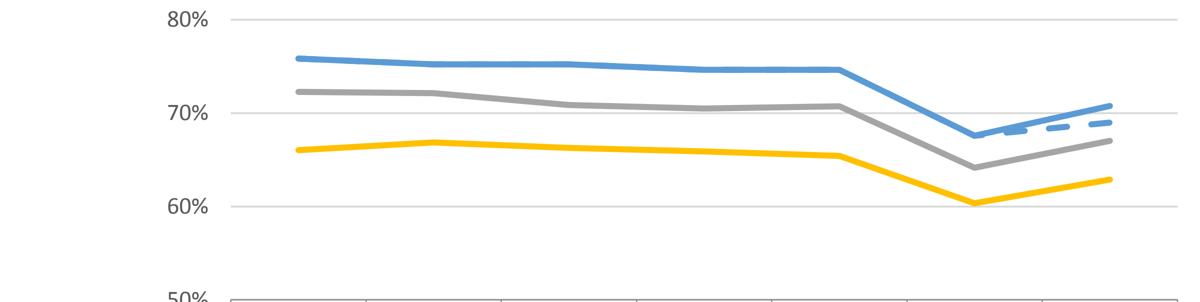
Source: Authors Calculations

Overall, we find similar trends for all one earner households with children. The main difference is the size of the impact that BTWFD makes increases with more children as the value of the Qualified Child Increase payments that are retained is greater. Importantly also, all income levels examined for each hypothetical group in this category are under the key 70% threshold.

Under the terms of the BTWFD scheme households which leave welfare for work may retain their full qualified child increases payments (up to a maximum of 4 children) for the first year in employment. This is withdrawn in the second year in employment with half the payment retained. The impact of this is shown in the below figure. Also shown is the impact of the possible increase in the National

Minimum Wage. These measures have been projected for 2016. There are other factors which would affect the replacement rates such as tax and welfare changes which will be decided in Budget 2016.

Figure 4: Couples (one earner) with 2 Children (Estimated 2016 after taper of BTWFD and increase in minimum wage)



	2010	2011	2012	2013	2014	2015	2016*
NMW	76%	75%	75%	75%	75%	68%	71%
NMW **	76%	75%	75%	75%	75%	68%	69%
67% AW	72%	72%	71%	70%	71%	64%	67%
AW	66%	67%	66%	66%	65%	60%	63%

*Projections ** Projected Effect of planned NMW increase & Taper

The planned increase in the NMW from €8.65 to €9.15 will help offset the reduction in the BTWFD as it begins to taper off. For example, in year two the BTWFD will be worth €14.90 per child whereas in our calculations if the increase in the NMW is €0.50 (assuming full hours) this will be worth €19.50. This would suggest that Replacement Rates will continue to fall for the most at risk groups. The increase in the NMW should see an even greater incentive to work.

The payments are wholly phased out from the third year of employment onward. There will be a need for evaluation to determine the effectiveness of the scheme in keeping people in work and off welfare, including beyond the key two year point. While it seems less likely that someone might leave work for welfare, the extent to which both the loss of BTWFD, medical card entitlement etc. after a period in work combine to give rise to such a trend will need to be closely monitored.

A study conducted by the ESRI[7] showed the impact of medical cards or GP Visit Cards on Replacement Rates of Unemployed recipients of Jobseekers Benefit/Assistance – with and without Children. They conclude that medical cards and/or GP visit cards have a small impact on Replacement Rates. They have identified two reasons for this:

[7] Savage, M., Colgan, B., Callan, T. & Walsh, J.R. (2015) Making Work Pay More: Recent Initiatives. *Budget Perspectives 2016.* ESI Conference, Paper 2, June

First, the composition of unemployed jobseekers is heavily tilted towards young single individuals. According to the Department of Social Protection[8] in 2013 almost 80 per cent of recipients of Jobseeker's Allowance or Jobseeker's Benefit were aged less than 45. Similarly, NESC (2011) showed that 60 per cent of recipients of a jobseekers' payment were single claimants. The researchers state that this is reflected in the composition of unemployed jobseekers in SWITCH, where over 70 per cent of unemployed jobseekers are under 45, the majority of whom do not have children. Therefore, the majority of those under analysis receive a relatively low value for a Medical or GP Visit Card when out of work.

They also concluded that the BTWFD scheme improves the work incentives of the unemployed with children. They found that the proportion of unemployed jobseekers with children who would be better off not working decreases from 1 in 15 to 1 in 20. The small number who would be financially better off not in work, close to five out of six still chose to work.

[8] Department of Social Protection (2013). *Statistical Information on Social Welfare* Services, www.welfare.ie.

Other Household Types

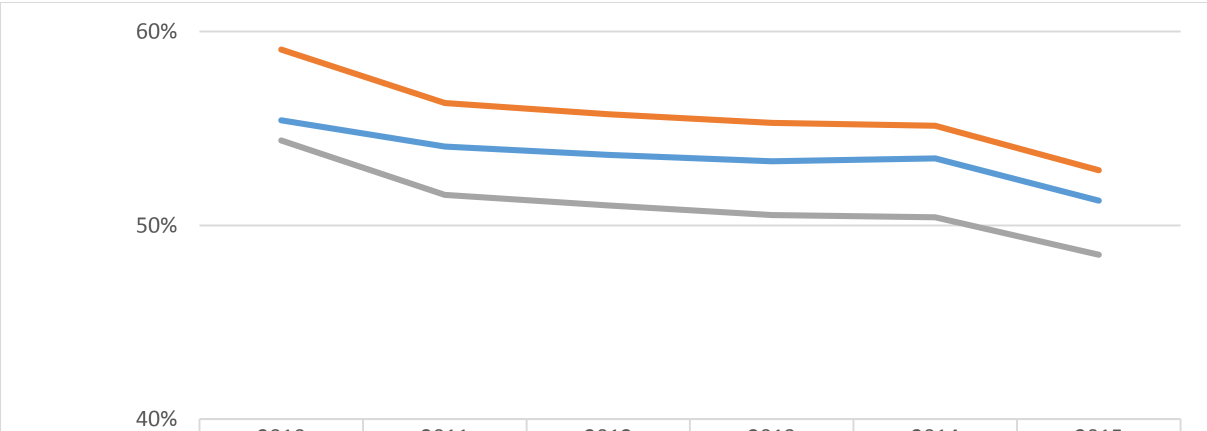
1. Two Earner Couples with and without Children

Replacement rates for these household types are quite small as the difference between in work income for two adults and out of work income is substantial. This includes two earners with and without children. The highest rates are for two earners with 3 children and are still below the 70% threshold at 65%. The lowest replacement rates are for two earning couples without children at 49%. This is the rationale for not including them in this paper. They have traditionally had low and unproblematic replacements rates, which ranged from 49-65% and therefore were discounted from further analysis.

2. One Parent Families

Perhaps surprisingly, we find that replacement rates for single parent families are typically low. The highest Replacement Rates for these groups were just over 50%. See Figure 5 below.

Figure 5: Single Parent Family with 2 children (excluding rent supplement)



	2010	2011	2012	2013	2014	2015
NMW	55%	54%	54%	53%	53%	51%
67% AW	59%	56%	56%	55%	55%	53%
AW	54%	52%	51%	51%	50%	48%

The following table shows the calculation of replacement rates for a single parent family with two children:

Table 4: Lone parent with 2 children

Column1	One Parent Family 2 children	NMW	67% AW	AW
In-work	Gross	€17,542	€24,250	€36,194
	Weekly	€337	€466	€696
	OFP payable	€130	€0	€0
	Gross + OFP	€24,307	€24,250	€36,194
	Tax	€0	€0	€44
	USC	€7	€16	€32
	PRSI	€0	€19	€28
	FIS	€85	€102	€20
	CB	€60	€60	€60
	Net weekly	€605	€594	€672
Out-of-work	OFP	€248	€248	€248
	Fuel Allowance	€10	€10	€10
	Smokeless	€0	€0	€0
	CB	€60	€60	€60
	Net weekly	€318	€318	€318
	R/R	**52%**	**53%**	**47%**

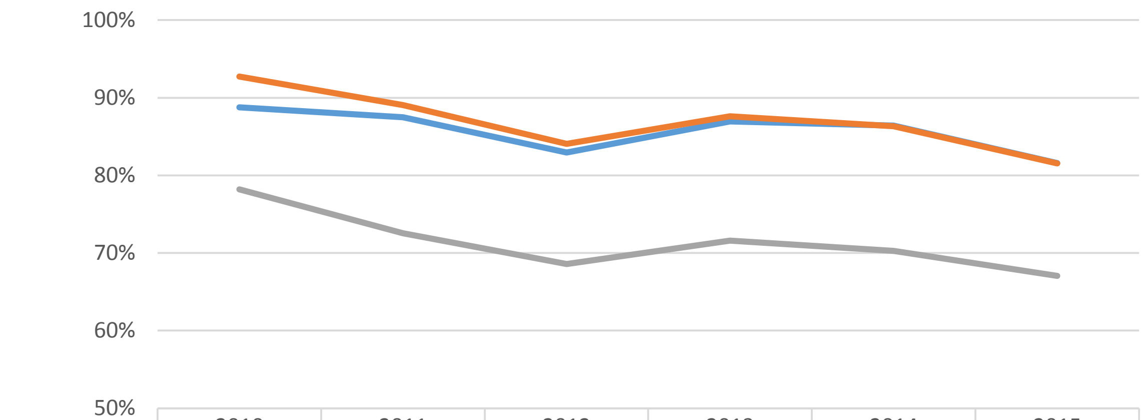
The reason for low replacement rates is that the difference between the main source of in work income and out of work income is quite substantial. The main source of income when out of work is One Parent Family payment, or another payment such as Jobseekers Transition, where the youngest child is between 7 and 13 (inclusive). Lone Parents can also receive a range of other benefits where eligible such as QCIs, fuel allowance, rent supplement and FIS. Whereas it is wages, lone parent's payment and FIS, if eligible, from in work income.

However, it is acknowledged that there are a range of other factors that affect the decision to work. Many of these fall outside replacement rate analysis. One additional factor which can be modelled is the impact of out-of-work Rent Supplement. The rationale for excluding rent supplement in this analysis is that the number of lone parents claiming rent supplement is very low. Data from the Department of Social Protection indicates that the proportion of one-parent families who are in receipt of rent supplement is approx. 16%[9]. However, for illustrative purposes we have shown here the impact of Rent Supplement on the replacement rates for those 16% of lone parents and we find

[9] Social Welfare Statistical Report 2014, page 126.

the picture changes significantly. Figure 6 below shows replacement rates using the maximum Dublin rates (this cohort have the highest replacement rates).

Figure 6: Lone parent with 1 child inclusive of Rent Supplement in Dublin



	2010	2011	2012	2013	2014	2015
NMW	89%	87%	83%	87%	86%	82%
67% AW	93%	89%	84%	88%	86%	82%
AW	78%	73%	69%	72%	70%	67%

We see that Rent Supplement in Dublin pushes up the replacement rates through the 80% threshold in 2015 for the above group. The reason the groups on 67% of the average wage have higher replacement rates is because at this point they lose the one parent family payment as their income is greater than the eligible threshold. According to Savage and Callan (2015) only 17.7% of lone parents have replacement rates above 70%[10] - a finding that is broadly consistent with this analysis.

It is acknowledged that there are a range of other factors which impact on the work incentives for lone parents including childcare availability and costs as well as logistical issues associated with taking up work and combining it with caring responsibilities, which cannot be encompassed by replacement rate analysis.

Given the importance of this policy issue, it could be worthwhile to undertake a broader evaluative piece of work focusing specifically on the combined impact on the work incentive for lone parents of recent structural reforms to One Parent Family payment; the introduction of the BTWFD; recent budgetary announcements on childcare and FIS improvements and the introduction of the housing assistance payment (which will address Rent Supplement disincentives).

[10] Savage, M., Callan, T., & Walsh, J. (2015) *A Profile of Financial Incentives to Work in Ireland*. ESRI

Conclusions

Household types with replacement rates above 70% face reduced incentives to take up employment. Changes in tax and welfare policy, and the interplay between both, can impact on a household's replacement rate.

Having come through a period of crisis with significant changes to both tax and welfare policy it is timely to review how replacement rates have evolved during that time.

Perhaps surprisingly, the analysis shows that replacement rates remained relatively stable over the period. This would suggest that changes on the welfare, or out-of-work, side of the equation were largely counteracted by changes on the tax, or in-work, side.

The significant exception has been 2015 which has seen a significant reduction in replacement rates for households with children. This is due to the introduction of the BTWFD scheme earlier this year.

As a result, the hypothetical household types which had high replacement rates (over the 70% threshold), up until the introduction in 2015 of the BTWFD – i.e. one earner couples with 2, 3 and 4 children in the NMW and 67% AW income groups, all fell below this key threshold point as a result of the introduction of BTWFD.

However, the impact employment retention of the taper off of BTWFD to a half payment in year two and no payment from year three will need to be assessed in the context of future evaluation of that scheme. A recent ESRI study into labour market incentives concluded that the BTWFD scheme improves the work incentives of the unemployed with children, which is consistent with the results of this analysis.

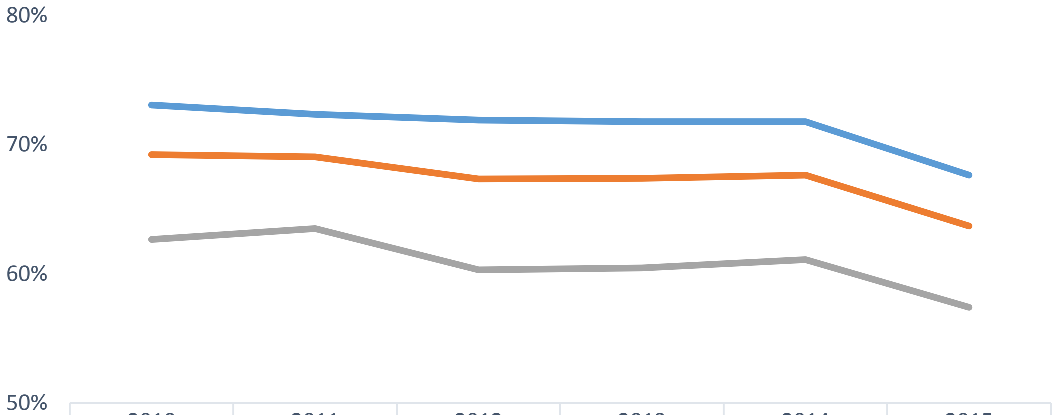
The position of lone parent households is more complex than replacement rate analysis alone suggests. While, on the face of it, lone parents appear to have low replacement rates, there are a range of other factors outside of that equation which impact on their decision to seek employment. This paper recommends that, given the importance of this policy issue, it may be worthwhile and timely to undertake a broader evaluative piece of work to look at the combined impact on the work incentive for lone parents of recent structural reforms to One Parent Family payment; the introduction of the BTWFD; recent budgetary announcements on childcare and FIS improvements and the introduction of the housing assistance payment.

The issue of employment incentives can be addressed on a range of levels. Clearly, this analysis shows that tax and welfare policy are key ingredients. Their relationship can be complex but is critical. It needs to be continuously monitored and cliffs, traps and pinch points highlighted and tackled. In parallel, however, employment activation and support strategies can serve to further encourage and support employment take up. There has been a consistent and intensified focus on labour market activation over the course of the period covered by this analysis under the strategic frameworks of the *Action Plan for Jobs* and *Pathways to Work*. The rollout of programmes such as JobPath make it clear that replacement rates can be relatively high but coexist with low unemployment if activation is strong[11]. As regards the impact of high replacement rates on the labour market Grubb (2007) has pointed out that there can be benefits to high replacement rates. These arise in the form of an improved earnings distribution (in terms of the low-paid) as well as, when combined with strong activation measures, increased productivity and increased labour force participation.

[11] Grubb, D. (2007) *Labour market policies at different benefit replacement rates.* OECD

Appendix 1 – Couples with children (1 earner)

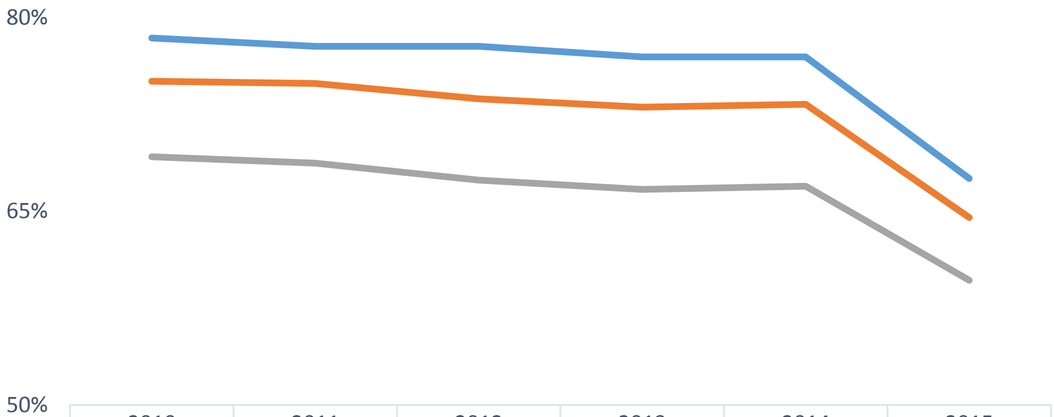
One Earner Couples with 1 Child



	2010	2011	2012	2013	2014	2015
NMW	73%	72%	72%	72%	72%	68%
67% AW	69%	69%	67%	67%	68%	64%
AW	63%	63%	60%	60%	61%	57%

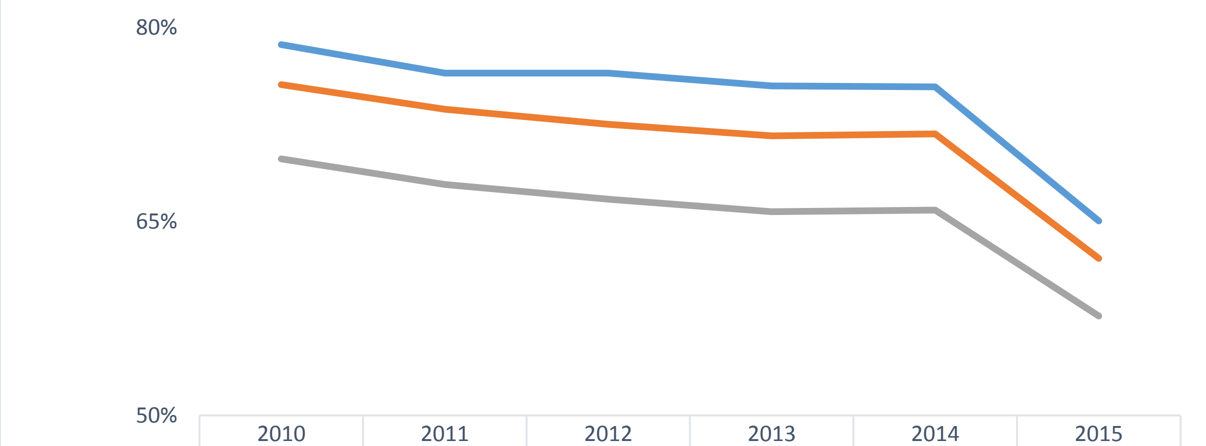
Source: Authors Calculations

One Earner Couples with 3 Children



	2010	2011	2012	2013	2014	2015
NMW	78%	78%	78%	77%	77%	68%
67% AW	75%	75%	74%	73%	73%	65%
AW	69%	69%	67%	67%	67%	60%

One Earner Couples with 4 Children



	2010	2011	2012	2013	2014	2015
NMW	79%	76%	76%	75%	75%	65%
67% AW	76%	74%	73%	72%	72%	62%
AW	70%	68%	67%	66%	66%	58%

Source: Authors Calculations

Appendix 2 – ESRI Switch Analysis of Distribution of Replacement Rates, Ireland 2015

TABLE 1 Full Distribution of Replacement Rates, Ireland 2015 **Replacement Rate Category**	**Unemployed on JA/JB - %**	**Employees - %**	**Both - %**
≤ 30	17.1	17.4	17.3
>30, ≤ 40	23.3	15.1	15.8
>40, ≤ 50	20.2	20.2	20.2
> 50, ≤ 60	10.5	17.2	16.6
>60, ≤ 70	10.5	13.9	13.6
>70, ≤ 80	7.3	7.9	7.9
>80, ≤ 90	5.4	4.8	4.9
>90, ≤ 100	2.8	2.1	2.1
>100	2.8	1.4	1.5
Total	100	100	100
Estimated sub-population:	163,000	1,581,000	1,744,000

Source: ESRI – Switch analysis