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Doolan, Michael; Keane, Claire

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Cliff edges in the Irish tax-benefit system

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June 2023

CLIFF EDGES IN THE IRISH TAX-BENEFIT SYSTEM

MICHAEL DOOLAN AND CLAIRE KEANE





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THE AUTHORS

Claire Keane is a Senior Research Officer at the Economic and Social Research Institute (ESRI) and Adjunct Associate Professor at Trinity College Dublin. Michael Doolan is a Research Assistant at the ESRI.

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TABLE OF CONTENTS

ABBREVIATIONS	iii
ABSTRACT	iv
SECTION 1: INTRODUCTION	
SECTION 2: TAXATION AND SOCIAL INSU	RANCE SYSTEM 2
2.1 PRSI and USC	
2.2 Income tax	
SECTION 3: WELFARE SYSTEM	14
3.1 Jobseeker's Allowance	14
3.2 Working Family Payment	
SECTION 4: OTHER BENEFITS	
4.1 National Childcare Scheme	
4.2 Medical cards	19
4.3 Third-level student grants	22
4.4 Housing supports	23
SECTION 5: CONCLUSIONS	
REFERENCES	
APPENDIX I	28

LIST OF TABLES

Table 1	PRSI – Current policy and reforms
Table 2	USC – Current policy and reforms
Table 3	Medical card weekly income limits
Table 4	Weekly social welfare rates
LICT OF	FIGURES
LIST OF	FIGURES
Figure 1	USC cliff edge
Figure 2	PRSI cliff edge
Figure 3	PRSI credit4
Figure 4	Distributional impact of reform 1 (PRSI)
Figure 5	Distributional impact of reform 2 (PRSI)
Figure 6	Distributional impact of reform 3 (USC)
Figure 7	Distributional impact of reform 4 (USC)
Figure 8	Additional income tax liability by earnings
Figure 9	NCS withdrawal 2020 18

ABBREVIATIONS

CSO **Central Statistics Office**

EUROMOD Tax-benefit microsimulation model for the EU

HAP **Housing Assistance Payment**

JST Jobseeker's Transitional Payment

Organisation for Economic Co-operation and Development OECD

OPFP One-Parent Family Payment

PAYE Pay as you earn

PRSI Pay-Related Social Insurance

RMF Research Microdata Files

RRReplacement rate

SILC Survey of Income and Living Conditions

Simulating Welfare, Income Tax, Childcare and Health policies **SWITCH**

USC Universal Social Charge

WFP Working Families Payment

ABSTRACT

Trade-offs exist in protecting those on lower incomes and ensuring an adequate incentive to work. If benefit entitlements and other supports are withdrawn sharply as income rises, there may be a financial disincentive to enter employment or to work more. The same is true for tax and social insurance liabilities – if these jump at certain points or increase sharply they may disincentivise employment. This paper examines cliff edges that exist in the Irish tax and welfare system – such as income thresholds for medical cards and Pay-Related Social Insurance (PRSI) contributions – that can mitigate against the generally strong incentives to work faced by the working-age population. Where possible, it considers options for reforms to these cliff edges.

Introduction

A well-designed tax-benefit system has a variety of aims. It should generate tax revenue at the lowest possible cost and is generally designed to be progressive, taking more from those on higher incomes. These taxes are then redistributed by funding a welfare system that seeks to provide incomes to those with low or no earnings.

Tax-benefit systems face challenges in achieving their objectives. One key challenge is to avoid work disincentives — ensuring we provide adequate incomes via the social welfare system without creating strong financial disincentives to work. A second issue is how to generate adequate tax revenue and achieve redistributive aims while minimising the disincentive effects of taxation whereby individuals may reduce their work hours or drop out of the labour market entirely in response to the taxes they face.

One key element in reducing work disincentives is to have a tax-benefit system that avoids cliff edges. Cliff edges usually occur where benefit entitlements and other supports are withdrawn sharply (or entirely) as income rises or where tax and social insurance liabilities increase steeply as income rises. However, cliff edges may also arise with other eligibility criteria; for example, in the case of the Student Grant Scheme, an eligible student residing less than 30km from their institution of higher education will be entitled to a much lower maintenance payment that an identical student living more than 30km away. Cliff edges reduce the incentive to work and should be avoided in any tax-benefit system. Indeed, the Commission on Taxation and Welfare (2022) recommends that 'cliff edges in the taxation and welfare system should be removed'.

This paper examines where such cliff edges exist in the Irish tax-benefit system and outlines some potential reform scenarios. Section 2 investigates whether cliff edges appear in the income tax and social insurance systems. Section 3 discusses cliff edges in the welfare system. Section 4 explores cliff edges in benefits outside of the standard welfare payments. Section 5 concludes.

SECTION 2

Taxation and social insurance system

2.1 PRSI AND USC

As pointed out by the OECD (Browne et al., 2018) and the Commission on Taxation and Welfare (2022), both Pay-Related Social Insurance (PRSI) and the Universal Social Charge (USC) are characterised by the presence of a cliff edge. These cliff edges occur as individuals with an income below a certain level (\le 352 per week for PRSI,¹ and \le 13,000 per year for the USC)² are exempt from these charges. Once income increases above these cut-offs, however, the entirety of a person's income becomes liable. This results in a drop in disposable income at these points. For example, an individual whose income rises by \le 1 from \le 13,000 to \le 13,001 incurs a USC liability of \ge 80 per annum, while someone whose income rises from \le 352 per week to \le 353 incurs a PRSI liability of \le 119 per annum. Both these changes result in very high marginal effective tax rates whereby a small rise in gross income results in a fall in disposable income (see Figure 1 and Figure 2).³

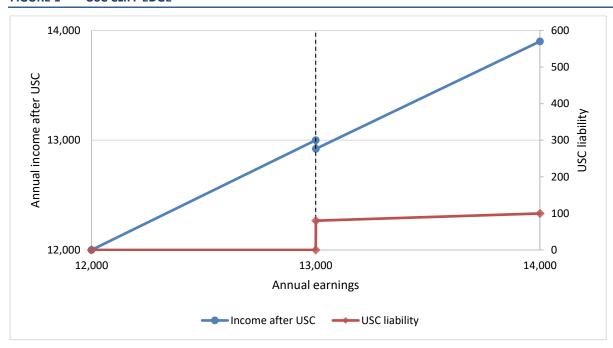


FIGURE 1 USC CLIFF EDGE

Source: Authors' calculations.

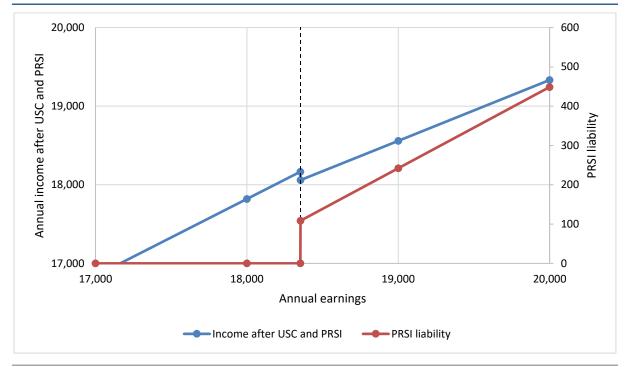
Notes: Hypothetical example of an employee.

A cliff edge also exists in employer PRSI at €352 per week whereby the employer must pay PRSI on the entirety of an employee's income above this point. However, given our focus is on cliff edges that impact upon an individual's incentive to work/earn more, we do not carry out detailed analysis of the employer PRSI cliff edge.

Reduced rates of USC exist for certain groups; e.g., medical card holders earning less than €60,000 per annum.

Given that the initial rate of USC is 0.5%, compared to a flat rate of 4% for PRSI, the disincentive effects of the USC cliff edge are likely smaller.

FIGURE 2 PRSI CLIFF EDGE



Source: Authors' calculations.

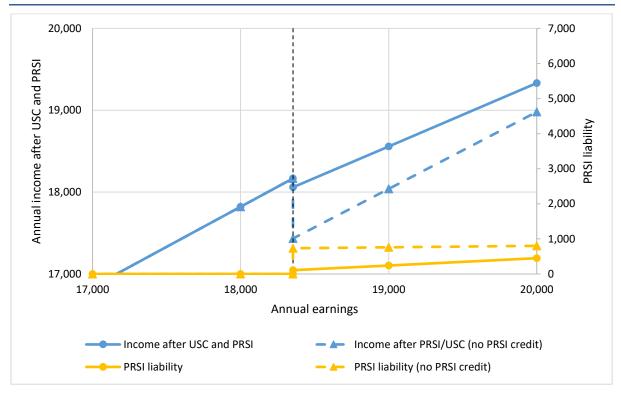
Notes: Hypothetical example of an employee.

These cliff edges may have behavioural implications, incentivising individuals to 'bunch' or cluster just below thresholds that, if crossed, would result in a jump in liability. Research suggests that this may be the case for the PRSI threshold.⁴ Hargaden and Roantree (2019), using administrative income receipt data, find a clustering of incomes just below the PRSI liability threshold.

The cliff edge nature of PRSI calculations was more severe prior to the introduction of a PRSI credit in 2016, which reduces the PRSI liability of an individual earning between €352.01 and €424 per week. The credit results in a more gradual increase in PRSI when a person's income surpasses €352 per week (see the difference between the yellow and dashed yellow lines in Figure 3) and produces a smaller fall in disposable income (see the difference between the blue and dashed blue lines in Figure 3).

⁴ To our knowledge similar research regarding the USC threshold has not been carried out.

FIGURE 3 PRSI CREDIT



Source: Authors' calculations.

Notes: Hypothetical example of an employee.

Despite softening the initial impact of PRSI on disposable income, the credit does not remove entirely the drop in disposable income when an individual's income rises above €352 per week. Using SWITCH⁵ (Simulating Welfare, Income Tax, Childcare and Health policies), the ESRI's tax-benefit microsimulation model, we examine policy reforms which would remove this cliff edge entirely and outline options for doing the same for USC. SWITCH is linked to a representative sample of the Irish population, the 2019 Survey on Income and Living Conditions (SILC), the primary source of information on household incomes, collected annually by the Central Statistics Office (CSO). The data are adjusted to ensure they are representative of the current 2023 population in terms of income levels etc.

We examine two key reforms in the case of both PRSI and USC:

- Remove cliff edge, maintain current rates and lower the eligibility threshold.
- 2. Remove cliff edge, increase current rates and maintain the eligibility threshold.

For more detail on the model, see https://www.esri.ie/publications/switch-a-tax-benefit-model-for-ireland-linked-to-survey-and-register-data.

The reforms have been designed to be revenue-neutral. There is, however, a distributional impact of these changes and this will be discussed further below.

TABLE 1 PRSI – CURRENT POLICY AND REFORMS

Rate (%)				
Current PRSI				
If earnings > €352 (EE) or > €96.15 (SE) per week				
4				
n rates and reduce eligibility threshold				
Applied to all weekly earnings				
0				
4				
Reform 2: Remove cliff edge, increase rates and maintain eligibility threshold				
0				
5.79				

Source: Thresholds and rates used in Reform 1 and Reform 2 estimated by authors using SWITCH run on 2019 SILC data,

uprated to 2023 levels.

Notes: EE = employee, SE = self-employed.

Table 1 summarises current PRSI policy and the main parameters of PRSI reforms 1 and 2. Currently, employees in Ireland pay no PRSI if they earn €352 per week or less. Once an employee surpasses this threshold, they pay PRSI at a rate of 4 per cent on the entirety of their earnings. Similarly for the self-employed, they do not pay PRSI if they earn €5,000 per year or less (€96.15 per week), with the entirety of a self-employed person's earnings liable for PRSI at 4 per cent once this threshold is passed. The PRSI credit has been outlined above.

To remove the cliff edge, we abolish the PRSI credit and instead introduce a 0 per cent rate — i.e., a band within which an employee or self-employed person pays PRSI at a rate of 0 per cent. Once earnings increase above the upper limit of this band, only the earnings above the limit will be subject to PRSI. When set up as such, a 0 per cent rate and an eligibility threshold are similar to each other, in that individuals with income below the relevant cut-off (€352 per week for an employee; €96.15 for the self-employed) have no PRSI liability.

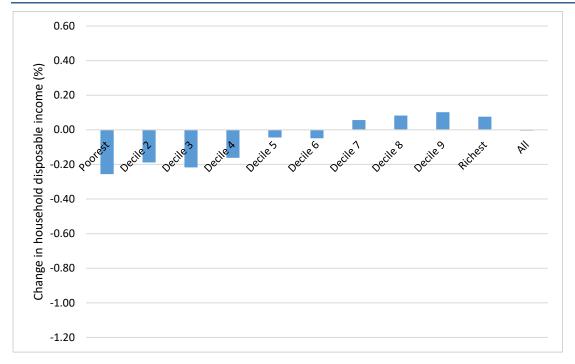
Under reform 1, we maintain PRSI at its current rate of 4 per cent. For this scenario to be revenue-neutral, the upper limit of the 0 per cent band must be set at a point below the current eligibility threshold – i.e., below €352 per week for employees. This is because under current PRSI policy, an employee earning €353 per week pays PRSI on the full amount of their earnings. If under reform 1 the upper limit of the

0 per cent band was set at the current eligibility threshold of €352 per week, this same employee would only pay PRSI on the €1 of their earnings above the €352 limit, resulting in a reduction in PRSI revenue for the Exchequer. We harmonise the 0 per cent rate for both employees and the self-employed. The reform is revenue-neutral when the upper limit of the 0 per cent band is set to €32.45 per week for both employees and the self-employed.

Under reform 2, we remove the cliff edge and maintain the eligibility thresholds at their current levels for both employees (€352 per week) and the self-employed (€96.15 per week). In other words, a 0 per cent rate is applied to all earnings up to €352 per week for employees and to all earnings up to €96.15 for the self-employed. For this reform to be revenue-neutral, a rate greater than 4 per cent must be applied to all earnings above the upper limit of the 0 per cent band. Under current PRSI policy, an employee earning €353 per week pays PRSI at 4 per cent on the full amount of their earnings. If this 4 per cent rate was maintained under reform 2, this same employee would pay PRSI at 4 per cent on the €1 of their earnings above the upper limit of the 0 per cent rate, yielding a reduction in PRSI revenue. Revenue-neutrality is achieved when the PRSI rate is increased to 5.79 per cent.

Figure 4 charts the distributional impact of reform 1. Throughout this paper, the distributional impacts of all of our reforms (1-4) are displayed using the same axis, facilitating the comparison of impact magnitude across reforms. We split the population into 10 equally sized groups, from the poorest 10 per cent to the richest 10 per cent, and investigate the effect of the reform on each. Losses and gains to household disposable income in each decile are minimal, ranging from a loss of 0.26 per cent in the poorest decile to a gain of 0.1 per cent in decile 9. Reform 1 does however display a regressive pattern, with losses concentrated among the poorest households. This is unsurprising as, prior to the reform, all employees with incomes below €352 per week (mainly found in the lower deciles) were exempt from PRSI. Under reform 1, only those with incomes below €32.45 per week are exempt – all those with weekly incomes between €32.45 and €352 are now liable for PRSI. Income deciles are calculated based on household income, meaning that individual lower earners are not necessarily all found at the bottom of the household income distribution. This is demonstrated in Figure 4, with losses observed right up to the sixth income decile. Households in decile 7 and above experience income gains. These deciles are composed mainly of earners with income above €352 per week, who currently pay PRSI on the entirety of their earnings. However, under this reform, they benefit from the 0 per cent rate applied to earnings up to €32.45 per week.

FIGURE 4 DISTRIBUTIONAL IMPACT OF REFORM 1 (PRSI)

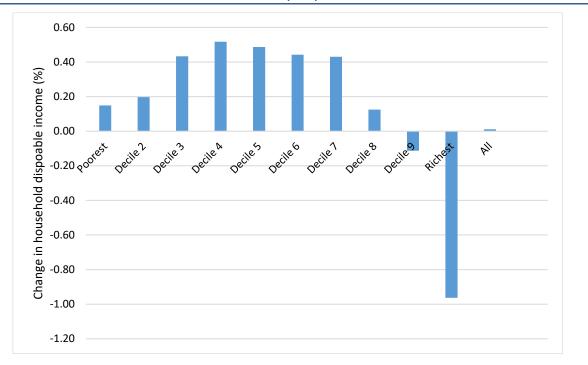


Source: Authors' calculations using SWITCH run on 2019 SILC data, uprated to 2023 levels.

Figure 5 charts the distributional impact of reform 2. Income changes range from a loss of -0.96 per cent in the richest decile to a gain of 0.52 per cent in decile 4. Reform 2 has a more progressive distributional impact as compared to reform 1, with poorer deciles experiencing income gains and with losses only observed in deciles 9 and 10. Anyone who is currently PRSI exempt (earning below €352 per week) remains so under the reform. Many earners currently liable for PRSI benefit from the reform. Although the 5.79 per cent rate applied to earnings above €352 under the reform is higher than the 4 per cent rate under current policy, the 0 per cent rate has the overall effect of reducing the PRSI liability for all individuals earning between €352 and €1,138 per week. Individuals with earnings above this level, mainly found in the higher income deciles, are left worse off following the reform. The beneficial effect of the 0 per cent rate is outweighed by the negative effect of the higher rate for these individuals.

In sum, the PRSI cliff edge could be removed with no fiscal impact and with minimal effect on household disposable income. Reform 2 allows for a more progressive distribution of negative impacts as compared to reform 1. However, changes in household disposable income are of larger magnitudes under reform 2.

FIGURE 5 DISTRIBUTIONAL IMPACT OF REFORM 2 (PRSI)



Source: Authors' calculations using SWITCH run on 2019 SILC data, uprated to 2023 levels.

TABLE 2 USC – CURRENT POLICY AND REFORMS

Bands (€)	Rates (%)			
Current policy				
If earnings greater than €13,000				
0–12,012	0.5			
12,012.01–22,920	2			
22,920.01–70,044	4.5			
70,044.01 +	8			
SE income > €100,000	11			
Reform 3: Remove cliff edge, mainta	ain rates and reduce eligibility threshold			
Applied to all earnings				
0–975	0			
975.01–12,012	0.5			
12,012.01–22,920	2			
22,920.01–70,044	4.5			
70,044+	8			
SE income > €100,000	11			
Reform 4: Remove cliff edge, increase	all rates and maintain eligibility threshold			
Applied to all earnings				
0–13,000	0			
13,000.01–22,920	2.2			
22,920.01–70,044	4.7			
70,044.01 +	8.2			
SE income > €100,000	11.2			

Source: Thresholds and rates in reform 3 and reform 4 were estimated by authors using SWITCH run on 2019 SILC data,

uprated to 2023 levels.

Notes: SE = self employed.

Table 2 summarises current USC policy and the main parameters of USC reforms 3 and 4, designed to be revenue neutral. Currently, employees and self-employed individuals do not pay USC if they earn €13,000 per annum or less. Once an employee surpasses this threshold, they pay USC at a rate of 0.5 per cent on all earnings between €0 and €12,012, creating a cliff edge. Earnings above this band are taxed at progressively higher rates (outlined in Table 2). A higher rate of 11 per cent applies to all non-pay-as-you-earn (PAYE) earnings in excess of €100,000. This rate does not apply to employment earnings.

As with PRSI, we introduce a 0 per cent band as part of both reforms, with only earnings above the upper limit of this band falling subject to USC. Under reform 3, we maintain the current rates of USC. To achieve revenue neutrality under this scenario, the upper limit of the 0 per cent rate must be set at a point below the current €13,000 eligibility threshold. The reasons for this are identical to those explained in the above description of reform 1. We reduce the eligibility threshold to €975 to achieve revenue neutrality.

Under reform 4, we maintain the eligibility threshold at its current level of €13,000. With only earnings above this level subject to USC, it is necessary to increase all USC rates by just under 0.2 per cent to ensure revenue neutrality. The reasons for this are identical to those explained in the above description of reform 2. The first band of USC under current policy (€0–€12,012) is below the upper limit of the 0 per cent rate of our reform. We remove this band and the rate of 0.5 per cent.

Figure 6 depicts the distributional impact of reform 3. Losses and gains to household disposable income are negligible across all deciles, ranging from a loss of -0.034 per cent in the poorest decile to a gain of 0.094 per cent in decile 8. Reform 3 does however display a regressive pattern, with losses concentrated among the poorest households. Individuals with earnings between ξ 975.01 and ξ 13,000 per year are currently exempt from USC but become liable under this reform, resulting in disposable income losses. Individuals with earnings above ξ 13,000 per year benefit from a portion of their earnings now being USC exempt (ξ 0 – ξ 975).

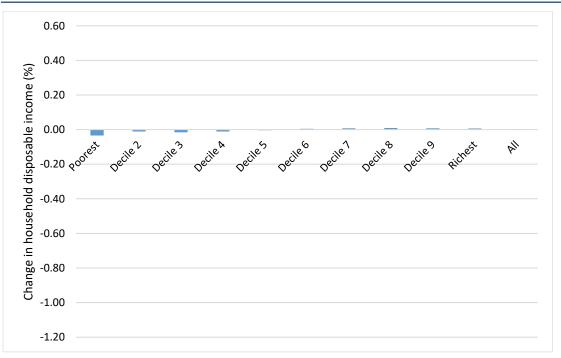


FIGURE 6 DISTRIBUTIONAL IMPACT OF REFORM 3 (USC)

Source: Authors' calculations using SWITCH run on 2019 SILC data, uprated to 2023 levels.

Figure 7 charts the distributional impact of reform 4. Again, changes in household disposable income across all deciles are minor, ranging from a loss of -0.18 per cent in the richest decile to a gain of 0.097 per cent in decile 5. The income changes are, however, of greater magnitude than those observed in reform 3. Unlike reform 3, reform 4 has a broadly progressive impact on incomes, with poorer households realising income gains and with small income losses concentrated in the upper two

deciles. All individuals currently exempt from USC remain so under this reform. Those with incomes between €13,000 and c. €52,910 per annum benefit from the reform, as the benefit of the 0 per cent rate outweighs the negative effect of the higher rates. Those with incomes above c. €52,910 per annum are left worse off under this reform, as the negative implications of the higher rates outweigh the benefit of the 0 per cent rate.

As with PRSI, the USC cliff edge could be removed without any Exchequer impact and with minimal effect on the disposable income of households. The changes in household income are of greater effect sizes under reform 4 as compared to reform 3. Reform 4 does however allow for a more progressive distribution of income losses across the population.

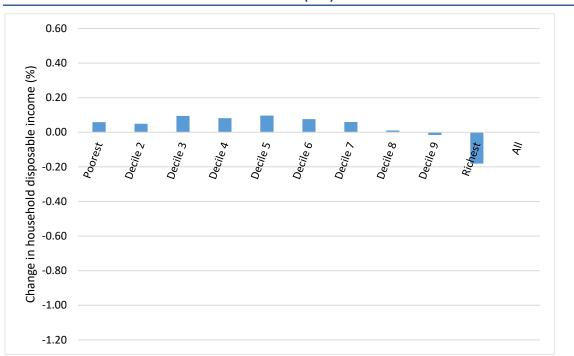


FIGURE 7 **DISTRIBUTIONAL IMPACT OF REFORM 4 (USC)**

Source: Authors' calculations using SWITCH run on 2019 SILC data, uprated to 2023 levels.

> The reforms that result in a higher PRSI or USC rate (reforms 2 and 4) are more progressive. They would, however, increase marginal effective tax rates and reduce work incentives, reflecting the trade-offs that are faced by policymakers.

2.2 **INCOME TAX**

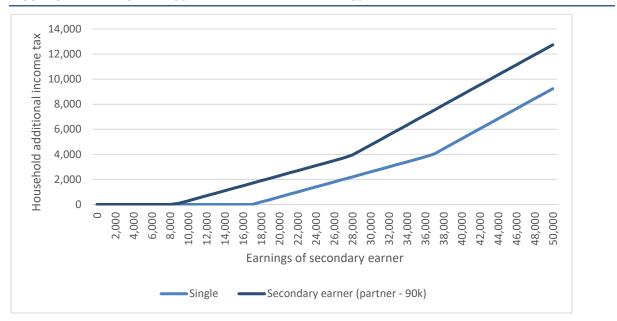
The income taxation system in Ireland generally does not have sharp cliff edges compared to the PRSI and USC systems described above, in that liability does not jump at a certain point. Instead, a person's income is taxed at three potential rates - 0 per cent, 20 per cent and 40 per cent. People receive tax credits so that a proportion of their income is effectively earned tax-free, with the next band falling at 20 per cent and the remainder at 40 per cent once the standard rate band threshold has been crossed.

There is, however, one group of individuals that faces a sharper rise in taxation in relation to their income, should they decide to enter employment – second earners in married couples/civil partnerships. This is due to the fact that the tax system in Ireland is not fully individualised. Instead, married couples can opt for joint taxation, which allows for a sharing of the personal tax credit and partial transferability of an individual's standard rate band. 6 This creates a disincentive for second earners in married couples to enter employment. Doorley (2018) found that the move in 2000 from a joint taxation system to the current partly individualised system we have today led to a five to six percentage point rise in the participation rates of married women, with women more commonly being the lower/secondary earner in a couple. The fact that Ireland only has a partially individualised tax system results in two disincentives. Firstly, the income level at which additional tax is incurred by the second earner is lower than for a single person as the second earner only retains their employee PAYE tax credit while the primary earner is availing of the secondary earner's personal tax credit. ⁷ Secondly, the partial sharing of the standard rate band means that a second earner begins paying the higher 40 per cent tax at a lower income level than they would if they were single/not jointly taxed. This is illustrated in Figure 8 below - the single person begins paying tax at a higher level of income and enters the 40 per cent tax band at a higher income than a married person (whose partner earns €90,000 per annum).

In 2023, the personal tax credit is €1,775 for a single person or €3,550 for a married couple/civil partner; the standard rate band is €40,000 for a single person and €49,000 for a one-earner married couple/civil partnership.

While the couple can opt to be individually assessed it is likely that most one-earner couples opt for joint taxation given the financial benefits. Even if they opt for individual taxation, if the other spouse commences employment, there would be a drop in disposable income for the first earner if they revert to the tax credits/SRB of a non-married person.

FIGURE 8 ADDITIONAL INCOME TAX LIABILITY BY EARNINGS



Source: Authors' calculations using EUROMOD and the 2022 policy system.

> A move to a fully individualised tax system would remove this issue and, given the findings of Doorley (2018), likely result in a rise in female labour force participation rates. There would, however, be a distributional impact of such a move. For example, those who currently benefit financially from partial individualisation (e.g. married one-earner couples) would experience a rise in taxation and a fall in disposable income. It is, however, unclear if such a move would result in a fall in disposable income overall as the likely labour supply reaction of secondary earners would have a positive impact on family disposable income. Further analysis would be needed to examine this issue.

> The Commission on Taxation and Welfare (2022) recommends a phased move towards individualisation of the standard rate cut-off so as to address disparities in the income tax system and to facilitate 'increased employment and decreasing the gap in the employment rate between men and women'.

SECTION 3

Welfare system

The social welfare system generally avoids cliff edges as benefit receipt of non-contributory schemes such as Jobseeker's Allowance (JSA) is tapered, or gradually reduced, through means testing. Some cliff edges do exist in the welfare system, however, and these are discussed below.

3.1 JOBSEEKER'S ALLOWANCE

Another cliff edge identified by the OECD (Browne et al., 2018) is related to the 'four-in-seven' rule: that those working part-time can receive Jobseeker's Benefit (JSB) or JSA, at a pro-rata rate. This is only the case, however, if they are unemployed for at least four out of seven consecutive days. JSA is means tested, meaning two lower-income individuals working part-time who satisfy the means test can have different JSA entitlements depending on their workdays. For example, if both work 15 hours per week – one spreading these hours over 5 days, the other working them all in 2 days, only the latter will be eligible for a partial JSA payment.

This rule creates a cliff edge for any individuals currently working three days per week – any increase in hours that result in an extra day being worked, even for only one additional hour, will result in a full withdrawal of any JSA currently being received. As discussed in Keane et al. (2021), this rule may therefore create constraints for employers if part-time work is available throughout the week rather than being concentrated in three days or less.

This cliff edge could be removed by the abolition of the four-in-seven rule. Given that JSA is already means tested, any additional income earned from extra hours worked would result in a gradual reduction of JSA, thus improving the financial incentive to work more. This is the case for the Jobseeker's Transitional Payment (JST), which falls under the JSA scheme. This payment was introduced in 2012 for lone parents when the qualifying child age for the One-Parent Family Payment (OPFP) was reduced. It has the same rates and means test as JSA but the four-inseven rule does not apply. The JTP therefore provides more flexibility and allows for a partial rate to be paid even if working in excess of three days a week. This flexibility is highlighted on www.gov.ie, the central portal for government services and information, where it is stated that it 'would allow you to work mornings only while your child or children are in school'.8

⁸ See https://www.gov.ie/en/service/9c29ef-jobseekers-transitional-payment/.

For people without children, the disincentive effect of the four-in-seven rule is likely stronger, as the in-work support for those on low incomes, the Working Family Payment, is only available to those with children.

3.2 **WORKING FAMILY PAYMENT**

The Working Family Payment is a weekly tax-free payment for employees with at least one child. It is an in-work benefit supporting those in lower paid employment. Different income limits apply depending on family size and the payment is 60 per cent of the difference between a person's average family income and the relevant income limit for that family.

The payment is only available to an individual working at least 38 hours per fortnight (their work hours can be combined with that of their partner). Once deemed eligible for the payment, a person keeps that payment level for a year. Therefore, if an individual's work hours fluctuate throughout the year, dipping below the 38 hours per fortnight level, they will still maintain the payment. An individual is reassessed each year, however, and should their hours fall below the 38-hour mark at the time of reassessment, they will no longer be eligible for the payment. Likewise, a person who is unable to find full-time employment and whose hours are below the 38 hour per fortnight level will not be eligible for the Working Family Payment and are likely to face a disincentive to work. The 38-hour working criteria creates a sharp cliff edge for those who may just fail to meet it, often for reasons outside of their control; for example, an employer reducing an employee's hours. A more gentle tapering of this payment as working hours decrease could be considered; alternatively, workers could be allowed to average their work hours over a longer period.

This issue of a lack of in-work support for those on low pay is heightened by the four-in-seven rule just discussed. If an individual working less than 38 hours per fortnight has their work hours spread throughout the week, rather than being concentrated in 3 days or less, they will not be eligible for a partial JSA payment either.

SECTION 4

Other benefits

In this section we examine some other benefits outside of the usual income support benefits administered by the Department of Social Protection.

4.1 NATIONAL CHILDCARE SCHEME

The National Childcare Scheme (NCS) provides hourly subsidies for Tusla-registered childcare for children between the ages of 6 months and 15 years. The scheme provides a combination of means-tested subsidies for those below certain income thresholds, along with a universal payment for those who do not qualify for the means-tested component. For parents in employment, the scheme subsidises up to 45 hours of childcare costs. For those not in employment, the scheme subsides up to 20 hours of childcare per week. The maximum subsidy rates are based on the child's age,⁹ and are available to parents whose reckonable income is below €26,000.¹¹¹ The means-tested subsidies are withdrawn as income rises up to a reckonable income of €60,000. Above this level a universal, non-means-tested subsidy of €1.40 per hour is available, increased from 50c per hour in Budget 2023.

Tapering benefit rates in line with earnings is standard in means-tested benefits and prevents a cliff edge whereby the benefit gets entirely withdrawn once a certain income threshold is crossed (i.e., in an 'all or nothing' manner). A trade off will always exist in means-tested benefits between the generosity of the transfer and work incentives. The more slowly a benefit is withdrawn, the smaller the negative impact on work incentives but the higher the cost to Government of providing the benefit. Sharp taper rates, while reducing the cost to Government, can reduce work incentives as it means benefits get withdrawn sharply as income rises. Therefore, while the NCS subsidy improves the financial incentive to join the labour market, particularly for parents with lower earnings potential, it reduces the incentive to work or earn more once a parent is actually in employment, with the subsidy amount reducing as income rises (Keane and Bercholz, 2019). This can, therefore, create a disincentive for an individual to earn more, for example through working more hours or accepting a promotion that would increase their hourly rate of pay.

Doorley et al. (2021) highlighted an issue in the NCS whereby the rate at which the subsidy gets withdrawn increases with the number of children. This is illustrated

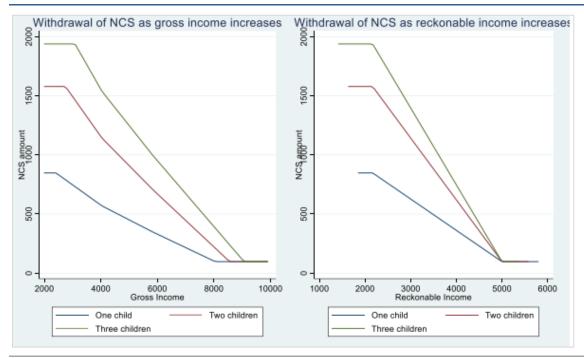
From January 2023, the maximum hourly income-assessed subsidy rates are €5.10 for children aged 24 weeks to 12 months, €4.35 for children aged 12-35 months, €3.95 for children aged over 3 years but not yet in school and €3.75 for school-age children.

Reckonable income is net income from all sources (including most social welfare payments), i.e., after tax, PRSI and USC have been deducted. Additional income deductions exists for families with two or more children.

by an example in Figure 9 below, taken from Doorley et al. (2021), which shows the NCS subsidy rate at different income levels for a family with one, two and three children. Each household is assumed to contain two adults, one in full-time employment (40 hours per week), the other in education. Below €2,167 reckonable income per month (€26,000 per year) the maximum subsidy is received. Between this point and €5,000 per month (i.e, the €60,000 annual cut-off point) the subsidy is withdrawn, above which only the universal hourly subsidy can be received. For all three families the subsidy amount falls as income rises (for example as the person in employment earns more through increased hours or a wage rise or through the second adult entering the labour market). The rate of withdrawal rises, however, as the number of children increase. For the one-child family the amount of NCS subsidy falls by around 27c per €1 extra of income. For the two-child family more than half (52c) of every extra euro of income is lost through the NCS subsidy withdrawal. This rises even more steeply for the three-child family: for every extra euro of income nearly two-thirds, 64c, is lost in NCS subsidies. Therefore, while the NCS does not have a strict 'cliff edge' in place - whereby all the benefit gets withdrawn fully once a certain threshold is crossed – these sharp taper rates in place for families with more than one child are still of concern.

Figure 9 examines NCS withdrawal in isolation, but it is important to remember that each element of the tax-benefit system interacts with others. For example, as pointed out by Doorley et al. (2021), tax and PRSI, etc., rise as income rises. This means that close to three-quarters of gross income is paid in income tax, PRSI and forfeited NCS for the two- and three-child family examples described above at the point where the family becomes liable for the top tax rate. Therefore, the combination of NCS withdrawal, along with rising taxes and social insurance, can create strong disincentives for a parent to earn more, or for the second parent to enter the workforce - particularly in families with more than one child using fulltime childcare.

FIGURE 9 NCS WITHDRAWAL 2020



Source: Doorley et al. (2021)

Notes: The one-child household contains a child aged two years. The two-child household contains children aged two and four years. The three-child household contains children aged two, four and eight years. In each case, all children are in full-time children or after-school care.

Recent reforms increased the hourly universal subsidy from 50c to €1.40 and increased the maximum qualifying age of children from 3 to 15 years, helping to reduce negative work incentive effects of the scheme. However, the issue remains of rising withdrawal rates as the number of children in a family increases.

One possible option proposed by Doorley et al. (2021) would be to increase the maximum income limit for larger families in order to reduce the taper rate for them and to improve their financial incentive to work. They suggest the maximum income threshold for parents of two or more children could be increased by the amount of the Child Allowance. The Child Allowance is a flat amount that a family can deduct from their means if they have two or more dependent children in the family, which means that they receive the maximum rate of NCS subsidies for longer. There is a €4,300 annual deduction for households with two dependent children and an €8,600 deduction for families with three or more children. The effect of these allowances can be seen in the left-hand side graph of Figure 9, whereby the maximum level of the benefit is received for longer by those with two or more children. Increasing the maximum income thresholds for families with two or more children by the amount of these allowances would reduce the taper rate for these families, reducing the speed at which the NCS is withdrawn as gross income rises. Indexing, or increasing, the income limits in line with inflation would also be advisable so that the thresholds rise in line with average earnings growth. Another alternative would be to set not the withdrawal income, as is the case now, but the withdrawal rate at a family level, so that the subsidy gets withdrawn at the

same rate regardless of the number of children for whom the subsidy is being received.

4.2 **MEDICAL CARDS**

Medical card holders are entitled to free primary, community and public hospital care. Prescription medication is also provided with a small co-payment fee. Given the fact that medical cards cover ongoing, as well as unforeseen, health costs, they are a substantial non-cash benefit. They also provide recipients with a sense of security that medical costs will not cause undue hardship or that medical care will not have to be foregone due to financial reasons.

The majority of medical card holders qualify based on satisfying the means test. Income limits for the cards are shown in Table 3 and differ by family type. For those over 70, means are calculated based on gross income (i.e., before tax, USC and PRSI). For those under 70, means are based on net income (i.e., after tax, USC and PRSI). A variety of costs are allowed against income, such as housing, childcare and travel-to-work costs. Some individuals may gain eligibility outside the financial criteria just discussed. These include those whose income falls above the income limit but who are granted a card on a discretionary basis if it is decided that not having a card would result in undue financial hardship. Others are granted a card without a means test; examples include children in foster care and children who have had a recent cancer diagnosis.

TABLE 3 MEDICAL CARD WEEKLY INCOME LIMITS

Under 70s (net income)	€
Single person living alone aged up to 65	184
Single person living alone aged 66 and over	201.5
Single person living with family aged up to 65	164
Single person living with family aged 66 and over	173.5
Married, co-habiting couple/single parent family aged up to 65 with dependents	266.5
Married, co-habiting couple/single parent family aged over 66 with dependents	298
Additional rates	
First two children under 16 financially dependent on applicant	38
Third and subsequent children under 16 financially dependent on applicant	41
First two children over 16 financially dependent on applicant	39
Third and subsequent children over 16 financially dependent on applicant	42.5
A dependent over 16 who is in full-time third-level education, not grant aided	78
Over 70s (gross income)	
Single	550
Couple	1,050

In general, if an individual's means go above the relevant income limit, they will no longer qualify for a medical card. Therefore, a cliff edge is inherent in the system whereby if an individual's income goes €1 above the income limit, the card is withdrawn. Tackling this cliff edge is substantially more difficult than in the case of the NCS issue just discussed, due to the non-cash nature of the benefit. While individuals could be asked to contribute a proportion of their increased income towards their medical costs, this would likely result in a large administrative burden to the State and cardholders. In addition, some benefits of holding a card are difficult, if not impossible, to put a value on (see O'Dea and Preston, 2014). The card often acts as an access gateway as those without a medical card may not be entitled to public community services such as physiotherapy, social worker services or public health nursing (Houses of the Oireachtas Committee on the Future of Healthcare, 2017), which are allocated to medical card holders first. This is in addition to the immeasurable benefit of the sense of security a card provides, with an individual or family safe in the knowledge that potential health costs will always be covered.

Some attempts have been made to soften the cliff edge in the medical card system and reduce the work disincentive that the card creates. Firstly, those entering employment after a spell of long-term unemployment (specifically those who were in receipt of a full social protection payment or government employment scheme payment for 12 consecutive months) can retain a medical card for three years. Secondly, GP visit cards, which cover the cost of attending a GP, were introduced in 2005. These cards are mainly means tested with income limits around two-thirds higher than the medical card limits. In addition, those under six years and over 70 are eligible for a GP visit card purely on an age basis.¹¹

One cliff edge still remains in the system, however. If an individual's assessable income is above the income limit and all of this income comes from social welfare, they will receive a medical card. There are two main problems with this rule. Firstly, it creates a work disincentive – an individual could enter employment and have the same, or lower, weekly amount in net earnings compared to their social welfare benefits but would lose the card if their net earnings are above the income limit. While they may retain a card this will only be the case for a three-year period and will not cover someone whose social welfare receipt lasted less than 12 months. Secondly, it creates horizontal inequity whereby two identical people/families with the same income level – one entirely from social welfare and another in receipt of employment income – have different eligibility for a medical card if their total income is above the relevant income limit. This issue is exacerbated by the fact that the income limits for medical cards are not routinely adjusted in line with price or

This is in itself another cliff edge in the system whereby entitlement to a GP visit card is lost, for example, when a child turns six.

wage inflation. In fact, the income limits for those under 70 have been static since 2005.

As shown in Table 4, the main social welfare payments have increased substantially since then - for example, the personal rates of Jobseeker's Benefit/Allowance, Disability Benefit and the One-Parent Family Payment have risen by close to 50 per cent over this period. If we compare the headline social welfare rates to the static medical card income limits, we can see that a single person aged under 65 in receipt of Jobseeker's Benefit/Allowance or Disability Allowance would have received €148.80 per week in 2005, putting them comfortably below the income limit for a medical card (€184 if living alone or €164 if living with family), while the €220 rate payable in 2023 puts them well above the unchanged medical card income limit. Likewise, a couple with two children in receipt of these payments has a medical card income limit of €342.50 (€266.50+(2*€38)). While their 2005 social welfare receipt, at €281.10 per week, puts them well below the medical card limit, their welfare receipt in 2023, €408, puts them substantially above it. It is therefore likely that this qualification rule regarding social welfare is growing in importance over time, as is the horizontal inequity between families of similar income levels but different employment statuses.

One policy option that would remove this issue would be to abolish the rule regarding automatic entitlement to a medical card for those whose income is solely from social welfare and instead adjust the income limits upwards to ensure that those in receipt of social welfare would qualify purely on a means-tested basis. This would ensure that those who have income from other sources (e.g., those in lower paid employment or those with both social welfare and employment income) would also qualify and it would help reduce the work disincentive of the card. Once set at an appropriate level, medical card income limits would then need to be indexed, or increased annually in line with social welfare rises.

TABLE 4 WEEKLY SOCIAL WELFARE RATES

	2005 (€)	2023 (€)	% Change 2005–2023			
State Contributory Pension						
Personal rate	179.30	265.30	48%			
IQA <66	119.50	176.70	48%			
IQA 66+	138.50	237.80	72%			
Couple on SCP (both 66+)	317.80	503.10	58%			
State Non-Contributory Pension	State Non-Contributory Pension					
Personal rate	166	254	53%			
IQA	109.70	167.80	53%			
Couple on SNCP	275.70	421.80	53%			
Jobseeker's Benefit (JSB) /Jobse	eker's Allowance 25+ (J	ISA)/ Disability Allowand	ce (DA)			
Personal rate	148.80	220	48%			
IQA	98.70	146	48%			
IQC	16.80	42/50*				
Couple on JSB/JSA/DA, 2 kids	281.10	408	45%			
One-Parent Family Payment (OPFP), <66						
Personal rate	148.80	220	48%			
IQC	19.30	42/50*				
OPFP <65, 2 kids	187.40	312	66%			

Source:

SW19 rates booklets.

Notes:

Maximum rates are shown in the table above. When calculating the rates for families with two children it is assumed one is under and one over 12 years. IQA = Increase for a qualified adult. IQC = Increase for a qualified child. SCP = State Contributory Pension. OPFP = One-Parent Family Payment. * The €42 rate applies to a child over 12 and the €50 to a child 12+.

4.3 THIRD-LEVEL STUDENT GRANTS

The Student Grant Scheme provides financial support to those in third-level education. These grants are means tested and cover tuition fees as well as providing a maintenance grant to help with living costs. The exact amount of the grant received depends on parental income, apart from independent mature students who are assessed on their own income (See Table A1 in Appendix A). Different rates (known as adjacent/non-adjacent rates) are paid depending on the distance between the third-level institution and the student's family home. Phulphagar and Kane (2020) found that 37 per cent of all students in higher and further education received some level of a grant. Financial support has been shown to increase progression rates on to third-level education (Mooney et al., 2010) and to reduce third-level drop-out rates.¹²

A couple of cliff edges exist in the Student Grant Scheme. Firstly, rather than being means-tested away in a gradual manner, 'bands' exists whereby support is withdrawn in steps – for example, a student living more than 30km from their institution receives 100 per cent of their fees along with the maximum

See, for example, Lassibille and Gomez (2008).

maintenance grant of €6,791 per annum if their parental means are below €25,000. If parental means are marginally above this level (but below €40,875) the maintenance grant drops to €3,677 per annum. This steplike manner continues until all financial support is withdrawn (full rates and income limits are shown in Appendix A). A more gradual tapering of support, as is the case in most social welfare benefits, would remove these steps and ensure the system was free of cliff edges.

Secondly, the distance cut-off is arbitrary in nature, whereby those who live within 30km of their third-level institution receive a lower maintenance rate than those who reside more than 30km away. A student qualifying for full maintenance based on their household income and who lives 31km away from their institution of higher education will receive a rate of €3,677. This rate drops by 56 per cent to €1,613 for an identical student living 29km away from their institution. Undoubtedly, this is based on the assumption that those living under 30km away can remain in their family home while those over 30km cannot. However, the ability to commute will depend on a range of factors, such as public transport availability, exact location etc. In a detailed review of the student grant system, Indecon (2022) suggested that the introduction of more graduated bands of support (e.g., 0–10km, 11–20km) could help soften this cliff edge.

4.4 **HOUSING SUPPORTS**

A substantial number of households in Ireland are in receipt of housing supports. Doolan et al. (2022) estimate that the share of renters has increased from 18 per cent in 2000 to 29 per cent in 2020, with significant rises in the numbers in the supported rental sector (i.e., those in either directly provided social housing or those in receipt of rental supports such as the Housing Assistance Payment (HAP)).

As is the case with any benefit, housing supports, if linked to employment status or work hours (e.g., Rent Supplement) can create a disincentive to work/work more. Likewise, any housing support that gets withdrawn as income rises will create a disincentive to increase work hours or to avail of opportunities to increase one's wage, for example through promotion. As noted by the OECD (Browne et al., 2018) there has been an improvement in recent years regarding housing supports. While a cliff edge exists in the Rent Supplement scheme, whereby it is withdrawn if an individual works more than 30 hours per week, long-term Rent Supplement receipt is being replaced by HAP. Eligibility for HAP depends only on income and not hours worked, which serves to remove this cliff edge.

Despite this improvement, some cliff edges remain in the housing support sector. These are driven by the fact that an income limit exists for those wishing to apply for social housing. Three maximum income limits, ranging from €30,000 to €40,000 (net) for a single person, exist, depending on the local authority within which a

person lives, with increases for larger households. Therefore, an individual earning €39,999 is eligible to apply for social housing while an individual earning €40,001 is not. Likewise, an individual qualifies for HAP only if they have qualified for social housing (i.e., are under the relevant income limit). Once an individual qualifies for HAP, no disqualifying income limit is applied. This means that an individual will retain eligibility as their income rises. The contribution they make toward their rent will also rise in this case.

Following the initial qualification for HAP, an individual's rental contribution will increase as their income rises. (In other words, their level of support is being reduced.) This helps to avoid work disincentives as an individual can earn more and will not have their rental support removed entirely. However, the increasing contribution the individual makes is based on paying a proportion of their income and not a proportion of the market rent. This generally means that the renter does not end up paying the full rental cost of the property. In addition, an eligible individual may increase their income to a point above the initial eligibility threshold following qualification. They remain eligible for support while others in an identical situation will not qualify. The targeting, or lack thereof, of housing supports is highlighted in Doolan et al. (2022) – almost one-fifth of supported renters are in the top half of the income distribution, while many lower-income renters receive no state support for their housing costs.

A HAP recipient's rental contribution is calculated based on the differential rent scheme of their local authority, which differs widely depending on the local authority in question. Identical individuals in different counties may receive very different levels of support as a result.

The existence of a threshold above which individuals cannot apply for social housing or HAP is exacerbated by multi-year freezes in the income limit - for example, the qualifying household income limit for most housing supports was frozen between 2011 and 2022. Doolan et al. (2022) estimate that a knock-on effect of this freeze is that the share of households eligible to apply to their local authority for housing supports fell from 47 per cent in 2011 to 34 per cent in 2019. Indexation of these limits in line with inflation would avoid this issue.¹³

Given the complexities in the HAP system we do not suggest a reform here, but suggest more detailed analysis should be carried out in the future to examine the issue.

Conclusions

This paper examines some of the cliff edges that exist in the Irish tax and social insurance systems along with the wider benefit system. Research has shown that individuals often adjust their behaviour (for example, by reducing work hours or misreporting income) in response to cliff edges in the tax-benefit system.¹⁴

Our paper analyses cliff edges and kinks across taxation, social insurance, welfare benefits and other cash and non-cash benefits. Though they have been discussed in isolation, it is worth bearing in mind that an individual may face a variety of these at different income levels. The more such issues are faced, the stronger the potential disincentives to work in the first place or to increase working hours.

The removal or reduction of such kinks, cliff edges in particular, can therefore avoid possible economic distortions and improve work incentives. The issue of work incentives is of particular importance currently, with Ireland's labour market characterised by low unemployment numbers and relatively high vacancy levels (see McQuinn et al., 2023). The proposed reforms of the Pay-Related Social Insurance (PRSI) and Universal Social Charge (USC) systems highlight the fact that such distortions can be removed in a revenue neutral manner while protecting those on lower incomes.

See for example Hargaden and Roantree (2019), Saez (2010), Sallee and Slemrod (2012) and Best and Kleven (2018).

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APPENDIX I

TABLE A1 UNDERGRADUATE INCOME THRESHOLDS AND GRANT AWARD RATES

Award	Less than 4 dependent children	Between 4 and 7 dependent children	8 or more dependent children	Income threshold increase per additional person in college
Special rate* of maintenance + Field trip element + 100% tuition fees or 100% student	Reckonable income must be under:	Reckonable income must be under	Reckonable income must be under	
contribution threshold.	€25,000	€27,400	€29,702	€4,950
Special rate* adj. (under 30km)				
Rate of maintenance grant available	€2,936	€2,936	€2,936	
Special rate* non adj. (30km or over)				
Rate of maintenance grant available	€6,971	€6,971	€6,971	
Band 1 full maintenance + field trip element +100% tuition fees or 100% student contribution hreshold	Reckonable income must be under	Reckonable income must be under	Reckonable income must be under	
contribution meshold	€40,875	€44,810	€48,575	€4,950
Band 1 full maintenance adj. (under 30km)				
Rate of maintenance grant available	€1,613	€1,613	€1,613	
Band 1 full maintenance non adj. (30km or over)				
Rate of maintenance grant available	€3,677	€3,677	€3,677	
Band 2 part maintenance + field trip element +100% tuition fees or 100% student contribution threshold	Reckonable income must be under	Reckonable income must be under	Reckonable income must be under	
contribution threshold	€41,970	€46,025	€49,890	€4,785
Band 2 part maintenance adj. (Under 30km)				
Rate of maintenance grant available	€1,221	€1,221	€1,221	

TABLE A1 (CONTD.) UNDERGRADUATE INCOME THRESHOLDS AND GRANT AWARD RATES

TABLE AT (CONTD.) ON	DERGRADUATE	INCOME THINEST	OLDS AND GIVA	VI AVVAND NAIL
Award	Less than 4 dependent children	Between 4 and 7 dependent children	8 or more dependent children	Income threshold increase per additional person in college
Band 2 part maintenance non adj. (30km or over)				
Rate of maintenance grant available	€2,717	€2,717	€2,717	
Band 3 part maintenance + field trip element +100% tuition fees or 100% student	Reckonable income must be under	Reckonable income must be under	Reckonable income must be under	
contribution threshold	€44,380	€48,670	€52,760	€4,785
Band 3 part maintenance adj. (under 30km)				
Rate of maintenance grant available	€886	€886	€886	
Band 3 part maintenance non adj. (30km or over)				
Rate of maintenance grant available	€1,887	€1,887	€1,887	
Band 4 part maintenance + field trip element +100% tuition fees or 100% student	Reckonable income must be under	Reckonable income must be under	Reckonable income must be under	
contribution threshold	€46,790	€51,325	€55,630	€4,785
Band 4 part maintenance adj. (under 30km)				
Rate of maintenance grant available	€556	€556	€556	
Band 4 part maintenance non adj. (30km or over)				
Rate of maintenance grant available	€1,051	€1,051	€1,051	
No maintenance	Reckonable	Reckonable	Reckonable	
50% tuition fees or 100%	income must be under	income must be under	income must be under	€4,950
student contribution	€50,840	€55,765	€60,455	

TABLE A1 (CONTD.) UNDERGRADUATE INCOME THRESHOLDS AND GRANT AWARD RATES

Award	Less than 4 dependent children	Between 4 and 7 dependent children	8 or more dependent children	Income threshold increase per additional person in college
No maintenance 50% student contribution	Reckonable income must be under €62,000	Reckonable income must be under €68,014	Reckonable income must be under €73,727	€4,950
No maintenance €500 student contribution	Reckonable income must be under €100,000	Reckonable income must be under €109,600	Reckonable income must be under €118,086	€4,950

Whitaker Square, Sir John Rogerson's Quay, Dublin 2 Telephone +353 1 863 2000 Email admin@esri.ie Web www.esri.ie Twitter @ESRIDublin

