NERI Research inBrief

January 2016 (no 31)

Income Taxes and the Earnings Distribution

Micheál L. Collins

ISSN 2009-5848

SUMMARY

Income taxation represents the principal method by which the state collects its taxation revenue in the Republic of Ireland. Currently, individuals contribute income related taxation to the state by means of three distinct payments: income tax, the Universal Social Charge (USC) and Pay Related Social Insurance (PRSI).

This Research *inBrief* examines the structure of the current system in the context of the distribution of earnings.

KEY POINTS

- Income taxes, including employees PRSI, account for almost €20 billion (approximately 36%) of tax revenue.
- The outcome of the current system is a progressive income taxation structure.
- Effective income taxation rates have fallen significantly over the past two decades.
- Although effective taxation rates rise reasonably smoothly within the current Irish system, there are a series of steep marginal tax step effects.
- These step effects imply that earners face obvious behaviour decisions, in particular at income levels in and around these step points.
- While marginal income taxes are important, judged from a policy perspective it is the effect on household disposable income that is a key determining factor for many of the labour supply decisions that people/households make.

Nevin Economic Research Institute (NERI)

31/32 Parnell Square
Dublin 1
+ 353 (1) 8897722

e-mail: *info@ NERInstitute.net*
Web: *www.NERInstitute.net*

Carlin House
4-6 Donegall Street Place
Belfast
BT1 2FN
Northern Ireland
+ 44 28 90246214

NERI Nevin Economic Research Institute

Research for new economic policies

Introduction and Context

Income taxation represents the principal method by which the state collects its taxation revenue in the Republic of Ireland (see Table 1). Currently, individuals contribute income related taxation to the state by means of three distinct payments: income tax, the Universal Social Charge (USC) and Pay Related Social Insurance (PRSI). Each of these collection mechanisms comes with its own tax base – each with different inclusions and exclusions of income sources.

This Research *inBrief* aims to examine the structure of the current system in the context of the distribution of earnings.

Data

The data used in this Research *inBrief* derives from two sources. First, details on the structure of the income taxation system in the current year, and over the past two decades, (rates, bands, credits, levies etc) is used to calculate marginal and effective income taxation rates.

Table 1: Ireland's Taxation Revenue, 2014

	€ millions	% of total
Income Tax	17,915	32.8%
VAT	11,496	21.0%
PRSI	7,947	14.6%
Excise Duties	5,185	9.5%
Corporation Taxes	4,615	8.4%
Stamp Duties	779	1.4%
Local Taxes	1,822	3.3%
CGT	561	1.0%
CAT	356	0.7%
Motor Taxes	1,159	2.1%
Pension levy	743	1.4%
Others	1,765	3.2%
EU taxes	275	0.5%
Total	**54,618**	**100.0%**

Source: Calculated from CSO Databank table N1422.

Second, the document uses data on the earnings distribution. This data derives from an analysis of the microdata from the Central Statistics Office's (CSO) Survey on Income and Living Conditions (SILC). This survey is part of an annual Europe wide household living standards survey and collects income and living standards

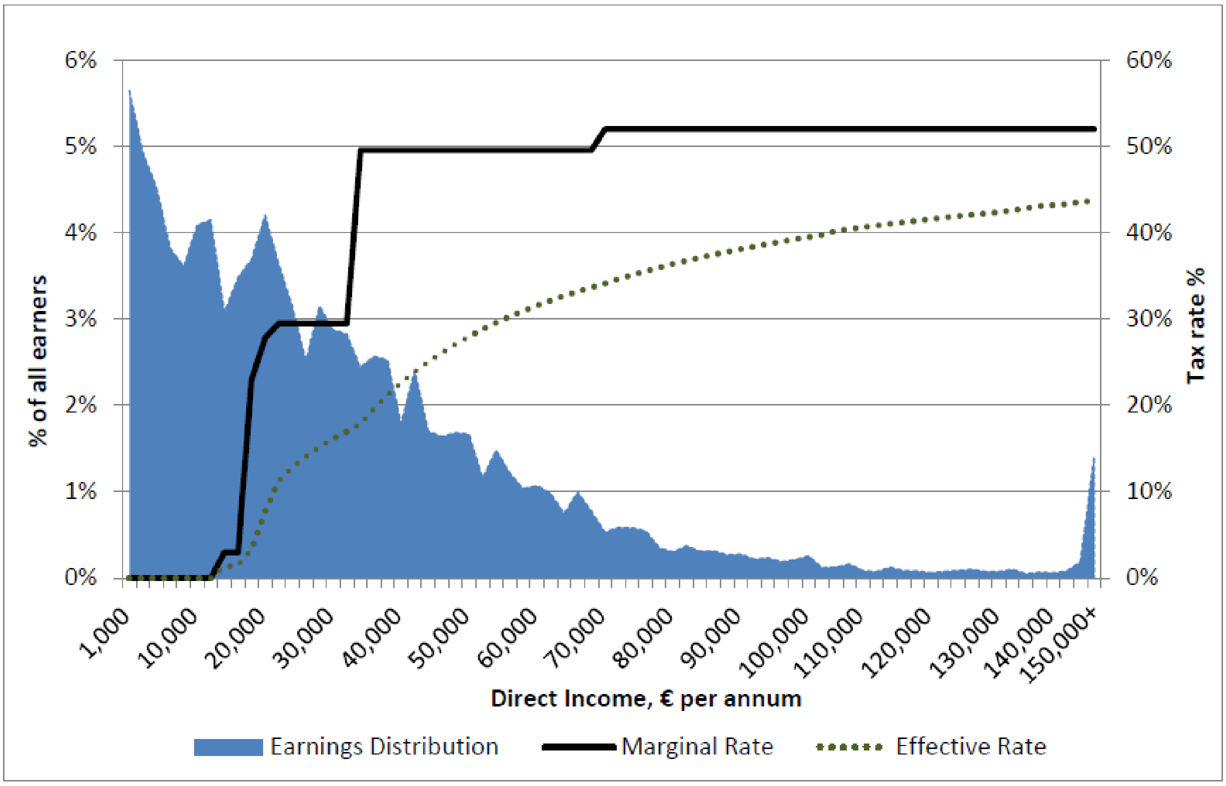
Table 2 Effective Income Taxation Rates, 1997-2016

Gross Income	1997	2001	2006	2008	2010	2016
Single Earner						
€15,000	23.0%	9.5%	0.0%	0.0%	0.0%	1.5%
€20,000	28.5%	15.2%	7.1%	4.4%	6.4%	7.8%
€25,000	33.7%	17.3%	12.5%	8.3%	10.3%	13.5%
€30,000	37.1%	22.2%	14.7%	12.9%	16.9%	16.1%
€40,000	40.6%	28.3%	21.9%	18.6%	22.1%	22.6%
€60,000	43.9%	33.6%	29.8%	27.5%	31.7%	31.6%
€100,000	46.5%	37.9%	35.6%	33.8%	39.2%	39.5%
€120,000	47.1%	38.9%	37.0%	35.4%	41.1%	41.6%
Couple 2 Earners						
€20,000	15.9%	1.0%	0.0%	0.0%	0.0%	0.0%
€25,000	20.3%	6.3%	1.5%	0.0%	1.3%	1.0%
€30,000	22.2%	10.3%	1.7%	1.7%	3.0%	2.4%
€40,000	28.5%	13.7%	7.6%	3.6%	4.9%	8.4%
€60,000	36.6%	22.0%	14.0%	12.2%	15.5%	15.9%
€100,000	42.6%	31.4%	26.5%	23.8%	27.9%	28.0%
€120,000	43.9%	33.6%	29.7%	27.2%	31.7%	31.7%

Source: Department of Finance (2006, 2011 and 2015a), Social Justice Ireland *Socio-Economic Review* (various editions) and Collins (2015a: 10).

Notes: Effective income taxation rates measure the percentage of gross income paid in income taxes (including USC, health and income levies) and employee PRSI. Couples assume a 65%/35% income split.

Chart 1: Tax Rates and the Earnings Distribution



Notes: Earnings data (left axis) is for individuals in the year 2013 (SILC) and includes all direct income flowing to employees and the self-employed. The definition of direct income use is as per Collins (2015). Marginal and effective tax rates (right axis) are for the year 2016 for a single PAYE earner aged less than 65 years. These rates include income taxes, PRSI and USC. All annual earnings in excess of €150,000 have been merged.

information from a representative national sample.

The data used here is for 2013 (the latest available) and was released in late January 2015. Earnings capture the income received by employees as earnings, the profits of the self-employed and other 'unearned' income (rent, private pension income, investment income). See Collins (2015b and 2015c) for more details.

Effective and Marginal Rates

The outcome of the current structures is a progressive income taxation system. Reflecting this, Table 2 presents the resulting effective or average taxation rates for two categories of earners (single PAYE workers and couples with two PAYE earners). An effective taxation rate calculates the percentage of gross income that is paid in various income related taxes taking account of all the different bands, rates, thresholds, exemptions and levies.

A few caveats accompany the table. First, the gross income amount is not adjusted for any changes in prices across the period, although €30,000 in 2006 is not the same as €30,000 in 2016; adjusting for prices would alter the shaped of the changes somewhat. Second, the established effective taxation rates are the (benchmark) taxation rates that people would face if they availed of no tax expenditures such as those for health expenses, education fees, public transport tickets etc. Where these are availed of, or where people receive tax exempt income (child benefit etc), their effective taxation rates will be below these rates.

The data in Table 2 is for the period since 1997; an overview which offers an insight into significant changes in effective income taxation rates over two decades. Over time these rates declined for all earners, reaching their lowest levels in 2008 before experiencing a recession induced increase.

Focusing on the current year and on just one earner type (single earners), Chart 1 graphs the marginal tax rates faces by these earners in Ireland.

Step Effects

Given the design of the three income related tax payments, the shape of the overall system of income taxation is characterised by a series of steps. Consequently, incremental increases in gross income can result in an individual (or tax unit) dramatically moving from one rate of marginal tax to another.

For example in 2016, a single worker on €16,000 faces a 3 per cent marginal tax while one earning €2,000 more faces a rate of 23 per cent. Similar a worker on €32,000 has a marginal tax rate of 29.5 per cent while one on €34,000 has a rate which is 20 per cent higher (49.5 per cent). Ireland's top marginal tax rate (applying to all earners) is 52 per cent; a rate which kicks in when incomes exceeds €70,000; thus applying to approximately the top 10 per cent of the earnings distribution.

Although effective taxation rates rise reasonably smoothly within the current Irish system (see Chart 1), the series of steep marginal tax step effects are problematic and imply that earners face obvious behaviour decisions, in particular at income levels in and around these step points.

While marginal income taxes are important, judged from a policy perspective it is the effect on household disposable income that is a key determining factor for many of the labour supply decisions that people/ households make.

In the case of decisions around labour market transitions in and out of employment, or marginal shifts between part-time and full-time work, or increases or decreases in hours worked; for each of these choices it is the post-tax and post-welfare effect on living standards that is really important.

For those earners up the distribution, such changes are predominantly about marginal tax rates and trade-offs between labour and leisure. However, for those lower down, including those who are unemployed, the interaction between tax, welfare and public services is key.

References

This NERI *Research inBrief* summarises some analysis within a forthcoming *NERI Working Paper* entitled '*Ireland's Income Taxation System: a social policy perspective*'. The paper will be released during April/May 2016.

Collins, M.L. (2015a), 'Earnings and Low Pay in the Republic of Ireland: A Profile and Some Policy Issues' *NERI Working Paper*, 2015/29. *Dublin, NERI.*

Collins, M.L. (2015b), 'Taxes and Income Related Taxes Since 2007' *NERI Working Paper*, 2015/25. *Dublin, NERI.*

Collins, M.L. (2015c), 'The Distribution of Market Income in the Republic of Ireland' *NERI Research inBrief no 22*. *Dublin, NERI.*

Department of Finance (various years), *Budget Reports and Documentation*. Dublin, Stationery Office.

Social Justice Ireland (various years), *Socio-Economic Review*. Dublin, Social Justice Ireland.