ESRI SPECIAL ARTICLE

Budget 2019

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DOI https://doi.org/10.26504/qec2018win_sa_roantree

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BUDGET 2019: TAX AND WELFARE CHANGES

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ABSTRACT

In his budget delivered to the Dáil on 9 October, the Minister for Finance, Public Expenditure and Reform announced an increase in General Government expenditure for 2019 of €4.2 billion, an increase of 5.1 per cent from its 2018 level. This is to be financed by a small General Government deficit of €75 million.

The majority of this additional expenditure was allocated to capital investment and public services, but the government also announced a number of changes to the tax and social welfare system in 2019: €711 million in tax increases, €370 million in tax cuts and €362 million in increased transfers. However, this excludes discretionary tax increases announced in the Summer Economic Statement which are expected to raise a further €600 million.

This article describes and assesses these reforms, first looking at the main taxation measures announced in the budget, before going on to examine the social welfare measures. It then considers the effect of these measures as a whole on the incomes of households using representative survey data and SWITCH, the ESRI's tax and benefit microsimulation model. The article concludes with some brief reflections on some of the fiscal challenges facing the government in the coming years.

1. INTRODUCTION

In his budget delivered to the Dáil on 9 October, the Minister for Finance, Public Expenditure and Reform announced an increase in General Government expenditure for 2019 of €4.2 billion, an increase of 5.1 per cent from its 2018 level. This is to be financed by a small General Government deficit of €75 million.

[1] We are grateful to the CSO for facilitating access to the Survey of Income and Living Conditions (SILC) Research Microdata File used to construct the database for the SWITCH tax-benefit model, and to the Irish Social Science Data Archive for facilitating access to the Household Budget Survey. Funding from the ESRI's Tax, Welfare and Pensions Research Programme (supported by the Departments of Public Expenditure and Reform, Employment Affairs and Social Protection, Health, Children and Youth Affairs and Finance) is gratefully acknowledged. We thank an anonymous referee for their comments.

The majority of this additional expenditure was allocated to capital investment and public services, but the government also announced a number of changes to the tax and social welfare system in 2019: €711 million in tax increases, €370 million in tax cuts and €362 million in increased transfers. However, this excludes discretionary tax increases announced in the *Summer Economic Statement* which are expected to raise a further €600 million.

This article describes and assesses these reforms, first looking at the main taxation measures announced in the budget, before going on to examine the social welfare measures. It then considers the effect of these measures as a whole on the incomes of households using representative survey data and SWITCH, the ESRI's tax and benefit microsimulation model. The article concludes with some brief reflections on some of the fiscal challenges facing the government in the coming years.

2. TAXATION MEASURES

Table 1 displays the revenue yield or cost of the tax policy measures announced in the budget, as estimated by the Department of Finance for 2019 in its 'Tax Policy Changes' document.[2] The single largest revenue raising measure listed was the increase in VAT on most goods currently subject to the 9 per cent rate, expected to yield €466 million. The next largest measures are increases to excise duties on cigarettes and gambling, expected to raise €101 million, and an increase in the National Training Fund levy from 0.8 per cent to 0.9 per cent of employers' payrolls, expected to raise €77 million in 2019. The most expensive tax cuts were those to income tax, costing a combined €196 million, and reductions in the Universal Social Charge (USC), costing €105 million. This section describes these changes, assessing their rationale and potential effects.

The tax cut affecting most individuals is the reduction in the main 4.75 per cent rate of USC to 4.5 per cent, and the increase in the threshold at which it begins to apply. Approximately 1.7 million individuals with incomes above €19,372 per year will pay less USC as a result of the change, with an average gain of €76 per year among those affected. The stated rationale for increasing the threshold was to ensure someone working 'full-time' at the adult minimum wage does not face the main rate of USC on an additional hour of work. However, the increase of €502 per year merely means that from January, someone on the minimum wage of

[2] See www.budget.gov.ie/Budgets/2019/Documents/2.%20Budget%202019%20Tax%20Policy%20Changes.pdf

€9.80 per hour will face this rate if working more than 39 hours per week, rather than 38.

Given evidence on the responsiveness of lower paid workers in Ireland (Hargaden, 2018), it is unlikely that facing a 2 percentage point lower rate of USC on earnings between €19,372 and €19,874 will have a substantial impact on the number of hours employees choose to work. More likely to affect this is a cliff-edge, or 'notch', that exists in the USC schedule at €13,000 per year, where the entirety of individuals' earnings become liable to USC. This means low-paid part-time workers can be left slightly worse off by a pay increase, or working more hours.

A similar cliff-edge, or 'notch', exists in the Pay Related Social Insurance (PRSI) schedule. Most individuals become liable to employee PRSI (4 per cent) on the entirety of their earnings at €352 per week, and to the main (8.7 per cent) and higher (10.95 per cent) rates of employer PRSI at €38 and €386 per week respectively. This creates a strong disincentive to increase earnings above these thresholds, as it results in both lower take-home pay and higher employer cost.

TABLE 1 2019 YIELD OR COST OF TAX MEASURES ANNOUNCED IN BUDGET 2019

	€ million
Changes to USC rates and bands	-105
Income tax measures	
Increase to the standard rate band	-138
Increase to the home carer tax credit	-21
Increase to the earned income credit	-27
Increase in the deductibility of mortgage interest for landlords	-10
Expansion of KEEP share-based remuneration programme	0
Changes to excise duties	
50c increase in duty on pack of cigarettes	59.4
Minimum excise duty on cigarettes	2.4
Increase in betting duty	39.5
VRT	
Diesel surcharge	25
Extension of relief for hybrid & plug-ins	-16
Extension of 0% BIK rate for electrics	-3
Agritaxation	
Income averaging	-1
Stock relief	-8
VAT	
Increase in 9% rate	466
Reduction in rate on e-publications and e-papers	-6
CAT increase group a threshold	-6.9
Employer PAYE compliance implementation	50
Corporation tax	
Film relief	-2
3-year start up relief	-5.7
Capital allowances for employer provided fitness & childcare	-1.9
Accelerated capital allowances for gas propelled vehicles & refuelling equipment	-1
Exit tax	0
CFC rules	0
Stamp duty: extension young trained farmers relief	-15
Employer PRSI threshold increase	-2.5
National Training Fund levy increase	69
Total	341

Source: Department of Finance, 'Budget 2019 Tax Policy Changes', available at www.budget.gov.ie/Budgets/2019/2019.aspx
Note: Cost or yield in 2019. Full-year effect different in many cases. Excludes revenue raised from holding tax credits and thresholds fixed in cash terms, as discussed below.

The budget announced an increase to the latter employer PRSI threshold on the recommendation of the Low Pay Commission, to reduce the likelihood that someone working full-time on the minimum wage will face these sharp disincentives. However, the announced increase is quite small, and still means that those employing workers for more than 39 hours a week at the minimum wage face a jump in employer cost of €451 per year at the threshold, disincentivising them from offering such employees additional hours of work or pay rises.

The government also announced an increase in the rate at which the National Training Fund Levy (NTFL) is charged against employees earnings, from 0.8 per cent to 0.9 per cent. The NTFL was introduced in 2000, replacing the previous Apprentice Levy, and is collected through the same payroll system – and levied on the same base – as employer PRSI. Despite being earmarked for expenditure on training and education programmes, the NTFL is best thought of as economically equivalent to employer PRSI.[3]

Alongside these small reductions in USC and PRSI, the government also announced an increase to the Earned Income Tax Credit self-employed workers can claim from €1,150 to €1,350, at a cost of €27 million in 2019 and €48 million in the longer run. This reduces – but does not eliminate – the less favourable income tax treatment of the self-employed, who will also continue to face a 3 per cent USC surcharge on incomes over €100,000 not levied on employees.

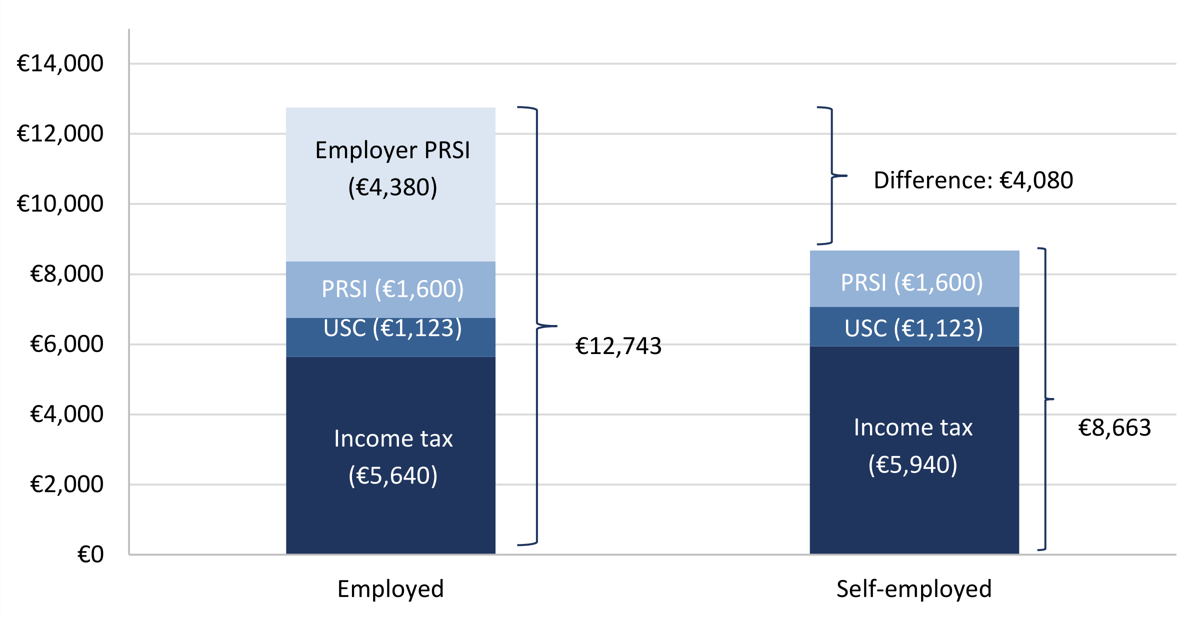
However, economic activity carried out via self-employment is subject to less PRSI than that carried out through employment. This is because while the main Class A (employee) and Class S (self-employed) rates of PRSI are the same (4 per cent), employers are required to make PRSI contributions of between 8.6 per cent and 10.95 per cent on behalf of their employees. This can create a substantial gap in the total tax burden associated with each form of employment.

For example, Figure 1 shows that a gross employee salary of €40,000 is associated with €12,743 in tax overall: the sum of €5,640 in income tax, €1,123 in USC, and €5,980 in PRSI (€1,600 in employee PRSI and €4,380 in employer PRSI). A similar self-employment income is associated with €8,663 in tax overall: the sum of

[3] The National Training Fund has run a surplus in each year since 2015, and has previously been topped up from general taxation when there was a financial shortfall: it is unclear why one would want to link the amount spent on education and training programmes to the revenue raised from a specific tax, especially one likely to decline during a recession when education and training programmes may have particularly beneficial effects.

€5,940 in income tax, €1,123 in USC but only €1,600 of PRSI. Such a gap in the overall tax burden across legal forms may distort individuals' choices, leading some people to operate as self-employed when they would otherwise prefer to be employed.[4]

FIGURE 1 TOTAL INCOME TAX, USC AND PRSI ASSOCIATED WITH ANNUAL INCOME OF €40,000



Source: Authors' calculations.
Notes: Assumes single individual with no income tax deductions beyond the standard Personal and PAYE/Earned Income tax credit, liable to Class A employee and employer PRSI if employed, and Class S PRSI if self-employed. Employer PRSI includes National Training Fund Levy of 0.9 per cent.

Budget 2019 also announced an increase to the Home Carer's Tax Credit, from €1,200 to €1,500. This is an income tax credit given to married couples or civil partners who are jointly assessed for income tax purposes, where one adult has income under €7,200 and looks after a dependant in the home. Combined with the nominal freeze to personal and employee tax credits (discussed below), the change increases the incentive for lower income couples with children or adult dependants to have just one adult in work compared to two. It is unclear whether this is the intended aim of the policy, given the Government has previously indicated their desire to reduce the barriers faced by mothers working outside the home.[5]

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4 Adam et al. (2017) assess the rationale for reduced rates of tax on the self-employed.
5 See, for example, the speech given by Taoiseach Leo Varadkar to the Congress of Women's Caucuses in Sept. 2018, https://www.taoiseach.gov.ie/eng/News/Taoiseach's_Speeches/Speech_of_An_Taoiseach_Leo_Varadkar_T_D_Congress_of_Women%E2%80%99s_Caucuses_10_September_2018.html

Higher income dual-earner couples, by contrast, are the group who gain most from the €750 increase in the standard rate cut-off, above which incomes are subject to the higher 40 per cent rate of income tax. This measure increases the point at which single adults face the higher rate to €35,300, with jointly assessed one-earner couples seeing this rise to €44,300. Jointly assessed two-earner couples with sufficiently high incomes, however, can benefit twice, and see the point at which they start to pay the higher threshold increase up to a maximum of €70,600. Overall, the change will benefit the approximately one-quarter of families that contain a higher rate taxpayer, at a cost of €140 million in 2019 (and €160 million in future years).

This increase was well flagged in advance of the budget, and much discussion of the measure appeared to conflate average with marginal tax rates. The standard rate cut-off is the point at which taxpayers begin to pay 40 per cent of any additional earnings in income tax, not where they begin to pay 40 per cent of their earnings overall in tax. While this threshold is comparatively low by European standards, particularly for single adults, the point at which taxpayers begin to pay income tax at all is comparatively high. As a result, workers at average levels of earnings in Ireland pay relatively little income tax as a share of their earnings (OECD, 2018).

Although this reform strengthens financial work incentives for those taxpayers brought into the basic rate band (by reducing the marginal rate they face from 40 per cent to 20 per cent), it is unlikely to have significant effects on aggregate employment or labour supply. This is because most of those affected see only a reduction in the overall amount of income tax they pay, with their marginal income tax rate left unchanged. This represents a pure ‘income effect’, which is likely to induce reductions, not increases, in labour supply as individuals can obtain the same level of consumption with fewer hours of work. Empirical evidence for Ireland also suggests that employees at the level of earnings where individuals do see reductions in their marginal tax rate – what matters for the ‘substitution effect’ that induces increases in labour supply – are relatively unresponsive to tax changes.[6]

While not described as such in Minister Donohoe’s Financial Statement or the Department of Finance’s ‘Tax Policy Changes’ document, the decision to hold both personal and employee tax credits fixed in nominal terms, alongside most

[6] Acheson et al. (2018) show that there is little ‘bunching’ in the distribution of earnings around the standard rate cut-off, which indicates that employees around this level of earnings are relatively unresponsive to changes in tax rates.

PRSI and USC thresholds, amounted to an effective tax increase for many workers. This is because inflation erodes the value of tax credits and thresholds that are specified in nominal terms, with wage growth leading to 'fiscal drag': an increase in the real tax burden on individuals and, correspondingly, in Exchequer revenues. Indeed the government counts the freezing of tax thresholds and credits as a discretionary revenue raising measure in its calculations of fiscal space available under the expenditure benchmark of the EU Stability and Growth Pact.[7] The inconsistent treatment of these measures in the budgetary documentation serves only to reduce transparency about the effects of the budget on households.

In addition to direct tax reforms, Budget 2019 announced a number of indirect tax changes, mostly increases. Foremost among these was a rise in the rate of VAT levied on most goods currently subject to second reduced rate of 9 per cent, to 13.5 per cent. This includes the supply of food and drink in catering, hotel lettings, theatrical performances and hairdressing services, although newspapers, magazines and maps will continue to be taxed at 9 per cent (alongside e-publications, previously taxed at the main rate of 23 per cent). This second reduced rate of VAT was introduced in July 2011 as a temporary measure and was supposed to expire in December 2013. However, it was retained by successive governments who cited the potential effects on tourism related sectors of the economy. Two recent reports, by the Department of Finance and the Revenue Commissioners,[8] found limited evidence of the VAT cut on employment or economic activity in affected sectors, while evaluations of a similar VAT cut in France suggests that owners of restaurants and hotels are likely to have been the main beneficiaries (Benzarti and Carloni, 2018).

More generally, the IMF, OECD and European Commission have all called for the elimination or review of reduced and zero rates of VAT, along with exemptions.[9] These distort consumption decisions towards tax advantaged goods, and lead to complexities in policing the boundaries between similar goods with different tax treatment. While arguments in favour of lower rates of VAT on certain goods are generally grounded in equity concerns, the existence of a modern, sophisticated tax and benefit system provides a much more effective way of meeting these

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7 See Table 3 in the Government's *Summer Economic Statement* (available at www.finance.gov.ie/wp-content/uploads/2018/06/20180622-SES-2018.pdf) and Table 4 in the Irish Fiscal Advisory Council's *2019 Pre-Budget Statement*, available at www.fiscalcouncil.ie/wp-content/uploads/2018/09/Pre-Budget-2019-Statement.pdf.

8 Department of Finance (2018) and Revenue Commissioners (2018).

9 See IMF 2018 Article IV Consultation (www.imf.org/en/Publications/CR/Issues/2018/06/28/Ireland-2018-Article-IV-Consultation-Press-Release-Staff-Report-and-Statement-by-the-46026), OECD (2018). *Economic Survey of Ireland* (www.oecd.org/ireland/economic-survey-ireland.htm) and European Commission (2017). *European Semester country report* (https://ec.europa.eu/info/sites/info/files/2017-european-semester-country-report-ireland-en.pdf).

concerns, by levying (progressive) income taxes and making cash transfers that vary with people's characteristics and needs.[10]

One area where there is a strong economic case for differentiated, higher rates of taxation is goods whose consumption generate negative effects, or externalities, on others. Budget 2019 announced increases in the duties levied on cigarettes, tobacco and gambling: all of which can be argued to fulfil these criteria. However, duties on alcohol, motor fuel and carbon – which also generate substantial negative externalities – were held fixed in cash terms, amounting to a 1.1 per cent real terms cut given current inflation forecasts. The decision to freeze carbon taxes for the fifth successive year means these now stand 2 per cent lower in real terms than when set at their current rate of €20 per tonne in 2014. This is well below the rate of €80 per tonne suggested as necessary by the Climate Change Advisory Council to meet the Government's own emission reduction targets.[11] Recent ESRI research (De Bruin and Yakut, 2018) estimates that even a doubling of the current rate of carbon tax to €40 would result in only a 5 per cent decrease in emissions. Delaying taking action raises the prospect of large European Union fines, along with the size of future carbon tax increases that will ultimately be needed.

Finally, the government announced a number of other changes to the tax system with revenue implications of less than €10 million in 2019, including an above inflation increase in the threshold above which Capital Acquisitions Tax applies to gifts and inheritances from parents to their children; reductions in taxation on farmers and the agricultural sector; increases (reductions) in Vehicle Registration Tax for diesel (hybrid) vehicles; and small changes to corporation tax, reliefs and allowances.

3. BENEFIT MEASURES

Budget 2019 saw a number of changes announced to benefit payments made by the Department of Employment and Social Protection (DEASP). The entire package (listed in Table 2) was estimated by the Department to cost €362 million in 2019, but because many measures will only take effect from March, the full-year cost is estimated to be almost €500 million per year.

10 For a comprehensive discussion of these issues, see Chapters 6-9 of Mirrlees et al. (2011).

11 Climate Change Advisory Council's *Annual Review 2018*, available at www.climatecouncil.ie.

TABLE 2 MAIN DEASP MEASURES ANNOUNCED IN BUDGET 2019

	Cost in 2019 €m
€5 increase in the maximum weekly personal rates of benefit payment from March 2019, with smaller increases for qualified adults and reduced rates of payment.	268.7
Increases for Qualified Children to rise by €2.20 per week for children aged under 12 and by €3 per week for children aged over 12 from March 2019.	20.9
Increase the earnings disregard for One Parent Family Payment and Jobseekers Transitional Payment by €20, from €130 per week to €150 per week.	5.3
Increase rate of Back to School Clothing and Footwear Allowance by €25.	6.6
Extend number of weeks Winter Fuel Payment made by one week, to 28 weeks.	8.4
Increase in the Daily Expenses Allowance rate paid to those in direct provision from €21.60 per week to €38.74 for adults and €29.80 for children.	3.1
Working Family Payment (formerly known as Family Income Supplement): new maintenance income disregard of €95.23 per week for housing costs, with the remainder assessed at 50%.	10.8
New paid parental leave scheme of two weeks each per parent, based on contribution conditions of Maternity/Paternity Benefit from November 2019.	1.5
Extension of (contributory) Jobseekers Benefit to the self-employed.	2.0
Other, including extension in payment of Domiciliary Care Allowance for three months in cases where the care recipient dies; and free school meals pilot.	13.9
Total cost of announced measures in 2019	362

Source: '2019 Expenditure Report', available at www.budget.gov.ie/Budgets/2019/2019.aspx
Note: Cost in 2019. Full-year effect different in many cases.

The largest change was a €5 increase in the maximum weekly rates of most benefit payments from 25 March 2019, costing €268.7 million next year and €349 million per year thereafter.[12] However, given that the rise will not take effect until almost quarter of the way through 2019, this is closer to a €4 per week increase. By announcing the increase as a flat-rate cash amount, this corresponds to a proportionately smaller increase in larger benefits: for example, the maximum rate of Jobseekers Allowance for a single adult aged 26 or above will increase by about 2 per cent across the year on average (above forecast inflation of 1.1 per cent, but below forecast wage growth of 2.9 per cent), but by 3.7 per cent for those aged 24 or under. This is as the latter group have been entitled to much lower weekly rates of payment since 2014, but will see the same cash increase from March. This is unlikely to represent a conscious decision to increase

12 Larger increases were announced to the Daily Expenses Allowance paid to those in direct provision, and to the Back to School Clothing and Footwear Allowance. Although the basic rate of payment was held fixed in cash terms, the Winter Fuel Payment was effectively increased by 3.7 per cent due to the increase in the number of weeks covered from 27 to 28.

the relative generosity of benefits with lower maximum rates of payments, but is the ultimate effect of the policy.

The government also announced that Increases for Qualified Children (IQCs) – awarded on top of personal rates of payment for most benefits – will from March be higher for children aged 12 and above, to reflect the greater costs associated with older children. However, there is now a substantial body of evidence that early childhood represents a formative stage of life, and that cash payments to low-income families can have significant, long-run effects on health and economic outcomes in later life (Almond and Currie, 2011; Hoynes et al., 2016). Higher payments to families with *younger* children may therefore provide greater insurance against the negative consequences that spells of unemployment or disability can have on children, so it is unclear that differentiating IQCs on the basis of age in the manner proposed by the government necessarily represents a more effective use of resources.

In addition to changes in weekly rates of payments, claimants of Working Family Payment (WFP, formerly known as Family Income Supplement, or FIS) will from March be able to disregard from the WFP means test up to €93.23 per week of maintenance income received for the purposes of housing costs, with 50 per cent of maintenance income above this amount deducted from their WFP award. Lone parents in receipt of One Parent Family Payment will also see an increase in the amount they can earn before having their payment reduced, due to a €20 increase in the earnings disregard from €130 to €150 per week. This almost restores the disregard in real terms to what it was at the end of 2011 (€150.95 in today's prices), and strengthens the financial incentive for lone parents to be in paid work. Bargain et al. (2014) found that single mothers in Ireland are particularly responsive to financial incentives, suggesting that this change could be expected to lead to higher employment among this group.

A new Parental Benefit is to be introduced from November 2019, paid at the same rate as Maternity Benefit and Paternity Benefit. While full details of the scheme are yet to be announced, it is expected to provide two additional weeks of paid leave from work to each new parent who has a sufficient history of PRSI contributions. Changes to subsidies paid under the Affordable Childcare Subsidy scheme were also announced, the most substantial of which increased the point at which means-tested subsidies begin to be withdrawn against income from €22,700 to €26,000, and raised the maximum income threshold from €47,500 to €60,000. This will mean that more families higher up the income distribution will be eligible for the scheme when it is fully rolled out, with most of those eligible entitled to a larger subsidy.

Finally, the budget announced that eligibility for Jobseekers Benefit will be extended to the self-employed, without any corresponding increase in PRSI contributions. Jobseekers Benefit is currently a non-means-tested contributory benefit, payable for up to nine months following loss of employment to those with a history of Class A or Class H PRSI contributions. Self-employed workers are already entitled to Jobseekers Allowance (a means-tested version of Jobseekers Benefit) or supplementary welfare allowance (a means-tested basic weekly allowance payable to those with no other source of income) if their business closes down or they experience a significant decline in income.

Lack of eligibility to certain contributory benefits has traditionally been advanced as a reason for why the self-employed pay less PRSI than employees, as described in Section 2. However, the extension of eligibility to Jobseekers Benefit for the self-employed without an increase in the rates of PRSI they pay undermines this argument. Indeed, the Department of Finance (2016) noted that an actuarial review of the Social Insurance Fund found an 'incremental increase in contribution rates from 4 per cent to 16 per cent would be required if Jobseeker's Benefit in addition [to] core State Pension (contributory) is provided' to the self-employed.

While the appropriate balance between the contributory and non-contributory nature of the tax and benefit system ultimately depends on a government's preferences for redistribution, insurance and the strength of financial work incentives, further loosening the link between PRSI and benefit payments represents a departure from the previous stated government policy of moving 'to a contributory European-style social insurance system'.[13]

4. GAINS, LOSSES AND DISTRIBUTIONAL

We now consider the impact of the announced tax and benefit measures as a whole on the incomes of households. To do this, we use SWITCH, the ESRI's tax and benefit microsimulation model, along with large-scale representative survey data on households' incomes and expenditures. We examine the impact of measures (listed in the Appendix) on the incomes of households, compared to what would have happened had tax and benefit thresholds, excise duties and benefit payments risen in line with forecast average wage growth.

13 See, for example, http://leovaradkar.ie/2016/06/varadkar-sets-out-his-plans-for-department-of-social-protection.

We compare the effect of announced policies relative to this wage-indexed counterfactual as it provides a neutral benchmark that will tend to hold inequality and the size of the State constant over time. Were we to examine the effect of announcements relative to their 2018 levels (a nominal freeze) or to a price-indexed counterfactual (where thresholds, duties and benefit payments rise in line with a measure of price inflation), real wage growth would lead to both an increase in the tax burden as a share of GDP/GNP, and to the incomes of households in receipt of benefits falling behind those of households containing individuals in work.

While the Government adopts the former (nominal freeze) approach in their Social Impact Assessment of budgetary policy, leading to very different results to those described below, policy has in practice been to increase tax and benefit thresholds and payments by at least real wage growth over the medium to longer run (Callan et al., 2018). Moreover, as noted in Section 2, the government has in recent years treated the freezing of tax thresholds and credits as a discretionary policy measure in the calculation of available 'fiscal space', indicating that the default policy is for these to rise annually. Comparison of budgetary measures to a wage-indexed baseline therefore also has the attraction of corresponding to de facto – if not explicitly stated – government policy.

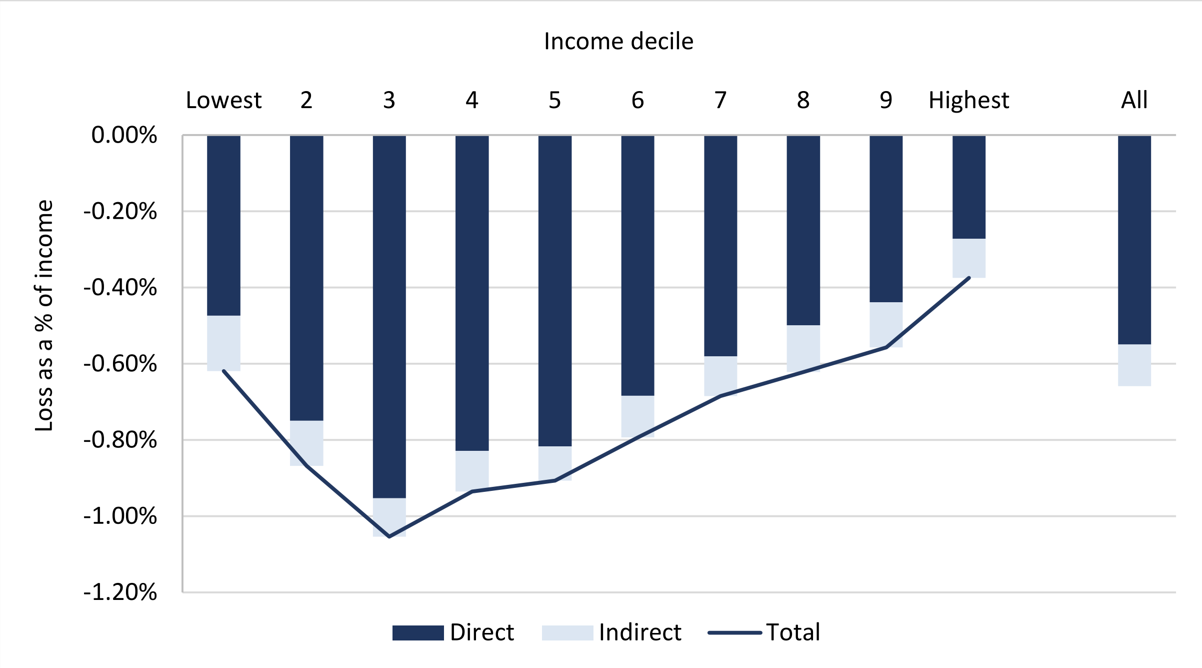
To calculate the effect of changes in tax and benefit policies on households, we use household survey data from the 2015 Survey of Income and Living Conditions (SILC) and the 2015-2016 Household Budget Survey (HBS). Monetary variables are uprated to 2019 terms, with SWITCH then used on SILC data to calculate households' income tax liabilities and benefit entitlements under the announced 2019 tax and benefit system, and under a counterfactual 2019 system whose thresholds and maximum benefit payments have been increased by forecast average wage inflation (2.9 per cent, from the ESRI's 2019 Autumn *Quarterly Economic Commentary*).[14] The HBS is used to estimate the indirect taxes paid by households (including VAT, duties, and carbon taxes) under announced 2019 rates and a counterfactual 2019 indirect tax system where duties and carbon

[14] The SWITCH model provides a detailed and accurate representation of almost all aspects of the personal tax and benefit system. It does not include taxes on businesses (like corporation tax) which are difficult to assign to individual households, or expenditure on public services, which unlike cash transfers provided through the benefit system, are conceptually difficult to assign a value to (O'Dea and Preston, 2014). It can, however, be used to examine entitlement to Medical or GP Visit Cards.

taxes rise in line with forecast wage inflation.[15] The cost of the measures we consider is around €520 million in 2019, €40 million more than the budget measures announced excluding the rise in VAT.

Relative to this wage-indexed benchmark, the measures in Budget 2019 result in an average loss equal to 0.66 per cent of household disposable income. This is primarily a result of changes to direct taxes and benefits, which account for more than three-quarters of the overall average loss. Indirect taxes account for only 0.11 percentage points of this loss, with real cuts to other duties and carbon taxes offsetting VAT increases.

FIGURE 2 DISTRIBUTIONAL IMPACT OF TAX AND BENEFIT CHANGES



Source: Authors' calculations using the 2015-2016 Household Budget Survey, and SWITCH run on 2015 Survey of Income and Living Conditions data, both uprated to 2019 prices.
Notes: Deciles are based on equivalised household income, using CSO national equivalence scales.

However, these losses are not equally distributed. Figure 2 illustrates the impact of the measures across the distribution of household income, adjusted for family size, with the population divided into ten equally sized groups, or deciles, ordered from lowest to highest income, left to right. The columns show that losses as a share of household disposable income are on average largest for the third lowest

[15] These estimates are produced using code jointly developed with officials from the Department of Finance as part of the ESRI's 'Tax, Welfare and Pensions' research programme. All responsibility for the interpretation of these results is the authors' own.

income decile (0.94 per cent) and smallest for the highest income decile (0.37 per cent). With the exception of the very lowest income decile, households in the bottom half of the income distribution (deciles 2-5) lose by more than those in the upper half.

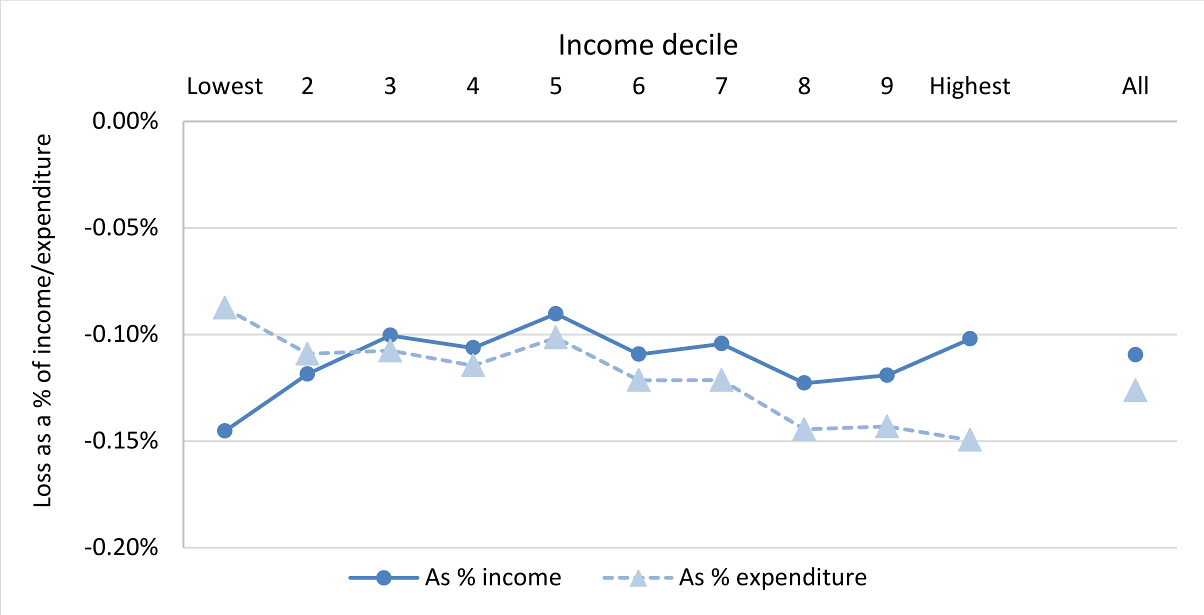
This pattern is driven by the nominal freeze (real cut) to personal and employee tax credits and to PRSI thresholds, which increase the taxes paid on earnings by households in the bottom half of the distribution. Households in the lowest income decile tend not to have sufficiently high incomes to pay tax, so are less affected by these changes, but do lose from the below wage indexation of benefit payments which make up a substantial share of their disposable incomes. The upper half of the income distribution see smaller losses because of USC reductions and the increases to the standard rate cut-off, but still lose on average because of the real cuts to personal and PAYE tax credits and the rise in indirect taxes.

While indirect tax increases play a secondary role in shaping the distributional pattern of overall losses, the solid blue series in Figure 3 shows these look slightly regressive, with larger losses as a percentage of income for lower income deciles.

However, this impression is misleading, and arises mainly because, at any given point in time, low-income households typically spend a lot (and therefore pay a lot of indirect taxes) relative to their incomes. But households cannot spend more than their income indefinitely. Over a lifetime, income and expenditure must be equal (except for bequests given and received and the possibility of dying in debt); households spending a lot relative to their income at any given point in time are often those experiencing only temporarily low incomes and either borrowing or running down their savings in order to maintain their expenditure smoothly at a level more befitting their lifetime resources.[16]

[16] Such temporarily low incomes can arise for a variety of reasons: people who are temporarily unemployed, students, those taking time out of the labour market to raise children, retirees drawing on past savings, and so on.

FIGURE 3 DISTRIBUTIONAL IMPACT OF INDIRECT TAX CHANGES



Source: Authors' calculations using the 2015-2016 Household Budget Survey, and SWITCH run on 2015 Survey of Income and Living Conditions data, both uprated to 2019 prices.
Notes: Deciles are based on equivalised household income, using the CSO national equivalence scales.

We can get a clearer picture of the distributional impact of indirect tax changes over a lifetime – abstracting from how much people are borrowing or saving at any point in time – by looking at changes as a percentage of expenditure, rather than income. The dashed lighter blue series in Figure 3 shows that on this basis, the indirect tax changes announced by the Government in Budget 2019 look broadly progressive. Average losses as a percentage of expenditure are larger for higher income households than for lower income households. This is because higher income households tend to spend a larger proportion of their overall expenditure on goods which were subject to an increase in VAT (hotel accommodation, food and catering services, theatre tickets etc.), and these losses exceed the real cuts to non-tobacco duties and carbon taxes.

The measures announced in the budget also have a differential impact across different types of households. Table 3 shows that retired couples and lone parents saw larger than average losses as a percentage of disposable income relative to our wage-indexed benchmark. This is because transfers from the State make up a large proportion of income for most of these households, while couples without children – who saw the smallest overall losses – are on average less reliant on State transfers, and include many higher earning couples who benefit twice over from USC reductions and the increase to the standard rate threshold.

TABLE 3 AVERAGE LOSSES AS A PERCENTAGE OF DISPOSABLE INCOME, BY FAMILY TYPE

Household type	Direct	Indirect	Total
Single adult	-0.50	-0.13	-0.63
Lone parent	-0.83	-0.11	-0.95
Couple with children	-0.56	-0.09	-0.65
Couple without children	-0.40	-0.13	-0.53
Single adult, retired	-0.97	-0.09	-1.07
Couple, retired	-0.82	-0.11	-0.93
Other	-0.45	-0.11	-0.56
All	-0.55	-0.11	-0.66

Source: Authors' calculations using the 2015-2016 Household Budget Survey, and SWITCH run on 2015 Survey of Income and Living Conditions data, both uprated to 2019 prices.
Notes: Other family type grouping includes households containing multiple single adults and families.

Under the assumption that men and women in couples do not pool their income, we can also examine differences in the impact of measures by gender. On average, women saw larger losses (0.73 per cent) as a share of disposable income than men (0.41 per cent). This difference is largely attributable to the differential impact of the measures on men and women with children who are in one-earner or no-earner couples. Women with children in one-earner couples lost 1.76 per cent of disposable income while women in no-earner couples with children lost 1.48 per cent of disposable income. The corresponding figures for men were -0.37 per cent and +0.20 per cent, respectively. This continues a pattern identified in recent ESRI research for women with children to be affected more by budgetary policy as a share of their disposable income than their male counterparts (Doorley et al., 2018).

5. CONCLUSIONS

This Article has described and assessed changes to the tax and benefit system announced in Budget 2019. Relative to a neutral benchmark, where all thresholds, duties and benefit payments rose in line with forecast wage growth, the budget is a small net takeaway from households on average, with larger proportional losses for lone parents, retirees, and lower income households. We conclude by reflecting briefly on some risks to the public finances facing the Government.

As highlighted by the Irish Fiscal Advisory Council and the Parliamentary Budget Office, the Exchequer has over recent years become increasingly reliant on receipts from corporation tax, which are highly volatile and concentrated among a small number of firms.[17] This leaves revenues highly vulnerable to the relocation of even one large company, changes in the international tax environment, or a large macroeconomic shock (such as a no-deal Brexit).

These risks suggest the government may want to look for other more stable sources of revenue in future budgets. Increases to carbon taxes seem one obvious source of such revenues, given these are likely to be needed to meet Ireland's 2030 EU emissions targets without incurring substantial costs through the purchase of other countries' emission allowances.[18]

Another source of risk to the public finances is the tendency of successive governments to announce current expenditure measures with much larger long-run than first-year revenue implications. For example, while the cost of the benefit changes announced in the budget is €361.6 million in 2019, it is almost €500 million (40 per cent larger) in subsequent years. This is not mirrored by the profile of tax rises, which are expected to raise €341 million in 2019 and €361 million subsequently, meaning the net annual long-run cost of announced tax and benefit measures (€136 million) is more than six times as large as in 2019 (€20 million). As it stands, no provision has been made in departmental expenditure ceilings to account for these known costs, or for additional recruitment and resources in the areas of education, justice and health.[19]

A further source of risk to the public finances is the recurring announcement – late in the year it is to be paid – of the Christmas bonus: an extra payment for people in receipt of certain social welfare benefits. The recent budget announced that this is to be paid in 2018 at a rate equal to 100 per cent of eligible individuals' normal weekly benefit payment. This requires a supplementary estimate to be passed by the Dáil, and either for expenditure elsewhere to be underspent, revenues to exceed forecasts, or an increase in borrowing. The public finances would be better served by the government announcing the rate of this payment at the same time as other welfare payments, at whatever rate is deemed appropriate to meet distributional and other policy objectives. Such a decision would also benefit lower-income households by removing needless uncertainty about whether the Christmas bonus will be paid in full (as this year), at a reduced rate (as between 2014 and 2017), or at all (as between 2009 and 2013).

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17 See the Irish Fiscal Advisory Council's 'Pre-Budget 2019 Statement' and Parliamentary Budget Office's 'Pre-Budget 2019 Commentary'. The former notes that close to 40 per cent of total corporation tax receipts are paid by just ten companies.

18 See the Climate Change Advisory Council's *Annual Review 2018*, available at www.climatecouncil.ie.

19 See p.43 of the *Expenditure Report 2019*, published at www.budget.gov.ie/Budgets/2019/2019.aspx.

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APPENDIX

The SWITCH model provides a detailed and accurate representation of almost all aspects of the Irish personal tax and benefit system. It does not include taxes on businesses (like corporation tax), which are difficult to assign to individual households, or expenditure on public services, which unlike cash transfers provided through the benefit system, are conceptually difficult to assign a value to (O'Dea and Preston, 2014).

The main measures we include in our analysis of Budget 2019 using SWITCH are:

- Changes to maximum personal rates of social welfare payments, Increases for Qualified Adults and Increases for Qualified Children;
- Changes to income tax credits and the standard rate band;
- Reduction in 4.75 per cent rate of USC and changes to USC thresholds;
- Reduction in mortgage interest relief;
- Freeze to employee PRSI thresholds;
- Freeze to child benefit and FIS/WFP income limits;
- Increase in number of weeks Fuel Allowance payable and freeze to basic amount and income limits;
- Increase in One Parent Family Payment earnings disregard;
- Freeze in Household Benefits package;
- Back to School Allowance increases and freeze to income limits;
- Freeze to Rent and Mortgage Supplement thresholds.