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Wealth Tax: Options for its Implementation In the Republic of Ireland

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WEALTH TAX: OPTIONS FOR ITS IMPLEMENTATION IN THE REPUBLIC OF IRELAND

Thomas A. McDonnell¹, TASC²

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ABSTRACT

This paper considers the advantages and disadvantages of introducing a net wealth tax in the Republic of Ireland. The implications for vertical and horizontal equity are discussed, as are the implications for economic efficiency, growth, savings and potential capital flight. There are other major questions. Are there administrative barriers to its introduction? How should debt be treated? Who should pay the tax? How does the tax relate to other taxes? How should assets be valued? The key objectives of a net wealth tax are to raise a meaningful amount of revenue for the exchequer and improve horizontal and vertical equity while at the same time minimising administration and compliance costs, minimising economic distortions, and minimising the risk of capital flight. The tax structure most compatible with these policy objectives is one with either zero or very few exemptions and reliefs, a high threshold of liability, and a flat marginal rate that is set at a low level. Nevertheless, for practical reasons it would be necessary to exempt certain asset classes, for example human capital. There is a general lack of good data on the distribution of wealth in Ireland and the potential revenue yield from a net wealth tax is highly dependent on the degree to which wealth is concentrated in the right hand tail of the population. Even so, a yield of at least 0.1 per cent of GDP appears very much compatible with a threshold of liability for net wealth set at €1 million and a wealth tax rate set at 0.6 per cent. Such a yield is attainable even under very conservative assumptions of aggregate wealth and the distribution of wealth in Ireland. Less conservative assumptions of the degree to which wealth is concentrated in the top 1 to 2 per cent of the population generate substantially higher estimated yields.

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Section One: Introduction

Ireland's post-2008 economic crash has generated an acute crisis in the public finances. This crisis reached its peak in late 2010 when the Irish state was forced to exit the sovereign bond market and agree to an EU/ECB/IMF loan facility with accompanying policy conditionality. As of 2013 Ireland has undergone five years of continuous discretionary fiscal consolidation. This process has included cuts to capital spending; cuts to public services; cuts to income supports and other social transfers; cuts to pay; increases to regressive taxes such as VAT and excises; new taxes such as the local property tax and soon water charges, as well as increased taxes on income. The process of discretionary fiscal consolidation is likely to continue until at least 2015 and probably beyond. It is notable given the express desire of the Irish Government to broaden the tax base that the introduction of a net wealth tax has rarely been considered. Wealth taxes are particularly attractive in distributional terms and taxing wealth and the wealthy can be an important element of social solidarity, particularly at a time of deteriorating living standards for a large section of the population.

The economics literature is divided on the merits of an annual tax on wealth. The 2009 Report of the Commission on Taxation did not favour the introduction of a net wealth tax citing concerns about potential capital flight in an environment where capital is highly mobile as well as concerns about high administration and compliance costs. A recent Oireachtas Research Note (2013) argues that the benefits of net wealth taxes (increased equity, revenue raised) are outweighed by the costs (administrative burden and potential capital flight). On the other hand, it was argued by John Hills (2013) at a recent European Commission workshop on the role of tax policy in times of fiscal consolidation that:

Greater taxation of wealth offers revenue-raising, economic efficiency, and social equity advantages (Hills, p.89)

Taxes on net wealth have become less common in recent years and have been increasingly abandoned in Europe over the last two decades. In general, wealth taxes as enacted and modified were poorly designed with a range of exemptions and reliefs and with high costs. A good wealth tax may well be nuanced with some limited exemptions. However the scale and range of the exemptions and reliefs that developed over time in different jurisdictions increasingly undermined the justification for wealth taxes on horizontal equity grounds; as well as increasing the administrative burden; encouraging the use of tax planning by the very wealthy to avail of tax shelters, and reducing the overall tax yield. In addition, exemptions and reliefs have tended to favour non-productive assets such as housing over other more productive asset types. This type of design distorts investment decisions away from more growth enhancing activities.

Setting a low threshold of liability for a wealth tax will increase the number of households liable. However a low threshold of liability will also increase the administrative burden as well as political opposition to the tax. In addition, a high marginal rate undermines the rationale for accumulating savings and for investing. A well-designed wealth tax has many merits, but if Ireland were to introduce an annual wealth tax it should avoid pursuing the type of wealth tax model that has tended to prevail internationally i.e. with multiple exemptions and reliefs, with a low threshold, and with a high marginal rate.

This report will set out clearly what a well-designed wealth tax should look like. The key objectives should be to

- A. Raise a meaningful amount of revenue for the exchequer;
- B. Adhere to the principles of horizontal equity and vertical equity within the tax system;
- C. Minimise administration and compliance costs while assisting the fight against tax evasion and avoidance; and
- D. Minimise the distortion to savings and investment decisions and minimise the risk of capital flight.

As Collins (2011) notes it is challenging to design a good taxation system that simultaneously adheres to the principles of equity, efficiency and simplicity. With regard to a wealth tax the structure that will best reconcile the tension between these objectives is one with:

- a) Either zero or very few exemptions and reliefs,
- b) A relatively high tax-free allowance or threshold, and
- c) A flat marginal rate that is set at a low level.

For practical reasons a net wealth tax should contain an exemption for human capital. There is also a reasonable case for partial or full exemption of pension rights and for ‘goodwill’³. In general it is appropriate that a net wealth tax minimise the number and scale of exemptions and reliefs but compensate for this by setting a relatively high threshold of liability. Concerns about the costs of identifying, measuring and valuing net assets have motivated the abandonment of net wealth taxes in a number of countries (Lawton and Reed, 2013). In addition, Figari (2013) points out that the design of a wealth tax must address the issue of the increased mobility of the tax base and the ease of access

³ Goodwill is an accounting concept. It refers to the value of an asset owned that is intangible but has a potentially quantifiable value. Reputation is a good example of a goodwill asset.

of wealthy households to tax havens. Despite the history of abandonment there is no administrative reason in principle why a net wealth tax cannot be introduced. Nevertheless an easily understood and standardised valuation system that does not insist upon open market valuation and is administered on a self-assessment basis is crucial to ensure costs are manageable. Finally, the introduction of a net wealth tax should be considered complementary to the reform of Capital Acquisitions Tax (CAT) and to reforms to ensure the equality of taxation for all forms of personal capital income.

There is a general absence of good data on the distribution of wealth in Ireland. Not alone is this deleterious to good economic policy formation and implementation but it also makes precise estimates of potential tax yields impossible. Higher rates and/or lower thresholds are associated with higher yields. This paper will show that an annual tax yield of at least 0.1 per cent of GDP is highly achievable where the threshold of liability is set at €1 million net household wealth and the wealth tax rate set at 0.6 per cent. Such a yield is feasible even under very conservative assumptions of aggregate wealth and the degree to which wealth in Ireland is concentrated in the top 1 to 2 per cent of the population. In practice the degree of wealth concentration may be substantially higher than in these assumptions and the resulting tax yield commensurately larger. However caution is required as the estimates described are purely mechanical and should be considered highly uncertain.

In section two I define the key concepts discussed and describe the main ways in which wealth and capital are taxed in Ireland and in the OECD. Section three sets out the arguments for and against taxing net wealth. In this section I also describe the net wealth tax that operated in Ireland between 1975 and 1978 as well as the surviving net wealth taxes in other OECD countries. In section four I consider existing estimates of household wealth in both Ireland and the euro area, while in section five I consider the key policy issues and examine potential tax yields and effective tax rates. Section six concludes.

Section Two: Definitions and Concepts

2.1 Key concepts

The sheer length and scale of Ireland's on-going fiscal crisis has led to understandable calls for greater taxation of wealth and the wealthy. There are a range of arguments in favour of a wealth tax from the potential revenue yields, to social justice considerations (both horizontal and vertical equity), to economic benefits, and to administrative advantages including in the fight against tax evasion. The OECD (2011, p.368) notes that the taxation of wealth raises wider issues about the potentially harmful effects of wealth concentration e.g. through its effects on the balance of power and influence in a country and society. However there is often confusion between wealth and income and it is important to begin by differentiating between the two concepts. Most importantly wealth is a stock variable whereas income is a flow variable. Wealth is a function of past endowments, past income flows, past value changes, and also of past saving and consumption decisions. A 'wealth tax' is a tax on a stock whereas an 'income tax' is a tax on a flow.

It is useful to establish clear definitions. An individual's gross stock of assets is mainly composed of the individual's total legal claims on society's resources (e.g. land) but also includes more nebulous and difficult to trade intangible assets such as human capital and goodwill. On the other side of the balance sheet an individual's gross debts or liabilities can be seen as the sum of the rest of the world's total legal claims on the individual's resources. We can define an individual's **Gross Wealth** as the value of the individual's gross stock of assets before deduction of all debts and liabilities. Wealth may include tangible assets⁴, for example land, buildings and vehicles, as well as intangible assets, for example equities, human capital and pension rights. Asset types differ in a number of respects. For example some assets are transferable to another individual, whereas others are not, while some assets are immovable, whereas others are not.

Net Wealth is defined as gross wealth after deduction of all debts and liabilities.

$$\text{Net Wealth} = \text{Gross Assets} - \text{Liabilities} \quad (1)$$

$$\Delta \text{ Net Wealth} = \Delta \text{ Value of Assets/Liabilities}^5 + \Delta \text{ Savings}^6 + \Delta \text{ Endowments} \quad (2)$$

⁴ Tangible assets are assets that have physical form. Intangible assets are assets that do not have physical form.

⁵ Value changes can be due to changes in the price of an asset/liability, exchange-rate fluctuations, or other changes such as classification changes (Cussen and Phelan, 2011).

⁶ Savings is derived as gross disposable income minus consumption. Thus wealth accumulation is a function of an individual's disposable income. The size of an individual's wealth stock is also heavily influenced by the lifetime endowments of inherited or gifted wealth obtained by the individual.

The **Tax Base** is made up of all those assets subject to taxation. For the purposes of an annual wealth tax we may define an individual's **Assessed Wealth** as net wealth minus the value of all exempted asset types and minus the value of the reliefs on all taxable asset types.

$$\text{Assessed Wealth} = \text{Net Wealth} - (\text{Exempt Assets}) - (\text{Relief on Taxable Assets}) \quad (3)$$

For the purposes of calculating the tax liability the wealth tax may provide for a free allowance called a threshold. Assessed wealth less the value of this threshold gives us the **Taxable Wealth**.

$$\text{Taxable Wealth} = \text{Assessed Wealth} - \text{Threshold} \quad (4)$$

The actual amount of **Tax Payable** will depend on whether the tax is flat or graduated, and upon the chosen tax rate, or rates. Under a simple flat rate structure the amount of tax payable is equal to the taxable wealth multiplied by the rate at which the wealth tax is set.

$$\text{Amount of Tax Payable} = (\text{Taxable Wealth})(\text{Rate of Wealth Tax}) \quad (5)$$

The size of the tax yield depends upon the tax base; the treatment of debt; the availability of exemptions and reliefs; the size of the free allowance or threshold, the tax structure, the actual rate or rates set, and the concentration of wealth in the population. The net yield to the exchequer will also be influenced by the ability of taxpayers to evade the tax and by the administrative cost of the tax.

2.2 Typology and composition of assets

Wealth can take many forms and an individual's or household's wealth will invariably be composed of a mix of different assets⁷. Assets are typically decomposed into real assets and financial assets. However certain assets, for example human capital, do not easily fall into either of these categories. Assets can also be decomposed into transferable and non-transferable categories, and into movable and immovable categories. Assets include but are not limited to: land, houses and other real estate (residential and commercial property), business equity, agricultural assets including livestock, vehicles, cash, current accounts and deposits, life assurance reserves, pension fund equity, securities

⁷ Total wealth in the economy consists of the wealth of the household sector (household wealth); the wealth of the corporate sector (business wealth), and the wealth of the government sector (public wealth).

(e.g. bonds, stocks, derivatives and promissory notes), human capital, goodwill, intellectual property, and personal property such as jewellery, antiques, furniture, collections and works of art.

Assets yield potential value to the holder of the asset. Often this value will take the form of monetary income e.g. interest, dividends, rents and royalties. However there can be other benefits for the asset holder including capital appreciation, financial security, participation in society, status, access, power and influence, economic freedom, and psychological benefits. In other words, wealth provides substantial benefits to the holder of wealth above and beyond the monetary income generated from that wealth.

The results of the first Euro system Household Finance and Consumption Survey (HFCS, 2013) which was published by the ECB in 2013 indicate that real assets (physical assets) make up almost 85 per cent of the value of total gross assets of euro area households⁸. Financial assets make up the remaining 15 per cent. The household's main residence is by far the most important asset making up 51.7 per cent of the total value of gross assets. Other real estate property makes up 19.3 per cent, while self-employment business assets make up 9.8 per cent. Deposits make up 6.4 per cent of gross household assets making them the most important financial asset, while voluntary private pensions and whole life assurance when added together make up 3.9 per cent of total household assets. Mutual funds (1.3 per cent), shares (1.2 per cent), bonds (1.0 per cent) and other financial assets (0.8 per cent) are, on average, of limited importance to euro area household portfolios. Wealthier cohorts tend to hold a relatively higher proportion of financial assets. The principal private residence makes up a relatively smaller proportion of the net wealth of the wealthiest households.

The HFCS data estimates the median net wealth of euro area households at €109,200, and the mean net wealth at €230,800. The substantial difference between these figures reflects the highly uneven distribution of net wealth in the euro area. The wealthiest 10 per cent of households were found to control over half (50.4 per cent) of total net wealth in the euro area (ECB, 2013). The composition and distribution of gross household assets in Ireland will undoubtedly differ somewhat from that of the overall euro area. Nevertheless the HFCS give us some indication of the potential tax base if an annual net wealth tax was to be introduced in the Republic of Ireland.

⁸ The HFCS had a sample size of 62,000 households. The 2013 survey only covers 15 of the 17 euro area countries. Ireland and Estonia were the exceptions although it is expected that both countries will be covered in future editions. The HFCS is limited in so far as it does not cover more esoteric assets such as human capital, and does not cover certain financial assets, for example public and occupational pensions.

Table 1: Composition of gross assets in the euro area by main types, %

	% real assets	% financial assets	% gross assets
Real assets	100		85
Financial assets		100	15
Real assets⁹			
<i>Main residence</i>	60.8		51.7
<i>Other real estate</i>	22.7		19.3
<i>Self-employ. Business</i>	11.5		9.8
Financial assets			
<i>Deposits</i>		42.9	6.4
<i>Insurance Tech. Res.</i>		26.3	3.9
<i>Mutual funds</i>		8.7	1.3
<i>Shares</i>		7.9	1.2
<i>Bonds</i>		6.6	1.0

The reference year for most country surveys was 2010; Ireland and Estonia were not surveyed; Insurance Technical Reserves are made up of voluntary private pensions and whole life assurance

Source: Euro system Household Finance and Consumption Survey (ECB, April, 2013)

2.3 Taxes on capital

The potential tax base is comprised of that which can be taxed. Tax policy is not just about the advantages and disadvantages of any individual tax, but about the overall tax package (Weale, 2010) including its composition and the aggregate size of the tax take relative to that of the overall economy. All government tax receipts (including social security contributions) are obtained from one or more of three tax bases - consumption, labour, and capital¹⁰. Alternatively we can categorise tax receipts as coming from income, profits, expenditure, property or wealth. Capital taxation broadly refers to all taxes on assets including taxes on the income derived from those assets. Property taxes are taxes levied on one or more types of asset. Eurostat (2013) identifies six broad categories of property tax. These are:

1. Recurrent taxes on net wealth (e.g. Net Wealth Taxes)
2. Recurrent taxes on immovable property (e.g. Residential Property Taxes and Land Taxes)
3. Other recurrent taxes on property (e.g. Domicile Levies¹¹)
4. Other non-recurrent taxes on property (e.g. Capital Levies¹²)

⁹ The other main categories of real assets are vehicles (e.g. cars, boats and motorbikes), and valuables (e.g. jewellery, collections, antiques and art).

¹⁰ Categorising taxes in this way is a simplification as hybrid categories are common. For example personal income tax is made up of taxable income from both labour and capital.

¹¹ Irish nationals and domiciled individuals whose worldwide income exceeds €1 million and whose Irish located capital is greater than €5 million are required to pay an Irish domicile levy of €200,000 per annum regardless of where they are tax resident.

5. Estate, inheritance and gift taxes (e.g. Capital Acquisitions Tax)
6. Taxes on financial and capital transactions (e.g. Stamp Duty)

There is a distinction between taxes on income derived from capital and taxes on the capital stock itself. Taxes on capital income include taxes on the income or profits of corporations; taxes on the income of the self-employed; and personal income taxes paid on the capital income of households, for example dividends, interest, rents and royalties.

The fundamental characteristic of wealth taxes is that they are taxes on a stock of assets. There are three common forms of wealth tax:

1. *Taxes on wealth transfers.* Estate tax, inheritance tax, and gift tax are all taxes on wealth transfers. Most OECD countries employ capital transfer taxes in at least one form. Ireland taxes inheritances and gifts through Capital Acquisition Tax (CAT). CAT was originally introduced in Ireland in 1976 as a replacement for estate duty.
2. *Taxes on capital appreciation.* Capital appreciation is partially¹³ taxed in Ireland through Capital Gains Tax (CGT). CGT was originally introduced in Ireland in 1975¹⁴ and has been altered many times since. Most countries have CGT on sales. CGT on gifts or transfers on death are less common.
3. *Taxes on wealth holdings.* A net wealth tax is a recurrent tax on the capital value of assets less liabilities. France, Norway and Switzerland all have recurrent wealth taxes, while Spain and Iceland have introduced recurrent wealth taxes on a temporary basis. Ireland operated a net wealth tax between 1975 and 1978. A recurrent wealth tax typically refers to an annual tax on the stock of net wealth – i.e., a tax on the value of gross assets minus liabilities. Such taxes may be applied to individuals, to Discretionary Trusts, or to businesses.

Total tax receipts in the OECD from wealth taxes are much smaller in scale than total receipts from either taxes on income or taxes on expenditure. Indeed the combined tax revenue from expenditure taxes and income taxes (which includes taxes on income from capital and employment), accounts for

¹² Capital levies are once off taxes on capital assets. See Eichengreen (1989) and Bach (2012) for discussions on the use of capital levies in theory and practice. Bach, Beznoska and Steiner (2011) have evaluated the potential revenue and distributional effects of a one-time capital levy on personal net wealth in Germany.

¹³ Many asset classes are not covered and there are exemption e.g. for the principal private residence.

¹⁴ CGT and other taxes on capital appreciation are not levied on a stock of assets at a point in time but rather on the appreciation of assets over a period of time. It can therefore be argued that these types of taxes are not actually wealth taxes at all.

almost all tax revenue raised by OECD member states (OECD, 2010). On average, the combined tax revenue from wealth transfer taxes and annual net wealth taxes accounts for less than 1 per cent of the total revenue of OECD countries (OECD, 2010)¹⁵.

Wealth taxes are not the only way to tax capital and in every OECD country a proportion of income tax is obtained from taxes on individuals' capital incomes. There is also usually a tax on corporate income levied at the business level. Some commentators, for example, Boadway, Chamberlain and Emerson (2010) take the view that a tax on wealth holdings is not justified. They argue that many of the advantages of a wealth tax can be achieved by the taxation of capital income at appropriate rates within the personal tax system. The validity or otherwise of this argument will naturally depend on the constraints on taxing capital income and on the ability to avoid or evade taxes on capital income. Others such as Cremer (2010) take a different view to Boadway et al (2010). Based on an analysis of the optimal taxation literature they argue that the instrument of wealth taxes is very much justified as a tool of policymakers.

2.4 Comparing weights of taxation

It is useful to consider the effective weight of taxation on different economic activities. The Implicit Tax Rate (ITR) is a measure of the average effective tax burden on different types of economic activities (Eurostat, 2013). Specifically, the ITR expresses aggregate tax revenues as a percentage of the potential tax bases for labour, for consumption, and for capital. The ITR is therefore the ratio between total revenue from the tax type and the maximum possible base for the tax type. Eurostat (2013) describes the ITR on capital as the ratio between taxes on capital and aggregate capital and savings income. The numerator includes taxes levied on the income earned from savings and investments by households and corporations, as well as taxes related to stocks of capital from savings and investment in previous periods. The denominator is made up of net operating surplus, interest, insurance property income attributed to policy holders, rents on land, dividends for non-financial and financial corporations, households, self-employed, non-profit organisations, general government and the rest of the world (Eurostat, 2013)¹⁶.

In 2011 total taxes in Ireland including social security contributions were 28.9 per cent of GDP and 36.7 per cent of GNP. This is low compared to the weighted EU average of 38.8 per cent of GDP. Table 2 shows the ITRs for consumption, labour and capital for Ireland, the UK, and the EU. Ireland

¹⁵ CGT is usually treated as a form of income tax for the purpose of these comparisons.

¹⁶ Eurostat estimates that Ireland's capital tax base in 2011 was the largest in the European Union at 46.7 per cent of GDP.

treats its capital tax base (ITR = 14.0 per cent) much more gently than either its consumption tax base (ITR = 22.1 per cent) or its labour tax base (ITR = 28.0 per cent). France has the highest ITR on capital at 44.4 per cent while Latvia has the lowest ITR on capital at 5.5 per cent. Ireland taxes the consumption tax base more severely than the EU average. Ireland's ITR on consumption was 110 per cent of the weighted EU average in 2011 (see Table 2). On the other hand, Ireland treats the tax bases for labour, and especially capital, much more lightly than the respective European averages. This suggests there is scope in Ireland for increasing the average effective weight of capital taxes.

Table 2: Where the burden falls: comparing Implicit Tax Rates (ITRs)

	Consumption (2011)	Labour (2011)	Capital ¹⁷ (2010)
Ireland	22.1%	28.0%	14.0%
UK	19.5%	26.0%	34.9%
EU (weighted average)	20.1%	35.8%	27.4%
Irish ITR as per cent of European Union ITR	110.0%	78.2%	51.1%

EU figures represent weighted averages; not all EU countries report data for the implicit tax rate (ITR) on capital and therefore the ITR shown for capital represents the euro area; the euro area' ITR on capital increased to 28.9% in 2011

Source: Eurostat (2012 and 2013), *Taxation Trends in the European Union*

Taxes on capital as a proportion of GDP are relatively low in comparison to the weighted EU average. Taxes on stocks of capital/wealth in 2011 amounted to 2.2 per cent of GDP in Ireland (see Table 3). This compares to the EU average of 2.6 per cent of GDP. One school of thought argues that Ireland's tax ratio should be measured as a proportion of GNP rather than GDP, at least when international comparisons are being made. This is because a significant portion of Ireland's GDP is repatriated out of the country by multinationals in the form of profits. However using GNP instead of GDP brings its own problems. GDP measures all income generated in Ireland, and all of this income is theoretically available to be taxed by the Irish government. Profits intended for repatriation are not immune to taxation and form part of the tax base. Thus all taxation revenue from repatriated profits should be excluded if the tax to GNP ratio is being used as the benchmark for international comparison. Using GNP therefore overstates the comparable scale of the national tax take¹⁸ in Ireland. Increasing the

¹⁷ Ireland's ITR on capital was not reported for 2011. Earlier editions of *Taxation Trends in the European Union* reported a figure for Ireland's ITR on capital and it is unclear why the 2013 edition failed to do so.

¹⁸ The Irish Fiscal Advisory Council (IFAC, 2012) argues that GDP and GNP are both problematic as measures of Ireland's fiscal capacity. The excess of GDP over GNP is dominated by foreign multinational profits suggesting that each euro excess of GDP over GNP has lower (but not zero) revenue capacity relative to each euro of GNP. IFAC proposes a hybrid measure and estimates the relative fiscal capacity of each euro of the component in excess of GNP to be 0.40 of the revenue capacity of each euro of GNP.

overall taxation of capital could in principle raise additional revenues while having a significant redistributive effect. This is because capital income is disproportionately concentrated in the wealthiest cohorts.

Table 3: Taxes on capital as % of GDP, 2011

	Total	Stocks of capital/wealth	Capital and business income	<i>Income of households</i>	<i>Income of self- employed</i>	<i>Income of corporations</i>
Ireland	6.7	2.2	4.5	0.9	1.2	2.4
UK	10.0	4.4	5.7	1.3	1.2	3.1
EU	8.0	2.6	5.4	0.8	2.0	2.6
Ireland GNP	8.4	2.8	5.7	1.2	1.5	3.0

EU figures represent weighted averages

Source: Eurostat (2013), Taxation Trends in the European Union

The behavioural effect(s) on aggregate saving arising from increased taxation of capital is difficult to determine in theory and in practice (OECD, 2011, p.366). Banks and Diamond (2010) analyse the argument that the tax distortion on savings compounds over time and that therefore income from capital should not be taxed. They conclude that this argument only applies in very restrictive theoretical circumstances and that capital income should indeed be taxed. Attanasio and Wakefield (2010) summarise the literature on the effects of taxation on capital income. They conclude that the behavioural response is small. On the other hand, significant distortive effects can arise from treating different sources of capital income differently. For example, subsidising or exempting the return on residential property will divert saving and investment away from other more growth enhancing alternatives.

Section Three: The Wealth Tax Debate and Wealth Tax Experiences

3.1 The wealth tax debate

The distribution of wealth is almost always very concentrated due to the cumulative and multiplicative processes governing wealth inequality dynamics (Piketty and Zucman, 2013). Piketty and Zucman argue that wealth inequality is likely to grow over time in the absence of progressive capital taxation and the taxation of acquired wealth. To counter growing wealth inequality Piketty (2013) has proposed a European wealth tax, while Mills (2013) has also highlighted the attractiveness of a wealth tax on distributional grounds.

Wealth taxes are taxes on the transfer, appreciation, or holding of wealth. There are a number of potential advantages and disadvantages to wealth taxes. Boadway, Chamberlain and Emmerson (2010) have questioned the rationale for a wealth tax on the grounds that it constitutes double or triple taxation i.e. taxation under income tax when it is created and then taxation subsequently in its own right. Yet double taxation is by no means peculiar to wealth taxes. For example householders must pay their consumption taxes out of their post-tax income. There are at least six arguments in favour of wealth taxes. The potential revenue yield is of obvious benefit to the exchequer although in practice the contribution of net wealth taxes and wealth transfer taxes to overall government revenue has tended to be very small across OECD countries and thus the value to national exchequers has been limited.

Taxing wealth and the wealthy is an important component of social solidarity in any modern democracy, particularly at a time of cuts to welfare spending, cuts to pay, and increasing taxes on the less well-off. The OECD (2011, p.362) argues that wealth taxes levied on the fortunes of the very rich could be very progressive and should in principle be considered alongside personal income tax in assessing the progressiveness of a tax regime. The redistribution of wealth is often considered the fundamental objective of a wealth tax and it is these social justice concerns which make up the second set of arguments in favour of wealth taxes. Wealth taxes reduce inequality in the distribution of wealth by constraining the accumulation of wealth by the wealthy. Underlying these social justice concerns are the concepts of vertical equity and ability to pay. Vertical equity is synonymous with the principle of progressive taxation – i.e. that those with greater taxable capacity should bear a proportionally heavier tax burden. Wealth taxes will usually be paid out of income and in order to address ability to pay concerns a ceiling provision is often included in net wealth tax legislation which establishes a maximum combined effective rate for income tax and wealth tax. A well-designed wealth transfer tax

is likely to be more effective than a recurrent net wealth tax at reducing inequality in the distribution of wealth, at least in the long-term. The reason is that taxes on inter-generational wealth transfers directly target and reduce the heterogeneity of individuals' initial wealth endowments. However a net wealth tax can play a strong complementary role to the extent that wealth transfer taxes such as inheritance and gift taxes are undermined by exemptions, reliefs, evasion, low rates and high thresholds.

The notion of horizontal equity underlies the third set of arguments in favour of wealth taxes. Horizontal equity is the idea that persons or groups with the same taxable capacity, or ability to pay, should be treated equally and should pay the same amount of tax. The possession of wealth confers advantages over and above the income derived from that wealth. These advantages include independence, security, influence and satisfaction. Sen (1985) makes the point that wealth is an instrument for enhancing one's opportunities in society. In addition, wealth can provide income without having to sacrifice leisure. It is clearly difficult to quantify all of the intangible benefits to the possessor of wealth. However wealth clearly provides some additional taxable capacity beyond that of monetary income. It is this additional capacity which justifies taxing capital stocks over and above taxing income. Such was the position taken by the Meade Report (1978) which argued that wealth should be subject to additional taxation above that of income. One option is to supplement income tax with a wealth surtax to reflect this additional taxable capacity granted by wealth.

In the context of a wealth tax, horizontal equity in the tax system will be undermined, and investment decisions distorted, if exemptions, reliefs, or favourable valuations are provided for different asset types. In practice, many asset types are routinely exempted by net wealth taxes. For example no country has included human capital or the accumulated value of pension rights within the base for a net wealth tax. Reliefs and exemptions for private residences and personal property are also common. There may be understandable social and practical reasons for some exemptions and reliefs. However the only net wealth tax truly consistent with the principle of horizontal equity is a net wealth tax without any exemptions or reliefs. As more and more exemptions and reliefs are introduced, the less justification and credibility the wealth tax will retain on grounds of horizontal equity.

Administrative efficiency and the fight against tax evasion form the basis of the fourth and fifth set of arguments often used to justify annual wealth taxes. All taxes are susceptible to evasion. An administrative advantage of net wealth taxes is that they can help detect and discourage evasion of

other capital taxes by providing data that can then be cross-checked with other tax returns e.g. income tax returns on investment income. Wealth tax data can also provide evidence of assets that might otherwise go undisclosed or unobserved. While the ability to cross-reference data from multiple capital taxes might make evasion more difficult, there are also obvious administrative costs to increasing the number of capital taxes. Net wealth taxes are likely to be susceptible to non-disclosure and valuation problems. Personal property such as jewellery is particularly easy to hide and susceptible to undervaluation or non-disclosure. Yet exempting personal property from taxation will erode horizontal equity. Valuation difficulties associated with certain asset types may also raise particular administrative problems. How should one value assets if there are few actual transactions to establish open market value? Presumably valuation formulae could be devised for particular assets. If so, the formulae would have to be consistent, transparent and easy to understand. The formulae would also probably have to err on the side of undervaluation in order to prevent a plethora of costly and time consuming legal challenges. Such an administrative compromise would mean that some assets such as quoted shares are taxed at market value, while other assets, such as agricultural land and business assets, are taxed at below market value. In this instance the net wealth tax will fail to achieve horizontal equity. Fortunately there are a number of ways to reduce the administrative costs associated with the valuation of certain assets. For example valuations used for the residential property tax could also be used for the net wealth tax.

If appropriately designed, a wealth tax can promote efficiency and growth. Net wealth taxes may encourage more productive use of assets by imposing charges on wealth irrespective of income. The classic example is of land lying waste or being used unproductively. Imposing a wealth tax that applies regardless of whether the land produces any income will encourage the owner to use it more productively, or to sell it to someone who will. A net wealth tax should encourage a general shift in investment from low yielding assets to higher yielding assets. Yet it is important not to confuse high yield with efficiency. A new and potentially highly profitable business may generate very low yields in its first few years. Despite being unlikely to make profits the new business would still be liable for the wealth tax. Thus a heavy net wealth tax which is unlinked to income might become a significant disincentive to entrepreneurship. Where this is the case, the long-run effect would presumably be to reduce the rate of innovative activity and therefore the rate of intensive economic growth. Similarly, the process of businesses adjusting to and surviving recessions, during which there may be little or no profits, would be made more difficult by the presence of a net wealth tax. This could lengthen and deepen recessions. More benignly a wealth tax related to past income flows, and therefore to past effort, is likely to have a smaller disincentive effect on labour supply and work effort than an equivalent increase in income tax.

There are other possible effects. Wealth taxes, as with all capital taxes, may adversely affect saving - and hence slow the rate of capital accumulation. A decline in the rate of capital accumulation will reduce the economy's expected rate of long-run economic growth. In addition, there will be dis-saving if the wealth tax is set at a sufficiently high rate, i.e. there will be consumption out of saving. One possible solution is to try to minimise the negative effects of slower capital accumulation by exempting or providing relief to the classes of asset considered most productive. In theory any exclusion from the base of a net wealth tax, or any favourable valuation procedure for a particular kind of asset, will distort investment. Yet this distortion could actually be beneficial to the extent that it favours more productive investment. Overall net wealth taxes have ambiguous theoretical implications for risk-taking; work incentives; savings behaviour, and investment decisions. The actual outcome will not only depend upon the precise design of the net wealth tax itself, but will also be influenced by overall tax policy in Ireland and in other countries. The size or importance of these impacts will be difficult to quantify in practice.

Tax exemptions and/or reliefs may be appropriate to support other public policy goals. For example exempting pollution controlling assets might provide an economic incentive to invest in such assets. Finally, the risk of capital outflow and the emigration of the wealthy as a form of tax avoidance must be considered. Many asset types have become increasingly mobile in the last few decades and a relatively high proportion of the wealth of the wealthiest individuals is held in mobile assets. This has increasingly undermined the ability of net wealth taxes to achieve their core objectives of horizontal and vertical equity. Tax avoidance and capital outflow will be discussed in more detail in later sections.

The wider literature is generally mixed on the value of wealth taxes. Jan Schnellenbach (2012) surveys possible motivations for having a wealth tax but concludes that economically the wealth tax walks on thin ice. He argues that progressive income tax is preferable to a net wealth tax and that positive effects on efficiency are only likely if the revenue from a wealth tax is used to reduce marginal income tax rates. He also argues that income tax is better suited to reconciling the security of private property rights with the goal of redistribution. Finally, Schnellenbach stresses the risk of capital flight by the very wealthy to tax havens. The actual rate of tax avoidance and tax evasion will be determined by the behavioural elasticity of the wealthy and the ease of avoidance and evasion. On the other hand, Brunner, Eckerstorfer and Pech (2010) have developed a model of the optimal taxation

of wealth which shows that a tax on wealth is desirable, even if it can be evaded¹⁹. Peter Diamond and Emmanuel Saez (2011) argue that a result from basic research is relevant for policy only if it is (a) based on economic mechanisms that are empirically relevant (b) reasonably robust to changes in the modelling assumptions and (c) politically implementable. They conclude that much of the existing literature does not meet these criteria and is therefore not policy relevant.

The Mirrlees Review was set up in the UK to identify what makes a good tax system for an open and developed economy in the 21st century. The Review included a chapter discussing the taxation of wealth and wealth transfers. The authors Robin Boadway, Emma Chamberlain and Carl Emmerson (2010) were dismissive of the value of a wealth tax, stating that:

We take the view that a wealth tax is not sufficiently justified and dismiss this option apart from a tax on occupation of high net value property...many of the advantages of a wealth tax can be achieved by the taxation of capital income at appropriate rates within the personal tax system (Boadway, Chamberlain and Emmerson, p.810)

Boadway et al. also point to difficulties with valuation and raise concerns about the ease of tax avoidance e.g. through loading up on debt to invest in exempt assets or through the use of offshore companies and Discretionary Trusts.

However the Mirrlees Review also contained three commentaries on the Boadway et al. chapter and on its recommendations. All three of the commentaries disagreed with the substance of the recommendations. Helmuth Cremer (2010) describes their review of the optimal taxation literature as somewhat of a caricature. He notes that the general result that emerges from the academic literature is that taxes on wealth should not be equal to zero and should not be dismissed or given up altogether.²⁰ According to Cremer the pure efficiency approach justifies the use of wealth taxes. In addition, he states:

My comments...ask if wealth and wealth transfers ought to be taxed in order to maximise social welfare...it seems to me that the literature I have reviewed overall makes a case for a positive answer to this question (Cremer, p.823)

In the second commentary on the Mirrlees Report, Thomas Piketty (2010) states that the literature is ambiguous in its conclusions and argues that economists have not yet found the proper way to develop useful dynamic models of optimal capital taxation – in other words, models that are actually useful for informed policy discussion. Piketty (2010) notes that household wealth to household

¹⁹ The model primarily focuses on the taxation of initial wealth.

²⁰ On the other hand the optimal tax literature is ambiguous about precisely what level wealth taxes should be set at. As a general rule the tax rate should be informed by the elasticity of the variable. The more elastic a variable is to its price, the less it should be taxed (Cremer, 2010).

income ratios have increased substantially since the 1970s with an acceleration of the trend since the 1990s.²¹ He suggests that the evolution of the tax system should move towards greater reliance on capital taxation and concludes that the contribution of capital taxation to overall progressivity is larger than commonly assumed. The third commentary on the Mirrlees Report, by Martin Weale (2010), highlights the advantages that wealth confers over and above the income that it provides. He also notes that taxes on wealth are not double taxation where the wealth has its origins in asset revaluations rather than from past savings. However Weale's main argument is that a wealth tax cannot be considered in isolation from the rest of the tax system. For example, where income can easily be dressed up as capital gains and the latter cannot be taxed as income there may be a case for a wealth tax to remedy this defect in the system. Weale stresses that tax policy is not only about the advantages and disadvantages of any individual tax, but also the overall tax package. Weale is critical of the Boadway et al. analysis because:

Trade-offs between wealth-related taxes and other taxes are...not mentioned (Weale, 2010, p.836)

Francesco Figari (2013) underlines three key characteristics for a wealth tax:

- a) It should ensure equality of taxation for all forms of personal capital income.
- b) It should account for the mobility of the tax base and the use of tax havens by the wealthy
- c) It should have a high tax-free allowance to avoid an excessive burden on low income people with high value assets

Finally, Gérard (2013) discusses measures to 'immobilize' the tax base as the mobility of assets can undermine the potential yield. He suggests the problem of mobility points towards the need for collaboration between states at the international level. Nevertheless, Gérard notes that:

...it is hard to avoid the conclusion that safeguarding social equity during fiscal consolidation is likely to require the use of *all* available tax bases and rates of tax, rather than being a choice between them, and that doing so is likely to be more equitable than most forms of spending cut (Gérard, p.95)

3.2 Wealth taxes in the OECD

The treatment of wealth for taxation purposes varies widely from country to country. Direct comparisons between countries can be misleading as countries have different legal and economic systems from each other as well as different institutional architectures. Twenty three out of thirty

²¹ Piketty and Zucman (2013) have examined the evolution of aggregate wealth-to-income ratios for the US, UK, France and Germany in the long-run. They find a gradual rise of wealth-income ratios in recent decades, from about 200 to 300 per cent in 1970 to 400 to 600 per cent in 2010.

OECD countries used wealth transfer taxes in 2010. The general trend for these taxes has been to move away from estate taxes levied on the deceased, and towards inheritance and gift taxes levied on the beneficiaries. Where they exist, net wealth taxes have generally focussed on the individual. Annual net wealth taxes have tended to operate in practice as supplements to income tax because, although wealth is the actual base for the tax, it is in almost all cases paid out of the taxpayer's income. There is therefore a relationship between income tax and net wealth tax, and the marginal rate of income tax should inform the appropriate maximum rate for the wealth tax. Many countries with net wealth taxes have used ceiling provisions in order to cap the combined total of net wealth tax and income tax at a maximum percentage of income.

Net wealth taxes were once common in the OECD. However the number of countries taxing the holding of wealth has steadily declined in recent decades. The increased mobility of capital is one likely reason. In addition, certain taxes such as property taxes and wealth taxes tend to be unpopular due to their high visibility. This unpopularity makes them difficult to introduce and vulnerable to being revoked or undermined for political reasons. Half of the OECD countries still maintained a net wealth tax in 1990. Yet by 2000 this ratio had fallen to just over a third and the decline has continued apace in recent years²². The Oireachtas Library and Research Service (2013) cite the mismatch between administration costs and the revenue raised as the main reason underlying the trend to eliminate wealth taxes. They give the example of the Netherlands abolishing its wealth tax because of high administrative and compliance costs which amounted to 26.4 per cent of the tax yield. As of 2010 non-temporary recurrent net wealth taxes only existed in the OECD in France, Norway and Switzerland. The situation is similar outside of the OECD. China, Brazil, Indonesia, Russia and South Africa do not use net wealth taxes although India does tax net wealth at a 1 per cent rate. On the other hand, reintroduction of a net wealth tax has been proposed by the main social democratic parties in Austria and Germany while the Netherlands has introduced a de facto wealth tax within its income tax system. Under the Dutch tax a 4 per cent return is assumed on financial and physical capital, and these assumed profits are then taxed at a flat rate of 30 per cent (Schnellenbach, 2012).

The French wealth tax, the 'Solidarity Tax on Wealth', or ISF, applies to natural persons and is payable by those with net taxable assets exceeding €1.3 million. There is a wide range of reliefs e.g. a deduction of 30 per cent of the current value of the main residence. There is also a wide range of

²² Spain, Sweden, Finland, Iceland and Luxembourg have all abandoned net wealth taxes since 2006. However Spain and Iceland have temporarily restored net wealth taxes due to fiscal pressures associated with the financial crash. Iceland did so with capital controls in place.

exemptions e.g. for business assets, farmland, professional property, heritage goods and pension funds. There is a ceiling provision in place to ensure that individuals do not pay more than 75 per cent of income in tax. About 1 per cent of taxpayers pay the ISF and the total tax take represented 0.2 per cent of GDP in 2011. As of 2013 the following bands apply:

Table 4: Basic structure of the French Solidarity Tax on Wealth (ISF)

Net Assets (€, 000s)	ISF Rate applicable	Net Assets (€, 000s)	ISF Rate applicable
0 – 800	0%	2,570 – 5,000	1.0%
800 – 1,300	0.5%	5,000 – 10,000	1.25%
1,300 – 2,570	0.7%	above 10,000	1.5%

Only those with net wealth in excess of €1.3 million are liable for the tax; the effective rate averages about 0.5 per cent of taxable net assets for those liable for the tax.

The Norwegian wealth tax is unusual in combining a particularly low threshold with a relatively high rate. As of 2011 the Norwegian wealth tax was set at 1.1 per cent on net assets exceeding €93,000 (Nkr. 700,000) for an individual and €371,000 (Nkr. 2,800,000) for a married couple. It is estimated that 17 per cent of taxpayers are liable for the tax (Edson, 2012). There is no Swiss wealth tax at the federal level but each canton applies a levy on individuals whose net value exceeds a certain threshold. The tax base is net wealth, i.e. gross wealth reduced by the sum of the taxpayer's documented debt as well as personal allowances and social deductions e.g. for children, that vary from canton to canton. Total property is subject to the wealth tax. Total property comprises all of the taxpayer's assets and rights that have cash value (SFTA, 2013). These assets and rights are usually assessed at market value (marked to market). Taxable property includes real estate, movable capital assets, redeemable life and annuity insurances and business assets. The threshold varies by canton and ranges from 50,000CHF²³ for married couples in Obwalden to 202,000CHF for married couples in Zug. Two thirds of the cantons use progressive rates. The maximal tax rate varies from 0.20 per cent in Obwalden to 8.00 per cent in Basel-Stadt (SFTA, 2013). Residents pay annual wealth tax on the value of all assets located in Switzerland while non-residents pay an annual wealth tax on assets derived from enterprises and real estate situated in Switzerland.

²³ 1 euro was equal to 1.20 CHF in June 2012.

Fiscal pressures arising from the post 2007-08 financial collapse have led to experiments with wealth taxes in a small number of countries²⁴. Iceland reintroduced an emergency wealth tax for the period of 2010-2013. As of January 2011 the rate was 1.5 per cent of net capital for individuals with more than €455,000 (ISK 75,000,000), or €606,000 (ISK 100,000,000) for married couples. The Icelandic government raised 0.3 per cent of GDP by taxing the top 2.2 per cent of the population. The wealthy were prevented from legally off-shoring capital due to the presence of capital controls. Spain restored its wealth tax in September 2011 as a temporary measure. The first €700,000 of each individual's assets is exempt from tax. For Spanish residents, €300,000 can be deducted from the valuation of the family home before it is added to the total asset calculation. The tax is structured progressively and rates range from 0.2 per cent to 2.5 per cent. It is estimated that only 160,000 people will pay a total of €1 billion in tax (Advoco, 2013).

3.3 The Irish wealth tax experience

Ireland operated a net wealth tax between 1975 and 1978. Cedric Sandford and Oliver Morrissey conducted a lengthy case study of the tax in 1985 and in this section I consider their findings and assess the wealth tax experiment. The introduction of the wealth tax came in the wake of a famous study by Patrick Lyons (1972) on the distribution of wealth in Ireland. Lyons estimated that the top 5 per cent of the population held 71 per cent of the wealth. A wealth tax had become official policy of the Labour Party by the early 1970s and Sandford and Morrissey (1985) describe how Fine Gael acquiesced to its introduction along with Capital Acquisitions Tax (CAT) in exchange for the abolition of Estate Duty. Abolition of Estate Duty had been a Fine Gael pre-election promise to the farming lobby. The 1974 White Paper on Capital Taxation identified the reduction of inequality as the core objective of the Net Wealth Tax. The proposed wealth tax in the White Paper had a graduated progressive structure ranging from 1 per cent to 2.5 per cent. It also had modest thresholds, a minimum of exemptions and reliefs, and no ceiling provision.

The wealth tax that was subsequently introduced in April 1975 was essentially unrecognisable from that which was originally proposed in the White Paper. Pressure from influential lobby groups had debased and undermined the basic structure proposed in the White Paper. Pressure had come from agricultural interest groups; chambers of commerce; the accountancy profession, and the tourism

²⁴ While not technically a net wealth tax, Cyprus was obliged to introduce a once-off capital levy as part of its bail-out arrangements in 2013. It was a once-off levy on the holding of a single type of wealth, namely bank savings.

lobby. The undermined wealth tax eventually enacted was therefore incapable of achieving the stated objectives of horizontal and vertical equity. The inevitably low yield then provided an apparent justification for its eventual abolition (Sandford and Morrissey, 1985). Fianna Fáil subsequently abolished the wealth tax in 1978 after it had taken power.

The Irish wealth tax was set at a rate of 1 per cent of taxable wealth. The tax was set at a high threshold by international standards and there were also multiple reliefs and exemptions. The threshold was £70,000²⁵ for a single person, £90,000 for a widowed person and £200,000 for a married person. The threshold was increased by £2,500 for each minor child. A ceiling provision was included to ensure the combined burden of income tax and wealth tax did not exceed 80 per cent of the total pre-tax income for any individual²⁶. There was an accompanying floor provision which restricted the ceiling relief to not more than 50 per cent of the total liability. There were also a number of other reliefs including for productive business property, for agricultural property, for hotel premises and for fishing boats. Sandford and Morrissey (1985) note the long list of exemptions. The list of exemptions included:

- The principal private residence²⁷ plus contents and one acre (except parts used mainly for business);
- Items of personal property (e.g. works of art, jewellery and collections);
- Livestock owned by a farmer and bloodstock;
- Timber growing on land owned by the owner of the timber;
- Scientific collections and gardens of special merit;
- Pension rights;
- Human capital;
- Property of a Discretionary Trust or private non-trading company established for charitable purposes only, or as a pension scheme holding, or as a Unit Trust;
- Shares in a private non-trading company which were taxed as being the property of the company but not the property of an individual.

The low average annual yield of £5.25 million²⁸ (0.1 per cent of GDP) can be seen as a consequence of the wealth tax's high threshold and of the wide range of allowable exemptions and reliefs.

²⁵ To put these figures into context £1.00 in 1975 prices is equivalent to €8.51 in 2010 prices.

²⁶ The marginal rate of income tax was 77 per cent in 1975.

²⁷ The exemption of the principal private residence was unusual by international standards. Most wealth taxes did not exempt the principal private residence.

²⁸ The average yield measured as a proportion of GDP would have been equivalent to €156.3 million in 2010.

The insistence on open market values, which the taxpayer was expected to provide and which the authorities could challenge, meant that administration and compliance costs were very high relative to the yield. Ireland's insistence on open market valuation for all assets was considered unusual by international standards. Sandford and Morrissey (1985) estimated that administrative costs were at least six per cent of yield based on the number of wealth tax cases, and the administrative costs of the former Estate Duty²⁹. Using sample data from wealth tax payers they estimated the average compliance cost/tax liability ratio to be 18.5 per cent (the median was 28 per cent). They also found that compliance costs exceeded the tax liability in 17 per cent of cases. Tax professionals were the biggest winners as professional advisor fees constituted the main component of compliance costs. The overall operating costs i.e. the combined administration and compliance costs may therefore have been in excess of 20 per cent of the total yield. It is plausible that the operating cost to yield ratio would have fallen year-on-year as familiarity with the tax improved on both sides. The cost/yield ratio was generally lower for Discretionary Trusts and for private non-trading companies. The very high operating costs to yield ratio should be seen as a consequence of the tax's poor design – notably the insistence on open market valuations and the wide range of complicating reliefs and exemptions that heavily reduced the yield. There were some administrative advantages in so far as the tax helped reveal the existence of offshore Discretionary Trusts which could then be targeted for income tax. However these benefits would have been limited given that less than 2,500 taxpayers were affected by the wealth tax.

Sandford and Morrissey's overall conclusion is that the wealth tax as eventually enacted was a costly failure which did not achieve its objective of reducing inequality. Achieving horizontal equity between taxpayers is conditional on a low threshold, and especially on the absence of exemptions and reliefs. Only 2,156 individuals paid wealth tax compared to 740,000 paying income tax – just 0.06 per cent of the total population³⁰. Clearly the relative advantages and privileges of wealth are enjoyed by far more than just this tiny percentage of tax payers. Given the low yield of the wealth tax, there can only have been a minimal redistributive impact. The low yield, which peaked at £6.5 million in 1976, is hardly surprising once the high threshold, ceiling provision, flat rate structure, and numerous exemptions and reliefs are all considered. Byrne (1989) describes the Irish wealth tax as having been the least onerous of twenty such taxes then in force in the world.

²⁹ The Revenue Commissioners provided Sandford and Morrissey (1985) with a lower estimate for the ratio of administration cost to yield in 1977. The ratio provided was £186,475/£5,806,066 = 3.21 per cent.

³⁰ Byrne (1989) estimates that this 0.06 per cent of the population controlled gross wealth equal to approximately 9 per cent of GNP at market prices in that year.

The economic effects are also likely to have been minimal given its limited nature. There is no evidence of any detrimental impact on investment. On the other hand there is no evidence of any beneficial transfer of resources from less productive to more productive uses. It is plausible there was a relative shift from taxed assets to exempt assets such as pension rights, bloodstock and the principal residence. Clearly the system of exemptions and reliefs as enacted would hardly have encouraged investment in more productive assets – in fact the overall incentive created by the exemptions would have been to shift to non-productive assets. There is little direct evidence of any effect on capital outflow. Indeed 1974, which marked the year before the wealth tax was introduced and well after its impending introduction had been signalled, and a year in which a net capital outflow might have been expected, saw the largest net capital inflow of any year between 1972 and 1980. Nor is there evidence of the wealth tax restricting foreign investment in Ireland, or of the wealth tax leading to international capital movements detrimental to Ireland. Foreign companies would have been generally unaffected by the wealth tax. Sandford and Morrissey (1985) identified minor administrative advantages but found little or no impact on the other goals. The main failures of the 1975-78 tax were seen as the complicated design, the range of exemptions and reliefs, the cost of operation, and the method of administration³¹. Any modern day wealth tax should be informed by these lessons.

3.4 Taxes on asset transfers and capital appreciation

The holding of net wealth is currently untaxed in Ireland. However there are other taxes on wealth. Capital Acquisitions Tax (CAT) is a tax on wealth transfers and Capital Gains Tax (CGT) is a tax on the appreciation of an asset's value. Sandford (1987) argues that inheritances and other endowments explain a large proportion of wealth inequality. CAT includes inheritance tax, gift tax and Discretionary Trust tax. CAT was introduced in 1976 as a partial replacement for estate duty and is charged on the amount gifted to, or inherited by, the person (known as the donee) receiving the gift/inheritance. Rates originally varied between 5 per cent and 50 per cent. As of December 2012 the rate of CAT was 33 per cent. Most of the net receipts from CAT in 2011 (see Table 5) were from inheritances (€213 million) while 11 per cent of receipts (€27 million) were from gifts. Discretionary Trust tax and probate tax are much less significant and together they generated less than €3 million in 2011 (Revenue Commissioners, 2012). Net revenue from CAT was €283 million in 2012 (Revenue Commissioners, 2013).

³¹ The tax outlined in the White Paper would have been better able to meet the objectives of horizontal and vertical equity and would have generated a much higher yield. The impact on savings and investment decisions would also have been much higher. A 2.5 per cent rate for the wealth tax, added on top of income tax, would have led to effective tax rates well in excess of 100 per cent for some individuals

Table 5: Net receipts for Capital Acquisitions Tax (€ 000s)

	2006	2007	2008	2009	2010	2011
Inheritance Tax	299,368	314,456	291,805	201,600	186,180	213,484
Gift Tax	40,094	70,510	46,837	50,516	46,790	27,050
Discretionary Trust Tax	1,996	4,386	3,275	2,928	3,023	2,410
Probate Tax	1,759	1,156	854	574	512	268
Total	343,217	390,509	342,771	255,618	236,505	243,212

Source: Revenue Commissioners (2012) Statistical Report 2011, Table CAT2

CAT has a tax-free threshold known as a group threshold which is determined based on the relationship between the person making the gift or leaving the inheritance (known as the disponer) and the donee. The tax-free thresholds are usually altered each year to reflect inflation. The 2012 group thresholds for CAT are shown in Table 6. The different thresholds for different groups are extremely difficult if not impossible to justify on equity grounds.

Table 6: Group thresholds applicable for Capital Acquisitions Tax, as of December 2012

Group	Relationship to Disponer	Group Threshold (Lifelong)
A	Son/Daughter	€225,000
B	Parent/Brother/Sister/Niece/Nephew/Grandchild	€30,150
C	Relations other than Group A or B	€15,075

Spouses/civil partners are exempt from CAT

CAT also has a number of generous exemptions and reliefs. There is an exemption on the first €3,000 of taxable gifts received during each tax year and very significantly there is an exemption for gifts and inheritances made between spouses/civil partners. There are also highly generous agricultural and business property reliefs which reduce liability to CAT by 90 per cent. The relief operates by reducing the market value of the relevant assets by 90 per cent, so that CAT is calculated on an amount - known as the 'agricultural value' or 'business value' as appropriate - which is substantially less than the market value. There is no upper ceiling on these reliefs. Business and agricultural property reliefs have been defended on the basis that they prevent businesses being split up (Boadway et al., 2010). However evidence from Bloom (2006) suggests that the retention of medium-size businesses might, through inferior management practices, actually harm the efficiency of the economy. To deal with

liquidity issues Boadway et al. (2010) offers the possibility of businesses and farms claiming instalment relief which could enable the tax to be paid over multiple years at a very low interest rate. The exemptions for certain gifts and the range of various reliefs and loopholes currently enables the very wealthy to minimise their CAT liability. This suggests a need for substantial reform³². The generosity of these exemptions and reliefs clearly undermine the principle of horizontal equity between taxpayers and greatly deplete the potential yield. In particular the exemption for spouses should be reviewed. If spouses are brought within the charge then a high threshold should be set to ensure forced sales of family homes does not become an issue. A threshold of between €1,000,000 and €1,500,000 might be an appropriate threshold for transfers between spouses. In addition, while recognising the rationale underlying agricultural and business reliefs, the 90 per cent reduction is overly generous. The absence of a ceiling on these reliefs is also difficult to justify.

Capital Gains Tax (CGT) is charged on the value of the capital gain made on the disposal of an asset. CGT was introduced at a rate of 26 per cent in 1975; the main rate was increased to 40 per cent in 1992, and then reduced to 20 per cent in 1998. It has been increased on four occasions since 2008 and is currently charged at a rate of 33 per cent. There are a number of CGT reliefs and an annual exemption of €1,270 for all assets disposed of by an individual. There are exemptions for disposals to spouses/civil partners and an exemption for disposal of the principal private residence. There are certain reliefs for disposal of business or farming assets. There is no indexation relief. Net receipts from CGT peaked at €3.097 billion in 2007 but had fallen to €345 million by 2010. The collapse in the CGT yield reflects the decline in asset values, as well as the reduced number of transactions, that accompanied the recession. The net CGT yield was €416 million in 2011 and €413 million in 2012 (Revenue Commissioners, 2013). The OECD (2011) suggests that a prudent reform for member states would be to align the tax rates that apply to income and gains more closely. They argue that differences in tax rates on different types of income (e.g. interest compared with capital gains) are at the heart of much income-shifting tax planning and more aggressive avoidance opportunities. The OECD (2011) also argues that trusts should not benefit from concessionary rates.

There are other taxes related to asset stocks and asset transfers. For example, the deposit interest paid to the accounts of Irish residents is taxed as Deposit Interest Retention Tax (DIRT). It is a tax deducted at source. DIRT is therefore a tax on the income arising from a capital stock. The rate is 33 per cent for payments made annually and 36 per cent where interest cannot be calculated at least annually. The Local Property Tax (LPT) is an annual charge on the value of residential property. The

³² There are also a concern that the use of trusts combined with offshore companies can be used to facilitate aggressive tax avoidance and tax evasion.

LPT is set at 0.18 per cent of the value of the property with a higher marginal rate of 0.25 per cent for properties valued in excess of €1 million. Taxes on immovable property and taxes on land are generally seen as the least distorting to economic activity and the least damaging to economic growth. These taxes are also very difficult for the super-wealthy to avoid because the underlying asset lacks mobility and is impossible to hide³³. There is no reason in principle why property taxes cannot be structured with progressive rates.

Stamp duty³⁴ applies ad valorem on residential and non-residential property transactions. Rates vary from 1 per cent to 6 per cent. Stamp duty also applies at a rate of 1 per cent to transfers in stocks and shares by way of sale and is levied at the rate of 3 per cent on premiums received by insurance companies from certain classes of non-life insurance business. There is also an annual levy on pension schemes of 0.6 per cent which will apply for the years 2011 to 2014. Net receipts from stamp duties were €3.632 billion in 2006³⁵ and €3.244 billion in 2007. However this had fallen to €1.001 billion in 2009. The decline reflects falling yields from charges on land and property and from charges on stocks and shares. Charges on land and property made up 82.3 per cent of net stamp duty receipts in 2006 but just 9.7 per cent in 2011. On the other hand the share of net receipts from insurance and miscellaneous jumped from 3 per cent to 68.8 per cent between 2006 and 2011. Net receipts from stamp duties were €1,383 billion in 2011 and €1,426 billion in 2012.

³³ According to the OECD (2011) the imputed rent from owner occupation is generally not subject to tax in OECD countries. They argue that the associated distortion of consumption and investment decisions is likely to harm not only welfare but also growth prospects.

³⁴ Stamp duties are charged mainly on legal and commercial instruments and in respect of certain transactions.

³⁵ These figures include receipts from stamp duty charges on credit cards, charge cards, ATM cards and debit cards.

Section Four: Estimates of Household Wealth, Data and Measurement Issues

4.1 Estimates of household wealth in Ireland

We do not know the distribution of household wealth in Ireland. The reason is a general lack of quality data usable for distributional analysis. We cannot even be certain about aggregate net wealth in Ireland or of the composition of wealth by asset type. Household balance sheet data, such as quarterly accounts data, is limited for distributional analysis as it only provides aggregate data and excludes certain types of asset. On the other hand survey data will have systemic biases on account of the undervaluation and/or omission of certain asset types, for example financial and personal assets. A census or sample survey of wealth holdings would encounter major problems (Byrne, 1989).

Voluntary surveys achieve a poor response rate. Even if compliance was made compulsory, the very wealthy are likely to be under-represented due to non-response, while those who do respond are likely to undervalue their wealth. Household surveys are therefore unlikely to be representative of the circumstances of the very wealthy (Boadway, Chamberlain and Emmerson, 2010). Surveys such as the Euro system's *Household Finance and Consumption Survey* (HFCS) will therefore tend to overestimate the relative weight of real assets in gross assets and to underestimate the relative wealth of the very wealthy.

Data from inheritance tax and estate duty have sometimes been used as a source of information, albeit limited, on wealth holdings and wealth distribution. The first serious analysis of wealth distribution in Ireland was for the years 1953 to 1955 and was conducted by Nevin (1961) using the estate duty approach. Patrick Lyons (1972) applied the mortality-multiplier approach to estate duty data in order to estimate the distribution of personal wealth in Ireland in 1966. Lyons found that per capita wealth in 1966 was £676 (or £1,130 per adult) and that total wealth was £1.948 billion. He also estimated that the top 5 per cent of the adult population held 72 per cent of household wealth. However the estate duty method is likely to underestimate wealth and Lyon's estimates were criticised on a number of grounds. There may have been a systemic underestimation of agricultural assets making the overall estimate for wealth too low. The estate duty approach is also problematic because it excludes large numbers of people who die leaving small estates which do not come to the attention of the tax authorities (Byrne, 1989). Certain types of property may also be excluded from the estate duty, while other types of property may be over-valued or under-valued. Harrison and Nolan (1975) calculated an average value of £30 for missing estates, and their results reduced the estimated share of wealth of the top 5 per cent of households to 70 per cent of total wealth. Subsequent estimates by Chesher and

McMahon (1976) reduced the estimated share of the top 5 per cent of wealth holders to 57 per cent of the total wealth.

Brian Nolan (1991) used 1987 data from an ESRI survey, *Income Distribution, Poverty and Usage of State Services*, to estimate the wealth of Irish households. Nolan estimated that the top 10 per cent of households held 42.3 per cent of household wealth; the top 5 per cent held 28.7 per cent of household wealth; and the top 1 per cent held 10.4 per cent of household wealth. The bottom 50 per cent of households held just 12.2 per cent of net household wealth. Survey data such as this is likely to underestimate the wealth of the very wealthy as they are likely to be under-represented in the sample. In addition, non-disclosure is likely to be more pervasive for wealthier households. Financial assets are more susceptible to non-disclosure than real assets and financial assets make-up a higher proportion of the net wealth of wealthier households. Nolan found that the principal residence was by far the most important component of reported wealth. The principal residence made up 55.0 per cent of the total even after subtracting for mortgages outstanding. Farm land was next at 26.5 per cent after subtracting for farm loans outstanding. This was followed by unincorporated businesses at 7.0 per cent. Ownership of financial assets and unincorporated businesses was particularly concentrated in the top wealth deciles. On the other hand ownership of the principal residence was much more evenly distributed over the entire population.

Bank of Ireland (BOI) and Credit Suisse have published more recent estimates of wealth and wealth distribution in Ireland. The BOI report (2007) estimated that in 2006 net household wealth in Ireland was €804 billion (€196,000 per capita), and that the gross assets of Irish households were worth €965 billion. Of this total €671 billion was residential property and €24 billion was commercial property. Deposits were valued at €92 billion, pension funds at €71 billion, and business equity at €50 billion. The report also estimated that the composition of assets was 72 per cent property; 15 per cent equities; 3 per cent bonds, and 10 per cent cash. The BOI report does not appear to include the value of land, vehicles, personal property, and certain financial assets e.g. life assurance policies. According to the report the top 1 per cent of the population held 20 per cent of household net wealth in 2006, while the top 5 per cent of the population held 40 per cent of household wealth. It is not entirely clear how these estimates were derived, although the report does state that a wealth concentration similar to that of the UK and other Anglo-Saxon economies was assumed.

The Credit Suisse (2011) report relates to the post financial crash environment. It estimates that in 2011 the average net wealth per adult in Ireland was \$181,000 (€126,000³⁶) and that the median wealth was \$100,000 (€69,000). The value of real assets was estimated at €336 billion; financial assets at €302 billion, and liabilities/debt at €210 billion. The Credit Suisse report therefore places net household wealth in 2011 at approximately €428 billion. The report does not decompose either real assets or financial assets by type. Finally, the Credit Suisse report estimates that the top 1 per cent of the population held 28.1 per cent of household wealth in 2011, and that the top 5 per cent held 46.8 per cent of household net wealth. As explained in the notes in Table 7 the estimated wealth distributions for both the Bank of Ireland report and the Credit Suisse report should be treated with a degree of caution.

Table 7: Recent estimates of household wealth in Ireland at current prices, € billions

Source	Year	Real assets	Financial assets	Debts	Net wealth	Top 5%	Top 1%	Notes
Bank of Ireland	2006	€695	€270	(€161)	€804	40.0	20.0	Original data source is unclear; multiple asset types excluded; distribution is premised on a level of wealth concentration similar to Anglo-Saxon economies
Credit Suisse	2011	€336	€302	(€210)	€428	46.8	28.1	Origin of financial data is identified as OECD and Eurostat Financial Balance Sheets and Central Bank of Ireland; data source for non-financial assets is unclear, distribution is inferred from Inland Revenue Statistics for the UK and should be considered of questionable applicability to Ireland
Central Bank of Ireland	2012	-	-	(€174)	€462	-	-	Data source is the Central Bank's QFA for Q4 2012; Household net worth is calculated as the sum of household housing and financial assets minus liabilities – suggests other real assets (e.g. self-employment business, vehicles, works of art) are not included

'Year' is the year to which the data refers rather than the year of publication; Figures for top 5% and top 1% refer to the estimated percentage of total household wealth held by the wealthiest 5% and 1% of households respectively

Sources: Bank of Ireland (2007); Credit Suisse (2011); Central Bank of Ireland (2012)

³⁶ All these euro figures are based on the June 2011 exchange rate of €1 = \$1.44 US

The Central Bank of Ireland's Quarterly Financial Accounts (QFA) reports data on household net worth³⁷. Household net worth in the last quarter of 2012 was estimated at €461.6 billion or €100,674 per capita (CBI, May 2013). The QFA shows that household debt in the last quarter of 2012 stood at €173.9 billion or €37,928 per capita. Census 2011 reports an average household size of 2.73. This suggests there is a mean net worth per household of approximately €274,840. QFA data cannot provide a picture of the distribution of wealth as it only looks at household wealth in aggregate.

The Irish Longitudinal Study on Ageing (TILDA) has collected data on the asset holdings of older people. O'Sullivan and Layte (2011) find that savings of older people, i.e. those aged 50 or over, varies with level of education from an average of €14,000 for those with primary education to €60,000 for those with tertiary education. TILDA shows that about 70 per cent of older people own their home and have finished paying off their mortgage. Around 13 per cent of older people owned a residential property that was not their main residence. Roughly one-fifth of the older population had some debt that does not include mortgages on their primary residence (O'Sullivan and Layte, 2011). O'Sullivan and Layte find that older people on higher incomes have greater asset holdings and that the median value of net assets for those in the lowest income quintile amounts to just €3,000.

The Central Statistics Office (CSO) began publishing Institutional Sector Accounts for the different institutional sectors in October 2011. The accounts provide data from 2002 onwards for the financial assets and liabilities of the household sector (see Table 8). The household sector was a net borrower up to the end of 2008 by which time borrowing had peaked at €212 billion. Irish households became net lenders from 2009 onwards. Net financial wealth in 2010 was reported as €118 billion and increased slightly to €120 billion in 2011 (CSO, November 2012). Gross financial assets were €310 billion in 2011, while liabilities were €190 billion. Insurance Technical Reserves³⁸ at €132.5 billion (43.5 per cent) made up the largest component of financial assets in 2011. This was followed closely by currency and deposits at €124.5 billion (40.1 per cent), and shares and other equity at €47.2 billion (15.2 per cent).

³⁷ The Central Bank calculates household net worth as the sum of the household sector's housing and financial assets minus their liabilities. The data on the value of the housing stock is taken from the CSO's Residential Property Price Index.

³⁸ Insurance Technical Reserves are mainly made up of net equity in pension funds and life assurance reserves.

Table 8: Household financial balance sheet, 2007-2011 end year, € million

	2007	2008	2009	2010	2011
Currency & Deposits	116,708	120,449	125,721	126,253	124,465
<i>Currency and Transferable.</i>	59,953	57,209	60,562	60,742	57,707
<i>Deposits</i>					
<i>Other Deposits</i>	56,755	63,240	65,159	65,511	66,758
Shares and other Equity	56,031	45,644	50,093	48,613	47,227
<i>Quoted Shares</i>	17,607	6,176	8,664	8,527	8,818
<i>Unquoted Shares</i>	38,424	39,467	41,429	40,086	38,409
Insurance Tech Res.	126,994	108,542	122,592	132,068	132,487
<i>Pension Funds</i>	71,753	61,069	67,690	70,331	69,278
<i>Life Assurance Reserves</i>	52,872	44,388	52,048	58,881	60,403
<i>Pre-payments of Premiums</i>	2,369	3,085	2,854	2,857	2,806
Securities besides Shares	484	575	630	494	477
OAR	1,897	4,868	4,470	4,716	5,438
Total Financial Assets	302,114	280,078	303,506	312,144	310,093
<i>Short-term Loans</i>	(13,490)	(12,213)	(12,104)	(8,293)	(6,854)
<i>Long-term Loans</i>	(180,824)	(190,506)	(185,554)	(176,589)	(171,858)
<i>OAP</i>	(5,877)	(10,094)	(9,593)	(9,368)	(11,270)
Total Liabilities	(200,191)	(212,813)	(207,251)	(194,250)	(189,982)
Net Financial Assets	101,923	67,264	96,255	117,894	120,111

Data is for households and non-profit institutions serving households; OAR refers to Other Accounts Receivable; OAP refers to Other Accounts Payable

Source: CSO (November, 2012) Table 3 and Table 5

Irish households have suffered large declines in net wealth since 2006. These losses largely reflect the severe deterioration in the value of housing assets and the exposure of Irish households to the housing market (Cussen and Phelan, 2011). By the fourth quarter of 2010 household net wealth had fallen close to its level in the third quarter of 2003. The general decline in the value of real and financial assets explains almost all of the fall in net wealth during this period³⁹. This fall was nearly identical to the fall in the value of the housing stock. Despite their collapse in value housing assets as a percentage of household net worth stood at 80 per cent in 2010. Cussen, O'Leary and Smith (2012) have compared the impact of the financial crisis on Irish households with the impact on other European countries. According to Cussen et al. (2012) the net worth of Irish households as a percentage of disposable income fell by a massive 164 percentage points - from 723 per cent to 559 per cent -

³⁹ Much of the dynamics of net wealth is actually driven by capital gains and losses on real and financial assets rather than by the active accumulation of saving by households.

between 2007 and 2010. This was the largest decline in net worth of 14 countries studied. Ireland also had the second largest percentage decrease in net financial wealth from 2007 to 2010.

While the holding of assets by households varies considerably from country to country there are still some general trends. For example a large proportion of household wealth in all countries is concentrated in housing assets. The proportion of households in Ireland that are owner occupied was 69.7 per cent according to the 2011 Census. This proportion is relatively high compared to most other Euro area countries and suggests that housing assets as a proportion of total assets may also be comparatively high in Ireland. The portfolio composition of financial assets can be quite different across countries. Borgy and Savignac (2011) attribute these differences to cross country variation across a range of factors including risk aversion, property ownership rates, the age structure, and the tax system including the tax treatment of pensions. Cussen et al. (2012) find that at 333 per cent of gross disposable income Irish households ranked fifth out of 22 European countries for the amount of financial assets in 2011. Irish households also had the second largest amount in currency and deposits as a percentage of gross disposable income. Compared to other European countries the composition of Irish household's financial portfolio is biased towards Insurance Technical Reserves (i.e. pension equity and life assurance funds). Insurance Technical Reserves accounted for over 40 per cent of Irish household's financial portfolio in the third quarter of 2011 (CSO, 2012). This compares to an average of 26 per cent in the other countries sampled by Cussen et al. (2012). On the other hand Irish households were less likely to rely on shares and equity than the other countries sampled. Shares and other equity made up just 17 per cent of Irish household's financial portfolio compared to an average of 26 per cent for the countries sampled.

4.2 Household wealth in the euro area

The Euro System Household Finance and Consumption Survey (HFCS) is the most comprehensive dataset available for household level net wealth⁴⁰, wealth composition, and wealth distribution in the euro area. Data from the HFCS suggests real assets make up almost 85 per cent of the value of assets in the euro area⁴¹ (see Table 1 in Section 2). For homeowners, the dominant components of net wealth appear to be housing assets and associated debts such as mortgages, whereas financial assets and liabilities (excluding mortgages) have only limited impact on net wealth (ECB, 2013). However the

⁴⁰ Care is required when interpreting cross country comparisons of net household wealth. One reason is the cross country variation in household characteristics. For example a higher rate of home ownership will be associated with higher levels of net household wealth but with lower levels of net wealth in the other institutional sectors.

⁴¹ The HFCS classifies self-employment businesses, where at least one member of a household works as self-employed or has an active role in running the business, as real assets.

85 per cent figure is probably an overestimation of the weight of real assets in total assets because financial assets are less likely to be disclosed by survey respondents. According to Davies et al. (2009), for most countries non-financial assets account for between 40 and 60 per cent of total assets with higher shares in the Czech Republic, New Zealand, Poland and Spain. This may indicate that the HFCS suffers from significant biases related to the under-valuation and/or non-disclosure of financial assets. The HFCS also fails to cover public and occupational pensions which in some countries may be quite substantial as a proportion of gross assets.

The composition of real assets is unevenly spread across wealth and income quintiles (see Table 9). At 16.8 per cent of real assets, self-employment business wealth makes up a much larger component of real assets for the top 20 per cent of wealth holders than it does for any of the other quintile groups. Non-main-residence real estate property is also a much more important component of real assets for the wealthiest quintile (29.6 per cent) than it is for any of the other quintile groups. It appears self-employment business wealth and ownership of commercial real estate properties are both highly concentrated in the wealthiest quintile. The relative importance of these assets is likely to be even more exaggerated for the top 5 per cent of households and for the top 1 per cent of households. The household main residence makes up a much smaller component of real assets for the wealthiest quintile than it does for the other quintile groups. Nevertheless at 50.0 per cent the household main residence is still by far the most important component of real assets for the wealthiest quintile. The small share of valuables in total real assets may reflect systemic under-valuation but may also suggest that the problem of under-valuation of valuables is not that important in the wider context of estimating net household wealth.

Table 9: Composition of real assets in total real assets of households, euro area, (%)

	Household Main Residence	Other Real Estate Property	Vehicles	Valuables	Self-employment Business Wealth
Euro Area	60.8	22.7	2.9	2.0	11.5
Percentile of Net Wealth					
Less than 20	63.5	15.6	11.9	5.9	3.1
20-39	67.3	10.4	14.3	6.1	1.9
40-59	81.4	9.5	4.8	2.3	2.0
60-79	81.6	10.8	3.4	1.9	2.4
80-100	50.0	29.6	1.8	1.8	16.8

Source: ECB, April 2013 (HFCS, Table 2.3)

The composition of financial assets in the euro area is shown in Table 10. Deposits are the most important financial asset overall and for each quintile group and represent over half of all financial assets for each quintile group except the wealthiest quintile group (35.4 per cent). Deposits and

Insurance Technical Reserves together make up over 60 per cent of total financial assets for each quintile and over 80 per cent of total financial assets for all bar the wealthiest quintile (60.8 per cent). Mutual funds, bonds and publicly traded shares combined make up almost one third (29.6 per cent) of the financial portfolio of the wealthiest quintile. This is twice the amount for the second wealthiest quintile (14.8 per cent). The relative importance of these assets is likely to be more pronounced for the wealthiest 1 per cent of households. There is little variation across quintiles in the proportion of financial assets held as Insurance Technical Reserves.

Table 10: Composition of financial assets in total financial assets of households, euro area, (%)

	Deposits	Mutual Funds	Bonds	Publicly Traded Shares	Money Owed to Household	ITRs	Other Financial Assets ⁴²
Euro Area	42.9	9.7	6.6	7.9	2.2	26.3	5.3
Percentile of Net Wealth							
Less than 20	65.7	1.8	-	1.2	4.4	26.1	0.6
20-39	62.3	5.4	1.4	1.7	3.9	23.9	1.3
40-59	55.4	5.5	2.5	2.9	1.9	30.1	1.7
60-79	53.5	6.7	4.0	4.1	1.8	28.2	1.7
80-100	35.4	10.4	8.6	10.6	2.2	25.4	7.4

ITRs refers to Insurance Technical Reserves

Source: ECB, April 2013 (HFCS, Table 2.6)

The distribution of wealth within a country will be shaped by a range of institutional factors including the country's economic history; its present economic structure; its sectoral composition of home ownership⁴³; its tax policy; its pension policy, and its demographics. The HFCS data shows wealth to be more unevenly distributed than income. The wealthiest 10 per cent of households were found to hold 50.4 per cent of total household wealth in the euro area, while the wealthiest 5 per cent held 37.2 per cent of household wealth⁴⁴. The large difference between median net wealth (€109,200) and mean net wealth (€230,800) is evidence of the extreme unevenness in the distribution of net wealth. Clearly wealth is highly concentrated. Households in the 10th percentile own just €1,200 in net wealth on average, whereas households in the 90th percentile own €506,200 in net wealth on average – i.e. the 90th percentile controls 422 times the net wealth of the 10th percentile. The bottom 20 per cent of

⁴² Other financial assets includes for example non-listed share ownership, managed accounts, options, futures, index certificates, precious metals, oil and gas leases, royalties, future proceeds from a lawsuit or estate being settled.

⁴³ A higher rate of government or corporate ownership of the housing stock will show up as lower household wealth.

⁴⁴ The top 10 per cent of income earners were found to earn 31.0 per cent of total income, while the top 5 per cent earned 20.2 per cent of total income.

households has negative mean net wealth. The top 50 per cent of households own 94.0 per cent of total net household wealth, while the top 20 per cent own 67.6 per cent.

Table 11: Household net wealth and its distribution in the euro area

	Median Net Wealth (€1,000)	Mean Net Wealth (€1,000)	Share of Total Net Wealth (%)
Euro Area	109.2	230.8	100.0
Percentile of Net Wealth			
Less than 20	1.2	-2.8	-0.2
20-39	27.0	29.4	2.5
40-59	109.2	111.9	9.7
60-79	230.6	235.1	20.4
80-100	506.2	780.7	67.6
Percentile of Net Income			
Less than 20	26.7	89.2	7.7
20-39	53.2	124.9	10.8
40-59	104.9	172.5	14.9
60-79	157.3	226.8	19.7
80-100	295.3	540.8	46.8

4.8 per cent of households hold negative net wealth

Source: ECB, April 2013 (HFCS, Table 4.1)

4.3 Wealth concentration

The distribution of wealth in the population tends to be highly skewed. This ‘skewness’ occurs not only between fractile groups but also within fractile groups. One implication is that the median net wealth of the top ten per cent of households will be less than the mean net wealth of the top 10 per cent of households. In addition, the asset mix of the top 10 per cent is likely to be quite different from that of the entire population, while the asset mix of the top 1 per cent will be different again. Financial assets tend to be a larger component of overall assets for wealthier cohorts.

The Central Bank’s Quarterly Financial Accounts (QFA) estimates that net household worth in Ireland, at least as defined by the QFA, stands at €461.6 billion (CBI, May 2013). According to the QFA, household net worth is calculated as the sum of the household sector’s housing and financial assets minus their liabilities (see notes in Table 7). The Eurosystem’s Household Finance and Consumption Survey (HFCS) report that the top 5 per cent of households in the euro area own 37.2 per cent of net wealth (ECB, April 2013). If Ireland’s wealth distribution were to mirror the wealth distribution of the euro area then the top 5 per cent of households in Ireland would hold €171.7 billion in net assets. However it is unclear to what extent the distribution of net wealth in Ireland actually does mirrors that of the euro area. We don’t have the data. The true distribution may well be substantially different and therefore any estimate of the wealth held by particular groups should be

treated with extreme caution. Ireland’s inclusion in future Eurosystem surveys will provide more reliable estimates of the distribution of net wealth in Ireland. Census 2011 data indicates there are 1,680,678 households in Ireland meaning the top 5 per cent represents 84,034 households (see Table 12). A total household net wealth of €171.7 billion divided by 84,034 households is equivalent to a mean household net wealth for the top 5 per cent of €2.04 million. Nolan (1991) used data from the last survey of household wealth in Ireland, which was conducted in 1987, to estimate that the top 5 per cent of households held a somewhat smaller proportion of net household wealth (28.7 per cent). If this proportion accurately reflects wealth distribution in Ireland in 2012 then the net household wealth of the top 5 per cent would be valued at €132.4 billion, which amounts to €1.58 million per household.

Table 12: Number of Irish households by fractile group

Net wealth	Number of Households
All	1,680,678
Top 5 per cent	84,034
Top 2 per cent	33,614
Top 1 per cent	16,807
Top 0.1 per cent	1,681

The median net wealth for the top 5 per cent of households will be somewhat lower than the mean net wealth for the top 5 per cent of households. Provided the distribution of wealth in the population follows a Pareto distribution the ratio of mean wealth to median wealth that prevails for the total population will remain constant for smaller segments of the population such as the top 5 per cent⁴⁵.

The mean to median ratio for the population of the euro area is $230.8/109.2 = 2.11$. If we: a) take the QFA estimate of €461.6 billion for net household wealth in Ireland, b) assume as per the HFCS that 37.2 per cent of household wealth is held by the top 5 per cent of households and c) assume that net wealth follows a Pareto distribution over the population, then we can tentatively estimate the net wealth of the 97.5 wealth percentile of Irish households at approximately €969,000. If this is correct, then around 2.5 per cent of Irish households (around 42,000 households) have a net wealth in excess of €969,000. If we instead assume as per Nolan that the top 5 per cent holds 28.7 per cent of net household assets then we can tentatively estimate the net wealth of the 97.5 percentile of Irish

⁴⁵ According to Davies et al. (2009) the Pareto distribution has been shown to approximate the upper tail of both income and wealth distribution data quite well at the national level. However the remaining 95 to 97 per cent of the population may be better represented by a lognormal distribution. If this is correct the mean/median ratio for the entire population will differ somewhat from the mean/median ratio for the top 5 per cent of the population.

households at €749,000⁴⁶. Both estimates should be considered purely indicative as we do not know the proportion of net wealth held by the top 5 per cent - nor can we be sure that the wealth distribution does in fact follow a Pareto distribution.

⁴⁶ Nolan also estimated that the top 1 per cent of households held 10.4 per cent of net wealth in 1987. If this accurately reflects the wealth distribution in Ireland in 2012, then 16,807 households held €48 billion in net household wealth. This is equivalent to €2.86 million per household.

Section Five: Policy Considerations

5.1 Establishing the tax base and setting the tax rate

An annual tax on net wealth can be applied to individuals or businesses or both. Special regimes may be required for Discretionary Trusts and for private non-trading companies. An important consideration is how best to treat debt. If assets are assessed net of related debt then wealthy individuals can encumber existing assets with debt and in so doing gain a tax-free source of expenditure. If certain assets are exempted, the wealthy individual can avoid the tax by borrowing (taking on debt) and investing in the exempt assets. On the other hand assessing gross assets creates a major disincentive to invest. In addition, assessing gross assets does not accurately reflect the individual's taxable capacity. On balance it is appropriate the tax base should consist of gross assets minus debts i.e. net wealth. A related consideration is the extent to which the wealth tax is comprehensive in its coverage. Lack of comprehensiveness will undermine horizontal equity. For example, if net wealth is to be truly consistent in its meaning then the capitalised value of future pension rights, human capital, and goodwill should all be included in the tax base along with real and financial assets. In principle, in order to arrive at an accurate figure for net wealth, every asset to which a value can be attached should be included in the tax base, while all debts should be deducted from the taxpayer's assets.

It is important that the tax base not be confused with the source of payment. The tax base is the householder's wealth. However, this does not mean that a wealth tax must be paid out of wealth through the disposal of assets. In reality a wealth tax will almost invariably be paid out of income. The wealth tax therefore effectively operates as surtax on income tax. The interrelationship between income, wealth and ability to pay is often accounted for through the creation of ceiling provisions. A ceiling provision establishes a maximum proportion of net income e.g. 70 per cent that can be taken in wealth tax and income tax combined. Countries with graduated rates, i.e. progressive rates, have also usually incorporated ceiling provisions. To prevent its abuse the ceiling provision can be accompanied by a floor provision. A floor provision will in some way limit the total relief provided by a ceiling provision.

Setting the tax rate should be informed by a careful consideration of the effective tax rate that is likely to ensue. Let us assume that the wealth tax is paid out of income. Consider a scenario where there is a nominal rate of return of 5 per cent, and an inflation rate of 2 per cent, i.e. a real return of 3 per cent. In this scenario the effective charge on a 1 per cent wealth tax is equivalent to a 33.3 per cent income tax, at least before considering the impacts of allowances, exemptions and reliefs. A 3 per cent wealth

tax under this same scenario is the equivalent of a 100 per cent income tax. As the wealth tax is paid out of income the 33.3 per cent charge acts as surtax on top of the prevailing rate of income tax. The surtax can be seen as reflecting the additional taxable capacity provided by wealth. However, the surtax can fluctuate wildly from year to year because the actual real rate of return is unknown in advance. Finally, a number of factors in addition to the nominal rate of the wealth tax will help determine the effective tax rate. These factors include the coverage of the tax, the nature of any allowances, exemptions or reliefs; whether the tax is levied at graduated rates; the size of the tax bands; the valuation methodology(s) used, and the composition of the tax unit.

5.2 Thresholds, exemptions and reliefs

Net wealth taxes have usually been accompanied by a wide range of exemptions and reliefs. This is despite the negative implications for horizontal and vertical equity, for economic efficiency, and for the revenue yield to the exchequer. Modern taxes, for example the French Solidarity Tax on Wealth, tend to have numerous exemptions and reliefs. So did the wealth tax that operated in Ireland between 1975 and 78. An exempt asset is an asset which is excluded from the assessable tax base for the purposes of assessing liability. A relief on an asset is a provision which reduces the tax liability of the asset receiving relief. Reliefs often work by applying a specific percentage reduction to the market value of the asset for the purposes of assessing liability. Where a particular class of assets is exempted or subject to relief, then a taxpayer who owns assets of that class will be advantaged and pay less tax than another taxpayer of equal wealth who owns none. To that extent exemptions and reliefs preclude the achievement of horizontal equity between taxpayers.

A second concern with exemptions and reliefs is that they undermine the net wealth tax's core income redistribution objective. Higher wealth/income groups are likely to make use of the available shelters to engage in tax planning in order to minimise their liability. Tax liability ends up partially being a function of the capacity of the taxpayer to avoid the tax. A third problem with exemptions and reliefs is that they generate incentives for taxpayers to inflate their liabilities in order to reduce their assessable net wealth, i.e. they encourage taxpayers to take out loans on assessable assets in order to invest the proceeds in the tax-favoured assets. Therefore exemptions and reliefs distort investment decisions by encouraging taxpayers to acquire assets of a particular class in order to take advantage of the exemption and minimise their tax liability. Such distortions will, in general, have negative implications for economic efficiency.

Exemptions and reliefs can sometimes be justified to the extent they support other public policy goals. The persuasiveness of the various arguments in favour of exemptions and reliefs is related to the level at which the threshold of liability is set. Setting the threshold at a very low rate might have serious implications for certain types of business such as small owner-occupied farms. In these circumstances there may be a case for relief. However the rationale for exemptions and reliefs will generally diminish as the threshold of liability is increased. On the other hand the higher we set the threshold of liability; the lower will be our tax yield. Ideally, the threshold of liability will be index-linked annually to account for inflation. There are other considerations. For example, should the threshold be different for single and married persons and should there be an increase in the threshold of liability for families with children? The norm for net wealth taxes has been to aggregate the wealth of the spouses. While in theory this could increase the combined liability for the household, aggregating wealth in this way may actually reduce the combined liability where there is a married couple's allowance. This would be the case where one spouse's wealth exceeds the single person's allowance, but where the combined wealth falls short of the married couple's allowance. In general, the principle should be to minimise the number of exemptions and reliefs but to avoid hard cases by setting a high threshold of liability.

Some exemptions have been common to all net wealth taxes. Pension rights have been universally exempted as has human capital. Also commonplace is some form of exemption or substantial relief for household and personal effects including heritage goods. Beyond those categories of asset practice has differed between countries. In many countries relief has applied to one or more of the following asset types: owner-occupied houses; heritage houses; livestock and farm equipment; woods and forests; property for carrying on a trade or profession; works of art and collections; small savings; life assurance policies; government bonds; patent rights and copyright, and goodwill.

Certain types of asset are intrinsically impractical to tax and/or inherently difficult to value. Human capital is a good example of this type of asset. Although difficult to value, human capital is nevertheless an asset with the potential to generate an income in the future, and in this context the capitalised value of the individual's earning power should properly be regarded as personal wealth. However human capital is non-transferable in the sense that it cannot be converted directly into cash and it cannot be gifted to someone else. Human capital also cannot be passed on inter-generationally. Therefore human capital does not directly perpetuate wealth inequality across generations⁴⁷ in the

⁴⁷ While human capital does not *directly* perpetuate wealth inequality it can *enable* the perpetuation of wealth inequality across generations to the extent that better educated parents confer advantages on their children. A

same way as other assets such as real estate. There is also uncertainty about the durability of the value of the human capital. No country has tried to tax human capital. However exempting it does impart bias into a wealth tax in favour of investment in education and training and in favour of those who have so invested. Even so, human capital is crucial to long-run growth. New knowledge applied in new ways and in new contexts is the critical input enabling sustainable long-term improvement in living standards. There is therefore a very strong case for exempting human capital from a net wealth tax. One caveat is that exempting human capital will necessarily introduce horizontal inequity into the tax. Patent rights, copyright and goodwill are similar to human capital in so far as they represent future earning power that in practice is uncertain and extremely difficult to value.

Pension rights are valuable assets which provide financial security and less need to otherwise save. However pension rights are also usually excluded from the base of net wealth taxes. The Oireachtas Library and Research Service (2013) points out that pension assets are usually excluded from net wealth taxes because individuals with unfunded pension schemes cannot be taxed in the same way as those with funded schemes. The exclusion of pension assets is also often justified on social grounds as an incentive for citizens to protect themselves in old age. Arguably the main justification for excluding pension rights from a net wealth tax is the problem of valuation. There is no market which can provide independent evidence of value. On the other hand the value of pension pots is assessable and this may provide some basis for estimating the value of a household's pension assets. Valuation formulae could certainly be devised although this could be complicated, potentially challengeable and administratively costly. There are nevertheless important reasons to include pension assets within the tax base. The Irish income tax system already provides huge advantages in order to encourage investment in pensions. On horizontal equity grounds pension rights should clearly incur a wealth tax liability above and beyond any income tax liability. However pension rights cannot be sold or realised for ready money and net wealth taxes are generally designed only to apply to realisable or saleable assets. As pension rights cannot be sold it is unclear whether pension rights actually generate additional taxable capacity beyond income. The case for exempting pensions hinges on the inability to cash in pension funds.

As with pension assets, social grounds can be used to justify exempting life assurance policies. Life assurance policies generate no income with which to actually pay the net wealth tax. However unlike pensions, life assurance policies can be realised, and this makes them somewhat indistinguishable from normal savings. Exempting life assurance policies could therefore encourage their use as a

classic example of educational advantage transferring across generations is private schools discriminating to favour admission from children whose parents attended the school.

means of minimising net wealth tax liability. Such an outcome would undermine many of the objectives of the wealth tax and would lead to a distortion of investment decisions.

Personal and household effects are also common exemptions from the base of a net wealth tax.

Personal effects are easy to hide and evasion is therefore likely to be endemic. There are also likely to be difficulties with valuation although insured values could be used in some cases. Including personal and household effects in the assessable tax base may represent a particular valuation burden for both the tax authority and the tax payer. An exemption for heritage goods, works of art and collections could be justified on cultural grounds. However an exemption would create possibilities for legally minimising tax liability.

Owner-occupied housing represents the largest and most important asset class in the economy.

Owner-occupied housing has attracted tax relief in many countries with the housing asset usually assessed at a percentage of value. Ireland's wealth tax was unusual in so far as it provided a full exemption for the principal private residence. The lack of direct cash income from owner-occupied housing is a common justification given for the relief. Nevertheless, while owner-occupied houses do not usually generate direct cash income, they do generate an imputed income. This imputed income can be thought of as the money saved by not having to pay rent. It is extremely difficult to justify relief for owner-occupied houses on either economic grounds or on equity grounds. Houses are assets of substantial value and for most people they make up the most important component of net wealth. An exemption or relief would therefore have serious implications for the revenue yield. Any relief would also provide a tax advantage over the person who rents accommodation and has to pay rent out of their income. In other words, providing a relief for the home will undermine horizontal equity and fail to reflect the additional taxable capacity of the home owner. Any relief for owner-occupied houses would also have negative consequences for economic efficiency as it would distort investment decisions away from more productive assets and activities. Finally, a relief assessed as a percentage of value would also disproportionately benefit those with more valuable homes.

An exemption for small savings such as bank deposits can be justified on social grounds as it would incentivise households to save. However if the threshold of liability for the tax is set sufficiently high enough then this justification disappears. Other exemptions and/or reliefs can be justified on public policy grounds. For example, an exemption for pollution controlling assets would provide an economic incentive to invest in such assets. A more general concern is how best to treat agricultural

property and business property? Providing a relief for these assets will undermine horizontal equity. The main argument for exempting business assets concerns the desire to encourage entrepreneurship and investment in productive assets. Many business assets are held indirectly via shares in a limited company. In practice valuing private businesses can be highly problematic. It also may be difficult if not impossible to differentiate between shares held as portfolio investments, and say a family business held by a large number of family members. Should a relief be provided for both types of asset, or just for the family business? What justifies the preferential treatment? Finally, how best should agricultural land or forestry be treated and what about shares in agricultural or forestry enterprise? A particular concern with agricultural assets is that they may not generate sufficient income to enable the owner to pay the wealth tax. Overall there appears some justification for providing some form of exemption or relief for business and farm assets although this would undoubtedly create opportunities for tax avoidance.

Table 13: Suggested exemptions and reliefs

Asset Type	Notes	Recommendation
Human capital, patent rights, copyright, goodwill	Inherently difficult to transfer; inherently impractical to measure the capitalised value of future earnings; accumulation of human capital is a key component of long-run growth	Exempt
Pension rights	Relief justified on social grounds; not immediately realisable; non-transferable; practical difficulties with valuation; targeting only private pensions would discriminate in favour of public pensions and occupational pensions; where pension rights can be sold or realised for ready money the case for exemption disappears	Exempt unless realisable but A) reduce the value of existing pension tax reliefs, B) cap the lifetime pension tax relief available, and C) reduce the tax relief on retirement lump sums
Life assurance policies	Relief justified on social grounds; provides no income with which to pay the wealth tax; unlike pensions they can be realised; exempting could provide a shelter for tax avoidance	No exemption
Owner-occupied houses	The largest component of net wealth; no tax on the imputed rental income; relief would distort economic activity away from productive activity; relief discriminates against renters, undermines the yield and provide a shelter for tax avoidance	No exemption
Personal property	Particularly susceptible to non-disclosure and evasion; practical difficulties with valuation including concerns re invasion of privacy; insured values could be used	Exempt first €20,000 of insured value but no relief on the excess
Heritage goods and collections	Cultural justifications for exempting; often difficult to value; exempting could provide a shelter for tax avoidance	Include within ‘personal property’ category – i.e. exempt first €20,000 of insured value but no relief on the excess; grounds for full exemption where loaned for free to the state
Small savings	Relief could be justified on social grounds as an incentive for small savers; justification disappears with a sufficiently large threshold	No exemption
Business assets including agricultural and forestry assets	Exempting might encourage investment in productive assets; difficulties of valuation; may be difficult to differentiate from portfolio investments	No exemption or relief if the threshold of liability is set at a sufficiently high value; relief is appropriate if the threshold is set low; income related ceiling provisions may be appropriate as a counter-cyclical alternative to reliefs

5.3 Administration and valuation issues

Administrative difficulty is perhaps the strongest argument against the adoption of a net wealth tax. To be effective the administration of a tax must be cost efficient and net wealth taxes tend to be associated with high cost yield ratios. The cost of running or operating a tax can be broken down into administration costs and compliance costs. Administration costs are the costs incurred by the revenue authorities in administering the tax, whereas compliance costs are the costs incurred by the taxpayer in meeting the requirements of the tax that are over and above the actual tax liability itself⁴⁸. Poor design can lead to these costs becoming significant. The administrative costs of any new tax are likely to be highest in the short term due to start-up costs such as setting up the computer system and training the staff. In addition, there will be temporary learning costs on both sides caused by lack of familiarity. Such costs should diminish over time. Long term costs can be described as follows:

$$\text{Administrative costs} = \text{Wages and salaries} + \text{Training costs} + \text{Legal costs} + \text{Office costs} \quad (6)$$

$$\text{Compliance costs} = \text{Direct money costs}^{49} + \text{Time costs} + \text{Uncertainty costs} \quad (7)$$

However it would be a mistake to use the cost yield ratio as the only measure of the tax's administrative efficiency. This is because cost yield ratios are highly susceptible to changes in the tax base and the tax rate. For example, the cost yield ratio will improve or deteriorate substantially simply by virtue of changing the rate, or indeed by virtue of altering the composition of the exemptions and reliefs. In addition, Ireland's previous experience with a wealth tax is not entirely informative because setting up a completely new tax from scratch today is much easier than it was in the 1970s. This is because:

- Self-assessment is now seen as an acceptable way to administer taxation systems;
- Computer systems are comparatively cheap and easy to set up compared to paper based systems of the past;
- The Irish Revenue has a very good electronic system for filing tax returns and has already begun to introduce compulsory electronic filing for certain groups of taxpayers and certain taxes. Compulsory filing of wealth tax returns would be possible to set up quickly at minimum cost.

⁴⁸ There can be trade-offs between administrative and compliance costs e.g. the Irish wealth tax that operated between 1975 and 1978 obliged taxpayers to provide open market values for their assets. Official valuations and formulae would have increased administration costs but would also have substantially reduced compliance costs.

⁴⁹ For example fees paid to professional advisors.

There are therefore, at least in principle, no fundamental administrative reasons why an annual net wealth tax could not be introduced quickly. The OECD (1988) has argued that the existence of a net wealth tax can assist with the administration of income tax by enabling tax authorities to cross-check data with income earning assets and in so doing identify discrepancies.

Who should be liable to pay a net wealth tax? Irish and foreign companies would not be liable for the tax as it would only apply to household wealth. Individuals can be assessed based on citizenship, residency or location of assets. Making all Irish citizens liable would be problematic as it would conflict with existing Income Tax law. This suggests using residency and/or location as the basis for assessment. There are a number of questions. How should we treat citizens of other countries resident in Ireland? How should we treat those of dual nationality? How should we treat assets located in Ireland but belonging to non-residents? The most straightforward approach, and the one proposed here, would be to make Irish residents liable for their entire net wealth, regardless of whether their assets are situated in Ireland or abroad⁵⁰. With regard to assets held abroad, the usual exemptions and reliefs would apply, and liability would be subject to double taxation agreements with those countries that have an annual net wealth tax in place. In principle a non-resident could be charged with a wealth tax liability for property situated in Ireland. In practice it may be difficult to tax the assets of non-residents. Where difficulties arise a withholding tax could be attached to income yielding assets. It is proposed non-residents would be liable for assets located within Ireland but would not be liable for assets located outside of Ireland. Irish and foreign companies would of course not be liable for the net wealth tax as it applies to net household wealth. There are concerns with using residency as the basis for assessment. Schnellenbach (2012) argues that wealthy individuals could avoid a residence based wealth tax by legally relocating to tax havens and transferring assets to foreign jurisdictions⁵¹.

Tax evasion (which is illegal) and tax avoidance (which is legal) are common to all taxes. Evasion of a net wealth tax relates to the non-declaration or under-declaration of assets. By virtue of its nature it is difficult to estimate the level of evasion. Evasion may be common for small savings and for easy to hide personal property. Evasion is also likely to be common for financial assets such as bearer bonds and through the use and abuse of offshore accounts. Discretionary Trusts are also used internationally as a means of facilitating tax evasion. Tax avoidance is the legal reduction of tax liability and is likely

⁵⁰ There is a case in equity for basing the assessment for liability on citizenship. Doing so would help to preserve social solidarity and the perception of fairness as it would force individuals that have left Ireland for tax avoidance purposes and taken up residency in tax haven jurisdictions to explicitly choose between giving up their citizenship and paying the tax.

⁵¹ There are a number of policy options that could be considered in order to counteract abuse and aggressive tax avoidance by tax exiles. These include introducing strict 'day counting' tests, introducing a 'permanent home' test, and/or introducing a 'centre of vital interest' test.

to be easy to achieve for a net wealth tax in the event that valuable assets are made exempt or carry significant reliefs. Income related ceiling provisions can also be used as a mechanism for tax avoidance e.g. by providing gifts to children with very little or no income. Another strategy for tax avoidance is the switching of assets between classes of assessable persons for purposes of tax planning and specific provisions would be needed to prevent the use of beneficial trusts for tax avoidance. One option is to treat the trust as a person with no threshold of liability or other allowance. Alternatively legislation could be enacted to make trusts 'see-through' and to add the value of the trust to the gross assets of the beneficiaries on a proportional basis. Sandford and Morrissey (1985) found that due to the way the wealth tax was structured there was little scope for avoidance of the 1975-1978 wealth tax through the use of Discretionary Trusts. Problems related to the disclosure and/or valuation of assets has prevented net wealth taxes from becoming more prevalent than otherwise might be the case. The disclosure problem relates to the ease with which many forms of wealth can be hidden. Personal assets such as jewellery and financial assets such as bearer bonds are very easy to hide while the use and opacity of Discretionary Trusts and offshore accounts can create further difficulties for the tax authorities. There is a risk that inequities will open up between honest and dishonest taxpayers and that this will erode the integrity of, and support for, the tax. In order to prevent widespread evasion it may be necessary to introduce random audits and to increase the investigative capacity of the revenue authority. The downside of course is the increased costs of administering the tax.

As Boadway et al. (2010) point out the need for regular valuations imposes compliance and administration costs. Mills (2013) also highlights valuation issues as a key barrier to introducing a wealth tax. There are three main objectives when choosing the best valuation method: A) obtaining the best possible values, B) minimising administration and compliance costs, and C) minimising uncertainty and delay. Tension between these goals is inevitable and compromise and approximation in valuation are necessary. Valuation is particularly difficult where there is no active market for the asset type in question. Assets like goodwill and human capital may be impossible to value in practice. Valuing pension rights also represents particular difficulties. To reduce the administration, compliance and uncertainty costs of running the tax we can apply a number of general rules:

1. Self-assessment should be used wherever possible;
2. A single rate is preferable to a graduated rate;
3. A high threshold of liability should apply;
4. An exemption can be given for personal and household effects worth up to a certain value;
5. Uniform rules and formulae should be set for the valuation of particular asset classes. These rules should be as simple, easily understood, and transparent as possible;

6. Rules and formulae should err on the side of undervaluation in order to obtain political acceptance and in order to minimise legal challenges;
7. The value of the taxpayer's total net wealth could be treated as fixed for a number of years e.g. for three years, before being re-assessed;
8. Alternatively, the value of particular asset classes can be treated as fixed for a number of years e.g. business assets, land or real estate;
9. Statutory provisions can be adopted to automatically adjust the thresholds and allowances every number of years to account for inflation;
10. Trusts could be treated as automatically transparent or 'see-through' in the sense that the trustee is legally obligated to identify the beneficiary or beneficiaries to the tax authorities with the value of the fund then added on a proportional basis to the assessable gross wealth of the beneficiaries.

One downside to revaluing assets only periodically is that relative changes can be large and this will create inequities. On the other hand frequent revaluations can be expensive and intrusive (Hills, 2013).

The design of valuation rules and formulae requires careful consideration. A possible starting point for valuing agricultural property and forestry⁵² is by reference to earning capacity. Earning capacity could be established by incorporating factors such as soil quality, location and farm size into a hedonic regression model. This type of valuation method would be politically difficult to implement because it would fail both the simplicity and the transparency tests. In addition, moving averages of yield would be required for a number of years and for a large number of farms in order to construct the hedonic model. Such data would be difficult to obtain in the short-term. A much less complicated solution would be to value agricultural land as if it had been leased. Market values are used when compensating owners for land lost due to a compulsory purchase order and a similar system could be applied for valuations under a net wealth tax. Livestock could be valued at market prices.

Valuing unincorporated businesses and unquoted shares raises particular difficulties because unquoted shares are infrequently traded offering little guidance to values. An important consideration is whether goodwill should be included in the valuation of business assets, or alternatively, whether the business should simply be valued on the aggregate value of its individual physical assets. The aggregate value of the individual assets will obviously be less than the true value of the business once goodwill is included. A second consideration is how to estimate the capital stock (the physical assets) of the business. Goldsmith's (1953) Perpetual Inventory Method (PIM) can be used for this purpose. The

⁵² See Bacon (2013) for a discussion on estimating the value of timber.

value of the capital stock for any given year t is calculated in the following way using the PIM: First, the inflation adjusted value of the capital stock for year $t-1$ is taken as the base estimate for year t . Second, the base estimate is then adjusted using a pre-defined depreciation function which takes account of the depreciating value of the year $t-1$ capital stock. The exact amount of depreciation in each time period will depend upon the composition and vintage of the stock. Third, the net value of capital additions in year t is added to the remaining value of the year $t-1$ capital stock. The result is the estimated value of the capital stock for year t . The capital stock will increase if the total value of net investments in year t exceeds the total value of depreciation in the year $t-1$ capital stock over the course of year t . A geometric depreciation function would most accurately estimate the non-consumed value of the capital stock although a straight line depreciation function might be simpler for compliance and administration purposes. To minimise the likelihood of challenges by taxpayers it may be necessary to compromise by having favourable (to the taxpayer) depreciation provisions. An alternative approach is to value the business at some multiple of average profit value or dividends over the previous number of years. Irrespective of the methodology used a uniform approach is needed for administrative purposes. A uniform approach and consistent formulae will also give the taxpayer certainty in regard to his or her potential tax liability.

5.4 Capital flight and investment issues

As foreign multinationals would not be exposed to a tax on net household wealth their investment decisions would not be directly influenced by the tax. In addition, investment in Ireland by non-resident individuals (with residency determined by the appropriate test e.g. the permanent home test) would only be liable for the tax to the extent their domestic assets exceeded the threshold of liability. This would enable a reasonable amount of investment by non-resident individuals⁵³. More substantial investments by individual non-residents would only be deterred to the extent the effective rate of the net wealth tax (as a surtax on income) was too high. This may be relevant where profits and dividends are low – e.g. for new businesses and/or during recessions. In their review of Ireland's previous wealth tax Sandford and Morrissey (1985) note that net capital inflows between 1972 and 1980 peaked in 1974 i.e. the year prior to the introduction of the last wealth tax and at a time when investors would have been well aware of the wealth tax's impending introduction. This suggests the deterrent factor was not high. According to Sandford and Morrissey the modest effective rate of the 1975-1978 wealth tax made it highly unlikely that a significant number of individuals emigrated to avoid the tax. They also found only sparse and inconclusive evidence of offshore Discretionary Trusts

⁵³ A grace period of one or more years could be given to non-residents coming to take-up residence in the state (e.g. for work purposes). This would avoid a situation where people are dissuaded from coming to work in Ireland for short periods out of fear of attracting a substantial wealth tax liability.

being established in response to the wealth tax. Overall foreign investment is unlikely to be significantly constrained by the introduction of a net wealth tax unless the rate is set at a high level. The actual constraint on investment will depend upon the rate; the threshold of liability, and the nature of the available exemptions and reliefs.

An annual wealth tax can be thought of as a tax on accumulated savings. A net wealth tax with a high effective rate will therefore discourage saving. A reduction in the savings rate will in turn reduce the flow of investment funds available to the private sector. The combined weight of the net wealth tax and income tax will depend on the rate of return on wealth and will therefore be inconstant from year to year. If the net wealth tax is additive⁵⁴ then dis-saving is inevitable. For example a wealth tax of 2 per cent and on an investment yielding 4 per cent is equivalent to an income tax of 50 per cent. If the rate of income tax is 52 per cent then the combined weight of the wealth tax and income tax is 102 per cent. In this case the individual's income will fall if he or she saves more – saving becomes very unattractive⁵⁵. On the other hand if the net wealth tax is substitutive⁵⁶ then the effect on saving is less straightforward. A wealth tax of 0.5 per cent on an investment yielding 4 per cent is equivalent to an effective income tax of 12.5 per cent. If the marginal rate of income tax is 52 per cent then the combined weight of the wealth tax and income tax is 64.5 per cent. The impact on aggregate saving can be reduced by setting a high threshold and low tax rate, and by incorporating a ceiling provision⁵⁷ that caps the combined wealth tax and income tax at a maximum proportion of income.

While an appropriately designed wealth tax with a sufficiently low effective rate should have limited effect on aggregate saving there may still be damaging effects related to certain types of investment. For example, closely-owned private businesses and agriculture (e.g. family businesses) that are just starting up or going through a difficult period may be less able to withstand the wealth tax burden because of cash flow difficulties. Agriculture may be especially problematic due to the ownership structure, the high capitalisation ratio, the length of time required to make a farm viable, the low average rate of return, and the extremely variable rate of return from year to year (e.g. because of the

⁵⁴ An additive wealth tax is a tax which cannot be met out of income when it is 'added' to the existing income tax rate – i.e. the tax can only be met by the sale of assets. Net saving becomes impossible where the combined average rate of income tax and wealth tax exceeds 100 per cent.

⁵⁵ Take an individual with €1 million to invest and with no other source of income. Assume a 4 per cent rate of return, a 52 per cent income tax (with all income charged at this marginal rate), and a 2 per cent wealth tax. The individual would receive €40,000 in income, would pay €20,800 in income tax, and would pay €20,000 in wealth tax. There would be no incentive to save.

⁵⁶ A substitutive tax is a tax which can be met out of income.

⁵⁷ Because ceiling provisions can be used for tax avoidance it is important they are accompanied by a floor provision which either caps the amount of relief available from the ceiling provision or sets the maximum ceiling provision at a defined proportion of the tax liability, or both.

weather and the high variability of commodity prices). Consideration should be given to installing a deferment provision in any future wealth tax legislation in order to take account of liquidity problems. Nevertheless, with a high threshold, low tax rate and ceiling provision the number of these hard cases can be minimised.

As Edson (2012) points out a wealth tax does not discourage investment per se – rather it discourages the holding of non-performing or underperforming assets. The wealth tax rate is variable in so far as it depends on the rate of return – the effective rate becomes greater for underperforming assets, and lower for assets with higher rates of return. The wealth tax itself persists regardless of the investment choice of the wealth holder and its existence will discourage investment in non-productive zero or low yielding assets classes such as owner-occupied housing, furniture and jewellery - the effective tax rate will be higher for those asset classes. Thus the introduction of a wealth tax may actually prove beneficial on efficiency grounds to the extent that it encourages investment in income earning assets. On the other hand exempting or providing reliefs for entire classes of asset e.g. owner-occupied housing will distort investment decisions and therefore reduce economic efficiency. An exemption for pension rights will encourage individual investment in pension funds at the expense of other investments. However investing in pension funds actually means indirectly investing in the capital markets - although biases will remain i.e. in favour of safer assets perceived as low risk. Pension funds can also be targeted in other ways if desired e.g. through retention of the pension levy, by standard rating pension tax reliefs, and/or by capping the amount of pension tax relief available.

5.5 Potential yields and effective rates

The potential yield from a net wealth tax depends on a number of factors including:

- (A) The defined tax base;
- (B) The chosen tax unit and the basis for liability;
- (C) The amount and distribution of wealth in the population;
- (D) The structure of the tax rate i.e. flat or graduated and the chosen tax rate or rates;
- (E) The threshold of liability;
- (F) The treatment of debt;
- (G) The range and type of exemptions and reliefs that is available;

- (H) The administration costs;
- (I) The capacity and the willingness of taxpayers to avoid or evade the tax
- (J) Overall tax policy in Ireland and other countries.

Net wealth taxes have generally yielded less than 1 per cent⁵⁸ of the total tax revenue for those OECD countries that have used them⁵⁹. Cabré and Moré (2007) report that wealth tax revenue as a percentage of total tax revenue was 0.2 per cent for Finland in 2005; 1.2 per cent for Luxembourg in 2005; 0.4 per cent for France in 2006; 0.4 per cent for Spain in 2006; 0.4 per cent for Sweden in 2006; 1.3 per cent for Norway in 2006, and 3.5 per cent for Switzerland in 2006⁶⁰.

The lowest marginal rates have generally varied between 0.2 per cent and 1.5 per cent, while the top marginal rates have generally varied between 0.5 per cent and 2.5 per cent. There has been a fairly even split between flat wealth taxes and graduated wealth taxes. Thresholds have often started quite low, for example Luxembourg had a threshold of €2,010 in 2005. On the other hand net wealth taxes have almost always been characterised by a wide-ranging menu of generous exemptions and reliefs that have combined to often dramatically undermine the potential yield. Sandford and Morrissey (1985) estimate that eliminating all the exemptions and reliefs provided for under Ireland's previous wealth tax would have increased the annual yield by at least £5.8 million, and would have generated a minimum annual yield of £13 million, or approximately 0.24 per cent of nominal GDP.

The preferred structure for a net wealth tax is one based on a relatively high threshold of liability and with the bare minimum of exemptions and reliefs. The Central Bank's Quarterly Financial Accounts (QFA) estimate household net worth in the last quarter of 2012 at €461.6 billion (CBI, 2013). This figure appears to exempt personal property⁶¹. The CSO (2012) reports that financial assets net of

⁵⁸ To give a sense of scale tax revenue (including social security contributions) in Ireland in 2013 will be approximately 31 per cent of GDP. In other words 1 per cent of total revenue is equivalent to 0.31 per cent of GDP or approximately €500 million.

⁵⁹ Together the unweighted average contribution of net wealth taxes and capital transfer taxes to the overall tax revenues of OECD countries fell from 1.61 per cent in 1965 to just 0.66 per cent in 1985 (OECD, 1988), and has remained low in recent years.

⁶⁰ These figures relate only to individuals. Luxembourg and Switzerland also applied their wealth taxes to corporations. The success of these countries in attracting foreign direct investment suggests their net wealth taxes have had minimal impact on foreign direct investment.

⁶¹ Self-employment business assets are represented as unquoted shares in the CSO's (2012) household financial balance sheet and this seems to match up with the QFA data.

liabilities were worth €120 billion in 2011. Liabilities declined by €15 billion in 2012 so we can tentatively estimate net financial assets at approximately €135 billion in 2012. This suggests real assets in 2012 are in the region of €327 billion. If the prevailing ratio of property assets to personal assets in the euro area (see ECB, 2013) holds for Ireland then the value of personal property assets is around €20 billion. This would put net household wealth at approximately €482 billion. The only significant exemption proposed in section 5.2 was for pension assets. The CSO (2012) values pension funds at €69 billion in 2011. Therefore our assessable wealth is in the region of €413 billion. A suggested relief for personal assets of up to €20,000 per household was also suggested (see Table 13). When this relief is considered we tentatively arrive at an assessable net wealth in the order of €400 billion. The HFCS data (2013) shows that Insurance Technical Reserves (which includes pension funds), and personal property make up similar proportions of the gross assets of each of the different quintile groups. This is important when calculating assessable wealth (and potential yields) because the actual tax liability will be unevenly distributed across households, falling primarily on those at the very top (1 per cent to 2 per cent) of the wealth distribution.

According to data from Census 2011 the top 5 per cent of households represents 84,034 tax units, while the top 1 per cent of households represents 16,807 tax units. For purely illustrative reasons let us consider a desired annual yield from the net wealth tax of €150 million. Such a yield can be obtained in a number of ways. For example, it can be obtained by imposing an average tax liability of €1,785 on the top 5 per cent of households or by imposing an average tax liability of €8,925 on the top 1 per cent of households⁶². The extent to which wealth is concentrated in the right tail of the distribution will heavily influence the actual yield obtained from a chosen tax threshold and tax rate. While we do not know the degree of wealth concentration in Ireland we do have some information to inform us. The Nolan study (1991) estimated that the top 5 per cent of households held 28.7 per cent of the wealth in 1987, while the top 1 per cent held 10.4 per cent of wealth. If those proportions accurately reflect the distribution of wealth in 2012 then the top 5 per cent held around €114.8 billion of the assessable net wealth, or an average of €1.37 million per household, while the top 1 per cent held around €41.6 billion of the assessable net wealth, or an average of €2.48 million per household.

In order to understand the scale of potential tax yields it is worth considering some scenarios. Consider a threshold set at €1 million and assume also that Nolan's estimates for the wealth

⁶² Obtaining the same tax yield from a larger cohort of households is achieved by simultaneously reducing both the tax threshold and the tax rate. To determine the exact combination(s) of tax threshold and tax rate required to obtain a desired tax yield we need to know the aggregate assessable household wealth as well as the distribution of assessable wealth in the population.

distribution in Ireland were to hold for 2012. Further let us conservatively assume that each household in the top 1 per cent has an assessable net wealth of at least €1 million and that the remaining 99 per cent of households hold less than €1 million in assessable wealth⁶³. Under this scenario the average assessable net wealth per household in excess of the threshold of liability is €1.48 million. To obtain an annual yield of €150 million from this cohort would require an average tax liability of €8,925. This implies that the rate for the wealth tax would need to be set at $8,925/1,480,000 = 0.6$ per cent. The average effective tax rate under this scenario is $8,925/2,480,000 = 0.36$ per cent. At an assumed rate of return of 5 per cent the surtax on income in this scenario is $0.36/5 = 7.2$ per cent.

A higher yield could of course be obtained by either lowering the threshold, increasing the rate, or both. The 0.6 per cent wealth tax rate described under the above scenario is by no means onerous. However the threshold of liability of €1 million is arguably quite low given the absence of the many reliefs and exemptions that have traditionally prevailed under most international wealth tax regimes. One caveat is that the proposed relief for goodwill is not included in these estimates and therefore the actual yield obtained will be somewhat smaller. On the other hand the Nolan study is based on survey data and therefore may dramatically underestimate the degree of wealth concentration. If the wealth concentration is underestimated the actual yield obtained under this scenario will be higher.

The Irish economy has changed drastically since the 1987 survey data used to produce the Nolan estimates was gathered. Table 14 presents a range of recent estimates of wealth concentration for those Western European and Anglo-Saxon (WEAS) countries with usable wealth distribution data. The unweighted mean of each fractile group for the WEAS countries is also shown. The most recent unweighted mean estimate collected for the WEAS countries (Credit Suisse, 2011) suggests a 42.3 per cent share of net wealth for the top 5 per cent of households in the WEAS and a 23.0 per cent share for the top 1 per cent of households. These wealth shares are similar to those collected by Davies et al. (2008). The HFCS (ECB, 2013) estimates a somewhat lower figure of 37.2 per cent for the top 5 per cent of euro area households. Table 15 compares Nolan's estimates of the wealth share in Ireland in 1987 with the more recent WEAS unweighted averages for the top 5 per cent and 1 per cent of households. As we can see the wealth concentration estimates for WEAS in the late 2000s are substantially higher than Nolan's wealth concentration estimates for Ireland in 1987.

⁶³ This is equivalent to assuming that just 16,807 households have a net wealth of €1 million or more.

Table 14: Wealth shares for Western European and Anglo-Saxon countries with wealth distribution data, %

	Country	Year	Unit	Bottom 50%	Top 20%	Top 10%	Top 5%	Top 1%
Davies et al. (2008)								
	Australia	2002	Household	9.0	62.0	45.0	32.0	-
	Canada	1999	Family	6.0	70.0	53.0	-	-
	Denmark	1996	Family	-	-	76.4	56.0	28.8
	Finland	1998	Household	7.4	61.4	42.3	-	-
	France	1994	Adult	-	-	61.0	-	21.3
	Germany	1998	Household	3.9	66.0	55.6	-	-
	Ireland	1987	Household	5.1	59.6	42.3	28.7	10.4
	Italy	2000	Household	-	63.8	48.5	36.4	17.2
	Norway	2000	Household	10.4	65.4	50.5	-	-
	Spain	2002	Household	13.2	-	41.9	-	18.3
	Sweden	2002	Household	-	80.1	58.6	-	-
	Switzerland	1997	Family	-	-	71.3	58.0	34.8
	UK	2000	Adult	5.0	-	56.0	44.0	23.0
	US	2001	Family	2.8	82.6	69.8	57.7	32.7
Mean WEAS				7.0	67.9	55.2	44.7	23.3
Credit Suisse (2011)								
	Australia	2006	Household	-	61.2	-	-	-
	Canada	2005	Family	5.4	69.0	50.4	35.8	15.5
	France	2010	Adult	4.0	-	62.0	-	24.0
	Germany	2003	Household	3.8	67.4	46.7	-	-
	Italy	2008	Household	11.5	59.4	42.3	29.6	-
	Netherlands	2008	Household	1.0	78.5	62.7	-	-
	N. Zealand	2001	Tax Unit	7.0	67.0	48.0	-	-
	Norway	2004	Household	3.8	80.1	65.3	-	-
	Spain	2005	Household	13.2	-	41.6	-	-
	Sweden	2007	Household	-	-	72.0	55.0	29.0
	UK	2008	Household	9.2	62.8	44.3	30.5	12.5
	US	2007	Family	2.5	83.4	71.5	60.4	33.8
Mean WEAS				6.1	69.9	54.3	42.3	23.0
Roine et al. (2007)	Sweden	2005	Household	-	-	58.4	43.6	19.7
Bach et al. (2011)	Germany	2007	Household	1.7	-	60.1	-	23.3
HMRC (2011)	UK	2005-07	Person	12.5	-	44.5	-	-
ECB (2013)	Euro area	2008-10	Household	6.0	67.6	-	37.2	-

Means are unweighted and are author's calculations; Euro area figures in the ECB study exclude Ireland and Estonia; Credit Suisse study presents 2001 data for Ireland but this is not shown above as the data appears to refer to wealth data for the United Kingdom

Sources: See Davies, Sandstrom, Shorrocks and Wolff (2008), Table 7 and Appendix IIC; also see Credit Suisse (2011), Table 1-2, Table 1-3 and Table 1-4; for Euro area data see ECB (2013), Table 4.1 and Chart 4.2; for 2005 Swedish data see Roine and Waldenstrom (2007), Table A1; for 2007 German data see Bach, Beznoska and Steiner (2011), Table 1; for 2005-2007 UK data see HMRC (2011);

Table 15: Comparison of Nolan and WEAS wealth concentrations

	Top 5% Wealth Share	Top 1% Wealth Share	Top 5% Mean Wealth	Top 1% Mean Wealth
Nolan	28.7% (€114.8 billion)	10.4% (€41.6 billion)	€1.37 million	€2.48 million
WEAS	42.3% (€169.2 billion)	23.0% (€92 billion)	€2.01 million	€5.47 million
Mid-point	35.5% (€142 billion)	16.7% (€66.8 billion)	€1.69 million	€3.97 million

Based on an assessable net household wealth of €400 billion (see earlier discussion); WEAS is the Western European and Anglo-Saxon unweighted average; Mid-point refers to the mid-point of the Nolan and WEAS concentrations.

Once again consider a threshold set at €1 million but on this occasion assume the WEAS average accurately reflects the prevailing wealth distribution in Ireland in 2012. Let us again conservatively assume that each household in the top 1 per cent has an assessable net wealth of at least €1 million and that the remaining 99 per cent of households hold less than €1 million in assessable wealth. Under this scenario the average assessable net wealth per household in excess of the threshold of liability is €4.47 million. As before, to obtain an annual yield of €150 million from this cohort we require an average tax liability of €8,925. This implies that the rate for the wealth tax would need to be set at $8,925/4,470,000 = 0.2$ per cent. The average effective tax rate under this scenario is $8,925/5,470,000 = 0.16$ per cent. This is a very low effective rate. At an assumed rate of return of 5 per cent the surtax on income under this scenario is $0.16/5 = 3.2$ per cent. As before, we can obtain a higher yield by lowering the threshold and/or increasing the rate. Alternatively, we can obtain the same yield by increasing the threshold and increasing the tax rate. It seems highly feasible under the above assumptions that a yield in excess of €150 million is compatible with raising the threshold to €1.5 million while still maintaining a tax rate well below 1 per cent.⁶⁴ Once HFCS micro data is available for Ireland it will be possible to better estimate potential yields and to verify or otherwise this claim.

Table 16 shows effective tax rates and tax liabilities for households based on different marginal rates and thresholds. The effective rates will actually be lower in practice if there are allowable exemptions or reliefs e.g. for human capital, goodwill and pension assets. If the marginal rate is set at 0.5 per cent and the threshold of liability is set at €1 million then a household with an assessable wealth of €1.5 million would have an effective tax rate of 0.17 per cent and a wealth tax liability of €2,500. Table 17 summarises these calculations. At the same marginal rate and threshold a household with an

⁶⁴ The proposed relief for goodwill is not included in these estimates. Thus the actual yield may be somewhat smaller. In addition, a degree of tax avoidance and tax evasion is inevitable and this will also reduce the yield. On the other hand the effective tax rate is so low that tax avoidance and tax evasion may not be that prevalent. Finally, the administration costs of the tax will reduce the net yield.

assessable wealth of €10,000,000 would have an effective tax rate of 0.45 per cent and a wealth tax liability of €45,000.

Table 16: Indicative effective wealth tax rates and wealth tax liabilities

Assessed Household Wealth	Marginal Rate	Effective Rate	Tax Liability	Effective Rate	Tax Liability	Effective Rate	Tax Liability
		€500,000 threshold	€500,000 threshold	€1 million threshold	€1 million threshold	€ 1.5 million threshold	€1.5 million threshold
€500,000	0.2%	0.0%	0	0.0%	0	0.0%	0
	0.4%	0.0%	0	0.0%	0	0.0%	0
	0.5%	0.0%	0	0.0%	0	0.0%	0
	0.6%	0.0%	0	0.0%	0	0.0%	0
	0.8%	0.0%	0	0.0%	0	0.0%	0
	1.0%	0.0%	0	0.0%	0	0.0%	0
	1.5%	0.0%	0	0.0%	0	0.0%	0
€ 1,000,000	0.2%	0.10%	€1,000	0.0%	0	0.0%	0
	0.4%	0.20%	€2,000	0.0%	0	0.0%	0
	0.5%	0.25%	€2,500	0.0%	0	0.0%	0
	0.6%	0.30%	€3,000	0.0%	0	0.0%	0
	0.8%	0.40%	€4,000	0.0%	0	0.0%	0
	1.0%	0.50%	€5,000	0.0%	0	0.0%	0
	1.5%	0.75%	€7,500	0.0%	0	0.0%	0
€1,500,000	0.2%	0.13%	€2,000	0.07%	€1,000	0.0%	0
	0.4%	0.27%	€4,000	0.13%	€2,000	0.0%	0
	0.5%	0.33%	€5,000	0.17%	€2,500	0.0%	0
	0.6%	0.40%	€6,000	0.20%	€3,000	0.0%	0
	0.8%	0.53%	€8,000	0.27%	€4,000	0.0%	0
	1.0%	0.67%	€10,000	0.33%	€5,000	0.0%	0
	1.5%	1.00%	€15,000	0.50%	€7,500	0.0%	0
€2,000,000	0.2%	0.15%	€3,000	0.10%	€2,000	0.05%	€1,000
	0.4%	0.30%	€6,000	0.20%	€4,000	0.10%	€2,000
	0.5%	0.38%	€7,500	0.25%	€5,000	0.13%	€2,500
	0.6%	0.45%	€9,000	0.30%	€6,000	0.15%	€3,000
	0.8%	0.60%	€12,000	0.40%	€8,000	0.20%	€4,000
	1.0%	0.75%	€15,000	0.50%	€10,000	0.25%	€5,000
	1.5%	1.13%	€22,500	0.75%	€15,000	0.38%	€7,500
€10,000,000	0.2%	0.19%	€19,000	0.18%	€18,000	0.17%	€17,000
	0.4%	0.38%	€38,000	0.36%	€36,000	0.34%	€34,000
	0.5%	0.48%	€47,500	0.45%	€45,000	0.43%	€42,500
	0.6%	0.57%	€57,000	0.54%	€54,000	0.51%	€51,000
	0.8%	0.76%	€76,000	0.72%	€72,000	0.68%	€68,000
	1.0%	0.95%	€95,000	0.90%	€90,000	0.85%	€85,000
	1.5%	1.43%	€142,500	1.35%	€135,000	1.28%	€127,500

Assessed household wealth = gross assets – (liabilities) – (exempt assets) – (relief on taxable assets); effective tax rates measured as a proportion of assessed wealth

Table 17: Example of net wealth tax liability based on 0.5 per cent rate and €1 million threshold

Gross assets		
	<i>less liabilities</i>	
	<i>less exempt assets</i>	
	<i>less reliefs on taxable assets</i>	
	<u>Assessed wealth</u>	€1,500,000
	Threshold	€1,000,000
Taxable wealth	(Assessed wealth – threshold)	€500,000
Tax liability	€500,000 @ 0.5%	€2,500
Effective tax rate	(Tax liability as % of assessed wealth)	0.17%
Marginal tax rate		0.50%

Based on an assessed household wealth of €1,500,000; Assessed wealth is gross assets less liabilities, exempt assets and the value of reliefs on taxable assets

The effective wealth tax rate will be even lower for certain households if a ceiling provision is in place to prevent the combined liability for income tax and wealth tax exceeding a certain percentage of income. This may be relevant where the average return on assets is either very low or highly variable from year-to-year as is plausible for farmers and for new businesses. As shown in Table 18 the surtax on income can become quite onerous when the rate of return from the household's assets is low. While a ceiling provision is one solution to this problem a ceiling provision will also reduce the yield to the exchequer. In addition, if the return on assets is very low then the household will only be subject to the top income tax rate if its assessed household wealth is extremely high or if the household has alternative income sources unrelated to their assets e.g. employee income. A ceiling provision may also create opportunities for tax avoidance and may reduce the incentive for high net worth individuals to adjust their portfolio from low yield to high yield assets.

Table 18 Surtax on income at different rates of return, tax rates and thresholds

Assessed wealth	Rate of return	Surtax on income @ 0.5% rate, €500,000 threshold	Surtax on income @ 0.5% rate, €1,000,000 threshold	Surtax on income @ 1.0% rate, €1,000,000 threshold	Surtax on income @ 0.5% rate, €1,500,000 threshold	Surtax on income @ 1.0% rate, €1,500,000 threshold	Surtax on income @ 1.5% rate, €1,500,000 threshold
€1,500,000	5.0%	6.7%	3.3%	6.7%	0%	0%	0%
€1,500,000	1.0%	33.3%	16.7%	33.3%	0%	0%	0%
€10,000,000	5.0%	9.6%	9.0%	18.0%	8.6%	17.0%	25.6%
€10,000,000	1.0%	48.0%	45.0%	90.0%	43.0%	85.0%	128.0%

Finally, let us consider potential tax yields based upon an allowable threshold of €1 million in assessed wealth. It is probable that between 1 per cent and 2 per cent of Irish households would incur

a wealth tax liability if the threshold is set at €1 million. If a threshold of this order is set then the distribution of wealth in the population, and in particular the concentration of wealth in the top 1 per cent to 2 per cent of households, will have a very large impact on the tax yield. Table 19 illustrates this point by showing the high degree of sensitivity of the potential tax yield to the concentration of wealth. While a marginal rate of 0.5 per cent would produce a gross tax yield of around €376 million under a WEAS type estimate of wealth concentration, it would produce a gross tax yield of just €124 million under a Nolan type estimate of wealth concentration. The estimates in Table 19 are based on an assumption that exactly 1 per cent of households have an assessable wealth equal to or greater than €1 million. The number of millionaire households may actually be double this in practice and in this case the potential tax yield will be somewhat higher. Estimates of this type are purely mechanical, do not consider behavioural effects, and should be considered highly uncertain. In addition, administration costs will reduce the net yield while compliance costs will increase the overall costs to the taxpayer.

Table 19: Indicative tax yields at €1 million threshold, (€ millions)

Distribution	Mean wealth of top 1%	Assessed wealth of top 1%	0.2% rate	0.4% rate	0.5% rate	0.6% rate	0.8% rate	1.0% rate	1.5% rate
Nolan	2.48	1.48	49.7	99.5	124.4	149.2	199.0	248.7	373.1
WEAS	5.47	4.47	150.3	300.5	375.6	450.8	601.0	751.3	1,126.9
Mid-Point	3.97	2.97	99.8	199.7	249.6	299.5	399.3	499.2	748.8

Figures are purely illustrative and are based on a threshold of €1 million in assessable wealth and an assumption that exactly 1 per cent of households (16,807 households) have an assessable wealth equal to or greater than €1 million. In practice the number of households with an assessable wealth in excess of €1 million is likely to be greater than 1 per cent. Mid-point is the mid-point of the Nolan and WEAS wealth concentrations.

Section Six: Conclusions and Recommendations

As Oliver Wendell Holmes famously said, ‘taxes are the price we pay for civilisation’. While the number of net wealth taxes has clearly declined across the OECD in the last two decades there is no consensus in the academic literature about the value of wealth taxes. The wealth taxes that have been enacted have generally been very poorly conceived and designed. Ristea and Trandafir (2010) argue that a high cost yield ratio has been a key reason for the decline in the popularity of wealth taxes in Europe. In some cases, wealth taxes, e.g. those in Germany, Luxembourg and Austria, were levied on both corporate and individual wealth. This was heavily criticised on grounds of double taxation and for the distortion of resource allocation through the disproportionate penalising of productive assets. In addition, inheritance and gift taxes are generally regarded as more effective in re-distributing resources than an annual wealth tax because the latter would need to be confiscatory in order to bring about any real re-distribution (Ristea and Trandafir, 2010). Finally, the wide ranges of exemptions and reliefs introduced in many countries gradually undermined the tax yield over time as well as the case in horizontal equity for the retention of enacted wealth taxes. Wealth taxes, at least as enacted in Europe, have generally been incoherently designed and incapable of achieving their core objectives.

However there is still a strong case for broadening the tax base to include an annual wealth tax – albeit only one that is well-designed. Such a tax should be related to ability to pay, should seek to minimise economic distortions, and should be as simple as possible. If the core objectives are horizontal and vertical equity then the wealth tax can be seen as a complement to income tax which reflects the additional taxable capacity of the wealth holder. A wealth tax with minimal exemptions and reliefs can also be a valuable tool for clamping down on tax evasion. In addition, minimising exemptions and reliefs will help to minimise arbitrary market distortions. Resisting the inevitable clamour and special pleading of interest groups for exemptions and reliefs will be a constant challenge for policymakers. Yet a viable wealth tax needs to have an acceptable cost yield ratio with low compliance and administration costs. A low cost yield ratio is consistent with a minimum of exemptions and reliefs, a single rate, and an easily understood, clear, and standardised valuation system that does not insist upon open market valuation and is administered on a self-assessment basis. The wealth tax should also have a low effective rate in order to minimise distortions to economic activity. This suggests a structure with a high threshold and a low marginal rate. It is crucial that the number and generosity of exemptions and reliefs is minimised if we are to simultaneously achieve the goal of a meaningful tax yield with the goals of keeping the threshold high and the rate low. Minimising exemptions and reliefs will also help to preserve horizontal equity to the greatest extent, while reducing the scope for tax avoidance through the use of tax shelters.

References:

Advoco (2013) *Spanish Wealth Tax 2012 Guide*, Available at: <http://www.advoco.es/advice/8-personal-tax/101-spanish-wealth-tax-2012-guide.html>

Attanasio, O. and Wakefield, M. (2010) The Effects on Consumption and Savings of Taxing Asset Returns, *Dimensions of Tax Design: The Mirrlees Review*, Oxford University Press for the Institute for Fiscal Studies, Oxford University Press for the Institute for Fiscal Studies, Oxford.

Bach, S. (2012) Capital Levies – A Step towards Improving Public Finances in Europe, *DIW Berlin Economic Bulletin No. 8*

Bach, S., Beznoska, M. and Steiner, V. (2011) A Wealth Tax on the Rich to Bring down Public Debt? Revenue and Distributional Effects of a Capital Levy, *DIW Berlin SOEPpapers No. 397*

Bacon, P. (2013) *Assessment of the Consequences of the Proposed Sale of Coillte's Timber Harvesting Rights: Final Report*, Peter Bacon and Associates, 10 January 2013

Bank of Ireland (2007) *The Wealth of the Nation: Update for 2007*, Bank of Ireland, Dublin

Banks, J. and Diamond, P. (2010) The Base for Direct Taxation, *Dimensions of Tax Design: The Dimensions of Tax Design: The Mirrlees Review*, Oxford University Press for the Institute for Fiscal Studies, Oxford.

Bloom, N. (2006) Inherited Family Farms and Management Practices: The Case for Modernising the UK's Inheritance Tax, *CEP Policy Analysis Paper No. 004*

Boadway, R., Chamberlain, E. and Emmerson, C. (2010) Taxation of Wealth and Wealth Transfers, *Dimensions of Tax Design: The Mirrlees Review*, Oxford University Press for the Institute for Fiscal Studies, Oxford University Press for the Institute for Fiscal Studies, Oxford.

Borgy, V. L. and Savignac, F. (2011) 'Households' Savings and Portfolio Choices: Micro and Macroeconomic Approaches, *Banque de France, Article No. 22*, Summer

Brunner, J., Eckerstorfer, P. and Pech, S. (2010) Optimal Taxes on Wealth and Consumption in the Presence of Tax Evasion, *Working Paper No. 1003, Department of Economics, University of Linz, Austria*

Byrne, S. (1989) Wealth and the Wealthy in Ireland: A Review of the Available Evidence, *Combat Poverty Agency, Research Report Series No. 5*

Cabré, J. M. and Moré, A. E. (2007) An Empirical Analysis of Wealth Taxation: Equity vs. Tax Compliance, *Institut d'Economia de Barcelone, Document de Treball, 2007/1*

- Central Bank of Ireland (2013) *Quarterly Financial Accounts for Ireland: Q4 2012*, May, Dublin
- Central Statistics Office (2012) *Institutional Sector Accounts Non-Financial and Financial 2011*, November, Dublin
- Chesher, A. and McMahon, P. (1976) The Distribution of Personal Wealth in Ireland – the evidence re-examined, *Economic and Social Review*, 8(1)
- Collins, M (2011) Taxation, **In** O’Hagan, J. and C. Newman (eds.), *The Economy of Ireland*, Gill and MacMillan, Dublin.
- Commission on Taxation (2009) *Commission on Taxation Report*, Dublin
- Credit Suisse (2011) *Global Wealth Databook 2011*, October
- Cremer, H. (2010) Taxation of Wealth and Wealth Transfers: Commentary by Helmut Cremer; *Dimensions of Tax Design: The Mirrlees Review*, Oxford University Press for the Institute for Fiscal Studies, Oxford University Press for the Institute for Fiscal Studies, Oxford.
- Cussen, M., O’Leary, B. and Smith, D. (2012) The Impact of the Financial Turmoil on Households: A Cross Country Comparison, *Quarterly Bulletin 02, April 2012*, Central Bank of Ireland
- Cussen, M. and Phelan, G. (2011) The Rise and Fall of Sectoral Net Wealth, *Quarterly Bulletin 03, July 2011*, Central Bank of Ireland
- Davies, J., Sandstrom, S., Shorrocks, A. and Wolff, E. (2009) The Level and Distribution of Global Household Wealth, *NBER Working Paper No. 15508*
- Diamond, P. and Saez, E. (2011) The Case for a Progressive Tax: From Basic Research to Policy Recommendations, *CESifo working paper: Public Finance, No 3548*
- Edson, C. (2012) The Capital Constraining Effects of the Norwegian Wealth Tax, *Statistics Norway, Discussion Paper No. 724*
- Eichengreen, B. (1989) The Capital Levy in Theory and Practice, *NBER Working Paper No. 3096*
- European Central Bank (2013) *The Eurosystem Household Finance and Consumption Survey Results from the First Wave*, Statistics Paper Series 2, April, Frankfurt
- Eurostat (2012) *Taxation Trends in the European Union: Data for the European Union Member States, Iceland and Norway*, 2012 Edition, Brussels
- Eurostat (2013) *Taxation Trends in the European Union: Data for the Member States, Iceland and Norway*, 2013 Edition, Brussels

- Figari, F. (2013) Redistributive Effects of Consolidation on the Revenue Side, Discussion, *European Commission Economic Papers 502*, August.
- Gérard, M. (2013) Redistributive Effects of Consolidation on the Revenue Side, Discussion, *European Commission Economic Papers 502*, August.
- Goldsmith, R.W. (1951) Perpetual Inventory of National Wealth, *Studies in Income and Wealth*, 14. New York: NBER.
- Harrison, A. and Nolan, S. (1975) The Distribution of Personal Wealth in Ireland – a comment, *Economic and Social Review*, 7(1)
- Hills, J. Safeguarding Social Equity during Fiscal Consolidation: Which Tax Bases to Use? *European Commission Economic Papers 502*, August
- HMRC (2011) *Personal Wealth Statistics 2001 to 03 and 2005 to 07*, June, London
- IFAC (2012) *Fiscal Assessment Report, September 2012*, Dublin.
- Lawton, K. and Reed, H. (2013) Property and Wealth Taxes in the UK: The Context for Reform, *Institute for Public Policy Research*, March
- Lyons, P. M. (1972) The Distribution of Personal Wealth by County in Ireland 1966, *Journal of the Statistical and Social Inquiry Society of Ireland*, 22(5)
- Meade, J. (1978) The Structure and Reform of Direct Taxation, *Report of a Committee chaired by Professor J. E. Meade for the Institute for Fiscal Studies*, London
- Nevin, E. T. (1961) *The Ownership of Personal Property in Ireland*, Dublin, Economic and Social Research Institute
- Nolan, B. (1991) The Wealth of Irish Households: What Can we learn from Survey Data? December, Dublin: Combat Poverty Agency
- OECD (1988) *Taxation of Net Wealth, Capital Transfers and Capital Gains of Individuals*, OECD, Paris
- OECD (2010) *Revenue Statistics 2010*, OECD, Paris
- OECD (2011) *Divided we Stand: Why Inequality Keeps Rising*, OECD, Paris
- Oireachtas Library and Research Service (2013) *Net Wealth Tax*, 12 June 2013

- O'Sullivan, V. and Layte, R. (2011) Income and Asset Levels of Older People, *The Irish Longitudinal Study on Ageing*, 243-264
- Piketty, T. (2013) Should we Make the Richest Pay to Meet Fiscal Adjustment Needs? *European Commission Economic Papers* 502, August
- Piketty, T. (2010) Taxation of Wealth and Wealth Transfers: Commentary by Thomas Piketty; *Dimensions of Tax Design: The Mirrlees Review*, Oxford University Press for the Institute for Fiscal Studies, Oxford University Press for the Institute for Fiscal Studies, Oxford.
- Piketty, T. and G. Zucman (2013) Capital is Back: Wealth-Income Ratios in Rich Countries 1700-2010, *Paris School of Economics Working Paper*, July 2013
- Revenue Commissioners (2012) *Statistical Report 2011*, Dublin
- Revenue Commissioners (2013) *Statistical Report 2012*, Dublin
- Ristea, L. and A. Trandafir (2010) Wealth Tax within Europe in the context of a possible implementation in Romania – The Existing Wealth Tax and its Decline in Europe, *Annals of the University of Petrosani, Economics* 10(2), 299-306
- Roine, J. and Waldenstrom, D. (2007) Wealth Concentration over the path of Development, 1873-2005, *SSE/EFI Working Paper Series in Economics and Finance*, No. 677
- Sandford, C. (1987) Death Duties: Taxing Estates or Inheritances, *Fiscal Studies* 8, pp. 15-23
- Sandford, C. and Morrissey, O. (1985) *The Irish Wealth Tax: A Case Study in Economics and Politics*, September, Dublin: Economic and Social Research Institute
- Schnellenbach, J. (2012) The Economics of Taxing Net Wealth: A Survey of the Issues, *Freiburger Diskussionspapiere zur Ordnungsökonomik*, No. 12/5
- Sen, A. (1985) *Commodities and Capabilities*, Amsterdam, North-Holland
- SFTA (2013) *Federal, Cantonal and Communal Taxes: An Outline on the Swiss System of Taxation*, Swiss Federal Tax Administration.
- Weale, M. (2010) Taxation of Wealth and Wealth Transfers: Commentary by Martin Weale; *Dimensions of Tax Design: The Mirrlees Review*, Oxford University Press for the Institute for Fiscal Studies, Oxford University Press for the Institute for Fiscal Studies, Oxford.

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