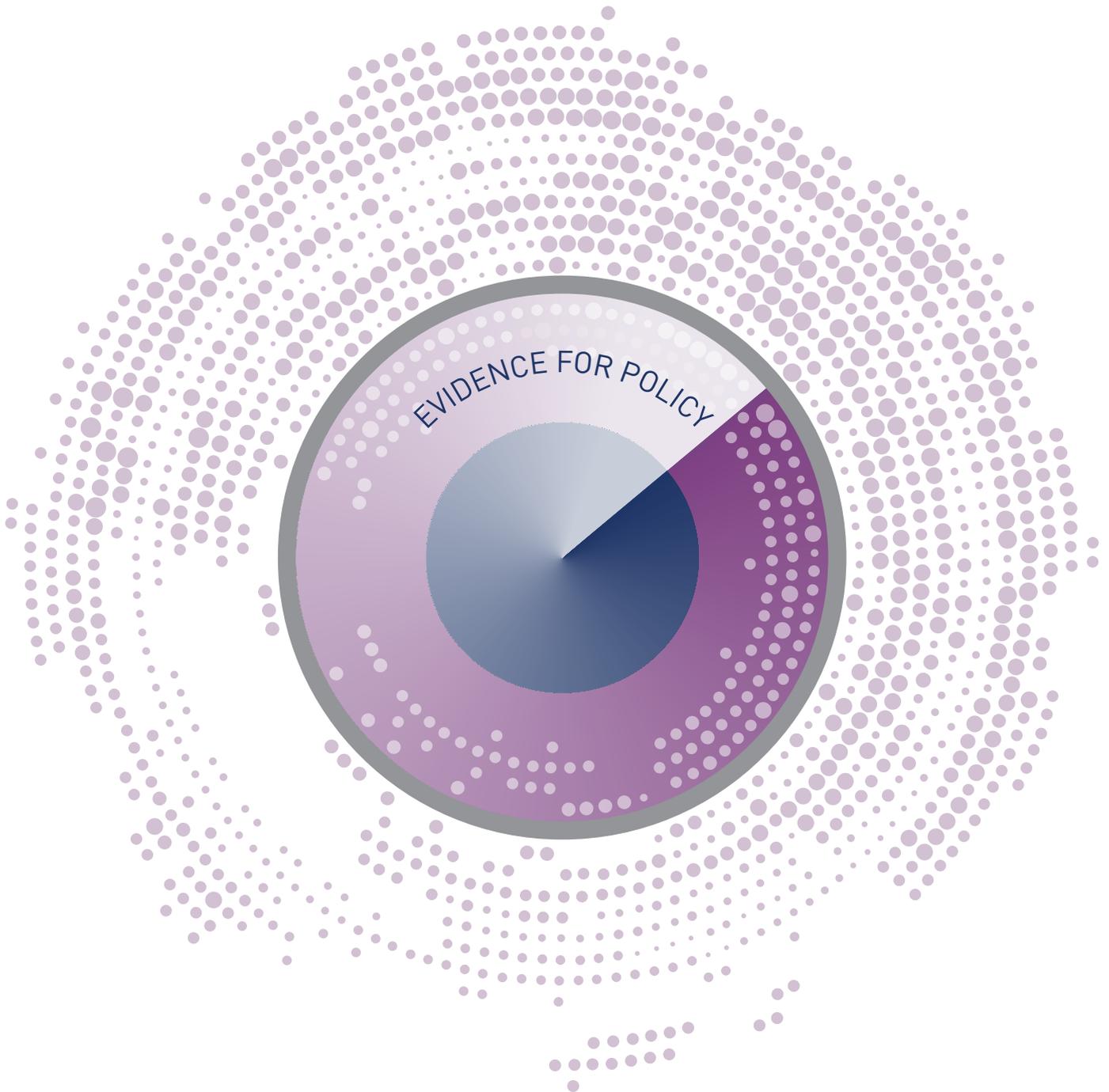


INCREASING PAY RELATED SOCIAL INSURANCE TO FUND THE STATE PENSION: INCIDENCE AND EFFECTIVENESS

KARINA DOORLEY AND DORA TUDA



INCREASING PAY RELATED SOCIAL INSURANCE TO FUND THE STATE PENSION: INCIDENCE AND EFFECTIVENESS

Karina Doorley

Dora Tuda

June 2024

BUDGET PERSPECTIVES 2025

PAPER 1

Available to download from www.esri.ie

© 2024 The Economic and Social Research Institute
Whitaker Square, Sir John Rogerson's Quay, Dublin 2

<https://doi.org/10.26504/BP202501>



This Open Access work is licensed under a Creative Commons Attribution 4.0 International License (<https://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution and reproduction in any medium, provided the original work is properly credited.

ABOUT THE ESRI

The Economic and Social Research Institute (ESRI) advances evidence-based policymaking that supports economic sustainability and social progress in Ireland. ESRI researchers apply the highest standards of academic excellence to challenges facing policymakers, focusing on ten areas of critical importance to 21st Century Ireland.

The Institute was founded in 1960 by a group of senior civil servants led by Dr T.K. Whitaker, who identified the need for independent and in-depth research analysis. Since then, the Institute has remained committed to independent research and its work is free of any expressed ideology or political position. The Institute publishes all research reaching the appropriate academic standard, irrespective of its findings or who funds the research.

The ESRI is a company limited by guarantee, answerable to its members and governed by a Council, comprising up to 14 representatives drawn from a cross-section of ESRI members from academia, civil services, state agencies, businesses and civil society. Funding for the ESRI comes from research programmes supported by government departments and agencies, public bodies, competitive research programmes, membership fees, and an annual grant-in-aid from the Department of Public Expenditure NDP Delivery and Reform.

Further information is available at www.esri.ie.

THE AUTHORS

Karina Doorley is a Senior Research Officer at the Economic and Social Research Institute (ESRI) and Adjunct Associate Professor at Trinity College Dublin. Dora Tuda is a Research Officer at the Economic and Social Research Institute and an Adjunct Assistant Professor at Trinity College Dublin.

ACKNOWLEDGEMENTS

The analysis in this paper draws on the microsimulation model, SWITCH. We are grateful to the Central Statistics Office (CSO) for providing access to the Survey of Income and Living Conditions (SILC) Research Microdata File, on which the SWITCH tax-benefit model is based. SWITCH is based on the EUROMOD platform. Originally maintained, developed and managed by the Institute for Social and Economic Research (ISER), since 2021 EUROMOD has been maintained, developed and managed by the Joint Research Centre (JRC) of the European Commission, in collaboration with EUROSTAT and national teams from the EU countries. We are indebted to the many people who have contributed to the development of EUROMOD. This work was carried out with funding from the ESRI's Tax, Welfare and Pensions Research Programme (supported by the Departments of Public Expenditure, NDP Delivery and Reform; Social Protection; Health; Finance and the Department of Children, Equality, Disability, Integration and Youth), which is gratefully acknowledged.

This paper has been accepted for publication by the Institute, which does not itself take institutional policy positions. The paper has been peer-reviewed prior to publication. The authors are solely responsible for the content and the views expressed.

TABLE OF CONTENTS

ABSTRACT.....	V
SECTION 1 INTRODUCTION	1
SECTION 2 METHOD	3
SECTION 3 RESULTS	5
3.1 Revenue raised	5
3.2 Distributional impact.....	6
3.3 Work incentives.....	11
SECTION 4 CONCLUSIONS	15
REFERENCES.....	17
APPENDIX A.....	18

LIST OF TABLES

Table 2.1	The Roadmap of Increases to Pay Related Social Insurance (PRSI).....	4
Table 3.1	The revenue effect of PRSI reforms proposed by the Roadmap of Increases to PRSI compared to an indexed no-reform 2024 baseline (€ million per annum).....	5
Table 3.2	The effect of the PRSI reforms proposed by the Roadmap of Increases to PRSI on poverty rates in 2028, compared to an indexed 2024 scenario.....	11
Table 3.3	The effect of the PRSI reforms proposed by the Roadmap of Increases to PRSI in 2028 on financial incentives to work by income decile, compared to an indexed no-reform 2024 scenario.....	14

LIST OF FIGURES

Figure 3.1	The annual distributional effect of the PRSI reforms proposed by the Roadmap of Increases to PRSI, compared to an indexed no-reform 2024 scenario.....	8
Figure 3.2	The distributional effect of the PRSI reforms proposed by the Roadmap of Increases to PRSI in 2028 by gender, compared to an indexed no-reform 2024 scenario	9
Figure 3.3	The distributional effect of the PRSI reforms proposed by the Roadmap of Increases to PRSI in 2028 by age, compared to an indexed no-reform 2024 scenario	10
Figure 3.4	The effect of the PRSI reforms proposed by the Roadmap of Increases to PRSI in 2028 on financial incentives to work, compared to an indexed no-reform 2024 scenario	13
Figure A.1	The distributional effect of the PRSI reforms proposed by the Roadmap of Increases to PRSI in 2028 by gender, compared to an indexed no-reform 2024 scenario	18

ABBREVIATIONS

AROP	At-risk-of-poverty rate
COTW	Commission on Taxation and Welfare
CSO	Central Statistics Office
DSP	Department of Social Protection
IMF	International Monetary Fund
METR	Marginal effective tax rate
PRSI	Pay Related Social Insurance
PTR	Participation tax rate
SIF	Social Insurance Fund
SILC	Survey on Income and Living Conditions

ABSTRACT

Demographic change is putting pressure on the sustainability of State Pension systems in many developed countries. In Ireland, there have been recent calls to reform the system of contributions and/or increase the State Pension age in order to avoid significant shortfalls in the Social Insurance Fund (SIF), out of which the State Pension is paid. The Government of Ireland has committed to retaining the State Pension age at 66. In order to achieve this and maintain the viability of the SIF, it has also committed to increasing social security contributions through the Roadmap of Increases to Pay Related Social Insurance (PRSI), which will occur between 2024 and 2028. Using SWITCH, the ESRI's microsimulation model for Ireland, this paper assesses the consequences of these planned reforms, focussing on the amount of revenue they will raise, on the distribution of income and on financial incentives to work. Our analysis shows that the reforms proposed by the Roadmap will result in revenue gains of €1.6 billion per annum by 2028. The reforms are progressive in nature, affecting high income households by more than low-income households. They affect men by slightly more than women due to their higher labour market participation. Across age-cohorts, the incomes of those aged 25-54 are estimated decrease the most. We estimate that the reforms will increase poverty rates slightly, particularly the child poverty rate. The proposed reforms slightly decrease the financial incentive to work, particularly for those in low-income households. We argue that further reform will be needed beyond 2028 to ensure the continued viability of the SIF, and suggest that policymakers may wish to consider some of the more structural reforms to PRSI and the SIF proposed by the Commission on Taxation and Welfare, the Commission on Pensions and the Irish Fiscal Advisory Council.

SECTION 1

Introduction

The sustainability of the Irish State Pension system, like that in many developed countries, is at risk due to population ageing. Ireland funds its State Pension system on a Pay-As-You-Go basis, meaning that those who are currently working fund the State Pension payment of those who are currently retired. As the population continues to age, this will result in a smaller proportion of working age people bearing the burden of pension payments to a larger retired population. The Central Statistics Office (CSO) projects that the ratio of working-age to pension-age people will decrease from 5 in 1991, to 3.5 in 2031 and 2.3 to 2051¹ while the European Commission has projected that Ireland's pension expenditure is expected to account for a significant proportion of the increase in ageing-related expenditure over the next few decades (European Commission, 2024). Due to these and other concerns, the recent Commission on Taxation and Welfare (COTW) has recommended that the:

overall level of revenues raised from taxation and Pay Related Social Insurance (PRSI) as a share of national income will have to increase materially over the coming years (COTW, 2022).

The Commission on Pensions, established in 2020 'to examine sustainability and eligibility issues with State Pensions and the Social Insurance Fund', outlines the projected deficits in the SIF estimated by an actuarial review performed by KPMG. They estimated that the Social Insurance Fund (SIF), out of which State Pensions are paid, would register an annual deficit of €2.4 billion by 2030, rising to €8.5 billion in 2040 and over €21 billion in 2070 (Commission on Pensions, 2021). These shortfalls are primarily due to projected increases in expenditure on State Pensions. The Commission recommended the use of a number of policy levers to combat this rising shortfall, including raising the pension age, increasing PRSI rates, with larger proportional increases for the self-employed, and making contributions to the SIF from the Exchequer. The Irish Fiscal Advisory Council highlights similar issues with the long-term sustainability of the SIF and points to the fact that smaller increases to PRSI rates will be needed in the long term if these are enacted sooner rather than later (Carroll and Barnes, 2023). It also suggests that PRSI increases could be lower in the long-term if a system of transferring 'excess' corporation tax receipts to the SIF were put in place.

¹ Projected Old Age Dependency Ratio Ageing Population Older Persons Information Hub - Central Statistics Office.

A more recent actuarial review of the SIF has estimated that the fund will remain in surplus until 2035 (Lee, 2024). At that point, it will begin to register an annual deficit, estimated at €0.4 billion in 2035, rising to €3.5 billion in 2040 and reaching €32.2 billion by 2077. While the possibility of an imminent deficit in the SIF has decreased, the magnitude of the projected deficits from 2035 onwards are similar or higher than what was projected in previous actuarial reviews. The ability of government to maintain the level of the State Pension, without decreasing expenditure on public services, increasing taxation or increasing the level of national debt, is therefore still of justifiable concern.

The Irish government has committed to maintaining the State Pension age at 66. In order to support this policy decision and in an effort to reduce future shortfalls in the SIF, it has also committed to a Roadmap of Increases to Pay Related Social Insurance (PRSI), which will occur between 2024 and 2028.² This paper evaluates the distributional effect of the government's proposed increases to PRSI over the next four years. Our analysis uses SWITCH, the ESRI's microsimulation model and considers two scenarios for how employer PRSI increases might be passed on to employees. We do not directly incorporate the potential effect of PRSI reform on labour supply into the distributional analysis. However, we do provide an analysis of how the reforms proposed by the Roadmap might affect financial incentives to work.

² All PRSI rates are set to increase by 0.1pp in 2024 and 2025, 0.15pp in 2026 and 2027 and 0.2pp in 2028 (DSP Press Release, 2023): <https://www.gov.ie/en/press-release/022d7-minister-humphreys-secures-cabinet-approval-for-major-social-welfare-reforms/#social-welfare-miscellaneous-provisions-bill-2023>.

SECTION 2

Method

We use SWITCH – the ESRI’s tax and benefit microsimulation model, described comprehensively in Keane et al. (2023) – to assess the revenue-raising and distributional effect of each proposed reform to PRSI rates. SWITCH allows us to calculate households’ social welfare entitlements, tax liabilities and net incomes. It also models employee (class A), employer (class A and J) and self-employed (class S) PRSI. SWITCH (v7.1) is linked to data from the 2019 Survey on Income and Living Conditions (SILC). Incomes are updated to 2024 levels using outturn and forecast earnings, output and price growth.³

The Roadmap commits to a series of PRSI increases for employees and employers between 2024 and 2028. Each reform is planned to come into effect in October of the relevant year. For simplicity, we model each scenario as if it were in place for the full year. The proposed reforms are detailed in Table 2.1. For each increase to PRSI proposed over this time period, we compare the reform to the 2024 baseline. To account for the fact that income and the parameters of the tax-benefit system are likely to grow over time, we adjust both the baseline and reform scenarios to reflect the income level and a correspondingly adjusted tax-benefit system for the year in question. To do this, we use projections for price growth from the International Monetary Fund (IMF).⁴ So, for example, to model the effect of the 2028 reforms, we first create a scenario, based on the SWITCH 2024 baseline, in which incomes grow in line with prices each year between 2024 and 2028. The parameters of the tax-benefit system are also indexed in line with this growth so that there is no fiscal drag, and the relativities of the tax-benefit system are constant. We compare this indexed 2028 scenario, with and without planned reforms, to PRSI rates. This methodology allows us to show the expected revenue and distributional effects of the proposed increases to PRSI on an annual basis, compared to a no-reform scenario, accounting for income growth and a proportional evolution of the tax-benefit system. We assume that there are no behavioural responses to the proposed reforms although we discuss potential effects on one behavioural margin, the decision to work, in Section 3.3.

³ Employment and demographics are assumed to remain as in 2019.

⁴ Prices are projected to grow by 2 per cent, 1.9 per cent, 2 per cent and 2 per cent in 2025, 2026, 2027 and 2028 respectively (World Economic Outlook (April 2024) - Inflation rate, end of period consumer prices (imf.org)).

TABLE 2.1 THE ROADMAP OF INCREASES TO PAY RELATED SOCIAL INSURANCE (PRSI)

	2023	2024	2025	2026	2027	2028
Employer PRSI – Class A: Lower rate	8.8	8.9	9	9.15	9.3	9.5
Employer PRSI – Class A: Higher rate	11.05	11.15	11.25	11.4	11.55	11.75
Employer PRSI – Class J	0.5	0.6	0.7	0.85	1	1.2
Employee PRSI – Class A	4	4.1	4.2	4.35	4.5	4.7
Self-employed – Class S	4	4.1	4.2	4.35	4.5	4.7

Source: Department of Social Protection (<https://www.gov.ie/en/press-release/022d7-minister-humphreys-secures-cabinet-approval-for-major-social-welfare-reforms/#social-welfare-miscellaneous-provisions-bill-2023>). Only the PRSI rates modelled by SWITCH (class A, class J and class S) are listed.

SECTION 3

Results

3.1 REVENUE RAISED

Table 3.2 shows the estimated revenue effect of the series of increases to PRSI on a full-year basis. Each reform scenario, from 2024 to 2028, is compared to a baseline 2024 scenario where both income and the parameters of the tax and welfare system are increased in line with forecast inflation. So, for example, the 2028 column reports the yield in 2028 from the cumulative reforms to PRSI between 2024 and 2028.

TABLE 3.1 THE REVENUE EFFECT OF PRSI REFORMS PROPOSED BY THE ROADMAP OF INCREASES TO PRSI COMPARED TO AN INDEXED NO-REFORM 2024 BASELINE (€ MILLION PER ANNUM)

	2024	2025	2026	2027	2028
Employee PRSI	95.71	196.01	349.84	509.77	727.94
Self-employed PRSI	15.00	30.73	54.88	80.01	114.31
Employer PRSI	99.47	203.72	363.64	529.88	756.66
Welfare	-1.61	-2.89	-6.53	-9.73	-15.45
Net Revenue	208.56	427.57	761.82	1,109.93	1,583.47

Source: Authors' calculations based on SWITCH v7.1 linked to 2019 SILC data.

Note: Reforms are modelled cumulatively so, for example, the 2028 column reports the yield in 2028 from the 2024-2028 reforms, compared to an indexed 2024 baseline.

The net revenue impact of the proposed PRSI reforms in 2024, of €209 million on an annual basis, is similar to the forecast of €240 million provided by the Department of Social Protection, although the latter is slightly higher as it includes increases to PRSI classes not modelled by SWITCH.⁵ This figure is composed of an increase in employee PRSI of €96 million, of self-employed PRSI of €15 million and of employer PRSI of €99 million, slightly moderated by a small accompanying increase in expenditure on social welfare. This increase is attributable to a small number of households becoming newly eligible or eligible for higher amounts of certain social welfare payments.⁶

After 2024, we estimate that the annual effect of the PRSI increases rises substantially. The net revenue effect of the 2025 reform is €428 million per annum

⁵ Cabinet gives approval to draft law for new Pay-Related Jobseeker's Benefit (www.gov.ie).

⁶ These are National Childcare Scheme subsidies, Disability Allowance, Working Families Payment, Fuel Allowance, One-Parent Family Payment, Jobseekers Allowance, Carer's Allowance and Medical and GP visit cards.

and the final proposed reform, in 2028, is estimated to net €1.6 billion compared to an inflation-indexed 2024 scenario.

3.2 DISTRIBUTIONAL IMPACT

In estimating the distributional impact of the Roadmap of reforms, we must consider the incidence of the reforms to PRSI, i.e. where the burden falls. There is a distinction between the ‘statutory’ or legal incidence of PRSI and the economic incidence, i.e. who pays in practice. On a statutory basis, employee PRSI is paid by employees while employer PRSI is paid by employers. However, as discussed by Kakoulidou and Roantree (2021), there is much international evidence to suggest that reforms to employer PRSI are at least partly borne by employees through wage decreases. A meta-analysis by Melguizo and González-Páramo (2013) suggests that two-thirds of labour tax reforms may be passed on to employees although Adam et al. (2019), among others, estimate that these effects may be limited in the short-run due to sticky wages.

Given this evidence, we consider two scenarios for pass-through of PRSI reform. The first, our central scenario, is one in which there is no pass-through to employees of reforms to employer PRSI. The second scenario considers a full pass-through to employees of employer PRSI reforms.⁷ In reality, we expect short-term effects to be closer to the former and long-term effects to be closer to the latter.

Figure 3.1 shows the distributional impact of the proposed increases to PRSI on an annual basis under these two different assumptions about the pass-through of the increase to employer PRSI. Households are split into equally sized groups ranging from the lowest income fifth (quintile) to the highest.

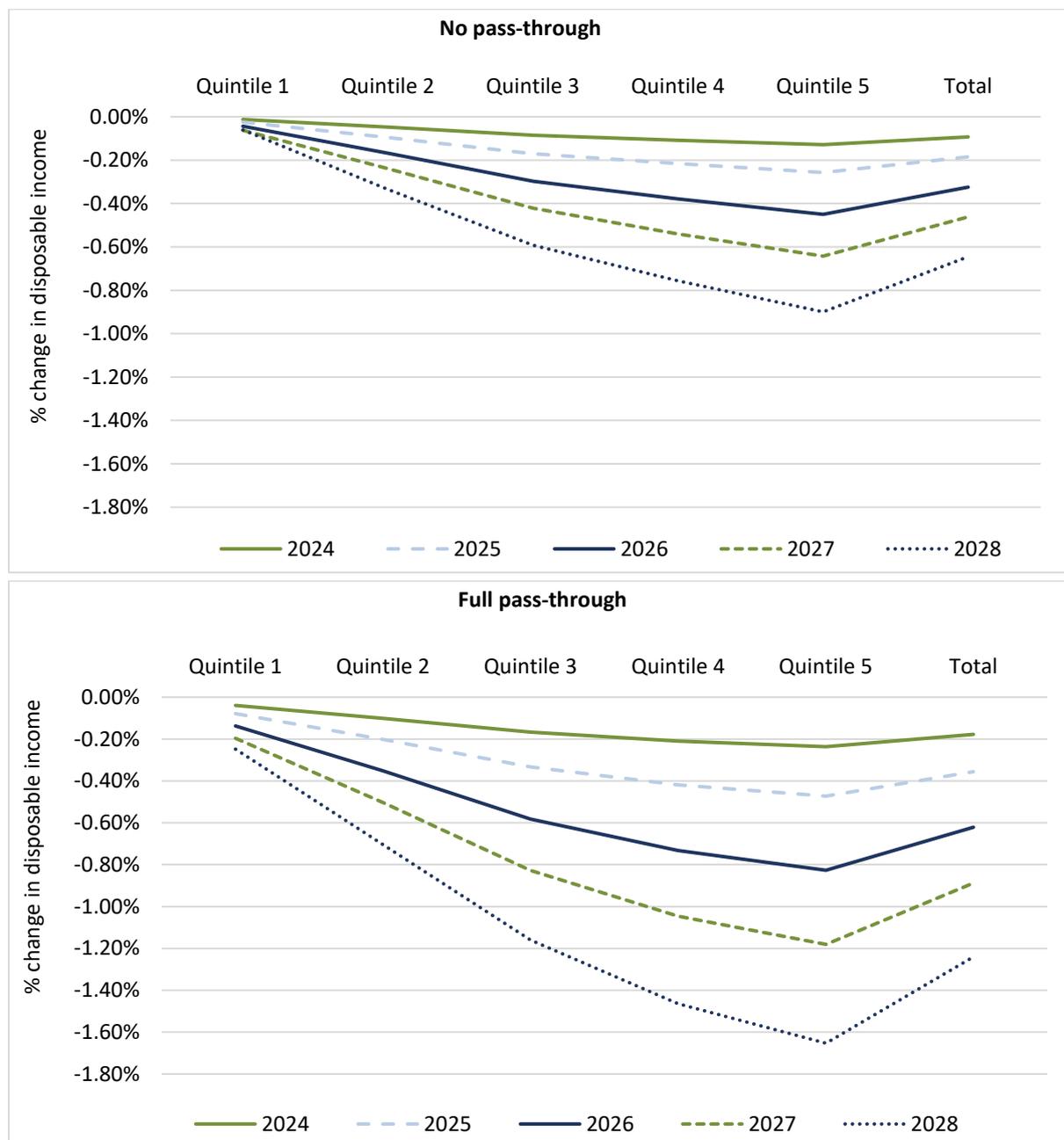
Assuming that the increase to employer PRSI is not passed on to employees, the impact of the reforms represents 0.1 per cent of disposable income on average in 2024, rising to 0.6 per cent of disposable income per annum by 2028. We estimate that the proposed increases are progressive in nature, impacting higher income households more than lower income households. There is almost no effect on the disposable income of households in the bottom quintile of the income distribution. Households in this income quintile are less likely to contain workers, and workers in this income quintile are more likely to be earning below the threshold for liability to PRSI.

⁷ This is accomplished by deducting the employee-specific change to employer PRSI from employee income. For simplicity, the interaction between this effect and eligibility for welfare and liability for tax is not considered although, in reality, this would be the case.

Moving up the household income distribution, the effect is small for households located in quintiles 2 and 3, reaching -0.3 to -0.6 per cent of disposable income in 2028. The impact of the reforms is more substantial for households located in quintiles 4 and 5 of the income distribution. By 2028, we estimate that the reforms will represent between 0.8 and 0.9 per cent of disposable income for these groups.

Assuming that the increase in employer PRSI is fully passed on to employees, the household income losses double, on average, and although the reforms remain progressive, there are some losses for households in the lowest income quintile. On average, we estimate that households will lose 1.2 per cent of disposable income per annum by 2028 in this scenario, with losses higher for higher income households.

FIGURE 3.1 THE ANNUAL DISTRIBUTIONAL EFFECT OF THE PRSI REFORMS PROPOSED BY THE ROADMAP OF INCREASES TO PRSI, COMPARED TO AN INDEXED NO-REFORM 2024 SCENARIO



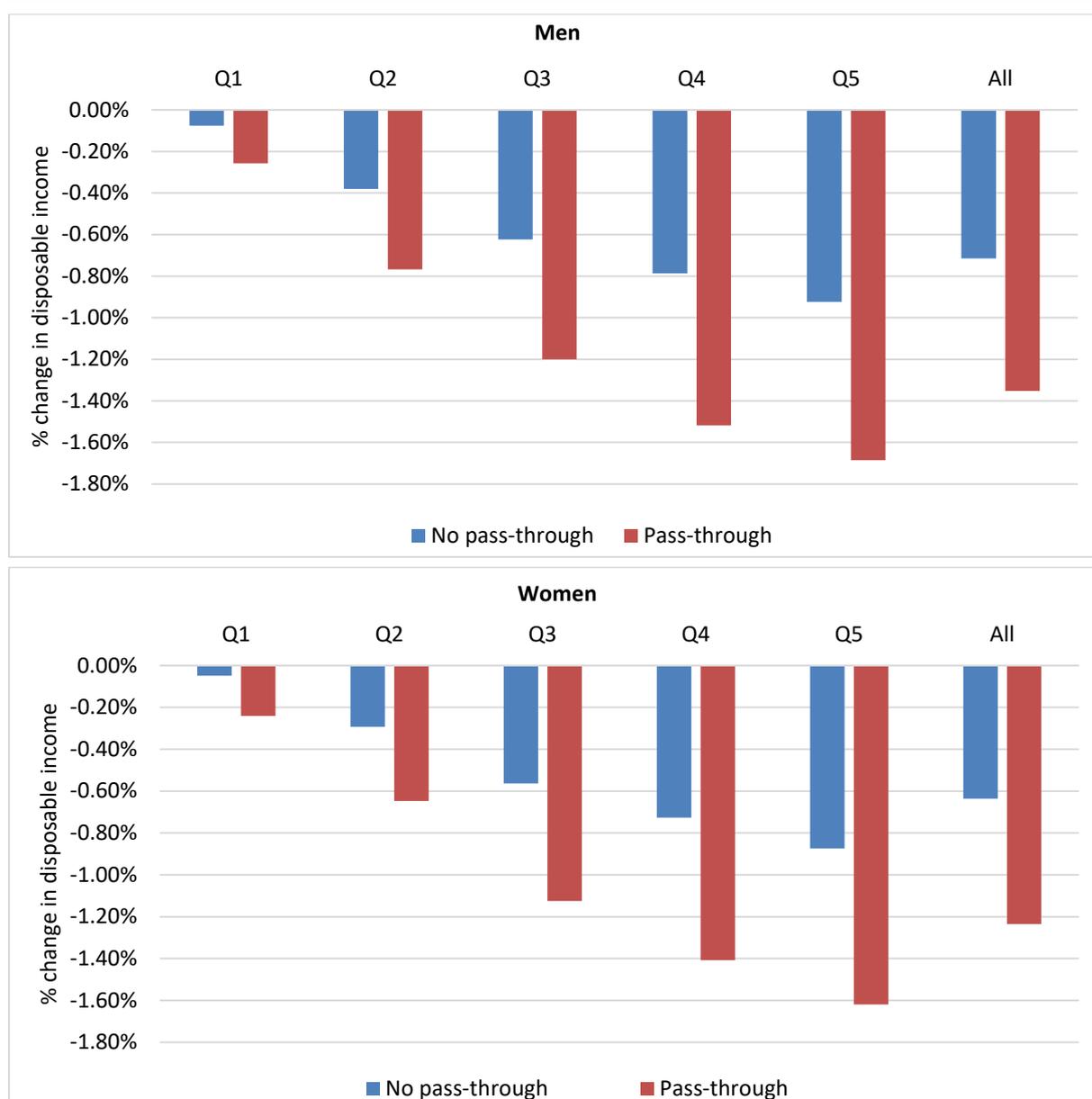
Source: Authors' calculations based on SWITCH v7.1 linked to 2019 SILC data.

We next assess the distributional impact of the reforms to PRSI proposed in the Roadmap by gender.⁸ For this analysis we assume that income is split evenly between individuals in a couple, although results using a different income sharing assumption (in Appendix A) are qualitatively similar. Compared to the 2024 baseline, our analysis in Figure 3.2 suggests that men lose out by slightly more than women due to the proposed PRSI reforms. This is line with the well-documented

⁸ See Doorley et al. (2018) for a description of how policy effects by gender are estimated using SWITCH.

pattern of higher labour market participation and wages of men compared to women. Assuming no pass-through of employer PRSI rates to employees, the disposable income of men falls by 0.7 per cent on average compared to 0.6 per cent for women. Assuming full pass-through, these figures rise to 1.4 per cent and 1.2 per cent for men and women respectively.

FIGURE 3.2 THE DISTRIBUTIONAL EFFECT OF THE PRSI REFORMS PROPOSED BY THE ROADMAP OF INCREASES TO PRSI IN 2028 BY GENDER, COMPARED TO AN INDEXED NO-REFORM 2024 SCENARIO



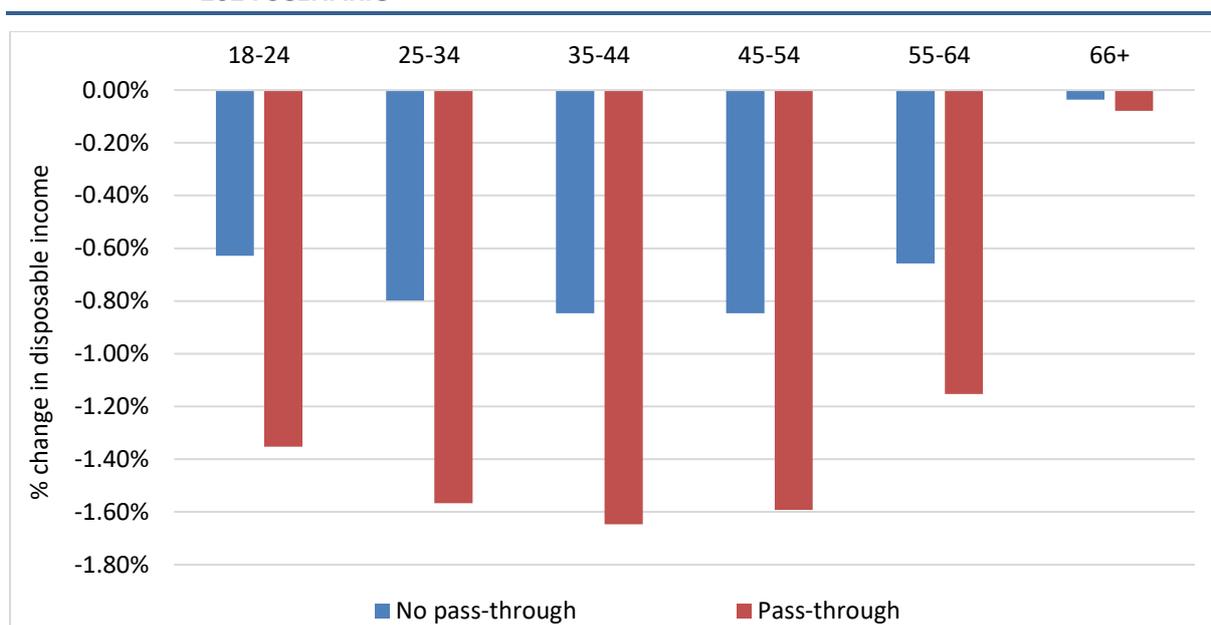
Source: Authors' calculations based on SWITCH v7.1 linked to 2019 SILC data.

Note: It is assumed that household income is fully shared between members of a couple.

The Commission on Pensions raised concerns about the intergenerational fairness of funding future shortfalls in the State Pensions system through increased PRSI, paid predominantly by those of working age. We investigate the effect of the

Roadmap reforms by age using the same principle of income sharing within a household as in the gender analysis.⁹ Figure 3.3 shows that the PRSI increases are borne by the working age population, in particular by those aged 25-54, who experience a decrease of 0.8-1.6 per cent of disposable income, depending on how employer PRSI increases are passed on. Losses for those in the 18-24 and 55-65 age category are lower at 0.6-1.35 per cent of disposable income. Losses for the over-66 group are close to zero.

FIGURE 3.3 THE DISTRIBUTIONAL EFFECT OF THE PRSI REFORMS PROPOSED BY THE ROADMAP OF INCREASES TO PRSI IN 2028 BY AGE, COMPARED TO AN INDEXED NO-REFORM 2024 SCENARIO



Source: Authors' calculations based on SWITCH v7.1 linked to 2019 SILC data.

Note: It is assumed that household income is fully shared between members of a couple. Age cohorts are based on current age in the 2019 SILC and do not account for population ageing.

Finally, we assess the effect of the proposed reform on poverty rates. We use two headline poverty indices: the at-risk-of-poverty (AROP) rate and the poverty gap, which assesses the depth of poverty or how far below the poverty line the poor are. Table 3.2 shows the simulated AROP rate and poverty gap in 2028, based on an indexed 2024 scenario. We estimate these rates for the whole population and for subgroups of the population, including the elderly, children and disabled adults.

We then simulate the change in the AROP rate and poverty gap as a result of the proposed changes to PRSI up to 2028, compared to this baseline. Assuming the employer PRSI increase is not passed on to employees, we estimate that the proposed reform will increase the AROP rate by 0.1 percentage points. This increase is slightly higher for the child population, at nearly 0.2 percentage points.

⁹ Income is assumed to be shared equally between adult members of a household.

This is in line with the impact by age, which shows that losses are higher for the population aged 25-54, who are also more likely than other cohorts of the population to have dependent children.

Assuming full pass-through of the employer PRSI increases, we estimate that the AROP rate will increase by nearly 0.3 percentage points in 2028, with the child AROP rate increasing by 0.4 percentage points. The projected increases in the poverty gap follow a similar pattern to the increases in the AROP rate in both scenarios.

TABLE 3.2 THE EFFECT OF THE PRSI REFORMS PROPOSED BY THE ROADMAP OF INCREASES TO PRSI ON POVERTY RATES IN 2028, COMPARED TO AN INDEXED 2024 SCENARIO

	AROP rate (%)	Poverty gap (%)	Change (percentage points)			
			No pass-through		Pass-through	
			AROP rate	Poverty gap	AROP rate	Poverty gap
Whole Population	13.53	2.85	0.11	0.01	0.26	0.03
Working Age Population	12.94	2.79	0.13	0.01	0.28	0.04
Elderly Population	14.07	2.41	0.00	0.00	0.00	0.00
Child Population	14.30	3.08	0.17	0.01	0.42	0.05
Disabled Population	19.92	3.65	0.03	0.00	0.19	0.02

Source: Authors' calculations based on SWITCH v7.1 linked to 2019 SILC data.

Note: The poverty line is defined as 60 per cent of median equivalised disposable income, adjusted for household size and composition using the national equivalence scale. The poverty gap measures how far below the poverty line the poor are.

3.3 WORK INCENTIVES

Increasing PRSI contributions will affect the financial incentive to work by reducing the amount of earnings that workers take home. As discussed by Savage et al. (2015), this may not always affect the decision to work (or to work more) as many other factors influence labour market behaviour. However, some groups, such as mothers, are more likely to respond to changing financial incentives than others (Doorley et al., 2023).

We estimate two measures of the financial incentive to work and how these are likely to change given the Roadmap of reforms to PRSI. For this exercise, we focus on the more short-term scenario of no pass-through of employer PRSI reforms to employees.¹⁰

¹⁰ It is not currently possible to model the full pass-through scenario for work incentives in SWITCH.

The participation tax rate (PTR) gives the proportion of earnings that are taken away in tax or lower benefit entitlements when an individual starts work, that is:

$$PTR = \left(1 - \frac{\text{net income in work} - \text{net income out of work}}{\text{gross earnings}} \right)$$

For example, an individual whose gross earnings are €1,000, net earnings are €700 and net income out of work are €400 (in the case of unemployment, for example) would have a PTR of 70 per cent. A lower PTR indicates a stronger financial incentive to work while a higher number indicates weaker financial incentives to work.

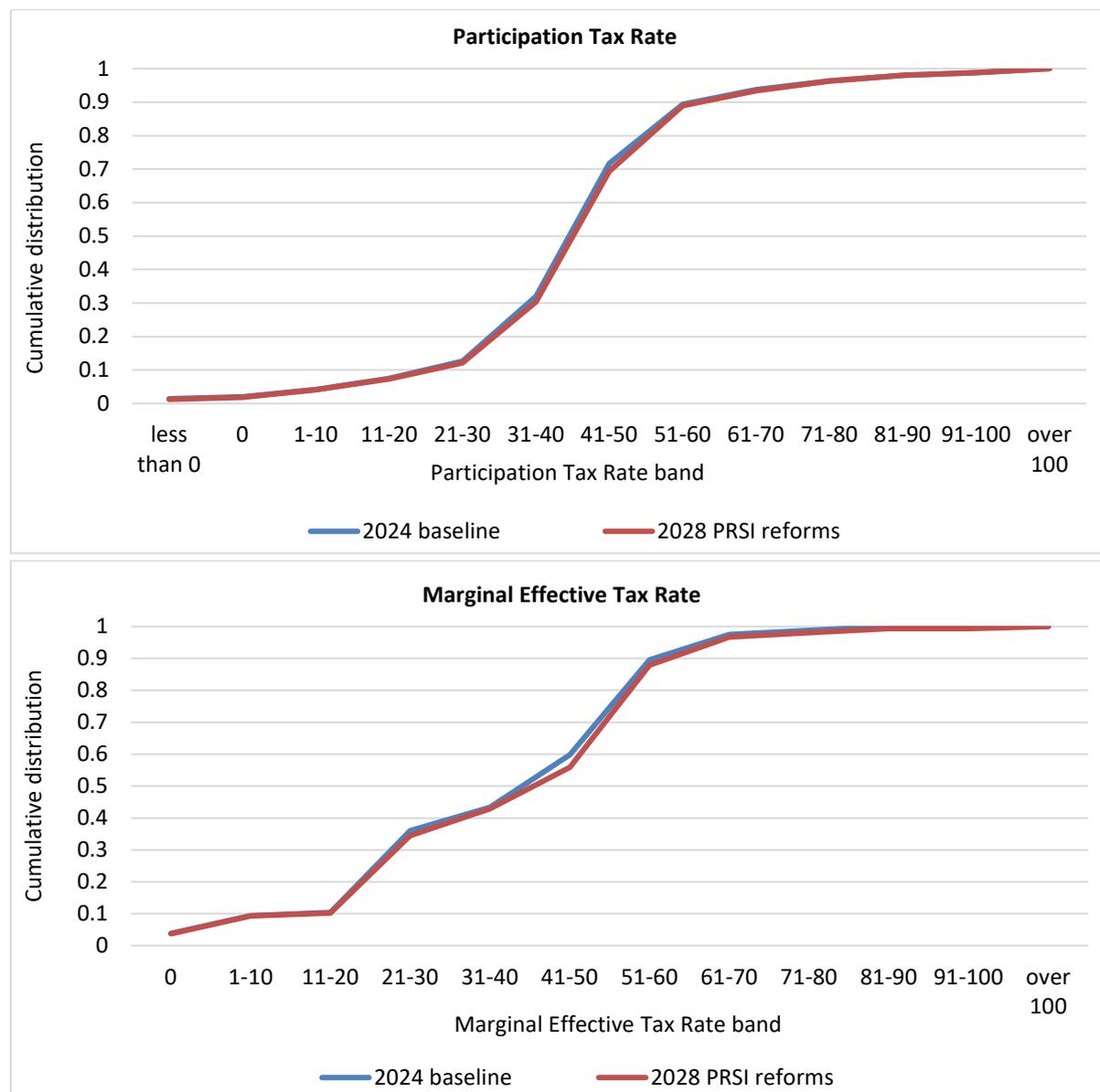
Another measure of financial work incentives, the marginal effective tax rate (METR), measures the incentive to earn more, either by working more hours or receiving a pay rise/promotion. The METR measures what part of any additional earnings are ‘taxed away’ through the combined effect of increasing taxes and decreasing benefits.

$$METR = 1 - \frac{\text{change in household disposable income}}{\text{change in individual earnings}}$$

For example, if an individual gets a €50 increase in their gross weekly pay (either by working more hours or by getting a pay rise), but loses €25 of this through increased tax, USC, PRSI or withdrawal of benefits then this individual has a METR of 50 per cent. The higher the METR, the lower the incentive to work or earn more.¹¹

¹¹ SWITCH calculates METRs by simulating a 3 per cent increase in each worker’s earnings and the corresponding new household disposable income once additional income tax, USC, PRSI or benefit withdrawal have been taken into account.

FIGURE 3.4 THE EFFECT OF THE PRSI REFORMS PROPOSED BY THE ROADMAP OF INCREASES TO PRSI IN 2028 ON FINANCIAL INCENTIVES TO WORK, COMPARED TO AN INDEXED NO-REFORM 2024 SCENARIO



Source: Authors' calculations based on SWITCH v7.1 linked to 2019 SILC data.

Note: METRs are calculated for all earners while PTRs are calculated for both earners and the unemployed or inactive of working age.

Figure 3.4 shows the effect of the whole package of reforms by 2028 on work incentives, compared to an indexed no-reform 2024 baseline scenario. There is a slight increase in PTRs, on average, but the effect is very modest. For example, the reform leads to an increase of 0.3 percentage points in the number of individuals with high PTRs, in excess of 70 per cent. Table 3.3 suggests that these increases are evenly distributed across the income distribution.

There is a more noticeable impact of the reforms on METRs with these increasing, on average, indicating a lower financial incentive to increase earnings. For example, there is an increase of 0.9 percentage points in the number of workers

facing high METRs, in excess of 70 per cent. Table 3.3 suggests that METRs increase more for those in low-income households compared to high-income households. In particular, earners in the lowest income decile experience an increase in their METR of 3.3 percentage points, compared to an average increase of 0.7 percentage points across the income distribution.

TABLE 3.3 THE EFFECT OF THE PRSI REFORMS PROPOSED BY THE ROADMAP OF INCREASES TO PRSI IN 2028 ON FINANCIAL INCENTIVES TO WORK BY INCOME DECILE, COMPARED TO AN INDEXED NO-REFORM 2024 SCENARIO

	METR	change	PTR	change
Decile 1	25.5	3.3	61.9	0.5
Decile 2	43.7	0.9	47.0	0.5
Decile 3	36.5	-0.8	42.8	0.5
Decile 4	36.5	0.9	45.8	0.6
Decile 5	37.9	0.6	42.8	0.7
Decile 6	37.0	1.1	45.2	0.6
Decile 7	39.2	0.7	37.9	0.6
Decile 8	45.9	0.7	41.7	0.7
Decile 9	47.8	0.7	42.6	0.7
Decile 10	51.6	0.7	43.0	0.7
All	42.2	0.7	44.2	0.6

Source: Authors' calculations based on SWITCH v7.1 linked to 2019 SILC data.

Notes: METRs are calculated for all earners while PTRs are calculated for both earners and the unemployed or inactive of working age. Income deciles are constructed using equivalised disposable income, adjusted for household size and composition using the national equivalence scale.

These results suggest that, while the Roadmap of reforms to PRSI may not substantially affect the financial incentive to be in paid work, it may affect the financial incentive to progress or earn more, especially for workers in low-income households. This effect may be more acute if PRSI increases for employers are passed on to employees.

SECTION 4

Conclusions

This paper has assessed the effect of the reforms proposed by the Roadmap of Increases to Pay Related Social Insurance on government revenue, on the distribution of income and on the incentive to work.

The Commission on Pensions recommended that any proposals by Government to reform PRSI or the pension age should be subject to ‘gender, equality and poverty proofing’. We carry out this assessment and find that the proposed reforms are progressive in nature, impacting higher income households more than lower income households. We also find that the burden of higher PRSI contributions is slightly larger for men than for women. Assessing the effects of the reforms by age, we find that those aged 25-54 bear most of the burden, with smaller income losses for those aged under 25 or between 55 and 65. Finally, we estimate that the proposed reforms will slightly increase poverty rates. The magnitude of the increase, while modest for all groups of the population, is higher for children. This is in line with the findings by age cohort, as those aged 25-54 are more likely to have dependent children than younger or older cohorts.

We estimate that the PRSI increases proposed by the Roadmap will have a limited impact on the financial incentive to work. The incentive to take up work is almost unchanged by the reforms. However, the incentive to earn more falls slightly, particularly for low-income households. These effects may be accentuated if the increase to employer PRSI is passed on to employees.

We estimate that the proposed reforms will raise a modest €209 million in 2024 but that the revenue raised will increase annually between 2024 and 2028 as further incremental PRSI increases are enacted. By 2028, the reforms will raise an additional €1.6 billion per annum, compared to an inflation indexed no-reform scenario. Given the relatively slow increases to PRSI envisaged by the Roadmap compared to the timeline of increases suggested by the Irish Fiscal Advisory Council, further PRSI increases are also likely to be needed well beyond 2028 to deal with the fact that the SIF is likely to be in deficit by 2035 and that this deficit is projected to rise exponentially in the decades that follow.¹²

¹² The Irish Fiscal Advisory Council estimates that an increase of 3.8 percentage points to the combined employee and employer PRSI rate by 2027 may be enough to counteract shortfalls in the SIF until the end of this century (Carroll and Barnes, 2023).

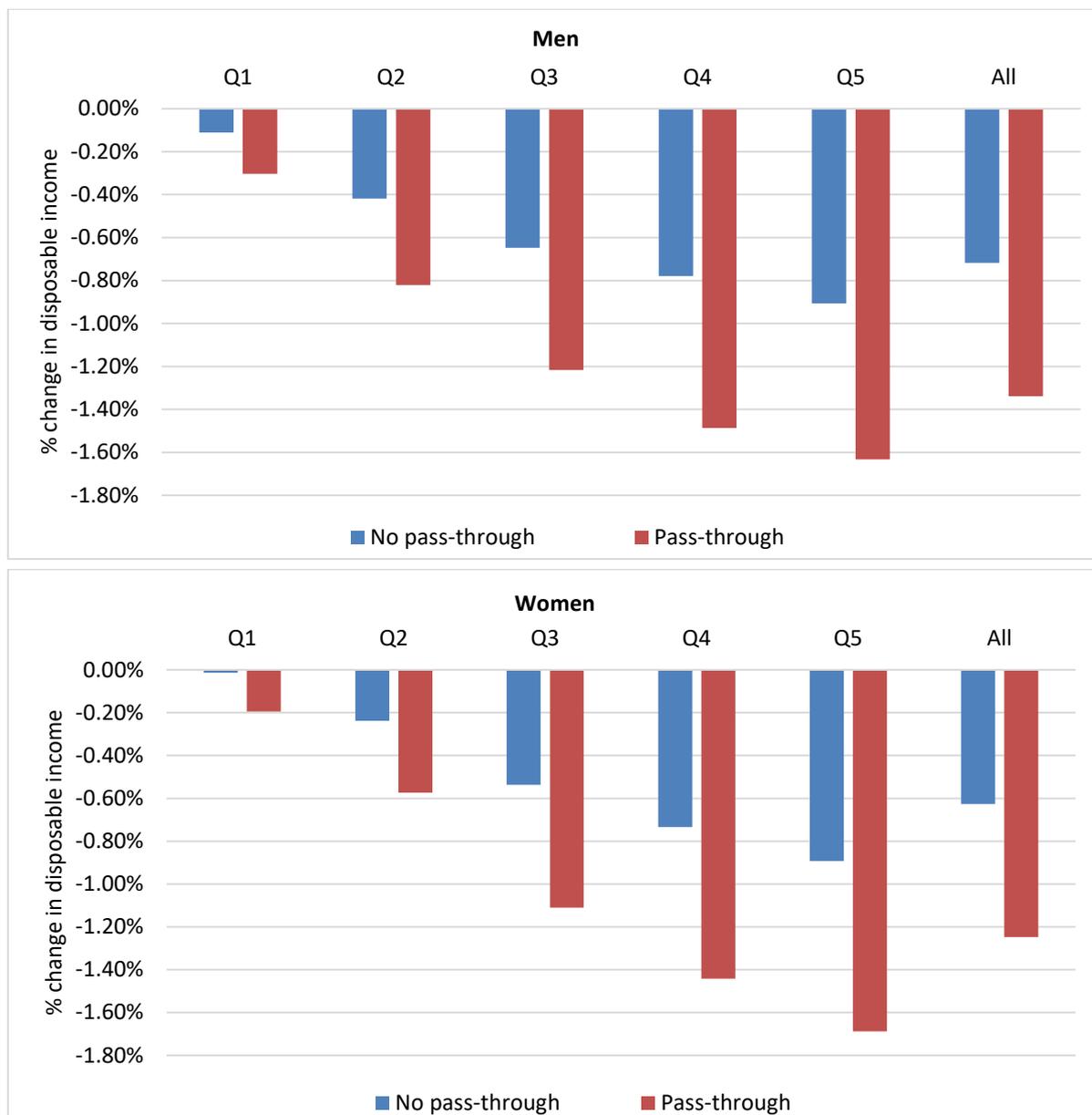
The sustainability of the SIF is crucial if policymakers wish to avoid diverting money from other public services or increasing taxation in order to pay State Pensions in the decades to come. The newly established Future Ireland Fund may help to relieve some of the pressure on the SIF from 2041 onwards, when it is envisaged that drawdowns will be possible. Some of the larger PRSI reforms recommended by the Commission on Taxation and Welfare and the Pensions Commission to shore up the SIF, such as levying PRSI on those aged 66 and over, abolishing or minimising exemptions based on age or income source and equalising the treatment of employee and self-employed income, are not included in the Roadmap. Policymakers may wish to consider these proposals in the interest of horizontal and vertical equity when further revenue-raising measures are being formulated, potentially following the next actuarial review of the SIF.

REFERENCES

- Adam, S., Phillips, D. and Roantree, B. (2019). '35 years of reforms: A panel analysis of the incidence of, and employee and employer responses to, social security contributions in the UK', *Journal of Public Economics*, Elsevier, Vol. 171(C), pp. 29-50.
- Carroll, K. and Barnes, S. (2023). *Saving for Ireland's Future: Building a Sustainable Framework to Fund the State Pension*.
- Commission on Pensions (2021). *Report of the Commission on Pensions*.
- Commission on Taxation and Welfare (2022). *Foundations for the Future: Report of the Commission on Taxation and Welfare*.
- Doorley, K., Bercholz, M., Callan, T., Keane, C. and Walsh, J.R. (2018). *The gender impact of Irish budgetary policy 2008-2018*, Research Series, Economic and Social Research Institute (ESRI), No. BKMNEXT367, June.
- Doorley, K., Tuda, D. and Duggan, L. (2023). 'Will Childcare Subsidies Increase the Labour Supply of Mothers in Ireland?', IZA Discussion Papers 16178, Institute of Labor Economics (IZA).
- European Commission (2024). *2024 Ageing Report. Economic and Budgetary Projections for the EU Member States (2022 - 2070)*. Institutional Paper 279.
- Kakoulidou, T. and Roantree, B. (2021). *Options for raising tax revenue in Ireland*, ESRI Budget Perspectives 2022 Paper 1.
- Keane, C., Doorley, K., Kakoulidou, T. and O'Malley, S. (2023). 'SWITCH: A Tax-Benefit Model for Ireland Linked to Survey and Register Data', *International Journal of Microsimulation*, *International Microsimulation Association*, Vol. 16(1), pp. 65-88.
- KPMG (2021). *Analysis for the Pensions Commission 2021*. Dublin: KPMG.
- KPMG (2022). *Actuarial Review of the Social Insurance Fund as at 31 December 2020*. Dublin: KPMG.
- Lee, M. (2024). *Actuarial Review of the Social Insurance Fund 31 December 2021*, Department of Social Protection.
- Melguizo, A. and González-Páramo, J. (2013). 'Who bears labour taxes and social contributions? A meta-analysis approach', *SERIEs: Journal of the Spanish Economic Association*, 4, issue 3, pp. 247-271.
- Savage, M., Callan, T. and Walsh, J.R. (2015). 'A profile of financial incentives to work in Ireland', *Journal of the Statistical and Social Inquiry Statistical Society of Ireland*, Vol.44, 2014-5, pp. 124-140. Dublin.

APPENDIX A

FIGURE A.1 THE DISTRIBUTIONAL EFFECT OF THE PRSI REFORMS PROPOSED BY THE ROADMAP OF INCREASES TO PRSI IN 2028 BY GENDER, COMPARED TO AN INDEXED NO-REFORM 2024 SCENARIO



Source: Authors' calculations based on SWITCH v7.1 linked to 2019 SILC data.

Note: It is assumed that only family-level benefits are shared between members of a couple. All employment income, tax, PRSI and individual level benefits are assigned to the person who receives or is liable for them.

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