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## Book

# The gender impact of Irish budgetary policy 2008-2018

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October 2018

# THE GENDER IMPACT OF IRISH BUDGETARY POLICY

KARINA DOORLEY, MAXIME BERCHOLZ, TIM CALLAN,  
CLAIRE KEANE AND JOHN R. WALSH



An Oifig Buiséid Pharlaiminteach  
Parliamentary Budget Office



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Oireachtais  
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 **ESRI** ECONOMIC & SOCIAL  
RESEARCH INSTITUTE

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Economic and Social Research Institute

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## CHAPTER 1

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### Introduction

Although the tax-benefit system does not differentiate based on gender, tax and welfare policies can have differing impacts for women and men (Stotsky, 1996). Gender-based divisions of work and caring roles, as well as the gender pay gap, have implications for pre-tax earnings and, hence, tax liabilities. Differences in social contribution histories can also affect welfare payment rates or, indeed, whether an individual qualifies for a contributory or non-contributory welfare scheme. In this context, monitoring the impact of budgetary policy changes by gender is an important component of a broader ‘gender budgeting’ approach.

Keane et al. (2014) developed a gender impact assessment framework in work supported by the Equality Authority/Irish Human Rights and Equality Commission. This framework uses SWITCH, the ESRI’s tax-benefit model, and data from the Survey on Income and Living Conditions (SILC), a large-scale nationally representative survey, to assess the gender impact of changes in tax and welfare policy. The scope includes income tax, the Universal Social Charge (USC), Pay Related Social Insurance (PRSI) and most welfare payments (State Pension, One-Parent Family Payment, Jobseeker’s Benefit, Jobseeker’s Allowance, Working-Family Payment, Child Benefit, etc.).<sup>1</sup>

The analysis goes beyond the household level, to look at the impact of policy changes on incomes at ‘tax-unit’ level – individuals or couples, together with their dependent children (children under 16, or under 18 if they are in education).<sup>2</sup> Many tax and welfare policies operate at precisely this level. It distinguishes between tax units that are headed by a woman, by a man, or by a couple.

The analysis also explores the potential impact of policy changes at the individual level. While it is possible to measure incomes attributable to each partner in a couple, it is not possible to provide a definitive account of how these incomes are shared or not shared, and how they may lead to differences in living standards. In order to deal with this underlying uncertainty, the framework examines the impact of budgetary policy changes under two polar cases:

1. full income sharing within the couple;

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<sup>1</sup> A full list of taxes and benefits simulated can be found in Chapter 4.

<sup>2</sup> In practice, spouses or civil partners can opt out of joint taxation and be considered as two tax units. SWITCH assumes that couples choose the option that is financially optimal for the household, which typically means that couples are treated as one tax unit.

2. gains or losses from budgetary policy are not shared; instead, the gain or loss from budgetary policy remains with the relevant income earner/welfare recipient.

Research by Watson et al. (2013) suggests that Irish couples do indeed pool a large proportion of their income, but that other adults in the household (e.g., adult children living with their parents) do not. These findings motivate a strong focus on results at tax-unit level and suggest that the ‘full income pooling’ results are more representative. The alternative assumption, with its focus on impacts on *individual* income, is also informative as there is evidence to suggest that household consumption patterns and bargaining power between spouses are partly dependent on who receives the income.

In this report, we make use of the analytical approach previously developed by the ESRI (Keane et al., 2014). We then provide an up-to-date picture of the overall gender impacts of budgetary policy from the start of the recession (2008) to 2018. This period is split into an austerity period, running from 2008 to 2012, and a recovery period, running from 2012 to 2018. This allows us to identify how the gender impact of Irish tax-benefit policy has evolved from austerity to recovery.

Lastly, and perhaps most importantly, we embed this analytical capacity within SWITCH, the ESRI’s tax-benefit model. This ensures that, in future, gender impact assessment of budgets can be routinely undertaken by government departments<sup>3</sup> and by ESRI researchers. This can be done both in the development of options prior to the budget, to help gender-proof policy reforms, and in the assessment of the impact of policies actually chosen in the budget. The project, therefore, not only helps to answer questions about the impact of past policy but will also serve to ensure that the need for gender impact assessment of tax and welfare policies – as identified, *inter alia*, in the Programme for Government (2016) – can be met more readily in future.

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<sup>3</sup> Currently, the Department of Employment Affairs and Social Protection, the Department of Health, the Department of Public Expenditure and Reform, the Department of Children and Youth Affairs and the Department of Finance have direct access to the SWITCH model and to research conducted by the ESRI using the SWITCH model both pre- and post-budget.

## CHAPTER 2

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### Gender budgeting

Australia was the first country to carry out a gender budgeting exercise, with the government publishing, in 1984, an audit of the impact of the federal budget on women (Department of the Prime Minister and Cabinet, 1984). Many countries now carry out gender budgeting. According to the OECD (2016), almost half of OECD countries reported that they have introduced (Austria, Belgium, Finland, Iceland, Israel, Japan, Korea, Mexico, Netherlands, Norway, Spain, Sweden), plan to introduce (Italy) or are actively considering the introduction of (Turkey, Czech Republic) gender budgeting. Most of the countries that engage in gender budgeting have a legal foundation for the practice. The OECD (2016) categorises gender budgeting into three types of system, as follows.

1. *Gender-informed resource allocation:* In this system, policy decisions and funding allocation take the expected impact on gender equality into account (e.g. Belgium, Japan and Finland).
2. *Gender-assessed budgets:* The gender impact of the budget as a whole is examined (e.g. Iceland, Israel, Korea, Spain and Sweden)
3. *Needs-based gender budgeting:* Policy decisions are guided by a prior assessment of gender needs (e.g. Austria, Mexico, Netherlands, and Norway).

The categories can be considered incremental in that most countries that carry out gender-assessed budgets also undertake gender-informed resource allocation, and most countries that implement needs-based gender budgeting also have gender-assessed budgets. The ESRI's tax-benefit model, SWITCH, has been adapted to carry out the second type of gender budgeting exercise and allows for the continuation of this kind of assessment as a routine part of the budgetary process, by embedding the capacity in SWITCH, the ESRI's tax-benefit model. The Equality Budgeting Campaign (2012) argues for a similar approach to be adopted on a broader scale in Ireland, including 'other equality categories, such as disability, age, or race'.<sup>4</sup>

#### 2.1 RELATED RESEARCH

Previous work has tried to quantify the gender impact of tax and benefit policy in

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<sup>4</sup> The approach adopted here could be adapted to examine the impact of tax and welfare policy changes – proposed or actual – on those other dimensions.

Ireland and elsewhere. Using the Institute for Fiscal Studies' TAXBEN model, Browne (2011) carried out an *ex-ante* assessment of the gender impact of the announced tax and benefit changes in the UK for the 2010–2015 period for singles and couples. He found that single females would be affected more adversely than single males due to particularly large losses among single parents (the vast majority of whom are women), in terms of both redistribution and work incentives. Going beyond household-level assessment, Figari et al. (2011) compared how the tax-benefit systems of nine European countries<sup>5</sup> affect *within-couple* income inequality. They found that partners' incomes were equalised the most in Finland, the UK and Austria, and the least in Greece and Italy, detailing the role of a range of policy instruments. Gallego-Granados and Geyer (2015) went a little further and combined decomposition methods, tax-benefit simulation and structural labour supply estimation to map relationships between the gross gender wage gap, the tax-benefit system and the net gender wage gap in Germany. In a different context, structural models have been developed to analyse the impact of tax-benefit policy on labour supply and welfare within couples (Bargain, 2008; Immervoll et al., 2011; Bastani, 2013), or for women specifically (Blundell et al., 2016).

Closer to home, O'Connor and Murphy (2008) argued that the Irish social welfare system tends to be based on the male breadwinner/female caregiver model. Social welfare payments involve a 'personal rate' in respect of the person qualifying for the scheme, an increase for a qualified adult (IQA) (formerly known as an 'adult dependant addition') and a qualified child increase (QCI) in respect of dependent children. IQAs, which are mainly paid for female dependants, are less than the personal rate and are often made to the principal claimant.

More closely related to our study, Keane et al. (2014) used the ESRI tax-benefit model, SWITCH, to isolate the gender impact of income tax, welfare benefits, property tax and public sector pay changes between 2009 and 2013. This study found that among singles, policy changes between 2009 and 2013 did not have a differential impact by gender. However, under the assumption that couples do not pool their income, women in couples lost out by relatively more than men during this period of austerity.

## 2.2 INCOME POOLING

The gender budgeting literature must make assumptions about the pooling of income within a household. Standard analyses of income distribution are generally carried out at the household level. The assumption is that income is fully shared or 'pooled' so that all household members enjoy the same standard of living. This

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<sup>5</sup> Austria, Finland, France, Germany, Greece, Italy, the Netherlands, Portugal and the UK.

unitary model of family behaviour is often an appropriate way to characterise household income sharing, but it is also a very convenient way as most household surveys are organised at the household level. For example, Eurostat's widely used *at-risk-of-poverty rates* are based on this assumption. The standard household approach pools all income received by members of the household and divides by the number of 'adult equivalents' – a scale designed to reflect the needs of households with different numbers of adults and children – to create income per adult equivalent, often termed 'equivalised income'.

Non-unitary models of family behaviour, which posit some form of bargaining or negotiation within the family, challenge this unitary approach and have been shown to have some validity (Lundberg et al., 1997; Cantillon and Nolan, 2001; Browning et al., 2010; Watson et al., 2013). For example, Cantillon and Nolan (2001) found a gap between the levels of deprivation experienced by members of a couple in Ireland. This gap was found to be consistently narrower when the wife had her own source of income. Sutherland's (1997) approach to income sharing is in line with a non-unitary model and focuses 'on income *as it is received* by individuals, before any transfer, sharing or spending has taken place [emphasis in original]'. Income is assigned to the adult recipient of that income, assuming that no income sharing occurs. Support for this approach comes from the fact that the distribution of cash income across household members can have a strong influence on the distribution of consumption (Browning et al., 1994; Lundberg et al., 1997). This has implications for the economic independence of each individual as well as for bargaining power within the household. However, the individual approach should not be considered as a realistic measure of economic welfare and most households do share income to some extent. Interpretation of the gender impact of policy, in particular, should be cautious in the individual framework as large numbers of women would be found to have very low resources in a purely individual framework.<sup>6</sup>

While much of the analysis of intra-household incomes and income sharing is focused on couples, similar issues arise in the context of children. Jones (1992) considers the 'grey area between childhood dependence and adult independence' and her evidence from Scotland suggests that there is considerable variation in the nature of inter-generational income relationships. In addition, Sutherland (1997) points out a major issue with regard to individual-level analysis and the treatment of children. One approach is to treat children as individuals, like adults, in receipt of their own income. Doing this, however, would result in the lower end of the income distribution being dominated by children. A second option, used by Webb

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<sup>6</sup> Beyond distributional analyses of the type presented in this report, the type of household model chosen also has implications for more structural examinations of the effect of tax-benefit reforms on welfare and labour supply within households (Bargain, et al., 2006).

(1993) and Duncan et al. (1994), excludes children from the analysis. A third option, and the one used by Sutherland (1997), allocates income received by or on a child's behalf to the person in the household assumed to be responsible for the child (the default is the mother or lone father) while adjusting this individual's income by the number of children they are responsible for. Attributing children by default to their mother assumes no financial contribution by the father towards the costs associated with the child or children. This moves more women to the lower end of the income distribution.

Research for Ireland, by Watson et al. (2013), suggests that Irish couples do indeed pool a large proportion of their income but that other adults in the household (for example adult children living with their parents) do not. This study, which drew on a special SILC module, found that a high share of both partners' incomes was 'pooled for common household expenses or savings or for other household members' expenses or savings'. Overall, some 86 per cent of men's incomes were estimated as being pooled in this way, and some 77 per cent of women's incomes. There was also some variation in the male contribution rate along dimensions such as age, education, economic status and the work pattern of the couple. However, along these dimensions, the lower bound for the contribution rate was 80 per cent of men's incomes, while the upper bound was 91 per cent. Contribution rates for women were also high, in the region of 70 to 88 per cent. The study also found no evidence that women experience higher levels of individual deprivation when they rely on the income and work of their partners. Lastly, focusing on consumption, male and female partners were found to spend similar amounts on themselves, but women were found to spend more on the children. This is in line with international research on consumption patterns, which has found that transferring benefits from men to women results in higher household spending on children (Ward-Batts, 2008).<sup>7</sup>

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<sup>7</sup> A study of poor households in Northern Ireland also found a very high level of income pooling. Financial resources were mainly found to be treated as a collective with a very low level of individual resource holding (Daly and Kelly, 2015).

## CHAPTER 3

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### Methodology

#### 3.1 SWITCH

Our analysis uses SWITCH, the ESRI tax-benefit model, linked to data from SILC, the Central Statistics Office's (CSO) main survey of household income.<sup>8</sup> SILC is an annual survey conducted since 2003 by the CSO in order to obtain information regarding the income and living conditions of Irish households. It is the Irish component of an EU-wide survey that aims to capture information on poverty and social exclusion across Europe. The survey is cross-sectional and has a panel dimension, with a quarter of the surveyed households replaced every year. The SWITCH database is currently based on a pooled sample of households from the 2013 and 2014 waves of SILC,<sup>9</sup> and contains almost 8,000 households or over 20,000 individuals. This pooled dataset is reweighted to be representative of the 2018 population in terms of demographics, income and benefit receipt. All reported results follow the CSO's rules for disclosure.<sup>10</sup>

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<sup>8</sup> See Callan et al. (2011) for a full description of the model.

<sup>9</sup> The sample of households used to construct the SWITCH database contains all households from the 2014 survey, and all additional households from the 2013 survey that were not interviewed in the 2014 survey. This ensures that households that were interviewed for both the 2013 and 2014 waves of SILC are present only once in the SWITCH database.

<sup>10</sup> Cells in which there are fewer than 30 observations (or percentages in which the denominator is less than 100) are not displayed, while cells in which there are 30–50 observations are highlighted in grey to indicate lower statistical reliability.

TABLE 3.1 SUMMARY STATISTICS FOR 2018 BY AGE, ECONOMIC STATUS AND TAX UNIT TYPE

	All		Male		Female	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
<b>A. Age categories</b>						
Under 65	11,597	78	5,496	78	6,101	78
65 or over	3,320	22	1,575	22	1,745	22
<b>B. Principal economic status</b>						
Working	7,036	47	3,663	52	3,373	43
Unemployed	1,460	10	967	14	493	6
Education or training	861	6	432	6	429	5
Home duties	2,347	16	60	1	2,287	29
Retired or early retirement	2,289	15	1,467	21	822	10
Ill or disabled	746	5	393	6	353	4
Other	178	1	89	1	89	1
<b>C. Tax unit type</b>						
Single employee	1,731	17	890	13	841	11
Single unemployed	730	7	485	7	245	3
Employed lone parent	349	3				
Other lone parent	365	4				
Retired single	1,449	14	514	7	935	12
One-earner couple without dependent children	546	5	546	8	546	7
One-earner couple with dependent children	782	8	782	11	782	10
Two-earner couple without dependent children	599	6	608	9	590	8
Two-earner couple with dependent children	1,070	10	1,068	15	1,072	14
Unemployed couple without dependent children	108	1	110	2	106	1
Unemployed couple with dependent children	221	2	221	3	221	3
Retired couple	986	9	991	14	981	13
Other tax units	1,431	14	771	11	820	10

Source: Authors' calculations using SWITCH, based on pooled SILC data from 2013 and 2014, reweighted to represent the 2018 population.

Note: Blank cells indicate that the sample size is too small to disclose results. *N* indicates the number of observations in each category in the pooled dataset. Dependent children are under 16, or under 18 if they are in education. 'Retired couples' are couples where at least one is aged 65 or over.

Table 3.1 shows the breakdown of the 2018 population of adults<sup>11</sup> for each gender by age category, by principal economic status and by tax-unit type. From Panel A, we note that over three-quarters of the population of adults are under 65 years of age and there is no difference in this proportion by gender.

In terms of principal economic status, reported in Panel B, more adult men (52%) than women (43%) report to be working. Men are also more likely than women to be unemployed (14% versus 6%) or retired (21% versus 10%). By contrast, women

<sup>11</sup> Adults are defined as ≥16 years of age.



are much more likely (29%) than men (1%) to be engaged in home duties.

Panel C reports the incidence of tax-unit types by gender. In line with unemployment rates, men are more likely than women to belong to single unemployed tax-units. There are not enough male lone parents to allow us to report the split between male and female employed and non-employed lone parents. However, the large majority of lone parents are females and lone parents are split reasonably evenly between working and not working. Being a single retiree is more frequent among women (12%) than men (7%), reflecting the higher life expectancy of women. The proportion of men and women belonging to all couple tax units (one-earner couples, two-earner couples, unemployed couples and retired couples) is similar, by definition.<sup>12</sup>

**TABLE 3.2** LABOUR MARKET AND INCOME STATISTICS (EXCLUDING OBSERVATIONS WITH A ZERO VALUE FOR THE INCOME CATEGORY)

	All		Male		Female	
	Mean	N	Mean	N	Mean	N
Hourly wage	20.4	5,844	20.7	2,795	20.1	3,049
Weekly work hours	35	5,844	38	2,795	32	3,049
Weekly market income	683	8,431	774	4,462	575	3,969
Weekly tax, social security and other deductions	163	10,507	206	5,243	116	5,264
Weekly Child Benefit	63	2,881	65	46	62	2,835
Weekly other social welfare	149	9,486	153	4,528	144	4,958
Weekly disposable income	538	14,065	632	6,741	444	7,324

Source: Authors' calculations using 2018 SWITCH policies linked to pooled SILC data from 2013 and 2014, reweighted to represent the 2018 population.

Note: Grey-shaded results indicate a small sample size (30–50 observations). N indicates the number of observations in each category in the pooled dataset.

Table 3.2 shows some labour market statistics by gender for 2018 (excluding zeros). For adults in employment, hourly wages are €20.40 on average and this figure is slightly higher for men than for women. For those in the labour market, men work more hours per week than women (38 versus 32). Weekly market income, which includes labour income, capital income and private pensions, is higher on average for men than for women (€774 compared to €575). Accordingly, men pay more tax and other deductions than women do (€206 per week compared to €116). While the average amount of Child Benefit and other social welfare is similar for male and female recipients, the number of females in receipt of these benefits is much larger than the number of males. Finally, men's disposable income

<sup>12</sup> There are a small number of same-sex couples in the data, which means that these numbers are not identical. In the case of same-sex couples with children, SWITCH allocates Child Benefit randomly to one member of the couple.

is 42% higher, on average, than women's.

### 3.2 SIMULATING COUNTERFACTUALS

SWITCH uses the SILC data to simulate the disposable income each family would obtain under the current set of income tax and social welfare policies as well as in a counterfactual 'what-if' scenario. For this analysis, SWITCH is used to simulate:

1. disposable income in the 'base' year, i.e. using the 2008 tax and benefit rules;
2. disposable income in an 'intermediate' year, i.e. using the 2012 tax and benefit rules;
3. disposable income in the 'end' year, i.e. using the 2018 tax-benefit system.

In each case, the population is held constant at the 2018 structure. This allows us to abstract from any compositional changes to the population between 2008 and 2018 and focus solely on the effect of different tax benefit systems on the same population. In line with best practice in this literature,<sup>13</sup> we index the 2008 tax-benefit parameters in line with earnings growth between 2008 and 2018 and the 2012 tax-benefit parameters in line with earnings growth between 2012 and 2018.<sup>14</sup> This is necessary in order to avoid artificial fiscal drag or bracket creep, which would arise if we applied the parameters of a budget based on 2008 or 2012 prices to a population whose income is expressed in 2018 prices.

We decompose the change in disposable income into the relative contributions of tax reform, Child Benefit reform and other welfare reform. To do this, we need to make use of a number of further 'counterfactual' income distributions. To decompose 'austerity' budget changes (2008–2012), we define two counterfactual income distributions. We apply to the 2018 population:

1. 2008 indexed Child Benefit policies, together with indexed 2012 other welfare and taxation policies;
2. 2008 indexed Child Benefit and other welfare policies, together with indexed 2012 taxation policies.

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<sup>13</sup> See Callan et al. (2001), Immervoll (2005), Gutierrez et al. (2005), Sutherland et al. (2008), Bargain and Callan (2010), De Agostini et al. (2014) and Bargain (2014) for extensive discussion of this issue.

<sup>14</sup> Earnings growth between 2008 and 2018 is calculated using weekly earnings growth between 2008 and 2016 from the Earnings, Hours and Employment Costs Survey and ESRI GNP growth estimates for 2017 and 2018 (Quarterly Economic Commentary, summer 2017 issue).

Computing the difference between the ‘base’ year (2008) disposable income distribution, these ‘counterfactual’ income distributions and the ‘intermediate’ year disposable income distribution gives the effect of reform to Child Benefit, other welfare and taxation between 2008 and 2012 on the income distribution. The same logic is applied to the ‘recovery’ (2012–2018) period so that the gender impact of Child Benefit, other welfare and tax reform can be separately identified for the two time periods.

### 3.3 INCOME POOLING RULES

Quantifying the gender impact of tax-benefit policy changes is straightforward for single men and women. However, a nuanced approach is necessary to study the gender impact of budgetary changes on men and women in couples, who make up over one-third of tax units in Ireland. Most analyses of income distribution are carried out at the household level, under the assumption that income is fully shared within the household. Under this assumption, policy changes have exactly the same impact on the man and the woman in a couple. There is evidence as described in Section 2.2, however, that income is not perfectly pooled between members of a couple. In these circumstances, policy changes that affect the individual incomes unequally may then have an impact, which is not ‘smoothed away’ by income pooling.

Results from Watson et al. (2013), described in Section 2.2, point to a large degree of income sharing within Irish couples. However, even in the case of full income sharing and as argued in Section 2.2, the question of who receives the income can have implications for consumption and bargaining power. Certainty on the issue of income sharing is not possible with the type of survey data we use, but approximate bounds on policy impacts for men and women can be found using:

1. aggregate income change for the couple as an indicator of the impact if there is full income sharing;
2. changes in individual income as an indicator of the impact if there were to be no income sharing.

We focus on tax units (as defined in Chapter 1) and follow the approach of Webb (1993) and Duncan et al. (1994), in that we exclude dependent children (children under 16, or under 18 if they are in education) from the analysis while any income pertaining to them (such as child-related benefits) is either allocated to the adult who states that they receive it or, in the case of Child Benefit and the Early Child Care Supplement, to the woman in a couple. To allocate other income between members of a couple, we use the information contained in the SILC data about which member of the couple is in physical receipt or payment of the particular

income type. Detailed information about the allocation of income in SWITCH is provided in Appendix A. Single adults, including children aged 16 or over (or 18 or over if they are in education), are treated as separate tax units.

## CHAPTER 4

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### Irish tax-benefit policy 2008–2018

This chapter documents the changes to tax and welfare between 2008 and 2018 that we simulate using SWITCH.

#### 4.1 REFORMS TO TAX AND OTHER DEDUCTIONS

Table 4.1 shows the rates, bands and main tax credits for income tax in 2008, 2012 and 2018. The standard rate of tax was stable over the past decade, but the higher rate of tax was one percentage point lower in 2012 and 2018. However, in 2012 tax units became liable to this higher rate of tax at a lower level of earnings. By 2018, this threshold had risen somewhat but was not back to its 2008 level. Most tax credits decreased between 2008 and 2012 and remained at that level in 2018. Changes to PRSI and other deductions are discussed below.

TABLE 4.1 TAX RATES, BANDS AND CREDITS

	2008	2012	2018
<b>Rates</b>			
Lower rate	20%	20%	20%
Higher rate	41%	40%	40%
<b>Bands</b>			
Singles	€35,400	€32,800	€34,500
Lone parents	€39,400	€36,800	€38,550
One-earner couples	€44,400	€41,800	€43,500
Maximum increase for two-earner couples	€26,400	€23,800	€25,600
<b>Tax credits</b>			
Age Tax Credit	€325	€245	€245
Maximum Home Carer's Tax Credit	€900	€810	€1,200
Employee Tax Credit	€1,830	€1,650	€1,650
Personal Tax Credit	€1,830	€1,650	€1,650
Single Person Child Carer Credit	€1,830	€1,650	€1,650
Maximum Earned Income Credit	€0	€0	€1,150
Widowed Person Tax Credit	€2,430	€2,190	€2,190
Widowed Parent Tax Credit	€1,830	€1,650	€1,650
<b>Other</b>			
Exemption limit if 65 or over	€20,000	€18,000	€18,000
Income ceiling on pension contributions relief	€275,239	€115,000	€115,000

*Note:* Single Person Child Carer Credit was formerly known as One-Parent Family Tax Credit. Widowed Person Tax Credit and Widowed Parent Tax Credit are shown for the years after the bereavement year (Widowed Person Tax Credit) and from the sixth year after death (Widowed Parent Tax Credit), since the year of death is not collected in the SILC and therefore cannot be used in SWITCH.

In addition to these changes, Mortgage Interest Relief was subject to a structural change in 2012. Previously based on the age of the mortgage, entitlement to this relief now depends on the specific year the mortgage was taken out. As a result, only mortgages taken out between 2004 and 2012 qualify for the relief, which is being phased out on a tapered basis and is due to end in 2021.

## PRSI

As SWITCH models all PRSI contributions as Class A, Class B or Class S contributions due to data limitations, we focus on changes in these classes, which mainly occurred in 2011 and 2013.

In 2011, annual pay ceilings for PRSI contributions were abolished and rate changes for the top weekly pay band in Class A and Class B meant that overall contributions were reduced for those contributors. By contrast, the Class S rate rose one percentage point to 4%. In 2013, reductions in reckonable income for PRSI contributions were ended, and the minimum contribution for Class S contributors was doubled to €500 per annum.

More recently, a tapered credit was introduced in 2016 for Class A contributors earning between €352.01 and €424 a week, reducing their PRSI contributions by up to €12 per week and thereby smoothing the transition from the exempted weekly pay band to the following band.

### **Local Property Tax and other**

An annual charge on non-principal private residences of €200 was introduced in 2009, and a separate household charge of €100 per annum was put in place for the year 2012. Both were replaced by Local Property Tax in 2013, which is based on the market value of properties on 1 May 2013.

In 2009, the Income Levy was introduced in Ireland. This and the Health Levy were replaced in 2011 by the Universal Social Charge (USC). Reductions to the level of the USC took place from 2015 onwards. SWITCH also accounts for the introduction of the Pension-Related Deduction for public sector workers in 2009.<sup>15</sup>

## **4.2 WELFARE REFORMS**

Table 4.2 shows the percentage change in welfare rates between 2008 and 2018, distinguishing between austerity and recovery budgets. The most common pattern observed is a decrease in the benefit rate in the austerity period followed by a symmetric increase in the recovery period so that personal rates in 2018 are broadly at their 2008 levels, failing to keep up with the estimated 7.8% earnings growth over the same period. Exceptions are State Pensions and Carer's Allowance for elderly recipients, which increased broadly in line with wages, and Jobseeker's Allowance, which decreased substantially for younger recipients. Increases for qualified children have risen significantly and equally across all schemes, while increases for qualified adults have mainly targeted the elderly.

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<sup>15</sup> Water Charges, which have also been modelled in SWITCH, were introduced in 2015 and repealed shortly after. As a result, they do not play a role in any of the years we analyse (2008, 2012 and 2018).

TABLE 3.2 PERCENTAGE CHANGE IN WELFARE RATES BETWEEN 2008 AND 2018

	2008 to 2012		2012 to 2018		Total	
	PR	IQA	PR	IQA	PR	IQA
Blind Pension						
Under 66	-5	-5	5	5	0	0
66 or over	3	3	6	6	9	9
Carer's Allowance						
Under 66	-5		5		0	
66 or over	3		5		9	
Carer's Benefit						
	-5		5		0	
Deserted Wife's Allowance						
Under 66	-5		5		0	
66 or over	3		6		9	
Deserted Wife's Benefit						
Under 66	-5		5		0	
66 or over	3		6		9	
Disability Allowance						
	-5	-5	5	5	0	0
Disablement Benefit						
Under 66	-4		5		0	
66 or over	-4		6		1	
Domiciliary Care Allowance						
	0		3		3	
Guardian's payments						
	-5		12		6	
Illness Benefit						
	-5	-5	5	5	0	0
Injury Benefit						
	-5	-5	5	5	0	0
Invalidity Pension						
Under 66	-5	-5	5	5	0	0
66 or over	3	3	6	6	9	9
Jobseeker's Allowance						
18 to 21	-49	-24	8	8	-46	-18
22 to 24	-27	-5	-25	-14	-46	-18
Age 25	-5	-5	-19	5	-23	0
26 or over	-5	-5	5	5	0	0
Jobseeker's Benefit						
	-5	-5	5	5	0	0
One-Parent Family Payment						
	-5		5		0	
State Contributory Pension						



	2008 to 2012		2012 to 2018		Total	
Under 66 (adult dependant)	3	3	6	4	9	8
66 or over (adult dependant)	3	3	6	6	9	9
<b>State Non-Contributory Pension</b>						
Under 66 (adult dependant)	3	3	6	5	9	8
66 or over (adult dependant)	3	3	6	6	9	9
<b>Supplementary Welfare Allowance</b>	-6	-5	5	5	-1	0
<b>Contributory Pension for Widow(er)s</b>						
Under 66	-5		5		0	
66 or over	3		6		9	
<b>Non-contributory Pension for Widow(er)s</b>						
Under 66	-5		5		0	
66 or over	3		6		9	
<b>Other</b>						
Increase for a qualified child	24		7		33	
Living Alone Allowance	0		33		33	

*Note: PR indicates Personal Rate and IQA indicates the increase for qualified adults. The age categories 'under 66' and '66 or over' apply to the claimant for personal rates and the adult dependant for the increase for a qualified adult. The changes in the increase for a qualified child apply to all schemes where such an increase is payable. Empty cells indicate 'not applicable'. Jobseeker's Allowance is now the same for all claimants aged between 18 and 24.*

In addition to these changes, the Christmas Bonus was suspended by the 2009 Supplementary Budget but reintroduced in 2015 and gradually increased to 85% of the personal rate or €20, whichever is greater.

There have also been more structural changes. On family support, the Child Benefit rates were €160 each for the first two children and €195 for subsequent children. These rates were gradually reduced and standardised and now stand at €140 per child per month. The upper age limit of eligible children in education was brought down from 18 to 17 by Budget 2009 with effect in 2010. In a similar development, Maternity Benefit became a flat weekly rate in 2014 and now stands at €240.

The Working Family Payment (formerly known as Family Income Supplement) saw its income limits increase, implying a fall in the rate for families just above the previous thresholds, with most of that increase occurring in the austerity period. Income limits also rose for Back to School Clothing and Footwear Allowance combined with lower rates and a shorter age range for eligible children.

Another important change was the reduction of the upper age limit of children for

the One-Parent Family Payment from 18 to seven in 2013 and the fall in the earnings disregard from €146.50 to €130. To partly counterbalance the former change, Budget 2015 introduced the Jobseeker's Transitional Payment, which has an upper age limit for qualified children of 13. Budget 2015 also introduced Back to Work Family Dividend, aimed at encouraging certain social welfare recipients to take up work with continued support for up to two years. Finally, the Early Childcare Supplement was replaced in 2010 by a free pre-school year under the Early Childhood, Care and Education Scheme. This has now been rolled out to all children aged between two years and eight months and five years and six months for up to two full academic years.

On housing, changes were made to Rent or Mortgage Interest Supplement, Fuel Allowance and the Household Benefits Package. Rent limits for Rent Supplement fell in the period from 2008 to 2012 and rose subsequently. The minimum contribution towards rent, or repayments in the case of Mortgage Interest Supplement, was increased from €13 to €30 for singles, and to €40 for couples, along with the earnings disregards, with most of these changes occurring in the austerity period. Mortgage Interest Supplement is closed to new applications since 2014 but continued to be paid until the end of 2017 and is still paid to recipients who were eligible at that time under the Supplementary Welfare Allowance Scheme. For simplicity, we do not model Mortgage Interest Supplement for 2018.

Fuel Allowance was raised but is now received for a shorter period and income limits were raised. The Household Benefits Package, Smokeless Fuel Allowance and Phone Allowance were discontinued, and other Household Benefits Package allowances were reduced.

Lastly, note that we cannot identify the effect of changes to public sector pay or pensions that occurred during austerity budgets, due to our focus on the market income of the 2018 population. Changes to eligibility requirements for GP Visit Cards and Medical Card entitlements are also not accounted for in this analysis given that our focus is on cash benefits.

## CHAPTER 5

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### Results

This chapter presents the gender impact of Irish budgetary policy between 2008 and 2018. The income changes presented here should be interpreted as the effect of moving from one set of policies to another for the same population. They do not represent actual changes for the period in question, from which it would be difficult to separate the policy effect from all other changes (market income shocks, changes in labour supply and demand, etc.). Fixing the population at 2018, however, allows us to evaluate the gender impact of policy changes separately from other changes over the same period.

#### 5.1 AVERAGE INCOME CHANGES FOR SINGLES

We first assess the gender impact of budgetary changes between 2008 and 2018 for singles. Table 5.1 shows the percentage change in disposable income for this group when moving from 2008 to 2012 policies, distinguishing between singles with no children, lone parents and retired singles. Table 5.2 shows the same figures when moving from 2012 to 2018 policies.

Budgetary changes during the austerity period resulted in a loss in disposable income of 7% for singles with no children. This loss is split relatively equally between single men (6.9%) and women (7.2%) with no children. Looking at lone parents, this group lose an average of 7.8% with 2012 policies compared to 2008 policies. Notably, using the pooled 2013/14 SILC data allows us to compare lone female and lone male parents, albeit in a limited manner. This was not the case in previous work by Keane, Callan and Walsh (2014) due to the small number of male lone parents observed in a single wave of SILC data. In this case, female lone parents, who represent a significantly larger group, lose slightly more (7.9%) than male lone parents (7%). However, due to the small sample of male lone parents present in the data, this difference should be interpreted with some caution. Lastly, singles who are retired lose less than the other groups, at an average of 3.8%. In this case, however, it is men who lose relatively more (5.1%) than women (3%).

Looking at the recovery period of 2012–2018 in Table 5.2, we note much smaller changes to disposable income for all groups of singles due to budgetary changes. Working-age singles gain slightly over this period (0.7%), while working-age lone parents and singles aged over 65 lose slightly (3.3% and 1.1% respectively). Aside from the fact that lone parents, who are mainly women, lost the most, there are no major robust gender patterns to these changes.

TABLE 4.1 PERCENTAGE CHANGE IN SINGLE TAX UNITS' DISPOSABLE INCOME AS A RESULT OF 2012 POLICIES RELATIVE TO 2008 POLICIES BY TAX UNIT TYPE AND POLICY TYPE

Tax unit type	Average % change			
	Tax	Child Benefit	Other welfare	Total
Working-age singles without children	-6.3	0.0	-0.7	-7.0
Of which men	-6.2	0.0	-0.7	-6.9
Of which women	-6.4	0.0	-0.7	-7.2
Working-age lone parents	-5.2	-1.8	-0.8	-7.8
Of which men	-5.5	-1.7	0.2	-7.0
Of which women	-5.1	-1.8	-1.0	-7.9
Singles aged 65 or over	-4.4	0.0	0.6	-3.8
Of which men	-5.4	0.0	0.4	-5.1
Of which women	-3.6	0.0	0.7	-3.0

Source: Authors' calculations using SWITCH, based on pooled SILC data from 2013 and 2014, reweighted to represent the 2018 population.

Note: These estimations were obtained by comparing the distributions of disposable income at the tax unit level under the 2008 system (indexed to earnings growth between 2008 and 2018) and the 2012 system (indexed to earnings growth between 2012 and 2018). Grey-highlighted results indicate a sample size between 30 and 50.

TABLE 5.2 PERCENTAGE CHANGE IN SINGLE TAX UNITS' DISPOSABLE INCOME AS A RESULT OF 2018 POLICIES RELATIVE TO 2012 POLICIES BY TAX UNIT TYPE AND POLICY TYPE

Tax unit type	Average % change			
	Tax	Child Benefit	Other welfare	Total
Working-age singles without children	1.0	0.0	-0.3	0.7
Of which men	1.2	0.0	-0.3	0.9
Of which women	0.7	0.0	-0.3	0.4
Working-age lone parents	0.2	-0.8	-2.6	-3.3
Of which men	0.7	-0.8	-1.5	-1.5
Of which women	0.1	-0.8	-2.8	-3.6
Singles aged 65 or over	0.0	0.0	-1.0	-1.1
Of which men	0.4	0.0	-0.8	-0.4
Of which women	-0.3	0.0	-1.2	-1.5

Source: Authors' calculations using SWITCH, based on pooled SILC data from 2013 and 2014, reweighted to represent the 2018 population.

Note: These estimations were obtained by comparing the distributions of disposable income at the tax unit level under the 2012 system (indexed to earnings growth between 2012 and 2018) and the 2018 system. Grey-highlighted results indicate a sample size between 30 and 50.

Tables 5.1 and 5.2 also decompose these average changes into three components – the part attributable to changes in tax policy, the part attributable to changes to Child Benefit and the part attributable to changes in other welfare policy between 2008 and 2018. In all cases, most of the average decrease in disposable income observed in the austerity period comes from changes to tax policy. The only observable gender pattern to this change is among singles aged over 65. For this group, tax policy changes affected men more than women. This is likely to be due

to the interaction of a higher average tax rate with the higher income of men compared to women in retirement. In addition to tax policy, changes to Child Benefit also affected the disposable income of lone parents during the austerity period.

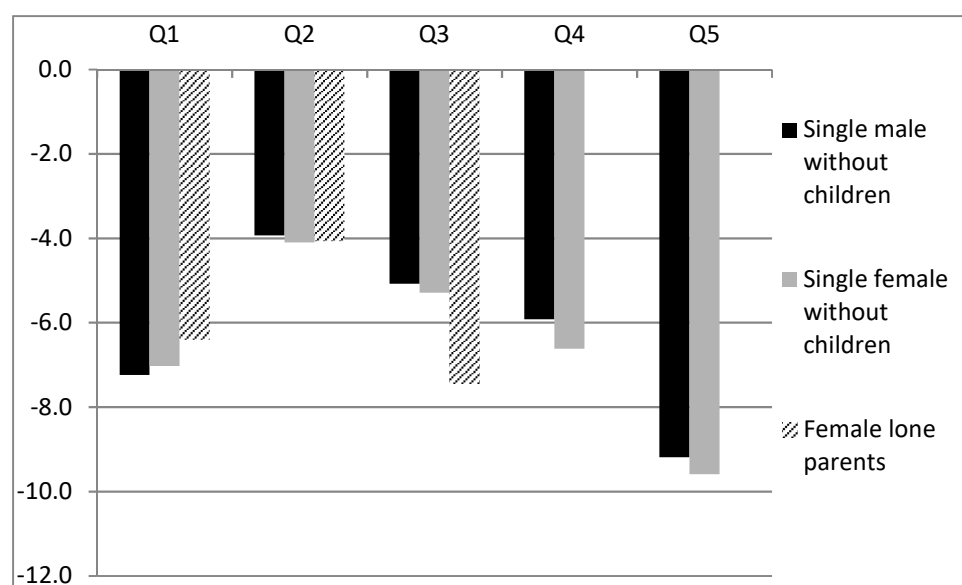
During the recovery period, tax changes led to small gains for most groups of singles. The fall in disposable income of lone parents over this period was mainly due to changes in other welfare. This is likely to be attributable to the tighter eligibility rules for the One Parent Family payment.

## 5.2 DISTRIBUTIONAL INCOME CHANGES FOR SINGLES

Moving beyond the average to study income losses by equivalised disposable income quintile,<sup>16</sup> Figure 5.1 shows the distribution of changes in disposable income for singles under 2012 policies compared to 2008 policies. For singles without children, losses are more concentrated at the bottom and top of the distribution for both genders, with the middle quintiles losing relatively less than the tails of the income distribution. Losses are relatively evenly distributed between men and women. For lone parents, a gender comparison by quintile is not possible due to the small number of male lone parents per quintile in the SILC data. However, we observe that, compared to 2008 policies, under 2012 policies, female lone parents lose the same in the bottom two quintiles but more in the middle quintile than either single men or single women without children.

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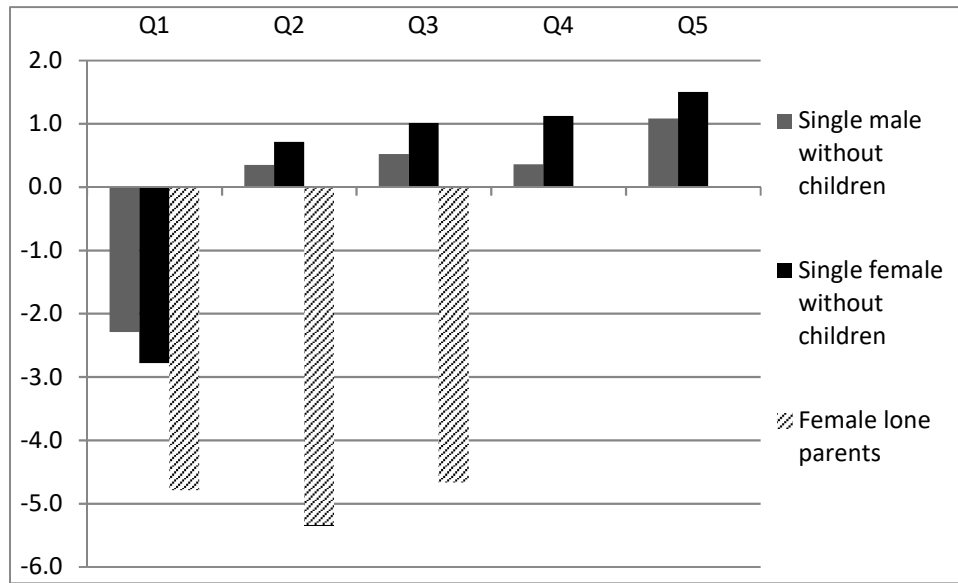
<sup>16</sup> Disposable income adjusted to take account of the size of the household using the national equivalence scale. This scale attributes a weight of 1 to the first adult in a household, 0.66 to each subsequent adult (aged 14+ living in the household) and 0.33 to each child aged less than 14.

**FIGURE 5.1 PERCENTAGE CHANGE IN SINGLE TAX UNITS' DISPOSABLE INCOME AS A RESULT OF 2012 POLICIES RELATIVE TO 2008 POLICIES BY TAX UNIT TYPE AND TAX UNIT INCOME QUINTILE**

*Source:* Authors' calculations using SWITCH, based on pooled SILC data from 2013 and 2014, reweighted to represent the 2018 population.

*Note:* These estimates were obtained by comparing the distributions of disposable income at the tax unit level under the 2008 system (indexed to earnings growth between 2008 and 2018) and the 2012 system (indexed to earnings growth between 2012 and 2018). The quintiles relate to equivalised disposable income at the tax unit level. There are too few female lone parents in quintiles 4 and 5 to report these results.

Figure 5.2 shows the same picture when moving from 2012 to 2018 policies. In the bottom quintile, female lone parents lose more than single men and single women without children. The pattern of loss is reversed in quintiles 2–5 for single men and women without children, who gain 1–1.5% of disposable income. However, losses among female lone parents are large and persistent up to quintile 3.

**FIGURE 5.2 PERCENTAGE CHANGE IN SINGLE TAX UNITS' DISPOSABLE INCOME AS A RESULT OF 2018 POLICIES RELATIVE TO 2012 POLICIES BY TAX UNIT TYPE AND TAX UNIT INCOME QUINTILE**

*Source:* Authors' calculations using SWITCH, based on pooled SILC data from 2013 and 2014, reweighted to represent the 2018 population.

*Note:* These estimates were obtained by comparing the distributions of disposable income at the tax unit level under the 2012 system (indexed to earnings growth between 2012 and 2018) and the 2018 system. The quintiles relate to equivalised disposable income at the tax unit level. There are too few female lone parents in quintiles 4 and 5 to report these results.

Decomposing these distributional effects into the relative contributions of changes to taxes and changes to benefits, some clear patterns emerge in Tables 5.3 and 5.4. Looking first at single men and women without children, changes to other welfare between 2008 and 2012 are responsible for most of the decrease in disposable income at the bottom of the income distribution. At the top of the income distribution, changes to tax policy are responsible for the observed decreases in disposable income. The distribution of disposable income changes for lone parents, although much larger, displays a somewhat similar pattern. Changes to welfare payments (which include tighter eligibility for the one-parent family) and Child Benefit account for a significant proportion of the decrease in disposable income for lone parents in the bottom three quintiles of disposable income.<sup>17</sup>

Changes to tax policy between 2012 and 2018 resulted in small gains to disposable income throughout the income distribution for singles without children but not for lone parents, who are less likely to be in employment (Table 1). Changes to other welfare and Child Benefit resulted in losses for lone parents throughout the income distribution.

<sup>17</sup> Results for lone parents in the fourth and fifth quintiles are not shown due to the small number of observations in these categories.

TABLE 5.3 PERCENTAGE CHANGE IN SINGLE TAX UNITS' DISPOSABLE INCOME AS A RESULT OF 2012 POLICIES RELATIVE TO 2008 POLICIES BY POLICY TYPE, TAX UNIT TYPE AND TAX UNIT INCOME QUINTILE

Tax unit type	Average % change					
	Q1	Q2	Q3	Q4	Q5	All
<b>Working-age singles without children</b>						
<i>Women</i>	-7.0	-4.1	-5.3	-6.6	-9.6	-7.1
Of which tax	-1.1	-3.5	-5.0	-6.5	-9.5	-6.4
Of which Child Benefit*	0.0	-0.2	0.0	0.0	0.0	0.0
Of which other welfare	-5.9	-0.4	-0.3	-0.1	-0.1	-0.7
<i>Men</i>	-7.2	-3.9	-5.1	-5.9	-9.2	-6.9
Of which tax	-1.1	-3.5	-5.0	-5.8	-9.0	-6.2
Of which Child Benefit*	0.0	0.0	0.0	0.0	-0.1	0.0
Of which other welfare	-6.3	-0.4	-0.2	-0.1	-0.1	-0.7
<b>Working-age lone parents</b>						
<i>Women</i>	-6.4	-4.1	-7.5	-10.3		-7.8
Of which tax	-0.6	-1.5	-4.6			-5.1
Of which Child Benefit	-3.6	-2.3	-1.6			-1.8
Of which other welfare	-2.1	-0.5	-1.3			-1.0
<i>Men</i>						-6.9
Of which tax						-5.5
Of which Child Benefit						-1.7
Of which other welfare						0.2

Source: Authors' calculations using SWITCH, based on pooled SILC data from 2013 and 2014, reweighted to represent the 2018 population.

Notes: These figures were obtained by comparing the distributions of disposable income at the tax unit level under the 2008 system (indexed to earnings growth between 2008 and 2018) and the 2012 system (indexed to income growth between 2012 and 2018). The quintiles relate to equivalised disposable income at the tax unit level. Blank cells indicate fewer than 30 observations and grey cells indicate between 30 and 50 observations.

\* From 2010 onwards, the upper age limit of children in education eligible for Child Benefit decreased from 18 to 17. As our definition of dependent children follows the contemporary rules for Child Benefit (<16 or <18 if in education), this change results in a loss of disposable income to singles without dependent children who lose Child Benefit for their 18-year-old children.



TABLE 5.4 PERCENTAGE CHANGE IN SINGLE TAX UNITS' DISPOSABLE INCOME AS A RESULT OF 2018 POLICIES RELATIVE TO 2012 POLICIES BY POLICY TYPE, TAX UNIT TYPE AND TAX UNIT INCOME QUINTILE

Tax unit type	Average % change					
	Q1	Q2	Q3	Q4	Q5	All
<b>Working-age singles without children</b>						
<i>Women</i>	-2.3	0.4	0.5	0.4	1.1	0.4
Of which tax	-0.2	0.7	0.7	0.5	1.1	0.7
Of which Child Benefit	0.0	0.0	0.0	0.0	0.0	0.0
Of which other welfare	-2.1	-0.4	-0.2	-0.2	-0.1	-0.3
<i>Men</i>	-2.8	0.7	1.0	1.1	1.5	0.9
Of which tax	-0.2	1.1	1.1	1.2	1.6	1.2
Of which Child Benefit	0.0	0.0	0.0	0.0	0.0	0.0
Of which other welfare	-2.8	-0.3	-0.1	-0.1	0.0	-0.3
<b>Working-age lone parents</b>						
<i>Women</i>	-4.8	-5.3	-4.7	0.0		-3.6
Of which tax	-0.3	0.2	-0.2			0.1
Of which Child Benefit	-1.8	-1.0	-0.7			-0.8
Of which other welfare	-2.8	-4.2	-4.2			-2.8
<i>Men</i>						-1.5
Of which tax						0.7
Of which Child Benefit						-0.8
Of which other welfare						-1.5

Source: Authors' calculations using SWITCH, based on pooled SILC data from 2013 and 2014, reweighted to represent the 2018 population.

Notes: These figures were obtained by comparing the distributions of disposable income at the tax unit level under the 2012 system (indexed to earnings growth between 2012 and 2018) and the 2018 system. The quintiles relate to equivalised disposable income at the tax unit level. Blank cells indicate fewer than 30 observations and grey cells indicate between 30 and 50 observations.

### 5.3 AVERAGE INCOME CHANGES FOR COUPLES

We next move to estimating the gender impact of 2018 policies compared to 2008 policies on couples. As discussed in Section 3.3, we alternatively assume full income sharing or no income sharing within couples. The individual or no income sharing approach should not be regarded as a realistic measure of economic welfare, as previous research has shown a large degree of income sharing within households. The 'true' change in disposable income for members of a couple is likely to lie between the bounds given by the full income sharing and no income sharing concept, but closer to the former.

TABLE 5.5 PERCENTAGE CHANGE IN DISPOSABLE INCOME AS A RESULT OF 2012 POLICIES RELATIVE TO 2008 POLICIES BY POLICY TYPE AND COUPLE TYPE

	Average % change					
	Without children			With children		
	Retired	Other	All	Retired	Other	All
<i>Full income sharing assumption</i>	-3.3	-8.0	-6.0		-8.9	-8.8
Of which tax	-4.0	-7.5	-6.0		-6.7	-6.7
Of which Child Benefit*	0.0	-0.1	-0.1		-1.5	-1.5
Of which other welfare	0.8	-0.4	0.1		-0.8	-0.8
<i>No income sharing: women</i>	-2.5	-8.1	-6.0		-11.9	-11.9
Of which tax	-3.5	-7.3	-5.8		-5.8	-5.9
Of which Child Benefit*	-0.1	-0.4	-0.3		-3.8	-3.8
Of which other welfare	1.1	-0.5	0.1		-2.8	-2.7
<i>No income sharing: men</i>	-3.6	-7.9	-6.0		-7.0	-7.0
Of which tax	-4.3	-7.6	-6.1		-7.3	-7.3
Of which Child Benefit*	0.0	0.0	0.0		0.0	0.0
Of which other welfare	0.7	-0.3	0.1		0.3	0.3

Source: Authors' calculations using SWITCH, based on pooled SILC data from 2013 and 2014, reweighted to represent the 2018 population.

Notes: These figures were obtained by comparing the distributions of disposable income at the tax unit level under the 2008 system (indexed to earnings growth between 2008 and 2018), and the 2012 system (indexed to earnings growth between 2012 and 2018). 'Retired couples' are couples where at least one is aged 65 or over. Blank cells indicate that the sample size is too small to report results.

\* From 2010 onwards, the upper age limit of children in education eligible for Child Benefit decreased from 18 to 17. As our definition of dependent children follows the contemporary rules for Child Benefit (<16 or <18 if in education), this change results in a loss of disposable income to singles without dependent children who lose Child Benefit for their 18-year-old children.

Table 5.6 shows the effect of moving from the set of tax-benefit policy rules in place in 2008 to those in place in 2012 on couples, distinguishing between couples with and without children and between those in which at least one member is over 65 years of age and all other couples. This age distinction is of interest as Table 4.2 showed that that only benefits paid to those of retirement age systematically kept pace with earnings growth over the period in question. Therefore, we expect sharper losses for those under 65.

Turning our attention first to working-age couples and assuming full income sharing within a couple, the average decrease in disposable income for each member of a couple under 2012 policies compared to 2008 policies is 8% for those without children and 8.9% for those with children. Decomposing this figure into the relative contributions of changes in taxes and benefits, most of this decrease comes through the taxation system with a small proportion of the change for couples with children attributable to changes in Child Benefit (-1.5%) and other welfare (-0.8%).

Assuming no income sharing, the change in disposable income is –8.1% for women in couples without children and –11.9% for women in couples with children. These figures can be compared to losses of 7.9% for men in couples without children and 7% for men in couples with children. Under a no income sharing assumption, the main gender difference is, therefore, between men and women with children. While men with children lose more than women with children due to tax changes during the austerity period, this is more than counteracted by the fact that women with children lose more than men with children due to changes to Child Benefit and other welfare.

TABLE 5 PERCENTAGE CHANGE IN DISPOSABLE INCOME AS A RESULT OF 2018 POLICIES RELATIVE TO 2012 POLICIES BY POLICY TYPE AND COUPLE TYPE

	Average % change					
	Without children			With children		
	Retired	Other	All	Retired	Other	All
<i>Full income sharing assumption</i>	–1.4	0.4	–0.4		–1.2	–1.2
Of which tax	–0.4	0.7	0.2		0.5	0.5
Of which Child Benefit	0.0	0.0	0.0		–0.6	–0.6
Of which other welfare	–1.0	–0.3	–0.6		–1.1	–1.1
<i>No income sharing: women</i>	–2.3	0.0	–0.9		–4.1	–4.1
Of which tax	–0.7	0.4	–0.1		–0.4	–0.4
Of which Child Benefit	0.0	0.0	0.0		–1.7	–1.7
Of which other welfare	–1.6	–0.3	–0.9		–2.0	–2.0
<i>No income sharing: men</i>	–1.1	0.6	–0.1		0.5	0.5
Of which tax	–0.3	0.9	0.4		1.1	1.1
Of which Child Benefit	0.0	0.0	0.0		0.0	0.0
Of which other welfare	–0.8	–0.3	–0.5		–0.6	–0.6

Source: Authors' calculations using SWITCH, based on pooled SILC data from 2013 and 2014, reweighted to represent the 2018 population.

Note: These figures were obtained by comparing the distributions of disposable income at the tax unit level under the 2012 system (indexed to earnings growth between 2012–2018), and the 2018 system. 'Retired couples' are couples where at least one is aged 65 or over. Blank cells indicate that the sample size is too small to report results.

Looking at the recovery period in Table 5.6, gains and losses from budgetary policy are small and relatively gender neutral for working-age men and women without children, regardless of the income sharing assumption. Among couples with children, women lose relatively more than men in the no income sharing assumption (–4.1% compared to +0.5%) and this difference is due to changes to tax policy, Child Benefit and other welfare.

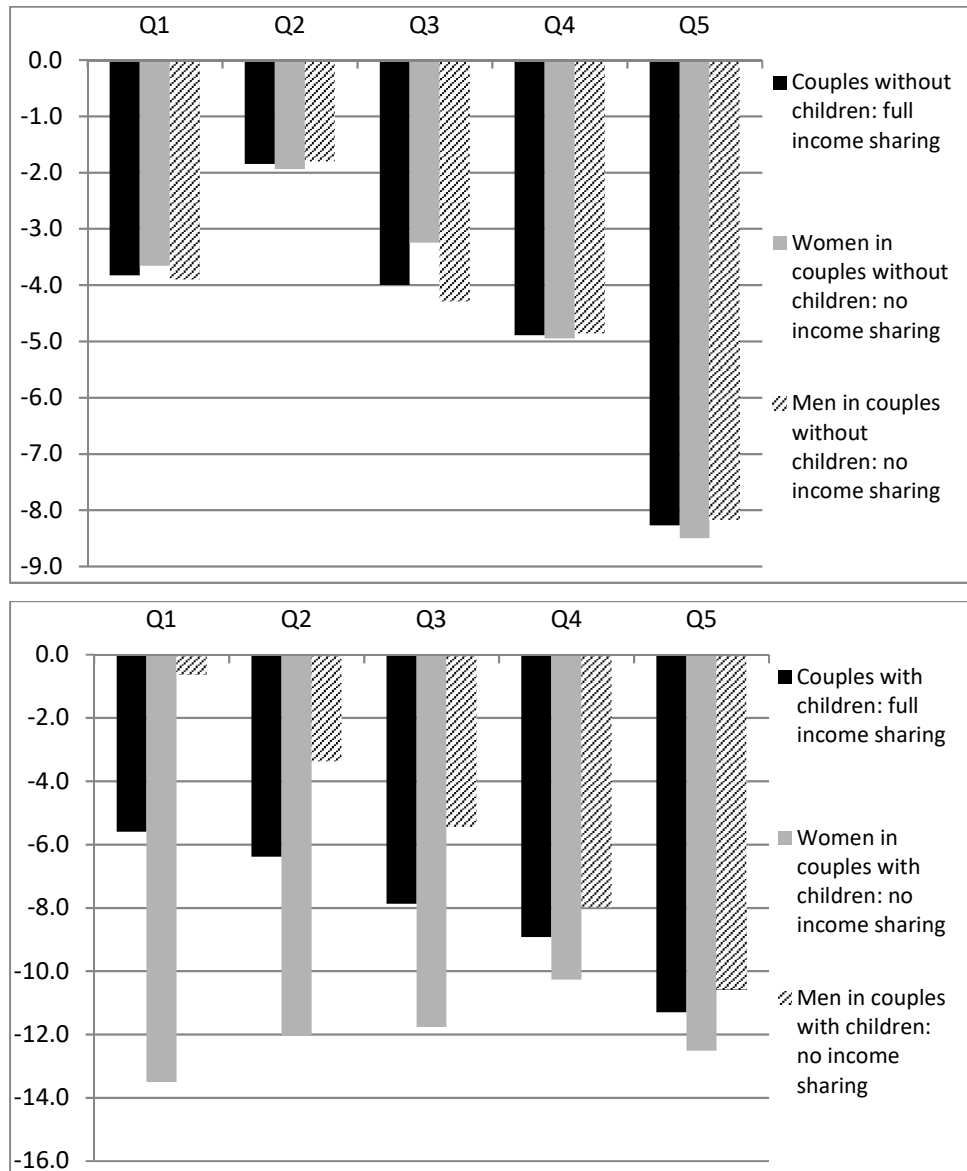
For couples in which at least one member is over the age of 65, losses are much smaller and evenly split by gender. During the austerity period, losses were 3.3% for both members of the couple under full income sharing. Under the no income sharing assumption, men (3.6%) lost slightly more than women (2.5%) and this

difference was driven by tax policy, with changes to welfare (which tended to keep pace with income growth for this group) having little effect on the disposable income of this group. During the recovery period, retired women lost slightly more than men under the no income sharing assumption (2.3% versus 1.1%) and this difference was driven by changes to other welfare policy.

#### **5.4 DISTRIBUTIONAL INCOME CHANGES FOR COUPLES**

Moving beyond average changes in disposable income for members of a couple, we next look at the distribution of changes by disposable income quintile. The top panel of Figure 5.3 shows that losses in disposable income by quintile moving from 2008 to 2012 policies are relatively evenly distributed throughout the income distribution for men and women in couples without children, regardless of the income pooling assumption. The richest couples lose the most while the lowest losses are found in quintile 2. Table 5.7 shows that these losses can largely be attributed to changes to tax policy, with other welfare playing a relatively minor role, except at the bottom of the income distribution.

**FIGURE 5.2 PERCENTAGE CHANGE IN DISPOSABLE INCOME AS A RESULT OF 2012 POLICIES RELATIVE TO 2008 POLICIES BY TAX UNIT INCOME QUINTILE AND GENDER UNDER DIFFERENT INCOME SHARING ASSUMPTIONS**



*Source:* Authors' calculations using SWITCH, based on pooled SILC data from 2013 and 2014, reweighted to represent the 2018 population.

*Note:* These estimates were obtained by comparing the distributions of disposable income at the tax unit level under the 2008 system (indexed to earnings growth between 2008 and 2018) and the 2012 system (indexed to earnings growth between 2012 and 2018). The quintiles relate to equivalised disposable income at the tax unit level.

For men and women with children, represented in the bottom panel of Figure 5.3, the income pooling assumption used changes the impact of the austerity period budgets substantially. Under full income pooling, men and women in couples with children lost least in the bottom quintile but lost more as we move up the income distribution. If income is not pooled between members of a couple, female members of a couple with children lose significantly more than male members, particularly in the bottom half of the income distribution. This is mainly due to changes to Child Benefit, although changes to other welfare also played a role

(Table 5.7). This pattern is most pronounced in the bottom quintile, where moving from 2008 policies to 2012 policies results in a loss of disposable income of 13.5% for female members of a couple compared to 0.6% for male members of a couple. Again, most of this difference is due to changes to Child Benefit while other welfare payments also played a role.

TABLE 5.7 PERCENTAGE CHANGE IN DISPOSABLE INCOME AS A RESULT OF 2012 POLICIES RELATIVE TO 2008 POLICIES BY POLICY TYPE, TAX UNIT INCOME QUINTILE AND GENDER UNDER DIFFERENT INCOME SHARING ASSUMPTIONS

	Average % change					
	Q1	Q2	Q3	Q4	Q5	All
<b>Without children</b>						
<i>Full income sharing</i>	-3.8	-1.9	-4.0	-4.9	-8.3	-6.0
Of which tax	-1.9	-1.9	-4.2	-5.0	-8.3	-6.0
Of which Child Benefit*	-0.1	-0.1	-0.2	-0.1	-0.1	-0.1
Of which other welfare	-2.0	0.2	0.3	0.2	0.1	0.1
<i>No income sharing: women</i>	-3.7	-1.9	-3.3	-5.0	-8.5	-6.0
Of which tax	-2.0	-1.8	-3.1	-4.9	-8.4	-5.8
Of which Child Benefit*	-0.2	-0.4	-0.5	-0.2	-0.2	-0.3
Of which other welfare	-1.6	0.2	0.3	0.1	0.1	0.1
<i>No income sharing: men</i>	-3.9	-1.8	-4.3	-4.9	-8.2	-6.0
Of which tax	-1.9	-2.0	-4.6	-5.0	-8.2	-6.1
Of which Child Benefit*	0.0	0.0	0.0	0.0	0.0	0.0
Of which other welfare	-2.2	0.2	0.3	0.2	0.1	0.1
<b>With children</b>						
<i>Full income sharing</i>	-5.6	-6.4	-7.9	-8.9	-11.3	-8.8
Of which tax	-1.6	-3.3	-5.3	-7.2	-10.1	-6.7
Of which Child Benefit	-3.1	-2.3	-1.8	-1.0	-0.7	-1.5
Of which other welfare	-0.9	-0.7	-1.2	-0.9	-0.6	-0.8
<i>No income sharing: women</i>	-13.5	-12.0	-11.8	-10.3	-12.5	-11.9
Of which tax	-1.4	-2.1	-4.3	-6.1	-9.4	-5.9
Of which Child Benefit	-8.1	-6.3	-4.6	-2.4	-1.7	-3.8
Of which other welfare	-4.4	-4.5	-3.0	-2.1	-1.6	-2.7
<i>No income sharing: men</i>	-0.6	-3.4	-5.5	-8.0	-10.6	-7.0
Of which tax	-1.8	-3.9	-6.0	-8.0	-10.6	-7.3
Of which Child Benefit	0.0	0.0	0.0	0.0	0.0	0.0
Of which other welfare	1.1	1.1	0.0	0.0	0.0	0.3

Source: Authors' calculations using SWITCH, based on pooled SILC data from 2013 and 2014, reweighted to represent the 2018 population.

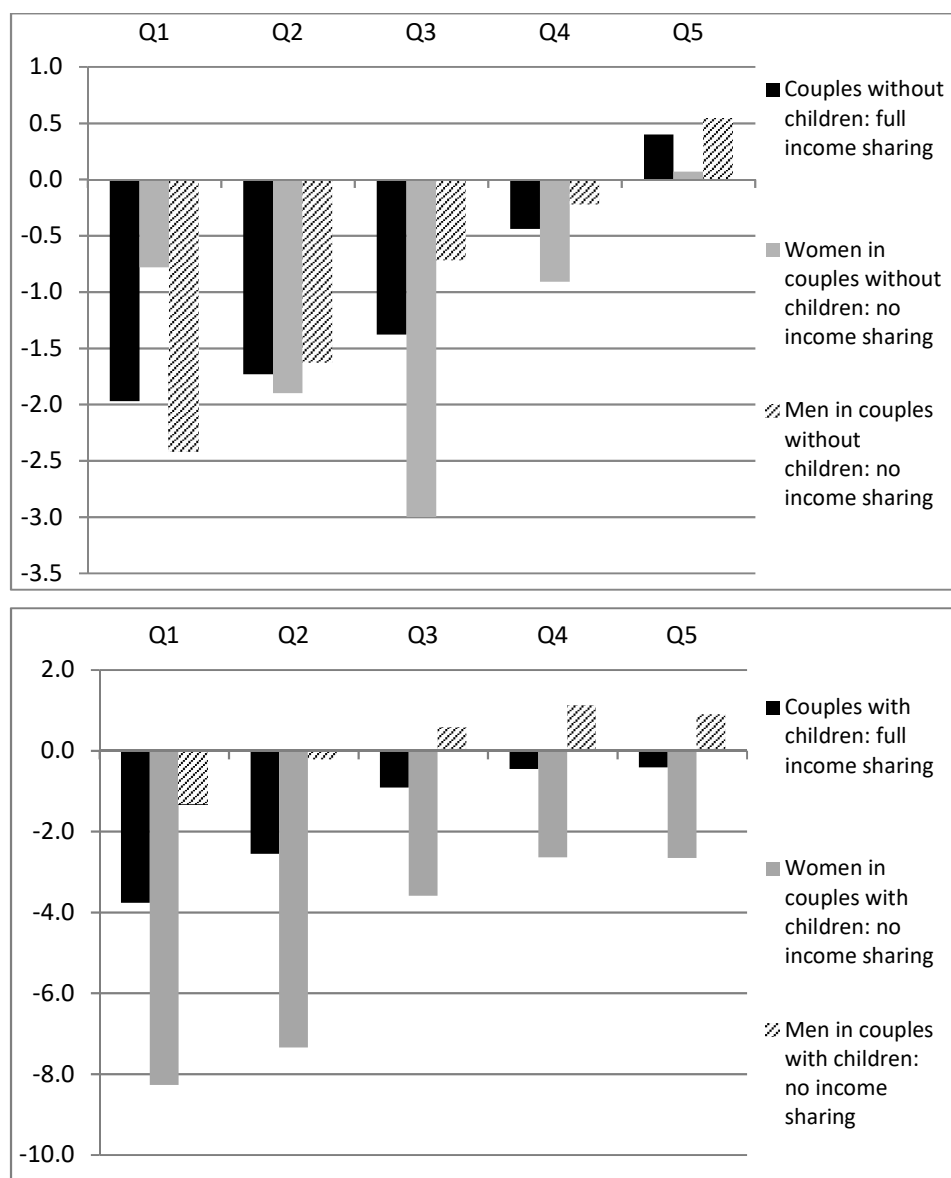
Notes: These figures were obtained by comparing the distributions of disposable income at the tax unit level under the 2008 system (indexed to earnings growth between 2008 and 2018) and the 2012 system (indexed to earnings growth between 2012 and 2018). The quintiles relate to equivalised disposable income at the tax unit level.

\* From 2010 onwards, the upper age limit of children in education eligible for Child Benefit decreased from 18 to 17. As our definition of dependent children follows the contemporary rules for Child Benefit (<16 or <18 if in education), this change results in a loss of disposable income to singles without dependent children who lose Child Benefit for their 18-year-old children.

Figure 5.4 presents the same patterns for the recovery period. Looking first at income changes for couples without children, in the top panel of Figure 5.4, these are strongly negative at the lower end of the income distribution and turn positive in the top quintile. If income is not pooled between members of a couple, men lose more than women in the bottom quintile and Table 5.8 indicates that this is due to

changes to other welfare. As men are more likely than women to be unemployed (Table 3.1), this is likely to be due to reduced Jobseeker's Allowance and Jobseeker's Benefit rates (Table 4.2). Changes are relatively evenly distributed by gender in the second, fourth and fifth quintiles but women lose more than men in quintile 3, with changes to other welfare also responsible for this gender difference.

**FIGURE 5.4 PERCENTAGE CHANGE IN DISPOSABLE INCOME AS A RESULT OF 2018 POLICIES RELATIVE TO 2012 POLICIES BY TAX UNIT INCOME QUINTILE AND GENDER UNDER DIFFERENT INCOME SHARING ASSUMPTIONS**



*Source:* Authors' calculations using SWITCH, based on pooled SILC data from 2013 and 2014, reweighted to represent the 2018 population.

*Note:* These estimates were obtained by comparing the distributions of disposable income at the tax unit level under the 2012 system (indexed to earnings growth between 2012 and 2018) and the 2018 system. The quintiles relate to equivalised disposable income at the tax unit level.



Looking next at changes for couples with children, the bottom panel of Figure 5.4 indicates that, if income was not pooled, women lost more than men at every point of the income distribution in the recovery period, but particularly so at the bottom of the income distribution where average losses for women in couples with children were 8.3% compared to 1.3% for men. Table 5.8 indicates that Child Benefit and, to a lesser extent, other welfare and tax contributed to this discrepancy. Men benefited from changes to tax policy, which increased their disposable income while women incurred relatively large losses due to Child Benefit and other welfare changes.

**TABLE 6** PERCENTAGE CHANGE IN DISPOSABLE INCOME AS A RESULT OF 2018 POLICIES RELATIVE TO 2012 POLICIES BY POLICY TYPE, TAX UNIT INCOME QUINTILE AND GENDER UNDER DIFFERENT INCOME SHARING ASSUMPTIONS

	Average % change					
	Q1	Q2	Q3	Q4	Q5	All
<b>Without children</b>						
<i>Full income sharing</i>	-2.0	-1.7	-1.4	-0.4	0.4	-0.4
Of which tax	-0.3	-0.2	-0.4	0.1	0.6	0.2
Of which Child Benefit	0.0	0.0	0.0	0.0	0.0	0.0
Of which other welfare	-1.8	-1.6	-1.0	-0.5	-0.2	-0.6
<i>No income sharing: women</i>	-0.8	-1.9	-3.0	-0.9	0.1	-0.9
Of which tax	-0.7	-0.3	-0.7	-0.3	0.4	-0.1
Of which Child Benefit	0.0	0.0	0.0	0.0	0.0	0.0
Of which other welfare	-0.5	-1.6	-2.3	-0.6	-0.3	-0.9
<i>No income sharing: men</i>	-2.4	-1.6	-0.7	-0.2	0.5	-0.1
Of which tax	-0.1	-0.1	-0.3	0.3	0.7	0.4
Of which Child Benefit	0.0	0.0	0.0	0.0	0.0	0.0
Of which other welfare	-2.3	-1.6	-0.5	-0.5	-0.2	-0.5
<b>With children</b>						
<i>Full income sharing</i>	-3.8	-2.6	-0.9	-0.5	-0.4	-1.2
Of which tax	0.5	0.6	0.7	0.6	0.4	0.5
Of which Child Benefit	-1.5	-0.9	-0.7	-0.5	-0.3	-0.6
Of which other welfare	-3.0	-2.2	-0.8	-0.6	-0.5	-1.1
<i>No income sharing: women</i>	-8.3	-7.3	-3.6	-2.6	-2.7	-4.1
Of which tax	-0.4	-0.7	-0.1	-0.3	-0.6	-0.4
Of which Child Benefit	-4.3	-2.8	-1.9	-1.1	-0.8	-1.7
Of which other welfare	-3.7	-4.3	-1.4	-1.5	-1.2	-2.0
<i>No income sharing: men</i>	-1.3	-0.2	0.6	1.1	0.9	0.5
Of which tax	0.9	1.2	1.1	1.1	0.9	1.1
Of which Child Benefit	0.0	0.0	0.0	0.0	0.0	0.0
Of which other welfare	-2.6	-1.2	-0.5	0.0	0.0	-0.6

*Source:* Authors' calculations using SWITCH, based on pooled SILC data from 2013 and 2014, reweighted to represent the 2018 population.

*Note:* These figures were obtained by comparing the distributions of disposable income at the tax unit level under the 2012 system (indexed to earnings growth between 2012 and 2018) and the 2018 system. The quintiles relate to equivalised disposable income at the tax unit level.

## 5.5 INCOME CHANGES BY ECONOMIC ACTIVITY

Lastly, we look at the whole population of men and women (singles and couples) and estimate the gender impact of moving from 2008 to 2018 policies by labour force status. For simplicity, results in Tables 5.9 and 5.10 are based solely on the assumption of full income sharing between members of a couple and thus take the less extreme and more realistic view of the gender impact of budgetary policy. Results for the alternative scenario of no income sharing can be found in Tables

B.1 and B.2 in Appendix B.

Looking first at the austerity period in Table 5.9, the loss in disposable income is similar for women (7.1%) and men (7.2). This pattern largely holds for women and men who work (losses of 8.3% and 8.1% respectively), unemployed and inactive women and men (7.6% and 8.2% respectively) and women and men who are retired (3.5% and 4.1% respectively). In the recovery period, Table 5.10 indicates that there are no major gender differentials of budgetary policy for working or retired women and men. However, men of working age who do not work lose more (3.2%) than women of working age who do not work (1.5%) and this difference is driven by changes to ‘other welfare’. As men who do not work are likely to be unemployed while women who do not work are more likely to be inactive, this difference is likely to be driven by the fact that changes to unemployment supports did not keep pace with income growth.

Under the more extreme assumption that income is not pooled between members of a couple, Tables B.1 and B.2 in Appendix B indicate a reversal of this pattern, with women who work losing slightly more than men who work and women who don’t work losing substantially more than men who don’t work. These differences are mainly due to changes to Child Benefit over both the austerity and recovery periods.

**TABLE 5.9** PERCENTAGE CHANGE IN INDIVIDUAL DISPOSABLE INCOME AS A RESULT OF 2012 POLICIES RELATIVE TO 2008 POLICIES BY POLICY TYPE, LABOUR FORCE STATUS AND GENDER. FULL INCOME POOLING ASSUMPTION.

	At work	Not earning	Retired	All
<b>Women</b>	-8.3	-7.6	-3.5	-7.1
Of which tax	-7.3	-5.1	-4.2	-6.1
Of which Child Benefit	-0.6	-1.3	0.0	-0.7
Of which other welfare	-0.4	-1.3	0.7	-0.4
<b>Men</b>	-8.1	-8.2	-4.1	-7.2
Of which tax	-7.1	-3.4	-4.5	-6.3
Of which Child Benefit	-0.7	-1.1	-0.1	-0.6
Of which other welfare	-0.4	-3.9	0.5	-0.4
<b>All</b>	-8.2	-7.7	-3.8	-7.2
Of which tax	-7.2	-4.8	-4.3	-6.2
Of which Child Benefit	-0.7	-1.3	0.0	-0.6
Of which other welfare	-0.4	-1.9	0.6	-0.4

*Source:* Authors' calculations using SWITCH, based on pooled SILC data from 2013 and 2014, reweighted to represent the 2018 population.

*Note:* These figures were obtained by comparing the distributions of disposable income at the tax unit level under the 2008 system (indexed to earnings growth between 2008 and 2018) and the 2012 system (indexed to income growth between 2012 and 2018).

**TABLE 5.10** PERCENTAGE CHANGE IN INDIVIDUAL DISPOSABLE INCOME AS A RESULT OF 2018 POLICIES RELATIVE TO 2012 POLICIES BY POLICY TYPE, LABOUR FORCE STATUS AND GENDER. FULL INCOME POOLING ASSUMPTION.

	At work	Not earning	Retired	All
<b>Women</b>	-0.3	-1.6	-1.4	-0.8
Of which tax	0.7	0.3	-0.4	0.4
Of which Child Benefit	-0.3	-0.6	0.0	-0.3
Of which other welfare	-0.7	-1.3	-1.0	-0.9
<b>Men</b>	0.1	-3.2	-1.1	-0.4
Of which tax	0.9	-0.4	-0.2	0.6
Of which Child Benefit	-0.3	-0.5	0.0	-0.2
Of which other welfare	-0.5	-2.4	-0.9	-0.7
<b>All</b>	-0.1	-1.9	-1.2	-0.6
Of which tax	0.8	0.2	-0.3	0.5
Of which Child Benefit	-0.3	-0.5	0.0	-0.3
Of which other welfare	-0.6	-1.5	-0.9	-0.8

*Source:* Authors' calculations using SWITCH, based on pooled SILC data from 2013 and 2014, reweighted to represent the 2018 population.

*Note:* These figures were obtained by comparing the distributions of disposable income at the tax unit level under the 2012 system (indexed to earnings growth between 2012 and 2018) and the 2018 system.

## CHAPTER 6

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### Conclusion

This report examines the gender impact of Irish budgetary policy between 2008 and 2018. This exercise was designed to isolate the gender impact of tax and welfare changes, all else being constant. As such, the income changes presented should not be interpreted as actual changes for the period in question, from which it would be difficult to separate the policy effect from all other changes. In particular, changes to labour supply that could be expected in the context of changes to the One Parent Family Payment and Jobseeker's Allowance and the introduction of the Back to Work Family Dividend are not possible to account for in this framework. Rather, we cleanly identify the effect of moving from one set of policies to another for the same population. Some important conclusions emerge.

Firstly, in considering the gender impact of budgetary policy in Ireland over the past decade, it has become clear that the main causes of differential impacts of budgetary policy by gender are the interaction of policy changes with the economic activity of the individual and the presence of children.

Single men and women, along with men and women in couples without children, have fared the same in terms of gains or losses to disposable income in both the austerity and recovery periods. Lone parents, however, present a particular case. Most lone parents are women, and lone parents lost proportionally more than singles without children during the austerity period. This higher loss can be attributed to reductions to Child Benefit during the austerity period. Additionally, when singles without children were making budgetary gains during the recovery period, lone parents continued to see a fall in their disposable income due to policy reforms, mainly due to changes to other welfare payments such as the One Parent Family Payment.

Most of the literature on household income and inequality assumes that members of a couple pool income between them. In the Irish case, there is strong evidence to support this assumption (Watson et al., 2013). Under this assumption, male and female members of a couple experience the same gains and losses from budgetary policy, by definition. However, couples with children have fared relatively worse over the past ten years than couples without children, and changes to Child Benefit and other welfare are responsible for this difference.

Under a more extreme assumption of no income sharing within couples, we find that women and men in couples without children saw similar changes to their disposable income during both the austerity and recovery periods. However, within couples, women of working age with children lost out by significantly more

than working age men with children. The differential impact by gender is largely due to the fact that women were more affected by stagnation of or changes to welfare payments (carer's supports, Child Benefit, etc.) than men.

The assumption of no income sharing within couples is somewhat extreme and it is likely that couples do pool a large proportion of their income. However, these results also give insight into how bargaining power and consumption patterns, such as the fact that women spend more of their income on children, may have evolved with budgetary policy in recent years.

Taking the whole population of singles and couples and adopting the assumption of full income sharing within couples, there is little evidence of gender differences in the impact of budgetary policy either in the austerity or recovery periods for men and women in the same economic activity. Men and women in paid work had similar changes in disposable income, as did retired men and women. One exception is those not in paid work (unemployed or inactive). Within this category, men actually lost more than women in both the austerity and recovery periods due to changes to other welfare, principally unemployment supports.

Under the more extreme assumption that income is not pooled between members of a couple, there is a reversal of this pattern, with women who are not in paid work losing substantially more than men who are not in paid work. These differences are mainly due to changes to Child Benefit over both the austerity and recovery periods.

Looking at gender differences in budgetary policy across the income distribution, we note that much of the differential impact of tax-benefit policy reforms is concentrated in the lower half of the income distribution. That is, in instances where women lost out by more than men, the difference was most noticeable when comparing women and men from low-income households.

In summary, gender differences in the impact of Irish budgetary policy over the past decade have stemmed from the fact that women are more likely than men to be lone parents, to be inactive and to benefit more from child-related supports. Changes to such supports over the past decade have decreased the disposable income of women more than that of men, particularly those with low earnings, and the size of this differential depends on the degree of income sharing within a couple. Future attempts to gender-proof budgetary policy should ensure that policy changes do not disproportionately affect tax units with children or tax units in which one member is inactive, as these are main mechanisms behind gender differences in the effect of policy changes.

A major contribution of this project is to embed gender impact assessment into SWITCH, the tax-benefit model developed by the ESRI and in use in a variety of government departments. In the future, this will facilitate the gender-proofing of budgetary policy, both *ex ante* in deciding upon policy reforms and *ex post* in assessing the impact of actual budgetary changes.

## REFERENCES

- Bargain, O. (2008). 'Normative evaluation of tax policies: from households to individuals', *Journal of Population Economics*, Vol. 21, pp. 339–371.
- Bargain, O. (2014). 'Decomposing changes in income distribution', *Handbook of Microsimulation Modelling* (Contributions to Economic Analysis series, Vol. 127, pp. 107–133), Bingley, UK: Emerald.
- Bargain, O., M. Beblo, D. Beninger, R. Blundell, R. Carrasco, M.-C. Chiuri, et al. (2006). 'Does the representation of household behavior matter for welfare analysis of tax-benefit policies? An introduction', *Review of Economics of the Household*, Vol. 4, pp. 99–111.
- Bargain, O. and T. Callan (2010). 'Analysing the effects of tax-benefit reforms on income distribution: a decomposition approach', *Journal of Economic Inequality*, Vol. 8, No. 1, pp. 1–21.
- Bastani, S. (2013). 'Gender-based and couple-based taxation', *International Tax and Public Finance*, Vol. 20, pp. 653–686.
- Blundell, R., M. Costa Dias, C. Meghir, and J. Shaw (2016). 'Female labor supply, human capital and welfare reform', *Econometrica*, Vol. 84, No. 5, pp. 1705–1753.
- Browne, J. (2011). *The impact of tax and benefit reforms by sex: some simple analysis*, London: Institute for Fiscal Studies.
- Browning, M., F. Bourguignon, P.-A. Chiappori, and V. Lechene (1994). 'Incomes and outcomes: a structural model of intrahousehold allocation', *Journal of Political Economy*, Vol. 102, pp. 1067–1096.
- Browning, M., P.-A. Chiappori, and V. Lechene (2010). 'Distributional effects in household models: separate spheres and income pooling', *Economic Journal*, Vol. 120, pp. 786–799.
- Callan, T., C. Keane, J.R. Walsh, and M. Lane (2011). 'From data to policy analysis: tax-benefit modelling using SILC 2008', *Journal of the Statistical and Social Inquiry Society of Ireland*, Vol. 40, pp. 1–10.
- Callan, T., M. Keeney, and J. Walsh (2001). *Income tax and welfare policies: some current issues*, BP2002/3, Dublin: The Economic and Social Research Institute.
- Cantillon, S. and B. Nolan, (2001). 'Poverty within households: measuring gender differences using nonmonetary indicators', *Feminist Economics*, Vol. 7, No. 1, pp. 5–23.
- Daly, M. and G. Kelly (2015). *Families and poverty: everyday life on a low income*, Bristol: Policy Press.
- De Agostini, P., A. Paulus, and I. Tasseva (2015). *The effect of tax-benefit changes on the income distribution in 2008–2014*, EUROMOD Working Paper EM11/15, Colchester, UK: Institute for Social and Economic Research.



- Department of the Prime Minister and Cabinet (1984). *Women's budget program: an assessment of the impact on women of the 1984–85 budget*, Canberra: Australian Government Publishing Service.
- Duncan, A.S., C. Giles, and S. Webb (1994). *Social security reform and women's independent incomes*, Manchester: Equal Opportunities Commission.
- Equality Budgeting Campaign, The (2012). *Equality budgeting in Ireland*, Dublin: Irish Feminist Network.
- Figari, F., H. Immervoll, H. Levy, and H. Sutherland (2011). 'Inequalities within couples in Europe: market incomes and the role of taxes and benefits', *Eastern Economic Journal*, Vol. 37, pp. 344–366.
- Gallego-Granados, P. and J. Geyer (2015). 'Distributional and behavioural effects of the gender wage gap', *Discussion Papers*, Berlin: Deutsches Institut für Wirtschaftsforschung.
- Gutierrez, R., H. Immervoll, and H. Sutherland (2005). *How European Union member states adjust tax and benefit systems for inflation*, ISER working paper, Colchester, UK: Institute for Social and Economic Research.
- Immervoll, H. (2005). 'Falling up the stairs: the effects of "bracket creep" on household incomes', *Review of Income and Wealth*, Vol. 51, No. 1, pp. 37–62.
- Immervoll, H., H.J. Kleven, C.T. Kreiner, and N. Verdelin (2011). 'Optimal tax and transfer programs for couples with extensive labor supply responses', *Journal of Public Economics*, Vol. 95, 1485–1500.
- Jones, G. (1992). 'Leaving home in rural Scotland', *Youth and Policy*, Vol. 32, pp. 19–29.
- Keane, C., T. Callan, and J.R. Walsh (2014). *Gender impact of tax and benefit changes*, Dublin: The Equality Authority and The Economic and Social Research Institute.
- Lundberg, S.J., R.A. Pollak and T.J. Wales (1997). 'Do husbands and wives pool their resources? Evidence from the United Kingdom Child Benefit', *Journal of Human Resources*, Vol. 32, No. 3, pp. 463–480.
- O'Connor, O. and M. Murphy (2008). 'Women and social welfare', in U. Barry (ed.), *Where are we now? New feminist perspectives on women in contemporary Ireland* (pp. 30–52), Dublin: TASC, New Island.
- OECD. (2016). *Gender budgeting in OECD countries*, Paris: OECD.
- Programme for Government Office (2016). *Programme for a Partnership Government*, Dublin: Programme for Government Office.
- Stotsky, J.G. (1996). *Gender bias in tax systems*, Working Paper Series, Washington, DC: International Monetary Fund.
- Sutherland, H. (1997). 'Women, men and the redistribution of income', *Fiscal Studies*, Vol. 18, No. 1, pp. 1–22.
- Sutherland, H., R. Hancock, J. Hills, and F. Zantomio (2008). 'Keeping up or falling behind? The impact of benefit and tax uprating on incomes and poverty', *Fiscal Studies*, Vol. 29, No. 4, pp. 467–498.

- Ward-Batts, J. (2008). 'Out of the wallet and into the purse: using micro data to test income pooling', *Journal of Human Resources*, Vol. 42, No. 2, pp. 325–351.
- Watson, D., B. Maître, and S. Cantillon (2013). *Implications of income pooling and household decision-making for poverty and deprivation: an analysis of the SILC 2010 Special Module for Ireland*, Dublin: Department of Social Protection.
- Webb, S. (1993). 'Women's incomes: past, present and prospects', *Fiscal Studies*, Vol. 14, No. 4, pp. 14–36.

## APPENDIX A

This appendix provides information on how different types of income are currently allocated between household members in SWITCH.

### **Non-labour income**

SWITCH's input data contain information on non-labour income sources that is relevant to the distribution of income within couples: investment income, rental income and private transfers.

Investment income, which includes dividends, deposit interest and other sources of investment income, is allocated to the person receiving it. In case an asset is jointly held, the SILC questionnaire asks the respondent to apportion its value according to ownership.

This requirement does not apply to rental income or private transfers, which are part of the individual questionnaire. These are allocated as stated in the individual questionnaire.

### **Social welfare income**

By default, increases in social welfare payments for qualified adults (IQAs) are paid to the claimant, but they can be paid directly to the qualified adult if both choose so. The reverse is true of state pension IQAs for applications received after September 2007 (which form a small proportion of overall pension payments). In SWITCH, a simplified approach is taken to the matter of IQAs and they are always attributed to the claimant. Future model development could investigate how best to split this type of payment within couples.

Among social welfare payments to households, SWITCH attributes Child Benefit and the Early Child Care Supplement to the woman within couples. This method of attribution is common in this literature.

## APPENDIX B

**TABLE B.1** PERCENTAGE CHANGE IN INDIVIDUAL DISPOSABLE INCOME AS A RESULT OF 2012 POLICIES RELATIVE TO 2008 POLICIES BY POLICY TYPE, LABOUR FORCE STATUS AND GENDER (NO INCOME POOLING)

	At work	Not earning	Retired	All
<b>Women</b>	-8.3	-13.0	-2.8	-7.7
Of which tax	-6.9	-0.8	-3.5	-5.7
Of which Child Benefit	-0.9	-5.8	0.0	-1.2
Of which other welfare	-0.6	-6.9	0.8	-0.9
<b>Men</b>	-7.3	-6.5	-4.2	-6.5
Of which tax	-7.4	-1.0	-4.6	-6.4
Of which Child Benefit	0.0	-0.1	0.0	0.0
Of which other welfare	0.1	-5.5	0.4	-0.1
<b>All</b>	-7.7	-10.5	-3.7	-7.0
Of which tax	-7.2	-0.9	-4.2	-6.1
Of which Child Benefit	-0.4	-3.6	0.0	-0.6
Of which other welfare	-0.2	-6.4	0.6	-0.4

*Source:* Authors' calculations using SWITCH, based on pooled SILC data from 2013 and 2014, reweighted to represent the 2018 population.

*Note:* These figures were obtained by comparing the distributions of disposable income at the tax unit level under the 2008 system (indexed to earnings growth between 2008 and 2018) and the 2012 system (indexed to income growth between 2012 and 2018).

**TABLE B.2** PERCENTAGE CHANGE IN INDIVIDUAL DISPOSABLE INCOME AS A RESULT OF 2018 POLICIES RELATIVE TO 2012 POLICIES BY POLICY TYPE, LABOUR FORCE STATUS AND GENDER (NO INCOME POOLING)

	At work	Not earning	Retired	All
<b>Women</b>	-0.7	-8.5	-1.8	-1.6
Of which tax	0.6	-2.1	-0.5	0.1
Of which Child Benefit	-0.4	-2.7	0.0	-0.5
Of which other welfare	-0.9	-3.9	-1.3	-1.2
<b>Men</b>	1.0	-4.4	-0.9	0.3
Of which tax	1.2	-1.1	-0.1	0.8
Of which Child Benefit	0.0	0.0	0.0	0.0
Of which other welfare	-0.3	-3.4	-0.7	-0.5
<b>All</b>	0.3	-6.9	-1.2	-0.5
Of which tax	1.0	-1.7	-0.3	0.5
Of which Child Benefit	-0.2	-1.6	0.0	-0.2
Of which other welfare	-0.5	-3.7	-1.0	-0.8

*Source:* Authors' calculations using SWITCH, based on pooled SILC data from 2013 and 2014, reweighted to represent the 2018 population.

*Note:* These figures were obtained by comparing the distributions of disposable income at the tax unit level under the 2012 system (indexed to earnings growth between 2012 and 2018) and the 2018 system.

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