

Evidence Paper 7

Wealth Tax Commission

One-off wealth taxes: theory and evidence

Author

Nick O'Donovan



Economic
and Social
Research Council



THE LONDON SCHOOL
OF ECONOMICS AND
POLITICAL SCIENCE ■



International
Inequalities Institute



C A G E

ONE-OFF WEALTH TAXES: THEORY AND EVIDENCE

Nick O'Donovan, Manchester Metropolitan University

Wealth Tax Commission Evidence Paper no. 7

Published by the Wealth Tax Commission

<https://www.ukwealth.tax/wealth-in-the-uk>

Acknowledgements

The author is grateful to Arun Advani, Emma Chamberlain, and Andrew Summers for comments.

The Wealth Tax Commission acknowledges funding from the Economic and Social Research Council (ESRC) through the CAGE at Warwick (ES/L011719/1) and a COVID-19 Rapid Response Grant (ES/V012657/1), and by LSE International Inequalities Institute AFSEE COVID-19 fund.

1. Introduction

In periods where the national public debt has grown rapidly beyond ‘normal’ levels, the idea of drawing on the stock of national private wealth in order to pay down that debt, whether in whole or in part, has gained currency. In the twentieth century, the enormous fiscal costs of the First and Second World Wars prompted calls for capital levies in order to offset wartime expenses. Similar proposals were advanced in the wake of the global financial crisis, and are once again being mooted as a potential response to the COVID-19 pandemic. The idea of a one-off levy on capital – which might also be described as a one-off wealth tax – has been championed by a broad range of commentators. From Joseph Schumpeter (1918), Arthur Cecil Pigou (1920), John Maynard Keynes (1940) and Friedrich Hayek (1940), through to the Reform Party incarnation of Donald Trump (Hirschhorn, 1999), the policy has garnered support from individuals of diverse political leanings and intellectual backgrounds. The rationale for such taxes is presented not just in fiscal terms, as a source of revenue, but also as a moral imperative – if we are all in this together, then the broadest shoulders must bear the biggest burdens.

One-off wealth taxes have admittedly been much more widely debated than deployed. In the wake of the First and Second World Wars, several countries introduced capital levies, with varying degrees of success, but they were far from universally adopted. The global financial crisis was deemed by some commentators to constitute a comparable historical moment – justifying a comparable course of action – though in the end, only a handful of countries pursued such policies in earnest, and even then in a much more limited fashion than the capital levies of the past. Is this a reflection of the fact that the history of capital levies ‘is not on the whole an encouraging one’ (Hicks, Hicks and Rostás, 1941)? Or can such charges play a part in alleviating the fiscal predicament in which many countries find themselves today, with the coronavirus pandemic buffeting public finances that had barely recovered (if they had recovered at all) from the financial crash and the decade of crises that followed it?

The question is particularly pertinent in light of a broader resurgence of interest in net wealth taxes that predates the pandemic – a response to widening economic inequalities within developed democracies over the last four decades (Piketty, 2014; OECD, 2018; Saez and Zucman, 2019). Clearly, one-off wealth taxes face many, although by no means all, of the same challenges as their annually-recurring counterparts – for instance, around valuation, liquidity, and the design of the tax base. It follows that, to the extent that these technical questions can be successfully addressed with regard to recurring wealth taxes – the focus of other contributions to this project – many of the practical objections to one-off wealth taxes fall away too. And, to the extent that they cannot, a one-off wealth tax might prove to be equally impractical.

Nevertheless, there are also important differences between one-off wealth taxes and their recurring counterparts, and it is these differences that constitute the focus of the first part of this evidence paper. By looking at the distinctive economic, administrative and normative characteristics of one-off wealth taxes, we can better assess when they might offer an appropriate way of raising revenue (and/or combating inequality).

The second part of the paper then examines how one-off wealth taxes have worked in the past. I begin by surveying existing literature on capital levies, which focuses on examples of wealth taxes taken from the immediate aftermath of the First and Second World Wars, before turning to parallel debates following the global financial crisis. The study examines two examples of one-off wealth taxes from the post-Second World War era in more detail, as well as three instances of more limited

one-off wealth taxes implemented over the last decade. In each of these cases, I briefly outline the basic design features of the policy in question, the context in which it was levied, and the fiscal, economic and political consequences of the charge. The final part of the paper then highlights key reasons why one-off wealth taxes were successful in some respects and not others – with the ultimate aim of informing discussions about the viability and desirability of such taxes today.

2. One-off and recurring net wealth taxes compared

As noted above, both one-off wealth taxes and recurring wealth taxes share many of the same properties, and face many of the same challenges. However, there are important differences in how they operate, when viewed from the perspective of economic theory, tax administration, politics and ethics. The objective of this section is to survey these differences, and to outline how they might impact upon the attractiveness of both policy alternatives – relative to each other, as well as relative to other tax policy options.

Economic issues

From the perspective of economic theory, a well-executed one-off wealth tax has much to recommend it. If we are concerned about taxes distorting the decisions of economic actors – making people consume, work, save, invest and produce differently (and often less efficiently) to how they would choose to act in a tax-free world – then an unheralded one-off wealth tax is highly attractive. The fact that the tax is unheralded means that it will not alter economic behaviour in the run-up to its announcement, as taxpayers cannot act differently in anticipation of it. The same would also hold if such a tax could be backdated, although a retrospective approach would face serious public law challenges.¹

A one-off wealth tax will not distort taxpayer choices after the fact either – assuming that taxpayers believe that it will not be repeated. Clearly, it will mean that some people will have less wealth with which to pursue their various ends than would otherwise have been the case, but it will not change the structure of incentives for their economic decisions in the future. The success of a one-off wealth tax in economic terms thus hinges upon the credibility of government promises that it is a one-off. But as has happened so often in the history of taxation, temporary measures may end up being extended beyond their intended lifespan, potentially even indefinitely. Why should taxpayers trust politicians?

An analogy might be drawn with the credibility challenges facing monetary policymakers. Crudely put, democratic governments have incentives to stimulate the economy in the here and now, causing inflationary pressures and amplifying the effects of the business cycle over the longer term. Moreover, firms and workers will anticipate these decisions, demanding higher prices for their output upfront, thereby negating any stimulus effect – resulting in both inflation and economic stagnation. In the past, problems with the perceived credibility of future promises in monetary policy were resolved through a range of institutional innovations and commitment mechanisms – in particular, the creation of independent central banks with inflation-targeting mandates and control over interest rates (Kydland and Prescott, 1977; Blackburn and Christensen, 1989; Balls et al., 2018). It is hard to imagine a democratically elected government adopting such a hands-off approach to tax policy.

¹ While there are precedents for retrospectivity in UK tax law, they are generally confined to specific instances of tax avoidance (Seely, 2020). Even an unheralded tax, effective from the date of its announcement, faces certain problems – for instance, breaching government promises regarding consultation. Nevertheless, a one-off wealth tax might be introduced with charges imposed on valuation as at the date of announcement, but with some design issues to be determined through subsequent consultation; or it could be announced as effective from a future date but with legislation introduced to prevent forestalling (this latter approach was adopted with regard to non-resident capital gains tax legislation, announced in 2017 and implemented with effect from 6 April 2019). I am indebted to Emma Chamberlain for highlighting these issues.

On closer examination, however, the credibility problem confronting a one-off wealth tax is not as problematic as it might initially appear. To begin with, it is far from clear whether the analogy to monetary policy holds, because it is far from clear that democratic governments face an incentive to tax wealthy people. While in theory redistributive taxes should be favoured by rational median voters, as the recent history of wealth taxes reveals, tax rises – even tax rises on the wealthy – are often unpopular, and democratically-elected governments often face pressures to cut rather than raise taxes (Graetz and Shapiro, 2011; Perret, 2020). Even where people claim they are in favour of taxing the rich, their voting behaviours suggest that they are concerned about the broader economic implications of such policies. It is noteworthy that, in the case studies of recent ‘temporary’ wealth taxes discussed later in this paper, while both the Icelandic and Irish governments extended the temporary charges they had introduced, both faced a backlash over this move and both taxes expired shortly afterwards. Democracy might thus act as an institutional check *against* repetition of a one-off wealth tax (or perpetuation of a temporary tax), although there are some grounds for believing that these anti-tax attitudes are beginning to shift in developed democracies today (Perret, 2020).

Credibility problems might also diminish if the government can advance a clear justification for a one-off wealth tax, highlighting its exceptional nature (Adam and Miller, 2020). Approaching the credibility problem from the perspective of common sense rather than formal modelling, if the circumstances that justify a one-off wealth tax are clearly one-off in nature, then it would be irrational to expect the policy to be repeated in ordinary times. Surveys of post-war capital levies highlight no significant issues with the credibility of government claims that such levies were one-offs, not least because it was manifestly obvious to taxpayers that these charges were related to the extraordinary costs of conflict, which future governments would strive (if not always successfully) to avoid (Robson, 1959; Eichengreen, 1989). By contrast, if a country levied a one-off wealth tax to fund everyday public spending – such as the policy proposed by Donald Trump in the late 1990s, to pay off the US public debt that had mounted rapidly following the self-financing tax cuts of the Reagan years – then it would be perfectly rational to assume that this levy might be repeated whenever governments failed to control public spending or raise adequate tax revenues (or both). The fiscal costs of dealing with a once-in-a-century pandemic – funding for additional healthcare provision, furlough schemes, emergency support for households and businesses, as well as the shortfall in ordinary tax revenues – seem to be closer to the war example than the Trump example. Rational actors should not interpret precedents that governments set in extraordinary circumstances as indicative of how policymakers will behave in ordinary times. However, it also follows that policymakers interested in offsetting the extraordinary costs of the COVID-19 pandemic through a one-off wealth tax should resist the temptation to levy a little extra on the side in order to pay down ordinary debt levels, as this may compromise their credibility.

In contrast to a credible one-off wealth tax, a recurring wealth tax could have a far larger impact on the behaviour of taxpayers. In order to minimise their wealth tax liabilities, wealthy individuals might opt to alter the composition or location of their asset holdings, to consume rather than to save and invest, to exploit exemptions and evasion opportunities, or simply to emigrate (Adam and Miller, 2020; Advani and Tarrant, 2020). Admittedly, many (though not all) of these problems could be mitigated by a well-designed tax – for example, one with a global approach to taxable asset wealth, sensible residence definitions and suitable exit provisions (Chamberlain, 2020). However, any tax-motivated increase in avoidance, evasion or exit, or decrease in wealth accumulation rates, would reduce the amount of revenue that a recurring wealth tax would generate. Moreover, it would affect the yield of other taxes besides, such as charges on capital gains and income, while also having a negative impact on the wider economy, potentially reducing efficiency, investment and

employment. In theory at least, none of these behavioural responses should apply in the case of an unheralded one-off wealth tax, assuming that taxpayers receive no warning about its introduction, and that they believe government assurances that it is a 'one-off'.

One implication of this is that one-off wealth taxes can be levied at higher rates, and thus raise more money in the short-term, than their recurring counterparts. Whereas with a recurring wealth tax, the government's desire for more revenue must be offset against increasing tax resistance as tax rates rise, as well as the risk of wider economic fallout as wealthy people choose to relocate themselves and/or their assets, these considerations do not act as a constraint on one-off wealth taxes. Indeed, historically, some one-off wealth taxes have been levied at extremely high levels – for example, the West German *Lastenausgleichsabgaben* (burden-balancing taxes), discussed later in this paper, were levied at a rate of 50%.

This is not to say that there are no economic constraints on the amount that a one-off wealth tax can feasibly raise (to say nothing of the political constraints that apply in democratic societies). Clearly, the transfer of assets from the private to the public sector can have serious implications for the trajectory of growth in and of itself. Pursuing such a policy during an economic downturn might be particularly unwise, as it could reduce households' willingness and capacity to spend, exacerbating shortfalls in aggregate demand (though any such objection must also recognise that wealthier households have a lower marginal propensity to consume). Simultaneous liquidation of a range of financial instruments, residential property and other assets, in order to fund tax liabilities from a one-off wealth tax, could depress asset prices, market confidence and tax yields, potentially precipitating a financial crisis. Unsurprisingly, then, the more successful historical examples of one-off wealth taxes have contained provisions to avoid such scenarios (Robson, 1959). These could include payment deferrals, payment by instalment, and payment in kind (for instance, the transfer of assets into a publicly-managed wealth fund, rather than their liquidation to pay a tax liability).² All of these measures could also help to resolve liquidity issues for assets that are difficult to dispose of rapidly and/or partially (Loutzenhiser and Mann, 2020).

Tax compliance and administration

Aside from the direct financial cost of a wealth tax, one of the most burdensome aspects of such a charge concerns valuation. For many assets, prices will be difficult to determine and open to dispute: no two properties are identical in all respects, for example, and valuing works of art or private businesses is notoriously difficult. Even for assets such as financial instruments or cash deposits, where the assets are fungible and up-to-date price information is available, this information must still be compiled and disclosed by the taxpayer, unless it can be automatically retrieved by the tax authority. Furthermore, irrespective of whether tax authorities or taxpayers perform that initial valuation, in many cases there will be duplication of effort as the other party seeks to audit this assessment. Disputed valuations may lead to complex legal cases, which could prove very costly to resolve for taxpayers and governments alike.

For annually-recurring wealth taxes, these valuation exercises need to take place periodically – potentially every year – imposing substantial costs on all concerned. By contrast, with a one-off wealth tax, the costs of valuation are also a one-off. This is significant because a higher rate one-off

² The *Lastenausgleichsfonds* managed receipts from the West German one-off wealth tax, albeit with more of an emphasis on disbursing funds than long-term wealth management (Hughes, 1999; Hauser, 2011). On the topic of how emergency support for businesses during the COVID-19 pandemic might capitalise a public wealth fund, see Lonergan and Blyth, 2020.

wealth tax that is paid in instalments could generate a similar pattern of revenue flows to a lower rate recurring wealth tax, at least over the short-term. The ratio of compliance costs (for taxpayers and governments alike) to revenue raised would thus be lower in the case of the one-off wealth tax than the recurring wealth tax, over this limited time horizon. A one-off wealth tax would also allow time for tax authorities to challenge and investigate valuations – which might also be preferable for taxpayers, who would only need to deal with enquiries on a single valuation, rather than face a series of unresolved challenges to annual valuations.

However, if updating existing valuations for wealth tax purposes were to prove substantially less burdensome than creating them in the first place, then any compliance cost advantage would correspondingly diminish. Similarly, it might be inefficient for a government to invest in the new policies, processes and systems needed to assess the wealth of individual taxpayers, if this investment were to be used only once. Finally, taxpayers may devote more time and money to fighting one-off valuation disputes, rather than disputes that would need to be fought anew every year.

Furthermore, fixing a tax liability to be paid in instalments, as opposed to recalculating that liability on a regular basis, will mean that risk (both upside and downside) will be transferred to the taxpayer. One-off wealth taxes could see taxpayers paying well over the odds for the ownership of assets whose value subsequently plummets, or paying less than they would do under a recurring wealth tax in the event of subsequent asset price surges. For volatile assets and/or risk-averse taxpayers, fixing the tax liability upfront in this way might prompt taxpayers to liquidate assets prematurely, or adopt hedging strategies to mitigate these risks. Were many taxpayers to behave in this way simultaneously, a sufficiently large one-off tax charge could trigger a crash in asset prices.

Politics

Tax-raising policies provoke opposition, and rival politicians may seek to capitalise on this opposition by promising to lower tax rates, or repeal unpopular policies outright. While a crude rational choice model of voting behaviours might lead one to conclude that recurring wealth taxes are likely to elicit widespread popular support – because the overwhelming majority of people are not, and will never be, wealthy enough to pay them – an examination of recent fiscal history suggests otherwise (Banting, 1991; Lehner, 1999; Chatalova and Evans, 2013; OECD, 2018). Many developed democracies have abolished their wealth taxes over the last four decades, citing both practical and normative objections (Perret, 2020). In some cases, wealth taxes were repealed or suspended only to be reintroduced, and then subject to renewed political attack.

This matters because a net wealth tax focused on the very wealthiest, levied at a sufficiently low annual rate to avoid a taxpayer exodus, requires time in order to achieve its distributional and revenue-raising goals. Recent experience suggests that a durable political consensus around such a policy will prove difficult to achieve. Introducing a wealth tax in the absence of such consensus means that it is likely to become a political football, subject to an ongoing cycle of reform, repeal and reintroduction. This undermines the predictability of the tax system, increases complexity for taxpayers and tax authorities alike, while also multiplying opportunities for investment and accounting strategies that aim at circumventing the tax charges in question.

By contrast, one-off wealth taxes are less vulnerable to changes in the political climate, and thus more likely to achieve their revenue and distributional objectives. The liability is fixed upfront, so political mobilisation and lobbying by taxpayer groups will be of limited value. True, a future government could conceivably cancel instalment payments that were still outstanding, though this

would prove both expensive for the government, and unpopular among those who had paid their share sooner – although the fate of Lloyd George’s land taxes in 1920 shows that a sufficiently unpopular tax can end up being refunded.

Perhaps the biggest political obstacle to the introduction of a one-off wealth tax is the fact that it is politically costly, yet many of the fiscal benefits that it generates will redound to the credit of future governments. Why expend political capital in the pursuit of additional revenue (or lower debt levels) for one’s successors? Yet the same objection could be levelled against any significant revenue-raising measure. Indeed, for politicians inclined towards the rolling back of the state, the time-bound nature of a one-off wealth tax might render it preferable to open-ended increases in the tax take.

Normative considerations

Many of the normative justifications for, and arguments against, recurring net wealth taxes apply equally to one-off wealth taxes. However, one area where the normative implications of the two approaches differ quite dramatically is with respect to their treatment of different generations. Intergenerational justice is one argument frequently advanced in favour of taxing wealth better, whether through wealth taxes or other means (Ackerman and Alstott, 1999; Select Committee on Intergenerational Fairness and Provision, 2019; Forman and Mann, 2020). At any given point in time, the older generation is likely to be wealthier, on average, than their younger counterparts – the product of a longer period of time in which to accumulate wealth, including unspent legacies from previous generations. Such wealth inequalities are not inherently inequitable, assuming young people enjoy similar opportunities to accumulate wealth over their own lifetimes. Therefore, although a recurring wealth tax would fall disproportionately on the shoulders of older taxpayers, it would not necessarily alter the distribution of resources between generational cohorts – assuming today’s poorer younger people go on to become tomorrow’s wealthier older people, both generations will be affected by the tax in turn.

A one-off wealth tax, by contrast, will disproportionately affect today’s older people relative to today’s young people. It would thus be appropriate in circumstances where the former group has already disproportionately benefited in comparison to the latter. This is most obviously the case where older people receive a one-off benefit that today’s younger generation (and future younger generations) will not enjoy when they themselves become old: a one-off depletion of natural resources and/or the sustainability of the biosphere; a one-off unfunded expansion in public spending (rescuing the economy following a pandemic or a financial crisis); a one-off increase in the money supply to lower interest rates and/or to finance (directly or indirectly) a one-off unfunded expansion in public spending, which pushes up the value of assets disproportionately owned by older people. Note that today’s younger people may avail themselves of these one-off benefits too, but if they also have to bear the associated costs of these one-off benefits and their elders do not, at least not to the same degree, then they are still relatively disadvantaged.

A one-off charge could also be appropriate in cases where new benefits are ongoing, to deal with the problem of transition. In principle, today’s younger people could themselves enjoy any new recurring public spending that benefits today’s older generation – such as more generous state pension entitlements, or an increased standard of elderly social care – as they themselves age, removing any intergenerational inequity. However, if those enhanced benefits are funded out of increases in taxes or decreases in public services and social transfers enjoyed by young people, then an intergenerational inequity would arise, as the older generation are enjoying a benefit the costs

of which are being transferred to younger people, costs that the older generation did not pay when they themselves were young. (Funding such benefits through debt rather than spending cuts or tax rises would have a more limited impact on today's young people, but could still impose costs on future generations, subject to the relationship between interest rates and growth.) Under circumstances where younger people are already bearing costs that older people did not bear when they themselves were younger – if, for example, working-age social spending (such as child benefit and income support) is reduced, if working-age taxes (such as National Insurance contributions in the UK) are increased, if working-age tax breaks (such as tax relief on pension contributions) are cut – then on normative grounds a one-off tax on older generations might be preferable to a recurring tax that today's younger people would themselves pay when they become old.

Obviously, fiscal factors are not the only metrics deserving of consideration when we assess what the older generation leaves to (or takes from) the younger generation. Private wealth, public assets, physical infrastructure, more advanced technology, higher productivity, longer life expectancy, greater happiness, stronger social cohesion and a habitable biosphere are all important as well, albeit not all of these factors are easily quantifiable. Furthermore, intergenerational equity is not the only lens through which we might assess the normative implications of wealth taxation. Wealth taxes might address unjust inequalities between people of different gender, ethnicity, talent, character, home environment and socioeconomic backgrounds, as well as people of different generations. Principles other than a highly transactional idea of equity might be advanced in favour of wealth taxes (principles involving duties to more vulnerable and less fortunate members of society, for example). Nevertheless, insofar as we are concerned with intergenerational justice, and insofar as a transactional sense of fairness between generations is appropriate, then a one-off wealth tax has markedly different properties to a recurring wealth tax (or other recurring taxes that fall disproportionately on older people, that younger people will themselves pay as they age).

The fairness of a one-off wealth tax (or lack thereof) is not solely a matter of intergenerational justice, however. Levying a one-off tax on residents of a particular jurisdiction at a particular moment in time raises questions of equity for both the temporarily resident and the temporarily non-resident. Should a person who has only just arrived in a country face a one-off levy on the full value of their worldwide wealth, purely because their arrival coincided with the introduction of any such tax? Should a person who has accumulated the bulk of their wealth in a given jurisdiction, but has recently migrated, be exempted from such charges? While similar problems also arise in the case of recurring wealth taxes (Chamberlain, 2020), the fact that a one-off wealth tax is imposed at a single point in time increases the arbitrariness of who is caught within the tax net and who is not. Moreover, the higher rate at which a one-off wealth tax is likely to be levied, in order to justify the effort of imposing it in the first place, increases the scale of the (arbitrary) cost imposed. While not necessarily fundamental objections, these issues (and potential remedies to them) would require further consideration in the design of a one-off wealth tax.

3. One-off wealth taxes in practice

Capital levies in the twentieth century

Both the First and Second World Wars inspired policymakers to experiment with one-off wealth taxation. Many governments involved in the fighting had incurred unprecedented levels of debt in order to fund military efforts. Meanwhile, much private sector wealth had been consumed in the conflict – whether requisitioned by government or destroyed by the enemy. What private wealth remained was even more arbitrarily distributed than in the past: chance played a large part in determining whether your house had been shelled, whether your town had found itself on the frontline, whether your factory or warehouse had been repurposed for military ends, ransacked, and/or razed to the ground.

Under these circumstances, one-off wealth taxes seemed to many to offer both an equitable and an effective way of funding the reconstruction effort. Following the First World War, one-off wealth taxes were levied in countries including Italy, Austria, Hungary and Czechoslovakia; Italy even repeated the policy in 1937, this time to arm itself in anticipation of future conflict (Rostás, 1940; Eichengreen, 1989). Finland instituted a one-off wealth tax in 1941, following the first Russo-Finnish war. In the aftermath of World War Two, capital levies played a role in the reconstruction efforts of France, Germany, Japan, Belgium, the Netherlands (twice), Finland (again), Luxembourg, Norway and Denmark (Carroll, 1946; Robson, 1959).

In reality, many of these levies proved to be less effective than their supporters had hoped. The post-First World War levies in Germany and Austria triggered substantial capital flight (Rostás, 1940; Eichengreen, 1989). In 1920s Hungary, the levy provoked opposition from a coalition of big landowners and smaller-scale farmers, and was rapidly repealed. The Czech law of 1920 only raised around half of the tax receipts originally anticipated (Rostás, 1940). The Japanese levy of 1946–7 – which primarily fell upon the richest two or three centiles of Japanese society – was more successful, raising over 10% of national income in the year that it was collected (Shavell, 1948).³

Reviewing this record in 1989, Barry Eichengreen concluded that ‘successful levies [can only] occur in cases like post-World War II Japan, where important elements of the democratic process are suppressed and where the fact that the levy was imposed by an outside power minimized the negative impact on the reputation of subsequent sovereign governments’ (1989: 37). However, Eichengreen’s conclusion is skewed by his focus on cases from the inter-war era – Japan is the only post-1945 case study included in his analysis. Actually, most of the aforementioned post-1945 capital levies were substantially more effective at raising revenue, achieving redistribution, countering inflation and financing reconstruction than their inter-war counterparts. As Peter Robson pointed out in an earlier survey of these taxes, ‘a comparison of experience in these two periods reveals a striking contrast between the smoothness and success with which, on the whole, the [post-Second World War] levies have been administered and the major difficulties encountered in the earlier period’ (1959: 33).⁴ To address this gap in the literature, we examine two examples

³ The Japanese levy also contained an interesting mechanism for discouraging undervaluation of assets in tax returns: the government could purchase any asset it believed to be undervalued at the price that its owner had specified in their self-assessment.

⁴ This does not mean that such successes are necessarily replicable today. As Robson also noted, one of the major factors contributing to the success of capital levies post-1945 was the Bretton Woods regime of managed exchange rates and effective capital controls.

from this era in greater depth: the French *Impôt de Solidarité Nationale* (ISN) of 1945, and the West German *Lastenausgleichsgesetz* of 1952.

France (1945)

Context

France emerged from the Second World War victorious, but with an economy devastated by the conflict. Its industries had been mobilised first for the protection of the Third Republic, then to fuel the German war machine (Occhino et al., 2008), and finally to support the Allied forces as they pushed eastwards across Europe. As one of the central theatres of conflict, French homes, factories and infrastructure were bombed out; agricultural land chewed up by waves of advancing and retreating troops; populations displaced and hundreds of thousands of working-age men dead or severely injured. Agricultural production was little more than 50% of pre-war levels and industrial output had fallen by around a quarter (INSEE, 1966). Reconstruction would clearly require a massive mobilisation of resources and the new French state aimed not merely at restoring the pre-war status quo, but rather at an ambitious modernisation of the French economy, perceived as stagnating even before its weaknesses were exposed by the speed of the German victory in 1940. This modernisation would require substantial state-coordinated investment – reflected in the Monnet Plan, introduced in early 1946.

As an added complication, the post-war French state was also confronted with a distribution of wealth that had been heavily influenced by the collaboration of parts of French industry and society with the occupying German forces, as well as by an explosion of informal economic activity outside the strictures of wartime regulation. Redressing these wrongs by penalising those who had profited during the Vichy era was a clear priority for the new regime. In the latter days of the occupation, the French Resistance had promised ‘the establishment of a progressive tax on war profits and more generally on gains made to the detriment of the people and the nation during the period of occupation’ (CNR, 1944). As French territory was liberated, in many areas local committees formed spontaneously to administer their own interpretation of redistributive (and retributive) justice. In an effort to curb and coordinate these initiatives, the French state created departmental committees, comprised of representatives from regional administrations as well as from local communities. A government decree of 18 October 1944 mandated the confiscation of profits arising from trade with the enemy, as well as black market activities (*Ordonnance tendant à confisquer les profits illicites*, 1944). However, faced with the massive scale of the informal economy during the occupation, the symbiotic relationship between the French and German economies over this period, gaps in record-keeping, the ingenuity of wealthy individuals potentially affected by the ordinance, and limited investigative resources on the part of the state, these confiscations bore little fruit (Mouré and Grenard, 2008). This bolstered both the fiscal and the ethical case for a more general charge on wealth, and wealth accumulated during the war in particular. It also chimed well with the social-democratic flavour of the Resistance’s vision for post-war France, a vision that included ‘the establishment of a genuine economic and social democracy, implying the removal of the great economic and financial feudal structures from the direction of the economy’ (CNR, 1944).

Impôt de Solidarité Nationale

The ISN was introduced on 15 August 1945 – a little more than three months following the Allied victory in Europe. The preamble refers to the ongoing efforts to reclaim ‘illicit’ profits, before stating that the distinctive goals of the ISN were to redress inequalities arising from the differential impact of the war on different households ‘whatever their causes’, as well as ‘to contribute to recovery from

the ruins of war' (*Ordonnance instituant un impôt de solidarité nationale*, 1945). The tax itself was comprised of two separate components: on the one hand, a one-off wealth tax computed on the basis of a taxpayer's net asset holdings as at 4 June 1945 (the date of the French post-war currency reform), on the other, a charge on the increase in their net wealth between 1 January 1940 and the currency reform date. As a contemporary commentator observed, the result was a form of double taxation (Rosier, 1948).

Both taxes had a progressive rate structure: ranging from a rate of 3% on fortunes under 500,000 francs to a maximum rate of 20% on wealth over 300 million francs, and from a rate of 5% on wartime wealth gains under 150,000 francs up to a 100% tax rate on gains in excess of 5 million francs (*Ordonnance instituant un impôt de solidarité nationale*, 1945: Art. 19, 25). Both taxes included a basic tax-free allowance: 200,000 francs for the overall wealth tax, and 50,000 francs on the incremental wartime wealth gain, with a range of additional allowances also available (*Ordonnance instituant un impôt de solidarité nationale*, 1945: Art. 16, 24). To put these figures into context, the average wage for a male industrial worker in Paris in October 1945 was slightly less than 35 francs per hour; by December 1946, the General Confederation of Labour was demanding a minimum living wage of 7,000 francs per month (84,000 francs per year) on the basis of a 48-hour working week (Cowan, 1947). Individuals and corporate entities were both subject to the levy on overall wealth, although the incremental charge on wartime gains only applied to individuals, and the overall wealth tax liability for corporate entities was calculated at fixed rather than progressive rates (Robson, 1959).

As of 1945, unlike in the German case discussed below, France did not have a comprehensive wealth tax in place. Consequently, the ISN instead invoked the rules of the French estate tax as a starting point for establishing the scope and valuation of the tax base (*Ordonnance instituant un impôt de solidarité nationale*, 1945: preamble) – effectively treating taxpayers as if they had inherited their wealth from themselves as of 4 June 1945 (over two months before the tax was announced). While valuations were generally supposed to take place at market price, in practice formulaic valuations using standardised indicators (such as historical values, revenues, profit, sector and region) were adopted for many asset classes (Rosier, 1948; Robson, 1959). The overall wealth tax could be paid in four equal annual instalments, from the start of 1946 through to the start of 1949, whereas the incremental tax on wartime wealth gain had to be paid in full no later than the end of February 1947 (*Ordonnance instituant un impôt de solidarité nationale*, 1945: preamble).

Impacts

According to official statistics, the ISN raised over 121 billion francs – equating to approximately a quarter of ordinary budgetary revenues, or around 5% of national income – for the post-war French state (Robson, 1959). The value of the tax take was curbed by high post-war inflation rates, as well as by difficulties in identifying taxpayers and auditing self-declared valuations. Only around two in every ten French households paid the tax – on account of both exemptions and evasion – and undervaluation of assets was commonplace (Rosier, 1948). While the amounts raised constituted a significant amount of revenue by ordinary standards, in relative terms the ISN generated a lower level of receipts than almost all other European capital levies of this era (Robson 1959). By comparison, procedures to confiscate illicit profits had imposed penalties amounting to 147 billion francs by 1950 (albeit only around a quarter of these monies had been recovered by this point) and many contemporary observers viewed this as a failure (Mouré and Grenard, 2008). Anecdotally, the ISN appears to have been much resented by those caught in its net, not least on account of the 'considerable' compliance burdens it imposed on taxpayers and their advisers (Rosier, 1948).

The comparatively small tax take meant that the tax had limited negative impact on individuals and businesses, but also meant it was only of limited use in achieving the French government's wider objectives. The tax did little to calm inflation rates or resolve the conflicting distributive claims confronting the post-war French state. Indeed, a subsequent 'exceptional levy to combat inflation' was introduced on 7 January 1948, during the first Schuman ministry, although this levy took the form of a one-off surcharge on profits and income (and was effectively administered as a forced loan), rather than as a capital levy or one-off wealth tax (*Loi instituant un prélèvement exceptionnel de lutte contre l'inflation*, 1948; Caron, 1982; Tristram, 2005). Ultimately, it fell to the Marshall Plan to stabilise the post-war economy and provide funds for investment in the reconstruction and modernisation effort (Casella and Eichengreen, 1991).

West Germany (1952)

Context

The mobilisation of industry and workers in support of the Nazi war effort, coupled with a rearguard action that saw large swathes of German territory transformed into battlefields in the final stages of the conflict, left the post-war German economy in a state of collapse. Many houses, factories, roads and rail lines had been destroyed or badly damaged by the Allied bombardment; many people of working age had been killed in the conflict, military personnel and civilians alike. The materials required for subsistence, let alone industry, were in short supply. From the perspective of the Allied victors, the devastation of the German economy – and, concomitantly, of the fiscal capacity of the German state – were considered in some quarters to be desirable outcomes. The US Treasury Secretary Henry Morgenthau Jr., perhaps the most prominent proponent of this view, advocated transforming the defeated nation into a primarily agrarian economy, envisaging a mass redeployment of German workers to the agricultural sector (Morgenthau, 1945). Preventing the recovery of German industry would prevent the recovery of German military capacity, as well as satisfying demands for punitive treatment of the German populace. However, as the post-war rivalry between the USA and the USSR escalated, the US and its allies began to see a prosperous reconstructed West Germany as key to the containment of the Soviet bloc. This shift culminated in 1948 with the introduction of the Marshall Plan, which provided funding for the economic reconstruction of West Germany as an advanced industrial country, and the convening of the *Parlamentarischer Rat*, the assembly that paved the way for the political reconstruction of West Germany as a constitutional democracy.

Foreign aid alone was not however sufficient to meet the fiscal demands of the reconstruction effort. Post-war Germany inherited a tax system which included a recurring wealth tax (*Vermögensteuer*), the rates of which were increased by the Allied Control Council in 1946. The *Soforthilfegesetz* (Emergency Aid Law) of 1949 raised the recurring wealth tax rate yet further to help pay for urgent social spending (Wieland, 2003). However, faced with the costs of reconstruction, recapitalising households and businesses whose assets were destroyed or confiscated during the conflict, and integrating the influx of refugees from outside the country's newly redrawn borders, even greater resources were needed (Albers, 1989). It was in this context that the *Lastenausgleichsgesetz* (burden-balancing law) of 1952 was formulated. Unlike the Japanese post-war capital levy – and contrary to Eichengreen's depiction of the conditions necessary for a successful one-off wealth tax – this was the outcome not of Allied imposition, but of complex political negotiations within the new West German democracy (Hughes, 1999; Wenzel, 2008).

Lastenausgleichsgesetz

As the name suggests, the burden-balancing law sought to even out the economic burdens confronting West German households in the wake of the conflict. This was a fundamentally ambiguous objective: suggesting on the one hand, a restitution of the *status quo ante*, and on the other, a radical redistribution of resources aiming at a more egalitarian society. In the end, the legislation sought to achieve both objectives, invoking both “the claims of particularly affected groups” and “the principles of social justice” in its preamble (*Lastenausgleichsgesetz*, 1952). Compensation was offered to households and businesses who had seen their assets destroyed or damaged in the conflict, but the law also provided for loans, grants and pensions to a wider cross-section of society too. Moreover, the new law was not exclusively concerned with transfers to private individuals and companies, but also promised funding for the construction of public benefit assets, such as social housing (Albers, 1989; Hauser, 2011).

The funding for this ambitious programme of public expenditure came from a variety of sources. The majority was taken from general taxation revenues, including the aforementioned recurring wealth tax, which remained in place through to the 1990s; but a significant proportion (around two-fifths) came from a one-off wealth tax (Hauser, 2011). This tax was levied upon assets based in the three Allied occupied zones, using a retrospective valuation date (namely, the date of the June 1948 currency reform which introduced the Deutsche Mark). The tax liability was charged at a flat rate of 50% of these assessed values, with relatively little by the way of allowances and exemptions, but with payment by instalment permitted over a period of 30 years (*Lastenausgleichsgesetz*, 1952: §31-34). Discounts and deferrals on instalment payments were available for families whose total wealth subsequently fell below a certain threshold, and for individuals on account of old age, disability, or unemployment (*Lastenausgleichsgesetz*, 1952: §53-5). Reliefs were also granted against tax charges incurred under the *Soforthilfegesetz* of 1949 (*Lastenausgleichsgesetz*, 1952: §48). Different asset classes were subject to different interest rates, with business asset wealth incurring the highest interest charge, followed by real estate, and the lowest charge on agricultural and forestry assets (*Lastenausgleichsgesetz*, 1952: §35). Financial assets such as mortgages and other loans were subject to a separate schedule of rules, reflecting their different treatment under the earlier currency reform (Hughes, 1999; Hauser, 2011).

Impacts

Because the legislation fixed the interest rate on the tax liability in nominal terms, post-war inflation and economic growth combined to reduce the economic impact of the instalment payments rapidly. Revenues from the *Lastenausgleichsabgaben* fell from a high of over 2.3% of GDP when first introduced, to circa 1.3% of GDP by the mid-1950s. By the start of the 1960s, receipts had already fallen below 1% of GDP, and continued their exponential decline through to the end of the 1970s (Bach, 2011). The *Wirtschaftswunder* of the post-war years, as the devastated West German economy rapidly caught up with its peers, meant high employment and rising wages, as well as strong profits. In turn, this meant that households and businesses were able to meet the instalment payments on their one-off wealth tax liabilities without too much hardship.

Indeed, the expenditure facilitated by the *Lastenausgleichsgesetz* played an important part in that post-war economic boom, as well as in the cultivation of social cohesion in the new West German state. Although, as discussed above, resources raised from the one-off wealth tax were used both for the egalitarian goal of levelling up all elements of German society, and for the inegalitarian goal of restoring the wealth of the formerly wealthy, in practical terms the former took priority. Compensation payments for specific losses of wealth did not begin until 1957 (Albers, 1989) and often took many years to be assessed and processed, with payments still taking place in the early

twenty-first century (Hauser, 2011). By contrast, more generic forms of support were decided and provided relatively quickly, as was funding for the construction of social housing, and for initiatives to create jobs and secure livelihoods (Albers, 1989). As such, the *Lastenausgleichsgesetz* has been celebrated not just as sound fiscal policy, but as a cornerstone of post-war nation-building (Albers, 1989; Hughes, 1999; Hauser, 2011).

One-off wealth taxes in the twenty-first century

The concept of capital levies fell out of favour in developed democracies in the latter part of the twentieth century, during the comparative peace of the Cold War. However, the global financial crisis reignited interest in one-off charges on wealth. The Berlin-based economist Stefan Bach broached the possibility of a one-off wealth tax as a way of stabilising European public finances in 2012 (Bach, 2012). The International Monetary Fund (IMF) briefly touched on one-off capital levies as a coda to a chapter of its October 2013 Fiscal Monitor, although it concluded – citing Eichengreen’s historical work, without noticing its limitations – that ‘experience suggests that more notable than any loss of credibility was a simple failure to achieve debt reduction, largely because the delay in introduction gave space for extensive avoidance and capital flight’ (IMF, 2013: 49). The Bundesbank produced a slightly more substantial analysis of the topic in its January 2014 Monthly Report (Bundesbank, 2014). Detailed estimates of how much such a levy might raise in Germany (and from whom) appeared in the March 2014 edition of *Fiscal Studies* (Bach et al., 2014) and economists from the Bundesbank also authored a working paper simulating the potential economic consequences of such a tax later that year (Kempkes and Stähler, 2014). The centre-left Fabian Society published a proposal for a one-off UK wealth tax in 2016, including more onerous reporting requirements for taxpayers who had previously engaged in tax avoidance, as determined by markers such as usage of tax haven bank accounts or disclosable schemes under the DOTAS regime (Donovan, 2016).

In practical policy terms, however, no developed democracy responded to the global financial crisis by imposing a one-off wealth tax of the breadth and scale envisaged by these authors, let alone a capital levy comparable in ambition to those adopted in the wake of the First and Second World Wars. As we will see in the remainder of this paper, particular policies adopted by Iceland, Ireland and Cyprus during the decade following the financial crisis can all be seen as species of one-off wealth tax, though they all constitute interesting variations on the conventional capital levy format. These case studies provide further insight into when, how and why one-off wealth taxes both succeed and fail in modern democracies, as well as suggesting novel policy options for the taxation of wealth.

Iceland (2009)

Context

Iceland was one of the first victims of the global financial crisis. As in many countries, Iceland’s largest banks had expanded their balance sheets on the assumption that short-term credit would be available and affordable, a business model that became rapidly unsustainable when the credit crunch hit. It was readily apparent to international markets that the Icelandic economy was not large enough to backstop its banks, and that unlike members of the EU and Eurozone it would be unable to call on any larger partner as a lender of last resort (Buiter and Sibert, 2008). Consequently, Iceland’s banks were among the first to fail in the wake of the Lehman Brothers bankruptcy of September 2008.

Unlike victims of the later Eurozone crisis, then, the Icelandic government did not have to foot the bill for the losses of its financial institutions. Nevertheless, the bank failures still wreaked havoc with the Icelandic economy, as businesses found themselves unable to access credit and the value of the krona fell precipitously. In late 2008, the government called upon the IMF and a range of other donors for financial assistance, in order to stabilise the currency and fund the public sector deficit, which following the crash peaked at almost 10% of GDP. As part of the conditions attached to those loans, Iceland was expected to engage in fiscal consolidation. In 2009, the Icelandic government – now led by a new, left-leaning coalition – announced a package of tax increases and spending cuts designed to achieve that goal, including a temporary wealth tax (IMF, 2010).

The temporary wealth tax

From a tax design perspective, the Icelandic temporary wealth tax is the most straightforward of our modern case studies – because it was, in essence, a time-bound version of a recurring net wealth tax, focused on a relatively narrow group of the very wealthiest households in the country. According to the December 2009 legislation, personal net wealth was to be taxed annually, on the basis of asset values as at the end of each preceding tax year. In 2010, wealth was taxed at a rate of 1.25% on net assets in excess of 90 million krona (equivalent to around €500,000 at the time) for individuals, or 120 million krona for a couple. In 2011, the rate was raised to 1.5% and the tax-free allowance lowered to 75 million krona (or 100 million krona for a couple). A higher tax rate for larger stocks of personal wealth was introduced in 2012, and the charge was levied for the last time in 2014 (Ríkisskattstjóri, 2020).

By the same token, it is also the most complex of the three contemporary case studies under consideration: as a tax applying to net wealth in general, rather than particular categories of wealth such as bank deposits or pension savings, the legislation had to provide for the valuation of diverse asset classes. Conveniently for Icelandic policymakers, however, the government had only abolished the country's recurring wealth tax back in 2006, which meant that many provisions were simply reinstated for purposes of the temporary tax. The legislation of 2009 stipulated that the tax would remain in force for three years, and although this was later extended by two years, the tax remained time-bound (Bogadóttir, 2016).⁵

Impacts

The tax raised 0.2% of GDP in revenue in 2010, 0.4% in 2011, and 0.5% for 2012 to 2014 – equivalent to around 40 billion krona in total (OECD, 2020). This was substantially larger than originally forecast. According to the IMF (2010), the tax was only expected to raise 3.5 billion krona per year. The higher yield reflected the increases in the tax rate and the lowering of the tax threshold in 2011, as well as the broader recovery of the Icelandic economy.

The revenue raised also reflects the limited scale of capital flight by wealthy individuals during this period. Iceland is an import-dependent economy, with many local debts either denominated in foreign currency or linked to inflation. Consequently, the government was swift to introduce capital controls to stem the depreciation of the krona that began in early 2008, even before the formation of the left-leaning coalition government that would introduce the temporary wealth tax in 2009.

⁵ By contrast, Spain also reintroduced its net wealth tax on a 'temporary' basis in 2011 in response to the financial crisis, but no expiry date was explicitly set and the measure remains in force at the time of writing – hence its exclusion from this survey. As it happens, the original 1977 legislation that introduced a wealth tax to Spain, following the post-Franco transition to democracy, also referred to the tax as a temporary measure ('transitorio') – even though no expiry date was set, and the wealth tax was ultimately put on a non-transitory footing with the wealth tax law of 1991.

These capital controls made avoidance of the new temporary wealth tax difficult. Somewhat unusually, the IMF accepted these measures, on the understanding that they were to be removed as soon as was practicable (Andersen, 2008). Capital controls were only fully abolished in March 2017, after the temporary wealth tax had run its course (Baldursson et al., 2017).

Administratively, Iceland benefited from the fact that it had had a very similar recurring net wealth tax in place as recently as 2005. Consequently, a relatively up-to-date template for how the tax was to be assessed, audited and collected was already in place, and employees of the Icelandic tax authority still had experience of administering the tax. The new temporary wealth tax was levied at more than double the rate of its permanent predecessor (the old tax rate stood at only 0.6% at the time of its abolition), so the Icelandic example fits the pattern of one-off wealth taxes being levied at higher rates than their recurring counterparts.

Politically speaking, the temporary wealth tax elicited complaints from taxpayers and commentators that will be familiar to analysts of non-temporary net wealth taxes. The tax was also subject to legal challenge on a range of grounds including the unequal treatment of different kinds of wealth and different kinds of family circumstance, although the Icelandic Supreme Court ultimately ruled in favour of the government.

Republic of Ireland (2011)

Context

Ireland, too, entered the global financial crisis with a banking sector that was large relative to the size of its economy. Having decided to offer a comprehensive package of support to its financial institutions, the Irish government was among the first countries to seek assistance from the EU and IMF during the European sovereign debt crisis (McGowan, 2011). In November 2010 it agreed a bailout package of €85 billion, including €17.5 billion from its own longer-term reserves.

The Irish government had already enacted a series of fiscal consolidation measures prior to the bailout. Nevertheless, the terms of the 2010 deal went further still, requiring additional tax rises and spending cuts in order to achieve the 3% deficit target enshrined in the Stability and Growth Pact. Consequently, after the incumbent Fianna Fáil-led government was voted out of office in February 2011, the economic adjustment programme left the incoming Fine Gael administration with little fiscal room for manoeuvre. Any new spending announcements would require offsetting tax rises or spending cuts. It was in this context that a private sector pension levy – a one-off wealth tax, focused exclusively on pension wealth – was introduced.

The Irish pension levy

The Irish pension levy was legislated as part of the Finance (No.2) Act 2011, which passed into law on 22 June, little more than a month after it was first announced in the Dáil Éireann on 10 May. The levy took the form of a new stamp duty, to be charged on a temporary basis between 2011 and 2014 on assets under management by Irish pension funds. The charge was calculated at a rate of 0.6% on the value of said assets on 30 June of each year, with payment due less than three months later. The tax was in essence a tax on the accumulated pension wealth of Irish residents, with no minimum thresholds or exemptions.

As with the Icelandic case, it could be debated whether such a levy should be considered as a one-off wealth tax, as opposed to a short-lived form of recurring wealth tax. In defence of the former classification, the levy was explicitly legislated as a temporary measure, charged annually from 2011 to 2014. Although it was extended in 2014 for an additional year (at a lower rate), and despite

concerns that it would become a permanent feature of the Irish tax system, it was discontinued from 2016 onwards. Moreover, the public spending that it was notionally intended to finance was a one-off too. While as a matter of administrative fact, the sums raised were treated as part of general tax revenues, the charge was presented to the Dáil as a way of funding a new 'Jobs Initiative', one of the central elements in the newly-elected government's economic strategy.

Having said that, in other respects, the pension levy did function more like a recurring wealth tax. Unlike a genuine one-off charge, which would involve a single assessment of the tax payable at a particular point in time (although that liability might be paid in a series of instalments over a number of years), the pension levy involved a new calculation of the tax liability due each year, based upon an up-to-date valuation of the assets under management. The annual valuation approach allowed the government to quote a lower tax rate than would be required under a lump-sum approach. At 0.6% per annum, the tax rate was comparable to the management fees charged by many pension fund managers. Indeed, the government hoped that part of the levy might be absorbed by fund managers' margins, rather than by pension savers themselves.

Nevertheless, in most cases, the levy was passed through in its totality (Williams, 2012), and the legislative package that introduced the pensions levy explicitly allowed trustees of defined benefit schemes to reduce members' benefits in light of the charge: 'the aggregate of the amount of duty paid... shall be deemed to be a necessary disbursement from those assets, and the benefits payable currently or prospectively to any member under the scheme may accordingly be adjusted by the trustees, but the diminution in value of those benefits shall not exceed the amount disbursed from the assets attributable at the valuation date to the scheme's liabilities' (Finance No. 2 Act, 2011: 4.12b). The attribution of the levy to individual members' benefits was a complex actuarial task, and presented trustees with a range of options that could cause 'a great deal of variability in outcomes for different categories of member' (Society of Actuaries in Ireland, 2011: 10). By way of example, already-retired members of the Tara Mines pension scheme were offered a choice between a 10% cut in their pensions for the duration of the levy alone, or a permanent reduction in income of circa 2.5% (O'Leary and Egan, 2011) – with the latter option ultimately preferred. The pensions levy thus operated primarily as a tax on pension wealth, reducing the size of individuals' savings (for defined contribution schemes) or the size of individuals' entitlements (for defined benefit schemes).

Impact

Not all pensions were affected by the levy. Because the tax base was defined as assets under management within Irish pension funds, public sector pensions that were financed out of general taxation on a 'pay as you go' basis were unaffected. However, public sector pensions had already been subject to a series of cutbacks in the preceding years. The February 2009 Financial Emergency Measures in the Public Interest Act introduced a 'pension-related deduction' for public sector employees, effectively reducing wages by an average of circa 7% as a putative retirement contribution. The deduction was applied both to public sector employees who were members of funded pension schemes, as well as to employees whose pensions were to be financed out of general taxation on a pay-as-you-go basis; in both cases, the 'contribution' was 'remitted to the benefit of the Exchequer', rather than paid into any dedicated pension fund (Government of Ireland, 2009). The following year, public sector pensions were cut directly as part of the bailout deal, with pensions of already-retired public servants reduced by an average of 4% above a €12,000 threshold (Department of Finance, 2010; Stewart, 2011). Consequently, the introduction of the pension levy in 2011 was not accompanied by widespread complaints of unequal treatment on the part of private sector savers. (The group who had most cause to complain on equity grounds were public sector

workers who paid into funded pension schemes – who thus paid both the pension-related deduction and the pension levy.)

In political terms, the levy was a remarkable success – raising the tax burden upon a broad range of households, yet eliciting little by the way of popular opposition. In the words of an Irish Times editorial of 2014, ‘few major tax changes have raised more revenue with less public outcry than the Government’s private sector pension levy’ (Irish Times, 2014). This success can be attributed to several factors. As just discussed, equity arguments for the levy were strong, given the treatment of public sector employees and their pension entitlements over the preceding two years. The temporary nature of the levy meant that opposition had limited time in which to mobilise and grow, while the fact that the charge was nevertheless spread over several years allowed for a lower headline rate of taxation, making it appear lower than if it had been levied upfront. The decision to make administration and payment of the charge the responsibility of pension fund managers, rather than individual savers, meant that public awareness of the levy and its impact upon household finances was lower than would otherwise have been the case. The macroeconomic and fiscal context – particularly the perceived lack of viable alternatives to austerity measures under the terms of Eurozone membership and the 2010 IMF/EU bailout – facilitated public acceptance of the trade-off between the new levy and the new spending measures it was supposed to finance. Indeed, in spite of EU-imposed austerity, the continuity in pro-integration public sentiment in Ireland over this period is striking (Simpson, 2019). Finally, the recovery in financial markets and the wider economy over the period 2011 to 2015 meant that the value of assets managed by pension funds rose sharply over this period anyway, exceeding their pre-crisis peak in 2014, making the impact of the tax charge less noticeable.

Admittedly, pension specialists, industry representatives and worker organisations expressed a great deal of dismay over the levy. The Irish Association of Pension Funds described it as ‘grossly inequitable’, and the Irish Congress of Trade Unions criticised it as ‘short-sighted, arbitrary and unfair’ (Wade, 2011). The 2014 surcharge, and the extension of the levy to 2015, proved even less popular and were denounced variously as ‘outrageous’, ‘disingenuous’ and ‘an attack on pensions’ (Williams, 2013). But criticism was primarily confined to experts, and efforts to challenge the levy in the courts did not succeed.

How much revenue did the pension levy raise? Government figures from the end of 2015 showed that the levy brought in nearly €2.4 billion over the five years that it was in operation (O’Dwyer, 2015) – in excess of the amounts originally anticipated, but still less than half a percent of GDP per year at its peak. The annual revaluation of the tax base enabled the government to benefit from growth in the value of pension assets over this period: in the words of the Economic and Fiscal Outlook that accompanied the 2014 Budget, ‘the over-performance of the pension levy... is welcome and comes as a result of an appreciation of the capital value of pension funds’ (Government of Ireland, 2014).

The flat-rate approach meant that the levy was not progressive. However, its flat-rate structure made administration easier, as there was no need for pension funds or the tax authority to compile information showing the total pension position of individual taxpayers (which might involve a combination of defined benefit and defined contribution schemes, held with multiple different providers). With a cumulative charge of less than 3% of underlying asset values, the levy has marginally reduced the financial security of current and future pensioners, though many of those most at risk of old-age poverty would have had negligible private pension savings anyway, being primarily dependent on state pension provision. To put the same point somewhat differently,

although the levy was not progressive with regard to pension savings, it was progressive with regard to overall pension income, as baseline state pension entitlements were not affected.

The legislative provision that enabled pension funds to vary their benefit payments in light of the new charge meant that the levy did not push the sector further into deficit, and despite the pension industry's concerns, there does not appear to be any conclusive evidence that the rate of retirement saving fell as a result of the charge. The proportion of the Irish population covered by voluntary personal and occupational pension plans did fall by 4.1% from 2008 to 2018, but the total asset value held by Irish pension funds still increased by more than 70% in nominal terms over this same time period (OECD, 2019). Other tax privileges associated with pension savings were retained, meaning that pensions remained tax efficient overall, compared to other forms of retirement saving.

Cyprus (2013)

Context

As in Iceland and Ireland, on the eve of the financial crash, Cyprus possessed a vast financial sector relative to the size of its economy – in large part, a product of its success in attracting depositors from other countries, both inside and outside the EU. However, the country initially appeared well-equipped to cope with the burgeoning crisis. In preparation for the country's January 2008 accession to the Eurozone, the government had run a 3.5% surplus the preceding year, and still managed to record a near 1% surplus in 2008 itself. During the first phase of the European sovereign debt crisis, capital flowed into Cyprus and Cypriot financial institutions in search of a safe haven. True, increases in public spending and a downturn in the Cypriot economy meant widening public deficits, which ultimately left the government unable to borrow from financial markets by the middle of 2011 – but this was substantially later than in Greece and Ireland. Even then, Cyprus managed to avoid recourse to an EU-negotiated bailout by obtaining emergency financial support from an alternative source: Russia. In early October 2011, a spokesperson for the Cypriot government announced that the Council of Ministers had agreed a €2.5 billion emergency loan package, running from 2012 to 2016.

The Russian loan was supposed to cover the government's anticipated deficit and debt refinancing obligations over the following five years. It was not, however, intended to pay the costs of bailing out Cyprus' banking sector – indeed, such a bailout was not widely anticipated at the point when the loan was concluded. In the initial stages of the financial crisis, Cyprus' major banks had appeared relatively robust. Certainly, the sector was large relative to GDP, and highly concentrated – with the two largest banks, the Bank of Cyprus and Laiki, accounting for almost half of all banking assets (Stephanou, 2011). Nevertheless, the banking sector was still able to keep credit flowing to the economy, funding an ongoing construction and housing boom, well into 2012 – aided by inflows of capital from other countries during the early days of the Eurozone crisis (Michaelides, 2014).

At the same time, however, Cyprus' banks were committing a series of strategic missteps – including not just overexposure to the inflated domestic property sector, but also to distressed Greek government debt. The Greek debt restructuring of late 2011, coupled with a downturn in the domestic property market at around the same time, left Cypriot banks' balance sheets in tatters (Clerides, 2014). By the middle of 2012, the government of Cyprus faced an unenviable choice between bailing out its banking sector, at a time when it was itself unable to borrow money from the international markets, or else allowing those banks to collapse.

It opted for the former, and petitioned the EU for assistance in June 2012. There followed a protracted process of proposal and counter-proposal between the government of Cyprus and the Troika (the European Commission, the European Central Bank, and the IMF), as the size of the bailout, and the austerity measures that Cyprus would need to implement in return, were negotiated. The President of Cyprus, Demetris Christofias, ultimately balked at the resulting package, and instead opted to see out the remaining months of his term in office by drawing down on resources held by pension funds and semi-governmental public bodies (Apostolides, 2013; Orphanides, 2014). Christofias' successor within the left-wing AKEL was defeated in the February 2013 Presidential election, and the new centre-right President returned to the negotiating table. However, Cyprus' bargaining power had weakened substantially during the delay. This was partly a result of further deterioration in the Cypriot public finances; partly a result of the politicisation of the bailout within the context of the upcoming federal elections in Germany, where the Social Democratic Party had made political hay out of the prospect of German taxpayers bailing out 'Russian oligarchs, businessmen and mafiosi who have invested their illegal money' in Cypriot banks (Dettmer and Reiermann, 2012; Chambers, 2013); and partly a result of growing concerns within the Troika (particularly the IMF) that loans might not be repaid, with the ongoing Greek crisis illustrating how the burdens of bailout packages (and the austerity measures associated with them) could preclude economic recovery and fiscal sustainability.

The Cypriot bank levy and bank restructuring

The rescue package that emerged on 16 March 2013 reflected these pressures. While it included a range of by-now familiar austerity measures – tax rises, spending cuts, and privatisation deals – the centrepiece of the package was a one-off levy on bank deposits: to be charged at a rate of 9.9% on uninsured deposits (over the guaranteed level of €100,000) and 6.75% on insured deposits (below the threshold). The one-off charge was supposed to raise €5.8 billion towards the costs of bailing out the Cypriot banks – almost a third of GDP. The tax was to be levied on all deposits held with Cypriot institutions, irrespective of whether or not depositors were themselves based in Cyprus – critical to ensuring that 'Russian oligarchs, businessmen and mafiosi' were included in the tax base.

As the levy required parliamentary approval, the government immediately shut down the banking sector to prevent capital flight before legislation could be passed. However, the Cypriot legislature voted down the new tax on 19 March and it was not until 25 March that a new deal was agreed. The suspension of banking activities lasted for 12 days in total, with strict capital controls kept in place thereafter (Weaver and Stothard, 2013).

The 25 March deal resolved the political impasse by recasting the levy scheme as a 'restructuring' of the banking sector, thus falling under the auspices of the Bank Resolution Law which the parliament had already approved. Interestingly, there were local discussions of using pension fund assets to raise the revenue to replace the levy, mirroring the approach adopted in Ireland, but these proposals were rejected by the Troika (Michaelides, 2014: 675; Apostolides, 2013: 301; Theodore and Theodore, 2016: 92). The new deal still imposed a haircut on deposits; however, this haircut was now restricted to deposits held with the country's two largest banks (the Bank of Cyprus and Laiki) that were in excess of the €100,000 threshold. Laiki's insured depositors and performing assets were transferred to the Bank of Cyprus. Uninsured deposits in Laiki were converted in their entirety to equity stakes in the non-performing assets that remained. Uninsured deposits in the Bank of Cyprus were 'taxed' at a somewhat lower rate – 37.5% were initially converted into equity (Apostolides, 2013; Roland, 2013), with the total ultimately rising to 47.5%. In effect, the banking crisis had been recast from a public crisis, which would require the state to raise funds from

taxpayers in order to bail out the banking sector, to a private crisis localised to particular banks, with the costs of resolution falling exclusively on their own customers.

Impacts

Rumblings in the European press about bailing in overseas depositors, particularly wealthy Russians, had already alerted some of the Cypriot banking sector's clientele to the risks they faced (Apostolides, 2013; Orphanides, 2014). From late 2012 to February 2013, the value of bank deposits in Cyprus fell from circa €80 billion to around €70 billion. A further €7.4 billion of deposits disappeared from bank balance sheets in March 2013, though this will have reflected the haircut imposed by the bail-in, as well as capital flight triggered by rumours about the possible terms of the deal (Michaelides, 2014). Once the bank levy was announced in mid-March, queues formed at ATMs as Cypriots sought to withdraw whatever they could from their accounts – even though the tax was to be assessed on the basis of deposits as at the time of the initial announcement.

Who paid? The banking levy as originally conceived, with its charge on insured depositors, would have affected a vast swathe of ordinary Cypriot households. Indeed, the perception that Cypriots were to be taxed in order to reduce the levy rate on uninsured foreign depositors was an important factor in mobilising opposition to the levy. By contrast, the restructuring plan only affected 4% of depositors (Demetriades, 2018).

The levy proposed on 16 March was mildly progressive, with horizontal equity between depositors in different banks. By contrast, the restructuring approach was extremely progressive (most depositors would pay nothing), but involved arbitrary differences in bail-in charges depending upon whether depositors had placed their funds in Laiki, the Bank of Cyprus, or elsewhere. In the case of both the proposed levy and the actual restructuring, progressivity only applied with regard to individual deposits, not any broader measure of wealth. Both bail-in approaches applied equally to individual and business accounts, meaning that many medium- and large-size firms lost access to their working capital. Perversely, those businesses who had behaved most prudently in the straitened economic environment were penalised the most, as their cash reserves were transformed into illiquid shares in the rescued banks (Apostolides, 2013). Different households were thus differently exposed to the bail-in costs, depending not just on how much cash wealth they possessed, but also on where they deposited that money, and whether or not they had invested in relatively cash-rich Cypriot businesses.

What of the international dimension? Precisely how much the restructuring affected the depositors demonised in the north European press is not altogether clear. A report into the Cypriot banking system, co-commissioned by the Troika and the Central Bank of Cyprus, indicated that only 40% of Cypriot bank deposits were owed to Cypriot residents in June 2012, with 34% belonging to Cyprus-based non-residents, 19% originating from Greece, and only 7% from other countries (PIMCO, 2013: 8-9). The decline in deposits from June 2012 through to March 2013 reflected a reduction in deposits by both monetary and financial institutions (MFIs) and other individuals and organisations. Although the drawdown was weighted towards MFIs by a ratio of about two-to-one (Michaelides 2014: 664), it seems reasonable to assume that more sophisticated overseas depositors would also have been more likely than most to withdraw their funds over this period. At the same time, the ten largest new shareholders of Cypriot banks created as a result of the bail-in all transpired to be politically-exposed Russian and Ukrainian oligarchs (Demetriades, 2018), which suggests that we should not overstate the extent of capital flight by the intended targets of the restructuring.

Unsurprisingly, the result of businesses losing access to their working capital, as well as the implosion of the Cypriot financial sector (viewed as both an export industry, and as a conduit for

credit to domestic households and enterprises), was a severe economic downturn. GDP shrank by 6.6% in 2013 and 1.9% in 2014. Capital controls were kept in place in one form or another for two years after the restructuring (Fox, 2015) to prevent a run on the banks. Nonetheless, deposits did still decline substantially over this period, most markedly among non-residents, and survey evidence from 2014 suggested that households were sceptical about the safety of deposits at Cypriot financial institutions irrespective of whether they had suffered direct losses themselves (Brown et al., 2017). While the fall in bank deposits by residents bottomed out in 2015, non-resident deposits have fallen consistently year-on-year from 2013 to 2019 (Central Bank of Cyprus, 2020). The restructuring was challenged in a slew of court cases, which took several years to work their way (unsuccessfully) through the European legal system.

Nevertheless, Cyprus' economy, government finances and banking sector did return to growth relatively quickly following the traumatic events of 2013, despite the widely-criticised bank levy proposals, and despite (or arguably, in part, because of) a bank restructuring that imposed an even more severe penalty on (some) stocks of wealth held in Cyprus. GDP growth turned positive once again in 2015, and in March 2016 Cyprus exited the EU-mandated adjustment programme early. In January 2017 the Bank of Cyprus successfully listed on the London Stock Exchange.

4. Discussion

Perhaps the most obvious point to note is that one-off wealth taxes introduced in the wake of the global financial crisis have been much more modest in scope than the capital levies that followed the First and Second World Wars. Both the Irish pension levy and the Icelandic temporary wealth tax raised relatively small amounts of revenue over their lifetimes – in the region of one or two percent of GDP in total, substantially less in relative terms than even the French one-off wealth tax of 1945. This was partly because these taxes involved lower rates than has historically been the case, and partly because the tax base was narrower than in capital levies of the past. The Irish pension levy base was broad in that all funded pension schemes were affected, but narrow insofar as the tax charge only applied to pensions, not other forms of wealth; and Iceland's temporary wealth tax only affected a small number of taxpayers at a relatively low tax rate (albeit more than double the rate levied by Iceland's previous recurring net wealth tax, abolished in 2006). The levy on bank deposits proposed by the government of Cyprus was more ambitious, taxing a broad range of depositors at a comparatively high rate, which would in theory have raised around a third of GDP. However, this levy proved politically impossible to introduce, so in the end the costs of the bailout were raised from a narrower base (circa 4% of depositors) at a much higher 'rate', through a bail-in of depositors rather than a levy.

In all three modern-day cases, the tax base was relatively immobile, minimising the risk of capital flight before the charge was introduced. In the case of Cyprus and Iceland, this was achieved through the use of capital controls, which prevented individuals from moving savings and investments to other locations – and in Cyprus specifically, the suspension of banking services associated with the introduction of the policy, which precluded transferring money out of bank deposits and into other asset classes. In the case of Ireland, it would have been difficult for savers to shift money out of their pension schemes, as strict rules and penalties applied to early withdrawal.

Has the levying of these one-off wealth taxes had any lasting impact on taxpayer behaviours? Or do taxpayers behave as if the charges were indeed a one-off? The removal of capital controls in Iceland in 2017 does not appear to have precipitated a sudden dash for the exit. The volume of savings managed by Irish pension funds has expanded rapidly over the last decade, although the proportion of the working-age population covered by voluntary personal and occupational pension plans has fallen slightly (OECD, 2019). In Cyprus, where substantially larger charges were both threatened and imposed upon depositors' wealth, there was a lasting impact upon banking behaviours, albeit more so among non-residents than residents. It is difficult to discern the extent to which the comparative indifference of wealth holders in Iceland and Ireland is a product of taxpayers in these countries trusting that the wealth taxes introduced post-crisis were indeed one-offs, or simply viewing the impact of such measures as relatively small given the low rate at which the charges in question were levied.

In all three contemporary cases, a fiscal emergency precipitated the taxes in question (or in the Cypriot case, the tax proposal and the restructuring charges). However, in both Iceland and Ireland the governments could have opted for other policies to achieve consolidation – the former could have opted for another kind of tax, and latter could have opted to forego public spending on the government's Job Initiative. Modest one-off wealth taxes can thus be politically acceptable and practicable even in the presence of alternatives. Only in the Cypriot case were alternatives explicitly ruled out by the Troika, ensuring that the money needed had to come from depositors in one form or another.

Interestingly, in both Iceland and Ireland policymakers opted for a temporary recurring charge rather than a one-off charge paid in instalments. This enabled them to quote lower annual tax rates, which meant that many taxpayers saw these tax costs offset by normal year-to-year increases in the value of the assets in question. Psychologically speaking, a tax that makes you get richer slower over several years may be more appealing than one that makes you poorer immediately and then leaves you to prosper, even if the ultimate financial outcomes are the same (Kahneman and Tversky, 1979). However, such a strategy means that policymakers must either restrict themselves to taxing relatively immobile forms of wealth (such as pension funds), rely on capital controls (as in the Icelandic case), or else resign themselves to some degree of capital flight.

By contrast, the Cypriot example demonstrates the risks of raising significant amounts from a one-off wealth charge without providing taxpayers with the option of spreading these costs out over time. The sudden loss of capital resulting from the bank restructuring forced many Cypriot businesses to fire staff and reduce investment, while others folded altogether. Even households that had suffered no direct financial loss may have been traumatised by the threat to their savings, and adjusted their saving and consumption behaviours accordingly (Demetriades, 2018). The 6.6% contraction in Cypriot GDP in 2013 was the largest in the EU by some margin – although it should also be noted that the Cypriot economy did recover relatively quickly thereafter.

Politically speaking, taxing other people remains a popular option for capital levies, as it does for other taxes. In Iceland, the temporary wealth tax was specified in such a way that only a small proportion of the population would be subject to the charge. In Cyprus, public opposition to the broad-based deposit levy that was initially proposed helped to ensure that smaller depositors were exempted from the bail-in approach agreed two weeks later. The costs were thus borne by wealthier depositors, which included a substantial number of businesses and non-residents. Nevertheless, the Irish pension levy serves as a salutary reminder that broader-based one-off taxes can also be politically viable – as do the capital levies introduced in the wake of the Second World War, albeit in the context of a very different international economic order.

5. Conclusions

Confronted by the fiscal costs of the COVID-19 pandemic, there has been a resurgence of interest in one-off wealth taxes (Conway, 2020; Kellerhof, 2020; Markovits, 2020; O'Donovan, 2020). Looking at the experience of one-off wealth taxes in the post-financial crisis period, it seems that such charges can make an important contribution to government finances, though modern capital levies have been more modest in scale and scope than their historical counterparts. Put bluntly, one-off wealth taxes are not going to pay off government debt burdens in their entirety (and in any event, paying off ordinary debts may undermine the credibility of government promises that such levies are one-offs). Indeed, such ambitions may well be unwise, given the fragile nature of post-pandemic economies and the potential impact on aggregate demand, as well as unnecessary, given the low costs of public borrowing enjoyed by (some) governments. Nevertheless, a well-crafted one-off wealth tax could help to offset some of the one-off fiscal costs associated with the pandemic, as they did some of the costs of the global financial crisis and some of the costs of post-war reconstruction in our case studies. Limiting such taxes to particular assets, such as pension savings, and collecting them through institutions rather than through complicated self-assessment procedures, can make administration easier and minimise risks of capital flight. Capital levies thus offer an interesting alternative (or potentially even complement, as in post-war West Germany) to recurring net wealth taxes, as well as to other tax reforms designed to raise additional revenue and/or redistribute the tax burden among different parts of society.

References

- Ackerman, B., & Alstott, A. (1999), *The stakeholder society*, Yale University Press.
- Adam, S., & Miller, H. (2020), 'The economics of a wealth tax', *Wealth Tax Commission Evidence Paper*, 3.
- Advani, A., & Tarrant, H. (2020), 'Behavioural responses to a wealth tax', *Wealth Tax Commission Evidence Paper*, 5.
- Albers, W. (1989), 'Der Lastenausgleich Rückblick und Beurteilung', *FinanzArchiv/Public Finance Analysis*, (H. 2), pp. 272-298.
- Andersen, C. (2008), 'Iceland Gets Help to Recover From Historic Crisis', IMF Survey, 2 December 2008.
- Apostolides, A. (2013), 'Beware of German gifts near elections: how Cyprus got here and why it is currently more out than in the Eurozone', *Capital Markets Law Journal* 8(3): pp. 300-318.
- Bach, S. (2011), 'Lastenausgleich aus heutiger Sicht: Renaissance der allgemeinen Vermögensbesteuerung?', *Vierteljahrshefte zur Wirtschaftsforschung*, 80(4): pp. 123-146.
- Bach, S. (2012), 'Vermögensabgaben: ein Beitrag zur Sanierung der Staatsfinanzen in Europa', *DIW-Wochenbericht* 79(28): pp. 2-11.
- Bach, S., Beznoska, M., & Steiner, V. (2014), 'A wealth tax on the rich to bring down public debt? Revenue and distributional effects of a capital levy in Germany', *Fiscal Studies*, 35(1): pp. 67-89.
- Baldursson, F. M., Portes, R., and Thorlaksson, E. E. (2017), 'Iceland's Capital Controls and the Resolution of its Problematic Bank Legacy'. Available at: <https://ssrn.com/abstract=2996631> [accessed 29 July 2020].
- Balls, E., Howat, J., & Stansbury, A. (2018), 'Central Bank Independence Revisited', *Harvard Kennedy School M-RCBG Associate Working Paper Series*, No. 87.
- Banting, K. G. (1991), 'The politics of wealth taxes', *Canadian Public Policy/Analyse de Politiques*, 17 (3): 351-367.
- Blackburn, K., & Christensen, M. (1989), 'Monetary policy and policy credibility: theories and evidence', *Journal of Economic literature* 27(1): pp. 1-45.
- Bogadóttir, T.E. (2016), 'Auðlegðarskatturinn var alltaf tímabundinn', Kjarninn 12 October 2016. Available at: <https://kjarninn.is/skyring/2016-10-12-audlegdarskatturinn-alltaf-timabundinn/> [accessed 29 July 2020].
- Brown, M., Evangelou, I., and Stix, H. (2017), 'Banking Crises, Bail-ins and Money Holdings', *Central Bank of Cyprus working paper*, 2017-2.
- Buiter, W. H., and Sibert, A.C. 'The Icelandic banking crisis and what to do about it: The lender of last resort theory of optimal currency areas', in *Preludes to the Icelandic financial crisis*, Palgrave Macmillan, London, pp. 241-275.

Bundesbank (2014), Monthly Report, January 2014, 66(1).

Caron, F. (1982), 'Le plan Mayer: un retour aux réalités', *Histoire, économie et société*, 1(3): pp. 423-437.

Carroll, M. B. (1946), 'Outline of War Profit Taxes and Capital Levies in Liberated European Countries', *Tax Law Review*, 1, pp. 409-429.

Casella, A., & Eichengreen, B. (1991), *Halting inflation in Italy and France after World War II*, National Bureau of Economic Research, no. w3852.

Central Bank of Cyprus (2020), *Monetary and Financial Statistics*. Available at: <https://www.centralbank.cy/en/statistics/money-and-banking-statistics-and-financial-accounts/data/%C2%ABmonetary-financial-statistics%C2%BB-publication> [accessed 29 July 2020].

Chamberlain, E. (2020), 'Defining the tax base', *Wealth Tax Commission Evidence Paper*, 8.

Chambers, M. (2013), 'German Opposition SPD Threatens to Block Cyprus Aid-Spiegel', Reuters, 2 February 2013. Available at: <http://www.reuters.com/article/2013/02/02/us-eurozone-cyprus-spd> [accessed 29 July 2020].

Chatalova, N., and Evans, C. (2013), 'Too Rich to Rein in: The Under-Utilised Wealth Tax Base', *eJournal of Tax Research*, 11(3), pp. 434-452.

Clerides, S. (2014), 'The collapse of the Cypriot banking system: a bird's eye view', *Cyprus Economic Policy Review*, 8(2), pp. 3-35.

CNR [Conseil National de la Résistance] (1944), *Programme d'action de la Résistance*. Available at: <http://museedelaresistanceenligne.org/media2839-Programme-daction-du-CNR> [accessed 22 September 2020].

Conway, E. (2020), 'Has the time come for a one-off wealth tax?', *The Times*, 23 April 2020. Available at: <https://www.thetimes.co.uk/article/has-the-time-come-for-a-one-off-wealth-tax-mrt3bqs8m> [accessed 29 July 2020].

Cowan, H. I. (1947), 'France: Wage Trends and Wage Policies, 1938-47', *Monthly Labor Review*, 65(2): pp. 149-157.

Demetriades, P. (2018), 'Failing banks, bail-ins, and central bank independence: Lessons from Cyprus', VoxEU, 21 February 2018. Available at: <https://voxeu.org/article/bank-bail-ins-lessons-cypriot-crisis> [accessed 29 July 2020].

Department of Finance (2010), *The National Recovery Plan 2011-2014*, The Stationery Office: Dublin.

Dettmer, M. and Reiermann, C. (2012), 'Bailing Out Oligarchs: EU Aid for Cyprus A Political Minefield for Merkel', *Spiegel International*, November 2012.

Donovan, N. (2016), *A Unique Contribution*, Fabian Society.

Eichengreen, B. (1989), *The capital levy in theory and practice*, National Bureau of Economic Research.

Forman, J. B., & Mann, R. F. (2020), 'Borrowing from Millennials to Pay Boomers: Can Tax Policy Create Sustainable Intergenerational Equity?', *Georgia State University Law Review*, 36(3), pp. 799-843.

Fox, B. (2015), 'Cyprus lifts last capital controls after two years', EUObserver, 7 April 2015. Available at: <https://euobserver.com/economic/128244> [accessed 29 July 2020].

Government of Ireland (2009), *Financial Emergency Measures in the Public Interest Act 2009, Frequently Asked Questions, Pension-related deduction from the remuneration of public servants*.

Government of Ireland (2014), *Budget 2014: Economic and Fiscal Outlook*.

Graetz, M. J., & Shapiro, I. (2011), *Death by a thousand cuts: The fight over taxing inherited wealth*, Princeton University Press.

Hauser, R. (2011), 'Zwei deutsche Lastenausgleiche: eine kritische Würdigung', *Vierteljahrshefte zur Wirtschaftsforschung*, 80(4), pp. 103-122.

Hayek, F.A. (1940), 'Review of How to Pay for the War (Keynes)', *The Economic Journal*, 50(198/199), pp. 321-326.

Hicks, J., Hicks, U. K., & Rostás, L. (1941), *The taxation of war wealth*, Clarendon Press.

Hirschhorn, P. (1999), 'Trump proposes massive one-time tax on the rich', CNN, 9 November 1999. Available at: <https://edition.cnn.com/ALLPOLITICS/stories/1999/11/09/trump.rich/index.html> [retrieved 29 July 2020].

Hughes, M. L. (1999), *Shouldering the burdens of defeat: West Germany and the reconstruction of social justice*, UNC Press Books.

IMF (2010), 'Iceland: Improving the Equity and Revenue Productivity of the Icelandic Tax System', IMF, June 2010.

IMF (2013), *Taxing Times*, IMF Fiscal Monitor, October 2013.

INSEE [Institut national de la statistique et des études économiques] (1966), *Annuaire statistique de la France: résumé rétrospectif*, cited in Casella, A., & Eichengreen, B. (1991), *Halting inflation in Italy and France after World War II*, National Bureau of Economic Research, no. w3852.

Irish Times (2014), 'A temporary pensions levy, now permanent?', *Irish Times*, 30 September 2014. Available at: <https://www.irishtimes.com/news/social-affairs/a-temporary-pensions-levy-now-permanent-1.1945442?mode=amp> [accessed 29 July 2020].

Kahneman, D. and Tversky, A. (1979), 'Prospect theory: an analysis of decision under risk', *Econometrica*, 47(2), pp. 263-291.

Kellerhof, S.F. (2020), 'Der „Lastenausgleich“ nach 1945 war vor allem psychologisch wichtig', *Die Welt*, 1 April 2020. Available at: <https://www.welt.de/geschichte/article206942969/Wiederaufbau-Was-die-Idee-vom-Lastenausgleich-taugte.html> [accessed 29 July 2020].

Kempkes, G., & Stähler, N. (2014), 'A One-Off Wealth Levy? Assessing the Pros and Cons and the Importance of Credibility', *Deutsche Bundesbank Discussion Paper*, No.29/2014.

Keynes, J. M. (1940), *How to Pay for the War: A Radical Plan for the Chancellor of the Exchequer*, Macmillan.

Kydland, F. E., & Prescott, E. C. (1977), 'Rules rather than discretion: The inconsistency of optimal plans', *Journal of political economy* 85(3): pp. 473-491.

Lehner, M. (1999), 'The European experience with a wealth tax: a comparative discussion', *Tax Law Review*, 53(4): pp. 615-692.

Loneragan, E., & Blyth, M. (2020). 'Beyond Bailouts', *Institute for Public Policy Research Discussion Paper*.

Loutzenhiser, G., & Mann, L. (2020), 'Liquidity issues: solutions for the asset rich, cash poor', *Wealth Tax Commission Evidence Paper*, 10.

Markovits, D. (2020), 'A wealth tax is the logical way to support coronavirus relief', *New York Times*, 21 April 2020. Available at: <https://www.nytimes.com/2020/04/21/opinion/coronavirus-wealth-tax.html> [accessed 29 July 2020].

McGowan, M.A. (2011), 'Overcoming the Banking Crisis in Ireland', *OECD Economic Department Working Papers*, 907.

Michaelides, A. (2014), 'Cyprus: from boom to bail-in', *Economic Policy* 29(80): pp. 639-689.

Morgenthau, H (1945), *Germany is our Problem*, New York: Harper, 1945.

Mouré, K., & Grenard, F. (2008), 'Traitors, Trafiquants, and the Confiscation of 'Illicit Profits' in France, 1944-1950', *Historical Journal*: pp. 969-990.

O'Donovan, N. (2020), 'Paying for the Pandemic', *Future Economies Research and Policy Paper*, 8, 17 April 2020. Available at: <https://www.mmu.ac.uk/media/mmuacuk/content/documents/business-school/future-economies/Paying-for-the-Pandemic-ODonovan.pdf> [accessed 29 July 2020].

O'Dwyer, P. (2015), 'Private pension levy hits workers for €2.39bn', *Irish Examiner*, 10 November 2015. Available at: <https://www.irishexaminer.com/business/arid-20364069.html> [accessed on 29 July 2020].

O'Leary, J. and A. Egan (2011), 'Thousands face significant income cuts over pension levy', *Irish Examiner*, 13 September 2011. Available at: <https://www.irishexaminer.com/business/arid-20167317.html> [accessed 22 September 2020].

Occhino, F., Oosterlinck, K., & White, E. N. (2008), 'How much can a victor force the vanquished to pay? France under the Nazi boot', *The Journal of Economic History*: pp. 1-45.

OECD (2018), *The Role and Design of Net Wealth Taxes in the OECD*, OECD Publishing: Paris.

OECD (2019), *Pension markets in focus*, OECD Publishing: Paris.

OECD (2020), *Revenue Statistics*. Available at: <https://stats.oecd.org/> [accessed 29 July 2020].

Orphanides, A. (2014), 'What Happened in Cyprus? The Economic Consequences of the Last Communist Government in Europe', LSE Financial Markets Group Special Paper Series, July 2014. |Available at: <https://www.lse.ac.uk/fmg/assets/documents/papers/special-papers/SP232.pdf> [accessed 29 July 2020].

Perret, S. (2020), 'Why did other wealth taxes fail and is this time different?', *Wealth Tax Commission Evidence Paper*, 6.

Pigou, A.C. (1920), *A Capital Levy and a Levy on War Wealth*, H. Milford, Oxford University Press.

Piketty, T. (2014), *Capital in the twenty-first century*, trans. A. Goldhammer, Belknap Press.

PIMCO (2013), *Independent due diligence of the banking system of Cyprus*, March 2013.

Ríkisskattstjóri (2020), 'Auðlegðarskattur'. Available at: <https://www.rsk.is/einstaklingar/skattar-og-gjold/audlegdarskattur/> [accessed 29 July 2020].

Robson, P. (1959), 'Capital Levies in Western Europe After the Second World War', *The Review of Economic Studies*, 27(1): pp. 23-43.

Roland, D. (2013), 'Bank of Cyprus executes depositor bail-in', *Daily Telegraph*, 28 April 2013. Available at: <https://www.telegraph.co.uk/finance/financialcrisis/10024209/Bank-of-Cyprus-executes-depositor-bail-in.html> [accessed 29 July 2020].

Rosier, C. (1948), 'L'impôt de Solidarité et sa mise en application', *Revue de Science et de Législation Financières*, 40: pp. 5-36.

Rostás, L. (1940), 'Capital Levies in Central Europe, 1919-1924', *The Review of Economic Studies*, 8(1): pp. 20-32.

Saez, E., & Zucman, G. (2019), 'Progressive wealth taxation', *Brookings Papers on Economic Activity*.

Schumpeter, J.A. (1918), *Die Krise des Steuerstaats*, Leuschner & Lubensky.

Seely, A. (2020), 'Retrospective Taxation', *House of Commons Library Briefing Paper*, 4369.

Select Committee on Intergenerational Fairness and Provision (2019), *Tackling Intergenerational Fairness*, House of Lords, 25 April 2019. Available at <https://publications.parliament.uk/pa/ld201719/ldselect/ldintfair/329/329.pdf> [accessed 29 July 2020].

Shavell, H. (1948), 'Postwar taxation in Japan', *Journal of Political Economy*, 56(2): pp. 124-137.

Simpson, K. (2019), 'European Union crises and Irish public opinion: Continuity and change in patterns of support', *Irish Political Studies*, 34(4): pp. 507-529.

Society of Actuaries in Ireland (2011), 'Pensions Levy – Practicalities and Complexities', *The Society of Actuaries in Ireland Newsletter*, September 2011: pp. 10-11.

Stephanou, C. (2011), 'Big banks in small countries: The case of Cyprus', *Cyprus Economic Policy Review* 5(1): pp. 3-21.

Stewart, J. (2011), 'New development: Public sector pay and pensions in Ireland and the financial crisis', *Public Money & Management* 31(3): pp. 223-228.

Theodore, J., and Theodore, J. (2016), *Cyprus and the financial crisis: the controversial bailout and what it means for the Eurozone*, Springer.

Trannoy, A. (2015). 'Much to do about nothing: The Solidarity tax on wealth (ISF) in France', in *Taxing Wealth, Present, Past and Future* (ed. C. Astarita), European Commission, July 2015: pp. 32-37.

Tristram, F. (2005), *Une fiscalité pour la croissance: la direction générale des impôts et la politique fiscale en France de 1948 à la fin des années 1960*, Comité pour l'Histoire économique et financière.

Wade, J. (2011), 'Noonan defends pension levy in face of 'hysterical' criticism', TheJournal.ie, 11 May 2011. Available at: <https://www.thejournal.ie/noonan-defends-pension-levy-in-face-of-hysterical-criticism-134613-May2011/> [accessed 29 July 2020].

Weaver, C. and Stothard, M. (2013), 'Cyprus imposes strict capital controls', *Financial Times*, 27 March 2013.

Wenzel, R. (2008), *Die grosse Verschiebung?: das Ringen um den Lastenausgleich im Nachkriegsdeutschland von den ersten Vorarbeiten bis zur Verabschiedung des Gesetzes 1952*, Steiner.z

Wieland, J. (2003), *Rechtliche Rahmenbedingungen für eine Wiedereinführung der Vermögenssteuer*. Available at: https://wipo.verdi.de/++file++53a83626aa698e68ab0022d3/download/rechtliche_rahmenbedingungen_fuer_eine_wiedereinfuehrung_der_vermoegensteuer.pdf [accessed 22 September 2020].

Williams, J. (2012), 'Ireland: A levy too far', Investment and Pensions Europe, February 2012. Available at: <https://www.ipe.com/ireland-a-levy-too-far/43859.article> [accessed 29 July 2020].

Williams, J. (2013), 'Ireland to introduce replacement pensions levy', Investment and Pensions Europe, 16 October 2013. Available at: <https://www.ipe.com/main-navigation/ireland-to-introduce-replacement-pensions-levy/10000201.article> [accessed 29 July 2020].