DOI: 10.1111/1475-5890.12281

Fiscal Studies
The Journal of Applied Public Economics
IFS Institute for Fiscal Studies

ORIGINAL ARTICLE

Liquidity issues: solutions for the asset rich, cash poor

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Abstract
Liquidity concerns are oft raised when considering wealth taxes, yet the issue has received scant attention in the extant literature. In this paper we provide the first comprehensive review of the liquidity problem. Our aims are to estimate the scale of the problem, to explore the extent to which archetypal examples are at risk of experiencing low liquidity, and to review the policy options to reduce the scale and impact of liquidity challenges. Using data from Round 6 of the Wealth and Assets Survey, we demonstrate that the scale of the problem depends largely on conceptual and design issues. We find that farmers and business owners are commonly over-represented in the low-liquidity group, but there is little evidence to support the typical narrative surrounding single pensioners. Finally, we conclude our review with a number of preferred solutions to address liquidity issues, including recognising that a net wealth tax can be paid out of income or by sale of assets, by withholding tax (e.g. by pension providers), by borrowing/financing, deferred payment arrangements and, possibly in limited circumstances, payment in specie.

KEYWORDS
business assets, liquidity, net wealth tax, pension assets, property, tax policy

JEL CLASSIFICATION
D14, G51, H23

1 | INTRODUCTION

This paper considers liquidity issues under a net wealth tax. The imposition of a tax on static wealth can lead to difficulties for taxpayers in paying the tax, especially if the assets upon which the tax is levied do not generate sufficient income, cannot be easily turned into cash, or where it may be difficult or undesirable for taxpayers to dispose of the assets in order to pay the tax. However, Sandford, Willis and Ironside (1975, p.4) make the very important point that although it is sometimes thought that a wealth tax has to be paid out of wealth, wealth refers to the *base* not the *source*: 'it no more follows that a tax on wealth has to be paid from wealth than that a beer tax has to be paid from beer'. Taxpayers may well have ready access to other sources of cash, including general income, liquid assets and borrowing, to pay a wealth tax and some assets may be relatively easily and uncontroversially turned into cash to pay the tax (e.g. disposition of part of a portfolio of quoted securities). Thus, liquidity can be an issue under wealth taxes, but it is not a universal one.

Liquidity is most problematic where the taxpayer has valuable illiquid assets that do not generate income and the taxpayer does not have other readily available sources of liquid assets or sufficient income from which to pay the tax. Such taxpayers are sometimes referred to in the literature by the shorthand terms 'asset rich, cash poor' or 'the wealthy hand-to-mouth'; see, for example, OECD (2018, p. 64) and Kaplan, Violante and Weidner (2014). An emotive and stereotypical example of an asset-rich, cash-poor individual sometimes used in the literature is the Devon widow, living alone in the former family home and receiving only a small pension income.[1] The general issue, however, is one of someone with high property wealth and low income, and this does not need to be confined to someone who has been widowed, nor does it matter whether it is a family home. Other asset-rich, cash-poor taxpayers may have large pension pots or valuable business assets/agricultural property but relatively small income.

The OECD maintains liquidity issues are 'one of the biggest concerns related to net wealth taxes',[2] yet they do not attempt to estimate the scale of the problem. Furthermore, despite general agreement that liquidity concerns present a challenge for the implementation of wealth taxes, definitions of the 'asset rich, cash poor' remain generalised. The OECD focuses its discussion on individuals who have 'limited realised income' with which to pay any net wealth tax liability, expressing particular concern for those who would need to sell assets in order to meet their obligations;[3] the availability of liquid assets is a side issue. Whereas, the definition of Kaplan et al. (2014) of the 'wealthy hand-to-mouth' focuses on households that have sizeable illiquid assets but have very little or no liquid wealth – all disposable income is consumed every period. Thus, there is no current consensus on how the scale of the liquidity issue might be measured.

Liquidity is generally given much less attention in the literature compared with the other difficulties typically associated with wealth taxes. The final recommendations of both the Mirrlees Review[4] and Thuryoni (2003, p. 329) highlight the problem of unevenness of application of wealth taxes but focus on valuation difficulties and do not mention liquidity specifically. Evans et al. (2017, p. 104) devote a chapter to capital or wealth taxes but also focus on the problems of disclosure and valuation. Peacock (1963, pp. 398–99) and Atkinson (1972, p. 158) considered the administrative problems with wealth taxes, but both focused on valuation, assessment and evasion. Sandford et al. (1975) devote entire chapters to some practical issues with wealth taxes including valuation – but not to liquidity. Instead, most of their discussion of liquidity is found in their chapters dealing with particular types of assets that are the most challenging for a wealth tax for a variety of reasons. The Labour Chancellor Denis Healey's 1974 Green Paper on Wealth Tax adopted a similar approach.[5] The Meade Committee, which undertook a review of the tax system in 1978, pointedly avoided discussing many of the detailed problems with wealth taxes, referring readers to other literature, such as Sandford et al. (1975).[6] Boadway, Chamberlain and Emmerson (2010, p. 783) raise liquidity issues at points. Liquidity issues are highlighted to some extent in the OECD's 2018 paper on wealth taxes, and that paper provides helpful examples of current and historical practice under European wealth taxes that have the effect of lessening liquidity concerns.

[1] See, e.g., McLean (2018, p. 196).

[2] OECD, 2018, p. 89.

[3] OECD, 2018, p. 64.

[4] Mirrlees et al., 2011, p. 347.

[5] HMSO, 1974.

[6] Meade, 1978, p. 351, fn. 1.

It should also be noted that an argument can be made that liquidity is neither a long-term nor a serious concern. Ultimately, all assets are liquefiable in the medium term, and in fact forcing taxpayers to dispose of assets to pay the tax may be a positive in that it provides an incentive to invest in productive assets rather than non-productive assets.[7] Further, Saez and Zucman (2019a) dispute liquidity concerns of the very rich as put forward in bad faith and unable to withstand scrutiny, or argue that the taxpayers have organised their own illiquidity by choosing to realise little income to avoid the income tax. McCaffery (2017, p. 306) takes a similar position on this deliberate or engineered liquidity, arguing that, in the United States, the very wealthy organise their affairs to minimise their tax burden by buying and holding assets that appreciate without producing taxable cash flows (e.g. main homes, holding assets in corporate form), borrow to finance their lifestyle, and hold on to their assets until death to benefit from the tax-free uplift on death for capital assets (which the UK also has).

This paper begins with an estimate of the scale of the problem in Great Britain, before considering the extent to which the archetypal examples of who is likely to experience liquidity issues is supported by the evidence. Next, the paper turns to the main administrative concerns with liquidity posed by wealth taxes. The focus is on asset-rich, cash-poor taxpayers and potentially vulnerable asset holders from a liquidity perspective as identified in our analysis and the existing literature. It then considers a range of possible solutions to manage these liquidity concerns. We include examples of how liquidity concerns have been addressed in current and past wealth taxes, and in particular European wealth taxes, drawing on the International Background Papers listed at the end of this paper and other sources. In considering international experience, it is worth bearing in mind the convenient shorthand distinction that Sandford et al. (1975, p. 14) drew between *substitutive* wealth taxes, which can be met from disposable income after allowing for reasonable consumption requirements, and *additive* wealth taxes, which cannot be so met and may require the disposition of assets to pay. The authors describe European wealth taxes at the time they were writing as all substitutive;[8] this appears still to be the case today, but of course it does not need to be the form that a UK net wealth tax takes.

Annual wealth taxes also have featured in the tax systems of some non-European countries including Columbia, India, Pakistan, Sri Lanka and Uruguay.[9] Reference is made below to features of current non-European wealth taxes in Algeria, Argentina, Columbia, Uruguay and Venezuela, using information provided in the IBFD Country Tax Guides.[10] This paper also draws on experience with related taxes, such as the UK's inheritance tax (IHT), capital gains tax (CGT) and annual tax on enveloped dwellings (ATED), as these can impose significant amounts of tax by reference to the value of assets and thus raise similar liquidity concerns.

2 | WHAT IS THE SCALE OF THE LIQUIDITY PROBLEM?

Two primary issues complicate measurement of the liquidity problem. First, the problem has not been consistently conceptualised; different definitions of who is at risk of experiencing liquidity challenges will result in different estimates of the scale of the problem. Second, design issues, such as the threshold at which the tax applies, the tax rate, the tax unit, the definition of wealth subject to the tax and the valuation of relevant assets and liabilities, all of which are currently unknowns in the context of a UK net wealth tax, will further affect the scale of the liquidity problem.

[7] Guvenen et al., 2019; Sandford et al., 1975, p. 8.

[8] Sandford et al., 1975, p. 31.

[9] Atkinson, 1972, p. 109.

[10] See IBFD Country Tax Guides, Individual Taxation, Taxes on Capital, Net Wealth Tax, on the IBFD Tax Research Platform at https://www.ibfd.org/IBFD-Tax-Portal/About-Tax-Research-Platform.

We use data from Round 6 of the Wealth and Assets Survey (WAS) conducted by the Office for National Statistics (ONS)[11] to illuminate these issues and estimate the scale of the liquidity problem in the UK. Consistent with the recommendations in the Final Report of the Wealth Tax Commission,[12] we assume that the tax applies to an individual's total net wealth, including their pension, property, business, financial and any physical assets[13] valued at greater than £3,000 each, less any liabilities, with the exception of student loans from the Student Loans Company; except where stated otherwise. Any jointly owned assets are allocated to individuals following the methodology of ONS (2020).[14] We assume that an individual's net financial assets excluding endowments[15] are liquid, and that all pensions, property, business, physical assets and endowments are illiquid. Children aged under 16 have been excluded from the analysis, due to the complex design issues regarding child wealth, and because their assets primarily fall into liquid categories; thus, their assets are less of a concern from a liquidity perspective.

There are three noteworthy limitations to this analysis. First, it is widely acknowledged that household surveys tend to under-represent the upper tail of the distribution.[16] Advani, Bangham and Leslie (2021) have further estimated the missing wealth at the top; however, this paper relies on the relationship between an individual's income and their wealth, and, as such, we use the unadjusted data. Second, the data are based on individuals' self-reported valuations of their assets and liabilities, which may vary considerably due to the valuation method[17] required should a net wealth tax be introduced. Third, the analysis is based on a snapshot in time (2016–18); individuals' income and wealth are not fixed, and will likely differ at different points in time. Furthermore, movements in the wider economy could systematically influence the number of individuals likely to experience liquidity issues.

2.1 | Conceptual issues in the measurement of the liquidity problem

There is seeming general agreement that those with insufficient disposable income or liquid resources to meet tax obligations are likely to suffer from liquidity problems. However, the measurement of sufficiency or insufficiency remains undetermined. Some consider that the liquidity problem inevitably will lead to taxpayers being forced to sell assets to pay the tax, as is tacitly implied in the report by the OECD (2018, p. 64). This seems to presume that the sale of assets to meet tax obligations is not desirable; however, this is not a universal opinion, and is a subject upon which the general public are divided.[18] Furthermore, if one accepts that selling assets to meet tax obligations is not necessarily undesirable, then there should similarly be little concern over taxpayers running down their liquid assets to pay tax obligations, even though that might later indirectly force the sale of illiquid assets. Different beliefs on this will likely result in different approaches to estimating the liquidity problem.

If selling valuable assets is a cause for concern, and the tax is an annual wealth tax, then it is logical to link liquidity solely to income, because a net wealth tax could be seen as an additional annual outflow. However, if selling assets is not considered to be a problem, or if it is a one-off wealth tax, then it could be argued that liquidity should be estimated in relation to the availability of liquid assets, plus any disposable income.

[11] ONS, 2020.

[12] Advani et al., 2020.

[13] Physical assets include collectables, valuables, vehicles and personal number plates, with a value exceeding £3,000.

[14] To summarise, jointly owned main residences are shared equally between the joint householders, and primary residence physical assets are shared between all resident adults; for more details, see ONS (2020), 'WAS: Round 6 Derived Variable Specifications – Individual Wealth'.

[15] Endowments cannot commonly be accessed prior to maturity without substantial penalty.

[16] Alvaredo, Atkinson and Morelli, 2016; Davies, Lluberas and Shorrocks, 2017; Advani, Bangham and Leslie, 2021.

[17] Readers should refer to Daly et al. (2021) for details of the methods of valuation and issues with taxpayers self-reporting valuation.

[18] Rowlingson, Sood and Tu, 2021.

Additionally, many estimates of financial well-being[19] consider the economic position of the household, in order to assess the financial well-being of the individuals living within the household. In this instance, even where the tax unit is the individual, one might wish to assess whether the household has a liquidity issue in order to assess whether the adults living in that household are suffering from a liquidity problem or not. For example, secondary earners in the household may have a net wealth tax liability that appears disproportionate to their personal income or liquid assets, yet the household has sufficient income or liquid assets to pay any net wealth tax liability. Whereas, high-income individuals may have sufficient income or liquid assets to pay their personal net wealth tax liability, but the household may have insufficient funds to meet the household's liability. Thus, different individuals may be identified as likely to experience a liquidity problem pending the method of analysis.

We analyse the scale of the liquidity problem with a number of definitions to illuminate the differences between approaches. To begin, it is useful to put design issues to one side. As such, here we use a tax rate of 1 per cent, and a threshold of £500,000; these are the public's preferred rate and threshold for tax.[20] Later in this paper, we vary the tax rate and threshold when testing the scale of the liquidity problem in the UK.

First, we estimate the number of people who are at risk of experiencing liquidity difficulties, by estimating the number of people for whom the tax due exceeds 10 per cent of their income. Second, we estimate the number of people for whom the tax exceeds 10 per cent of their income plus 10 per cent of their liquid assets. Third, we estimate the number of individuals for whom the tax due exceeds both 10 per cent of their income plus 100 per cent of their liquid assets. This methodology ultimately assumes that the sale of assets is acceptable, if not welcome; one need not be concerned with the fact that an individual is unable to pay for maintenance or upkeep of a property, or other valued asset, if one accepts the sale of the asset may be required. Fourth, we use the third methodology but exclude those who have more than £100,000 net income, post net wealth tax. Finally, whilst we continue to assume that the individual is the taxable unit – as recommended in Advani, Chamberlain and Summers (2020, pp. 44 and 94) – we use the household's liquidity position to determine whether individuals are likely to experience liquidity difficulties. Here, we estimate the number of people living in households where the tax due for all adult household members exceeds 10 per cent of the households' net income plus 10 per cent of their liquid assets. The results are shown in Figure 1.

The different definitions result in substantially different estimates of the scale of the liquidity problem. Based on these assumptions, for a striking 4.9 million individuals or 59 per cent of the potential taxpayers, the tax due would exceed 10 per cent of their income. For 1.5 million individuals or 18 per cent of potential taxpayers, the tax due exceeds 10 per cent of their income plus 10 per cent of their liquid assets. Whilst for 0.8 million individuals or 9 per cent of potential taxpayers the tax due would exceed 10 per cent of their income and all their liquid assets – suggesting that, were this an annual charge, they would likely need to find alternative methods of funding their payments, be it additional debt, or the sale of assets. Excluding individuals who have more than £100,000 net income after the net wealth tax has been applied makes very little difference to this estimate.

Finally, if we consider the household to be the relevant unit of analysis for economic well-being, for 1.9 million individuals or 14 per cent of adults living in a household with a wealth tax liability, the tax due exceeds 10 per cent of their household net income plus 10 per cent of their liquid assets. Notably, substantially more adults live in a household with a net wealth tax liability than individuals who personally have a net wealth tax liability; thus, the number of adults estimated to experience liquidity challenges is greater but the proportion of 'potential taxpayers'[21] is smaller.

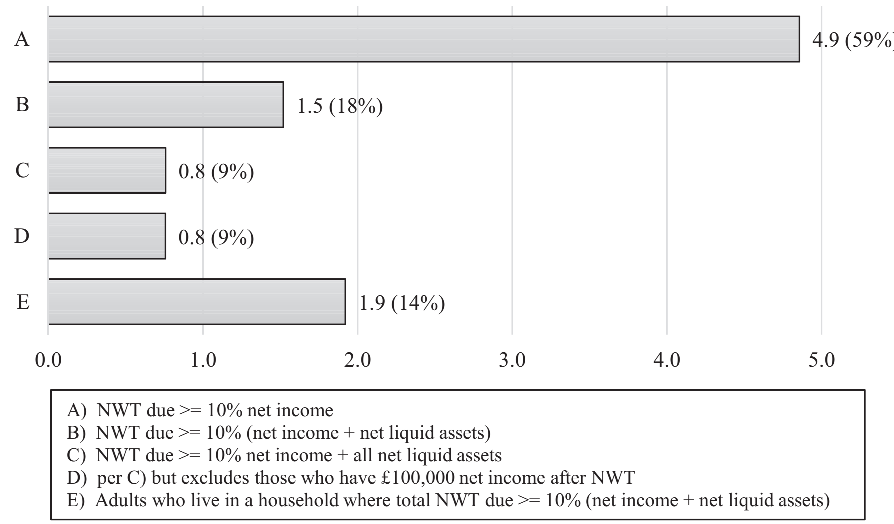
There is no correct approach to measure the scale of the liquidity problem, so the most useful method must be negotiated. It is likely that different individuals will have different views on how the

[19] See the Department for Work and Pensions (2021) Households below average income estimates or OECD's (2021) poverty and inequality measures.

[20] Rowlingson et al., 2021.

[21] Potential taxpayers under Method E is all adults living within a household with a Net Wealth Tax liability.

FIGURE 1 Number and proportion of potential taxpayers likely to experience liquidity problems using different conceptual approaches (millions)



Note: Constructed using data on adults' income and wealth in 2016–18. Weighted estimates of the number and proportion of potential taxpayers likely to experience liquidity problems under a net wealth tax payable at 1 per cent of total net assets over £500,000, using different conceptual approaches to measure liquidity.
Source: Authors' own calculations, WAS (ONS, 2020).

problem should be measured. Furthermore, an individual's views will likely be influenced by the tax design. For example, people may be less sympathetic to the forced sale of assets if the threshold is set at £5 million, than if it is set at £500,000.

As with all threshold-based estimates of economic well-being, individuals a penny over or a penny under the threshold are not in dissimilar positions, yet they are classified differently. Furthermore, the thresholds we have set for identifying the liquidity-constrained are arbitrary; an additional 10 per cent of income tax would likely be met with widespread disapproval, yet we assume that individuals could use up to 10 per cent of their income to fund wealth tax payments. Reducing this, to 5 per cent of income, or any other lower fraction of income, increases the number of individuals likely to experience liquidity challenges.

In the absence of an agreed approach, it would be informative to policymakers to use multiple methodologies in order to assess the scale of the liquidity risk from multiple perspectives. Here, we use Method B, where the tax due exceeds 10 per cent of an individual's net income plus 10 per cent of their net liquid assets, and Method E, where the tax due exceeds 10 per cent of the net income of the household in which the individual resides and 10 per cent of their household's net liquid assets, to estimate the scale of the problem under different tax designs. We use these methods as they are methodologically the most diverse; it is fairly easy to recognise that fewer individuals would be deemed to be at risk of experiencing liquidity difficulties if we assume that they are able to use a greater percentage of their income or liquid assets to fund their tax burden, but it is difficult to predict from the individual estimates how many adults live in liquidity-constrained households.

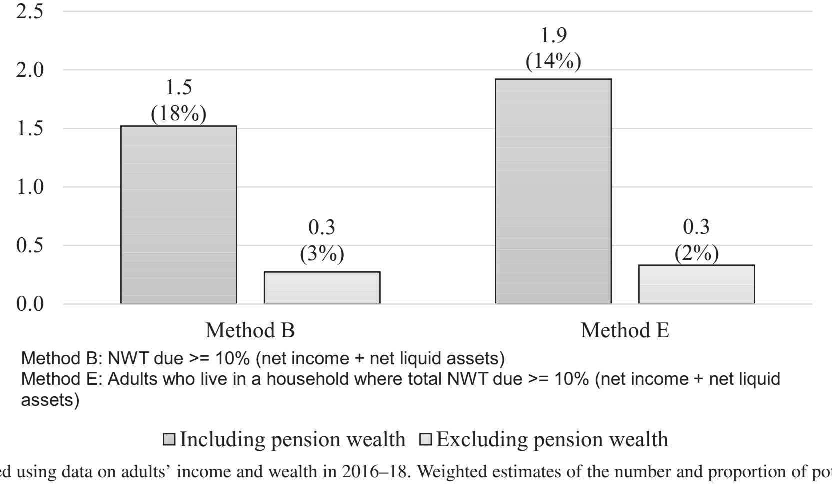
2.2 | The scale of the liquidity problem in the UK

Design issues, such as the tax unit, the rate of tax, the threshold at which the tax applies and the definition of wealth to be subject to tax, will all affect the scale of the liquidity problem. In the context of the UK, these remain unknowns. We now consider each of the design elements, with a view to offering our best estimate of the scale of the problem given a number of alternative tax designs.

We first consider the definition of wealth to be subject to the tax. Throughout our analysis, we assume that an individual's total net worth is subject to the tax, and that all assets are treated equally. However, the inclusion of pensions is contentious and, in our view, requires special consideration. As described further in the evidence paper on the tax base by Chamberlain (2021), and by Daly, Hughson and Loutzenhiser (2021) in their paper on valuation, pension rights are typically fully exempted from existing (and historical) European wealth taxes.[22] As Evans et al. (2017, p. 117) put it: '[i]n practice no country includes the value of pension rights within an [annual wealth tax] base'. The 1974 Green Paper provided a helpful and succinct explanation for exemption – pension rights could be viewed as essentially deferred pay that will eventually generate income subject to income tax and, further, that the UK (and most other countries) gives fiscal encouragement to savings for retirement, including income tax and capital gains tax relief, and taxing pension rights under wealth tax would run counter to this overall tax policy.[23] We also note that from 2018, the UK legislated automatic enrolment in workplace pensions. Clearly there has been a long-standing political view, in the UK and elsewhere, to encourage pension savings and to treat pensions more favourably for tax purposes than other forms of savings.

Offering exemptions for particular asset classes both contravenes the principal of horizontal equity and, in the case of pensions, substantially reduces the tax base. However, as we later discuss, there are options to mitigate the liquidity risk and either include pensions in the wealth tax base or levy a separate tax on pensions. Assuming for present purposes either that pensions are exempt or that there is specific policy in place to mitigate liquidity issues for pension assets, it is arguably reasonable to exclude pensions from the estimation of the liquidity problem. As Figure 2 shows, doing so substantially reduces the number of individuals estimated to be at risk of experiencing liquidity challenges, under either methodology. All other assumptions remain unchanged.

FIGURE 2 Number and proportion of taxpayers likely to experience liquidity problems including and excluding pension wealth (millions)



Note: Constructed using data on adults' income and wealth in 2016–18. Weighted estimates of the number and proportion of potential taxpayers likely to experience liquidity problems under a net wealth tax payable at 1 per cent of total net assets over £500,000, but where there is specific policy in place to mitigate liquidity issues for pension assets.
Source: Authors' own calculations, WAS (ONS, 2020).

[22] See also OECD (2018, p. 83).

[23] HMSO, 1974, p. 13.

TABLE 1 Number of potential taxpayers likely to experience liquidity difficulties, at various tax thresholds and rates (millions)

	Method B					Method E				
	£250k	**£500k**	**£1m**	**£2m**	**£5m**	**£250k**	**£500k**	**£1m**	**£2m**	**£5m**
0.2%	0.13	0.06	0.04	0.02	0.01	0.14	0.08	0.03	0.02	0.02
0.5%	0.33	0.14	0.07	0.04	0.02	0.34	0.18	0.09	0.04	0.02
1.0%	0.69	0.27	0.11	0.05	0.02	0.69	0.33	0.17	0.08	0.04
2.5%	1.75	0.59	0.20	0.07	0.02	2.04	0.75	0.29	0.11	0.04

Note: Constructed using data on adults' income and wealth in 2016–18. Weighted estimates of the number and proportion of potential taxpayers likely to experience liquidity problems under a net wealth tax payable at various rates and thresholds, if pensions are exempt or specific policy is in place to mitigate liquidity risks. Under Method B, the 'potential taxpayers' are all adults with net wealth exceeding the threshold. Under Method E, it is all adults who live in a household where there is a net wealth tax liability.
Source: Authors' own calculations, WAS (ONS, 2020).

TABLE 2 Proportion of potential taxpayers likely to experience liquidity difficulties, at various tax thresholds and rate

	Method B					Method E				
	£250k	**£500k**	**£1m**	**£2m**	**£5m**	**£250k**	**£500k**	**£1m**	**£2m**	**£5m**
0.2%	0.9%	0.8%	1.2%	2.9%	14.8%	0.6%	0.6%	0.6%	2.0%	14.4%
0.5%	2.1%	1.7%	2.3%	5.7%	19.7%	1.4%	1.3%	1.6%	3.5%	14.4%
1.0%	4.5%	3.3%	3.8%	7.6%	25.5%	2.9%	2.4%	3.0%	6.9%	25.5%
2.5%	11.3%	7.2%	6.6%	11.8%	28.4%	8.7%	5.4%	5.1%	9.2%	28.0%

Note: See note to Table 1.
Source: Authors' own calculations, WAS (ONS, 2020).

Given the level of controversy surrounding the inclusion of pension wealth in any net wealth tax, we assume either that there would be specific policy to deal with pensions (discussed further below), or that pension wealth would be exempted from the tax. Thus, in order to estimate the scale of the issue under different rates and thresholds, we exclude pension wealth.

In line with (EP1) we test the scale of the problem at tax thresholds of £250,000, £500,000, £1 million, £2 million and £5 million, and at tax rates of 0.2 per cent, 0.5 per cent, 1 per cent and 2.5 per cent. Tables 1 and 2 show the results.

Unsurprisingly, more individuals experience liquidity problems at higher tax rates than at lower tax rates. Equally unsurprisingly, more individuals experience liquidity problems at lower tax thresholds than at higher tax thresholds. Thus, the scale of the liquidity problem will move in the same direction as the revenue generated by any net wealth tax; the greater the revenue ambitions, the greater the liquidity problem.[24]

Under the thresholds and rates we use here, the issue is greatest when the threshold is low and the rate is high. Specifically, at a tax threshold of £250,000 and a rate of 2.5 per cent, 1.75 million adults are at risk of experiencing liquidity problems should a net wealth tax be implemented at this level, and 2.04 million adults live in a household that is at risk of experiencing liquidity difficulties.

At the opposite end of the scale at a threshold of £5 million and a tax rate of 0.2 per cent, just 10,000 adults are likely to experience liquidity problems, and 20,000 adults live in households that are likely to experience liquidity problems.

Perhaps counterintuitively, all else equal, higher wealth individuals are more likely to suffer from low liquidity at lower tax thresholds than at higher ones, because a greater proportion of their wealth is taxable. To further demonstrate this point, an individual with net wealth of £5 million would have

[24] Refer to Advani, Hughson and Tarrant (2021) for revenue analysis

to pay tax on £4.75 million if the threshold were set at £250,000, but no tax at all if the threshold were set at £5 million. Just as an individual with net wealth of £100 million would be more likely to suffer liquidity problems if the threshold were set at £5 million than they would if the threshold were set at £50 million. However, it is worth noting that the difference between the thresholds that we analyse here may be of little consequence to those with very high wealth. As the amount of wealth over the threshold varies with the threshold, an individual with £10 million wealth may experience liquidity problems, at none, some or all of the thresholds.

Table 1 can also be used to consider the depth of the liquidity problem, as the individuals who would be likely to experience liquidity problems at a tax rate of just 0.2 per cent would be at the greatest risk of experiencing liquidity problems. Further, it is also mathematically equal for the number of individuals considered at risk at a tax rate of just 0.2 per cent to be the same number of individuals who would be considered at risk if our cut-off for considering who was at risk was where the tax due exceeded 2 per cent of their net income plus 2 per cent of their liquid assets, and the tax rate were 1 per cent.

Lastly, these estimates all assume that a net wealth tax would be imposed on individuals, and that any joint wealth is shared equally between the relevant individuals. It is, however, possible that the tax could be imposed on the household, family, married couple, or couples whether co-habiting or married, as the taxable unit. The decision regarding the threshold is then more complicated; should couples or larger family units have a higher threshold? Even if the threshold were scaled such that a three-adult household had a threshold three times the threshold of a single adult, this could still vary the total tax due for the household, compared to the individual-based analysis. This is particularly true where one or two of the adults own much more wealth than the other(s).

Ultimately, the scale of the liquidity problem depends on both how liquidity problems are conceptualised and how a net wealth tax is designed. Here, we have attempted to highlight the effect of these decisions. Concerns regarding liquidity are not unfounded, but they may be inflated in the absence of serious attempts to measure the scale of the problem.

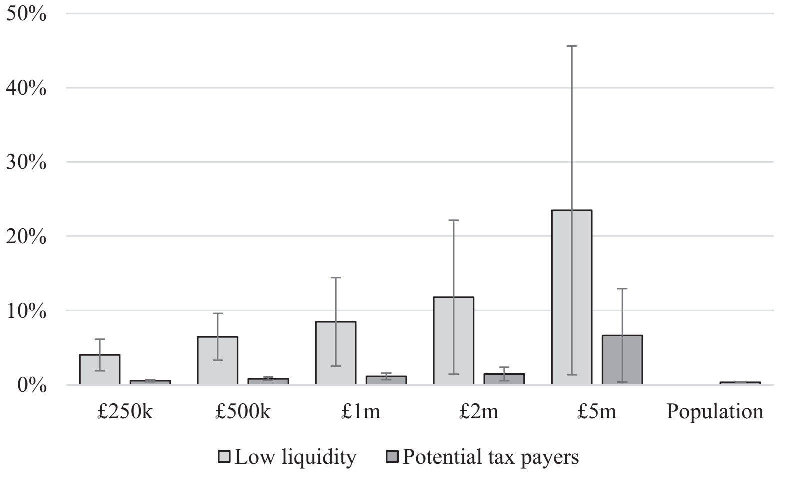
3 | WHO ARE THE 'ASSET RICH, CASH POOR'?

Here, we move on to consider the demographics of the 'asset rich, cash poor'. We are particularly interested in whether we are able to dispel, or confirm, concerns regarding farmers, business owners and single pensioners. This is not to say that there are no other groups who may be particularly vulnerable to liquidity issues, it is simply that these are the archetypal and emotive examples often raised in discussions regarding wealth taxation.

We aim to make farmers, business owners and single pensioners mutually exclusive groups; thus, we distinguish farmers by reference to their National Statistics Socio-Economic Classification (NS-SEC), as small agricultural employers, or agricultural own account workers. Business owners are less easily identifiable in the data. We are concerned about business owners who have substantial business assets, which could make them higher risk for liquidity challenges. Thus, we include any individuals who have net business assets worth more than £100,000 and who are not farmers. Single pensioners are identified as individuals who live alone, are over the state pension age (SPA), and are neither farmers nor business owners. It is worth noting that we have tested several definitions of business owners, with little effect on the overall trends we observe below.

We present the proportion of individuals likely to experience liquidity problems when a 1 per cent tax is charged on an individual's total net worth, compared to the proportions of individuals who will be subject to the tax, and the population proportion. We present the results using Method B where the tax due exceeds 10 per cent of the individual's income plus 10 per cent of their liquid assets, and we assume that there is specific policy in place to mitigate liquidity problems associated with pensions. We have also completed the same analysis using Method E, and whilst the exact estimates vary slightly, the overall trends and conclusions do not.

FIGURE 3 Proportion of adults who are farmers, at different tax thresholds



Note: Constructed using data on adults' income and wealth in 2016–18. Weighted estimates of the proportion of farmers, identified by their NS-SEC, amongst the low-liquidity group, potential taxpayers and population.
Source: Authors' own calculations, WAS (ONS, 2020).

3.1 | Farmers

As described in some detail in Clark and Fu (2020), liquidity is a particularly important issue for the agricultural sector. The authors highlight recent survey evidence indicating that roughly 20 per cent of farms operate at a loss and, further, that cash flow and borrowing levels are a major concern across the sector.

Figure 3 shows the proportion of adults who are farmers in the low-liquidity group, amongst the potential taxpayers and in the population, at different tax thresholds. At all thresholds, our best estimate of the proportion of farmers in the low-liquidity group exceeds our best estimates for the proportion of potential taxpayers who are farmers, and the proportion of farmers in the population, suggesting that farmers are over-represented in low-liquidity groups. At thresholds of £1 million and below, we can be 95 per cent confident of this. Because of the small sample size at thresholds exceeding £1 million, we have only low confidence that farmers are over-represented in the low-liquidity group when compared with the potential taxpayers; however, we remain confident that they are over-represented when compared with the proportion of farmers we estimate in the population.

3.2 | Business owners

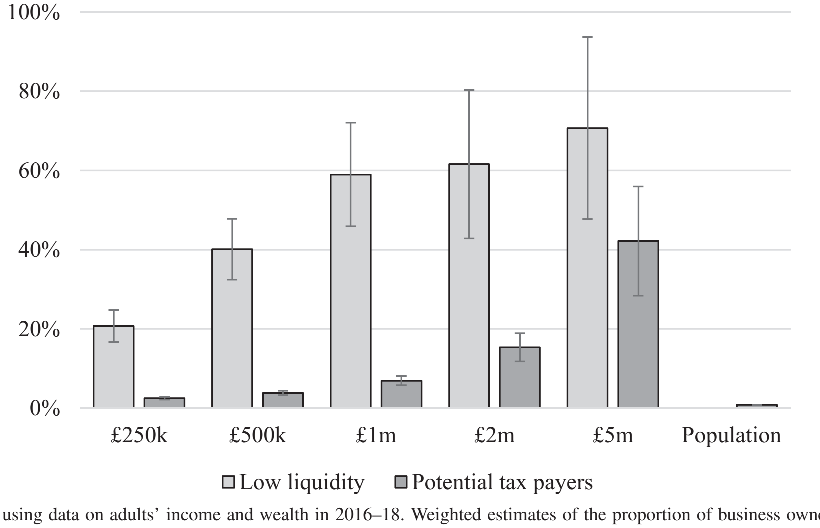
An annual net wealth tax on business assets could result in serious liquidity concerns for a taxpayer whose wealth derives to a large extent from a private business, particularly if that business is loss-making (e.g. a valuable but unprofitable start-up). The 1974 Green Paper highlighted potential liquidity issues for businesspersons, including marketable difficulties with small holdings, but recommended against exempting business assets from the tax base or offering specially favourable terms.[25] However, the Green Paper acknowledged that such taxation could be problematic and suggested the possibility of

[25] HMSO, 1974, p. 11.

a ceiling or deferred payment until the owner sells the assets, retires or dies.[26] These potential solutions are discussed below. The Meade Committee also recognised the difficulty encountered by owners of private businesses in raising the necessary funds to pay an annual wealth tax, but concluded that ‘the problem should be tackled by increasing the possibilities of raising outside funds rather than by special tax concession’.[27] Sandford et al. (1975, p. 215) argued that a substitutive wealth tax would present no particular problems for closely owned businesses, but the effect of an additive tax on efficient businesses requiring a high rate of investment could be particularly severe. They considered in some depth a number of solutions to the liquidity issues raised, including borrowing, deferral and steps that could be taken to make it easier to sell a stake in such businesses;[28] these are discussed further below. Boadway et al. (2010, p. 788) also highlight that access to capital markets may be limited for family companies, leading to liquidity concerns, but similarly suggest smoothing payments over a number of years with interest to mitigate such concerns.

Figure 4 shows the proportion of adults who are business owners in the low-liquidity group, amongst the potential taxpayers and in the population, at different tax thresholds. The proportion of individuals in the low-liquidity group that are identified as business owners increases as the tax threshold increases. At all thresholds, our best estimates suggest that business owners are over-represented in the low-liquidity group, compared to the proportion of potential taxpayers who are business owners, and to the proportion of business owners in the population. At thresholds of £2 million and below, we can be 95 per cent confident of this. Again, because of small sample sizes, we have only low confidence of our estimates at the £5 million threshold. That said, it is worth highlighting that business owners are estimated to represent an astonishing 71 per cent of the low-liquidity group at the £5 million threshold, whereas business owners with more than £100,000 net business assets represent just 1 per cent of the population.

FIGURE 4 Proportion of adults who are business owners, at different tax thresholds



Note: Constructed using data on adults’ income and wealth in 2016–18. Weighted estimates of the proportion of business owners amongst the low-liquidity group, potential taxpayers and population. Business owners are defined as individuals who have more than £100,000 net business assets and are not farmers.
Source: Authors’ own calculations, WAS (ONS, 2020)

[26] Ibid.

[27] Meade, 1978, pp. 358–59.

[28] Sandford et al., 1975, pp. 201–16.

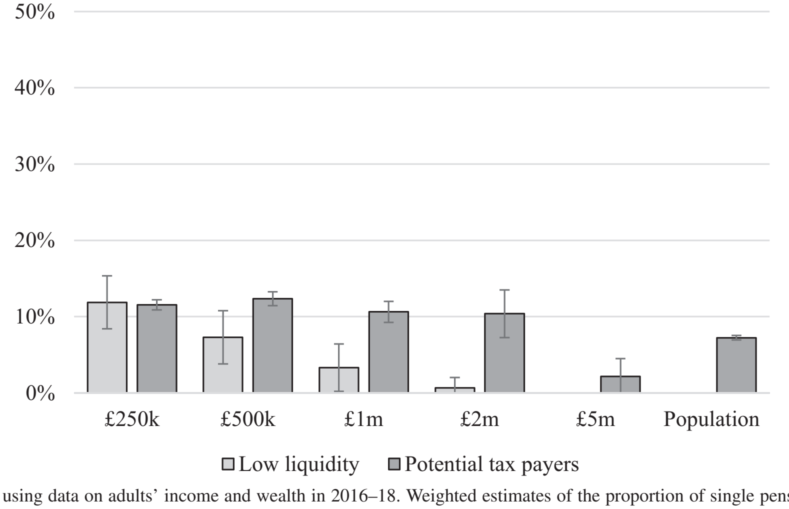
3.3 | Single pensioners

As noted in the literature and the economic analysis provided below, single pensioners are one group that may be particularly vulnerable to liquidity concerns under a net wealth tax. In addition, if an individual tax unit is chosen for the tax, this may give rise to liquidity issues for second earners who own a share of the primary residence. However, an argument can be made that the tax system should not be overly concerned with liquidity issues in respect of primary residences as it would encourage taxpayers to downsize and thus free up larger homes for larger families.

In European wealth taxes, tax relief for primary residences typically has taken the form of tax allowances or preferential valuation rules rather than outright exemption.[29] These forms of relief reduce the liquidity concern on taxing primary residences but do not eliminate it. According to the OECD, tax relief on primary residences in European wealth taxes is common and justified 'as a way to avoid burdening the middle class whose wealth mainly consists of the primary residence but also because owner-occupied housing does not generate the income needed to pay the tax'.[30] However, the OECD cautions that preferential wealth tax treatment for the primary residence could encourage shifting investment away from productive activities towards residential property, bearing in mind that homeownership is typically also encouraged in other parts of the tax system.[31]

In stark contrast to the trends seen for farmers and business owners, the proportion of single pensioners in the low-liquidity group decreases as the thresholds increase (refer to Figure 5). The evidence suggests that single pensioners are not over-represented in low-liquidity groups, compared to their proportion in the group of potential taxpayers.[32] Indeed, at higher thresholds, the evidence suggests that they are under-represented in the low-liquidity group compared to the group of potential

FIGURE 5 Proportion of adults who are single and over SPA, at different thresholds



Note: Constructed using data on adults' income and wealth in 2016–18. Weighted estimates of the proportion of single pensioners, who are not farmers or business owners, amongst the low-liquidity group, potential taxpayers and population.
Source: Authors' own calculations, WAS (ONS, 2020).

[29] See Daly et al. (2021).

[30] OECD, 2018, pp. 83–84.

[31] OECD, 2018, p. 83.

[32] Under Method E, single pensioners are over-represented in the low-liquidity group at the £250,000 threshold. This is the only point at which the general trends diverge between the two methods of analysis.

taxpayers. It should be remembered, however, that these calculations assume that there will be specific policy in place to mitigate liquidity problems associated with pensions. In the absence of this, these estimates would likely change substantially.

When analysed at the household level, single pensioners are over-represented in the low-liquidity group at the £250,000 threshold, but remain under-represented at higher thresholds.

In summary, there is evidence to suggest that business owners and farmers are over-represented in low-liquidity groups, at all thresholds analysed, albeit with low confidence at high thresholds. In contrast, the evidence regarding single pensioners contradicts the typical narrative, showing that where there are policies in place to mitigate liquidity risks associated with pensions, single pensioners are not over-represented in the low-liquidity group compared to the potential taxpayers. Albeit, noting the single difference in general trends, single pensioners are over-represented at the £250,000 threshold when analysed using Method E; they remain under-represented at higher thresholds.

4 | SOLUTIONS INCLUDING INTERNATIONAL EXPERIENCE WITH WEALTH TAXES AND ALSO EXPERIENCE WITH RELATED TAXES

A range of solutions to addressing liquidity concerns under a wealth tax, and particularly for the vulnerable groups identified in our analysis above, are considered next.

4.1 | Structural solutions, such as a high exemption threshold

As our analysis above shows, the scale of the liquidity problem will in part be dictated by the threshold at which the tax applies. Saez and Zucman (2019b, p. 29) advocate a high exemption threshold for wealth taxes, combined with a broad base, to avoid aggravating millionaires and focus instead on billionaires: '[t]he cleanest solution to liquidity issues is to increase the exemption thresholds so that mere millionaires are not liable'. Further, they see the fact that low exemption thresholds drag those with illiquid assets into the wealth tax as one reason for what they describe as the collective failure of such taxes in Europe.

We note that the exemption approach has been adopted to varying degrees in former and current European wealth taxes. In France (exemption threshold for singles or couples of €1.3 million) and Spain (couples also €1.3 million, approx. £1.1 million), the wealth tax only applies to the very wealthy. In Switzerland, however, tax exemption thresholds are comparatively low, ranging from CHF18,000 to CHF250,000 (approx. £14,000–157,000) across canons.[33] In Columbia, the exemption threshold is 5 billion Colombian peso (approx. £1 million), but in Argentina it is much lower at 2 million Argentinian peso (approx. £21,000).[34]

Other structural solutions that would reduce the number of taxpayers subject to tax and/or the tax charge on them include low tax rates and exemptions from the tax base for the most problematic assets from a liquidity (and valuation) perspective, for example, pensions (as discussed above) but also possibly primary residences, private businesses, agricultural property and art/heritage assets. In the case of the Irish wealth tax, the combination of a high general exemption threshold, low tax rates, a ceiling tied to total income and a raft of exemptions including full exemption for pension rights and primary residences plus partial relief for business and agricultural property meant that liquidity issues even in the case of these problematic asset types were unlikely to arise.[35]

[33] OECD, 2018, p.80 and Table 4.2; see IBFD Country Tax Guides.

[34] See IBFD Country Tax Guides.

[35] Sandford and Morrissey, 1985, pp. 133–37.

The counter argument is that high exemption thresholds and exemptions for particular assets are not well-targeted measures from a liquidity perspective and would significantly reduce the tax take and/or lead to higher tax rates. Exemptions for particular assets also raise horizontal equity and neutrality/substitution concerns, as previously noted above with respect to exempting pensions. Advani et al. (2020, pp. 48–54 and 97–98) are strongly in favour of a comprehensive base for both an annual and one-off wealth tax that applied to all assets without any exemptions for essentially these reasons.

4.2 | Ceilings on wealth tax tied to the taxpayer's income level and other tax liabilities

Ceilings or caps have been adopted on some wealth taxes on the basis that these prevent unreasonably high tax burdens and reduce liquidity concerns.[36] Those groups we have identified as potentially vulnerable to liquidity issues, namely farmers and business owners, could benefit from such caps. The 1974 Green Paper highlighted the possibility of a ceiling on a taxpayer's total liabilities, citing European examples including Sweden.[37] However, the Green Paper went on to note that 'such a ceiling would benefit most those whose assets produce a low income yield'.[38] Sandford et al. (1975, p. 72) highlighted that the Swedish ceiling provisions meant that two taxpayers with the same income from very different amounts of wealth may pay similar tax. In contrast, the other major case study used by Sandford et al., the German wealth tax, had no ceiling.[39]

Interestingly, ceiling provisions remain a common feature of European wealth taxes.[40] Typically, this involves setting a limit on the combined total of net wealth tax and personal income tax liability as a maximum share of income.[41] In France, the total French and foreign taxes are capped at 75 per cent of taxpayers' total income; any surplus over the cap is deducted from the wealth tax; see the IBFD country guide for France, Individual Taxation, para 4.1.1.[42] In Spain, the aggregate burden of income tax and net wealth tax due by a resident taxpayer may not exceed 60 per cent of their total taxable income and taxpayers may reduce their net wealth tax liability by any excess amount; see the IBFD country guide for Spain, Individual Taxation, para 5.1.[43] Notably, Spain also has a floor provision 'requiring that a minimum of 20 per cent of the net wealth tax liability, as originally calculated, be paid'.[44] The Irish wealth tax had a similar structure, with combined income tax and wealth tax limited to a ceiling of 80 per cent of total income but subject to a floor of 50 per cent of the wealth tax otherwise due.[45] In Switzerland, seven cantons have maximum limits based 'either on the net rent of net wealth, a limit of wealth tax payments as a share of total taxable income or a limit of wealth tax payments as a share of total net wealth'.[46]

[36] OECD, 2018, p. 88; Sandford et al., 1975, pp. 144–52.

[37] See HMSO (1974, p.10); for more details, see Du Rietz and Henrekson (2014).

[38] HMSO, 1974, p. 10.

[39] Sandford et al., 1975, p. 77.

[40] OECD, 2018, pp. 88–89.

[41] OECD, 2018, p. 88.

[42] Dupas, 2020; Tirard, 2020; OECD, 2018, p. 88.

[43] OECD, 2018, p. 88.

[44] Ramallo, 2020; OECD, 2018, p. 88.

[45] Sandford and Morrissey, 1985, p. 20.

[46] Eckert and Aebi, 2020; OECD, 2018, p. 88.

Example of cap plus floor, Spanish model

Toby has total taxable income of €100,000 and pays income tax of €25,000. Based on his net assets he also would be liable to €50,000 in wealth tax. However, the aggregate burden of income tax plus wealth tax is capped, and may not exceed 60 per cent of taxable income. 60 per cent of Toby's taxable income is €60,000. He has an income tax liability of €25,000, and thus his liability under the wealth tax cannot exceed (€60,000 − €25,000) €35,000. Further, a minimum of 20 per cent of the wealth tax as originally calculated must be paid. In Toby's case his reduced wealth tax liability of €35,000 exceeds the minimum (€50,000 × 20% = €10,000). Thus, his final liability to wealth tax is €35,000. Note that at Toby's income and income tax liability levels he would need a wealth tax liability as originally calculated of more than €175,000 before the minimum cap would come into play.

However, ceilings are another broad-brush, not especially well-targeted means to address liquidity concerns. As the OECD highlights, ceilings on wealth tax provide opportunities for avoidance, for example by encouraging taxpayers to artificially reduce income.[47] Advani et al. (2020, p. 63) 'firmly reject' an income-based cap on wealth tax liability. Similarly, Saez and Zucman (2019b, p. 28) reject such ceilings for defeating the main purpose of the wealth tax because 'the ultra rich can find ways to report very low income relative to their true wealth or true income'. Sandford et al. (1975, p. 152) also concluded that a ceiling is 'anomalous if a wealth tax is intended to be additive and has as its main objective the reduction of inequality of wealth' and, further, 'anomalous with a well-designed substitutive wealth tax, since it would conflict with the objectives of horizontal equity and efficiency in resource use'. However, they did think ceilings were worth considering in the particular case of closely held businesses[48] and agricultural property.[49]

4.3 | Caps tied to wealth itself

Alternatively, the wealth tax itself could provide for a cap or ceiling, on the overall base or on particular forms of wealth. Under such a cap, a taxpayer with wealth, say, above a ceiling of £50 million, would be taxed at a fixed maximum amount. Examples of such caps are currently found in the UK tax system and anecdotally are reported to be very popular with very wealthy taxpayers who are happy to pay the maximum tax if it means they do not have to disclose the actual value of their assets to HMRC and others. For example, a fixed ATED charge of £236,250 (for 2020–21) applies to all properties valued in excess of £20 million. Boadway et al. (2010, p. 807) highlight the possibility of using such bands in their discussion of property tax reform as 'one effective way of taxing high wealth individuals'.[50] In addition, non-UK domiciled individuals who are long-term UK residents can elect to use the remittance basis treatment for foreign income and gains by paying a fixed annual charge of £60,000 (for those resident in the UK for 12 years[51]).

Such a cap would reduce liquidity (and valuation, administration and privacy) concerns for the very wealthy, but can be criticised as inequitable and regressive.

[47] OECD, 2018, pp. 91–92.

[48] Sandford et al., 1975, pp. 208–12.

[49] Sandford et al., 1975, p. 229.

[50] See also Daly et al. (2021).

[51] See Finance Act 2008 Part 14, Chapter A1.

4.4 | Using income to pay wealth tax

As Sandford et al. highlighted with their 'beer tax' example, there is no reason that a net wealth tax on specific assets need be met from those assets – it could instead be paid from income. Further, in the case of asset-rich, cash-poor taxpayers, it may be possible for taxpayers to generate additional income to pay the tax from otherwise non-productive assets, for example taking in lodgers or short-term rentals of property including the main residence and second homes (note the UK provides a £7,500 rent-a-room income tax exemption[52])

In the particular case of business property, a net wealth tax levied on shares of a private company could be paid out of cash extracted from the company (dividends, salary, loan), if profits/assets were sufficient. This might discourage holding of excessive funds in companies to avoid a personal tax charge, i.e. treating them as money boxes given that the corporate tax rate is comparatively low (19 per cent versus higher rate of income tax of 40 per cent) and that National Insurance contributions (NICs) are not charged on dividends or capital gains.[53] Sandford et al. (1975) highlight that cash could be extracted from private companies to ease liquidity concerns under a net wealth tax by way of loan, salary or dividends, but each would give rise to a personal income tax charge. A decision on the choice of mechanism for extracting cash from a business may be complicated if there are multiple owners who may have different views on whether or how funds should be extracted in light of their personal (including tax) situation. These issues could be mitigated to some extent, however, for example, by using alphabet shares allowing dividends to be paid to some shareholders but not others or dividend waivers. The business may also have insufficient cash flow and/or may be subject to restrictions on the payment of dividends or other remuneration to shareholders imposed by creditors. Sandford et al. (1975, p. 207) recommended some way be devised to enable 'cash to be extracted from closely owned companies to pay wealth tax attributable to those companies without thereby incurring a personal tax charge'. However, this possibly runs the risk of exacerbating the use of businesses as money boxes, would introduce extra administrative complications into the operation of the wealth tax, raises equity concerns vis-à-vis other asset classes subject to the tax,[54] and also opens the door to arguments about alternative uses of extracted funds that may be similarly worthy of relief. Further, it should be emphasised that a wealth tax has a different purpose and a different base than an income tax. There is no objection in principle to levying both an income tax on business profits and a wealth tax on the value of the business itself any more than it is objectionable to levy income tax on earnings and VAT on spending the after-tax earnings or IHT on the value of a house purchased from after-tax earnings.[55]

4.5 | Withholding tax or levying a proxy tax on the assets, such as pension rights

Withholding tax from the assets is an attractive option for dealing with liquidity issues for certain asset types, particularly financial assets and some pensions. Prior to the introduction of the Personal Savings Allowance in 2016, UK deposit-taking financial institutions were required to withhold tax on interest income earned by individuals, for example, on bank accounts at the basic rate of income tax unless taxpayers were eligible for an exemption.[56] For wealth tax purposes, a similar withholding tax

[52] See Income Tax (trading and other income) Act (ITTOIA) 2005 s 786 et seq.

[53] See Mirrlees et al. (2011) and Adam and Miller (2020).

[54] For example, should withdrawals from pensions used to pay the tax get similar treatment, and what about rental income used to pay tax on an income-generating property?

[55] See Advani et al. (2020, p. 42), Mirrlees et al. (2011, pp. 364-65) and Summers (2021).

[56] See Loutzenhiser (2019, pp. 592–93).

mechanism could be used with respect to financial assets and possibly on companies for the wealth tax liability of shareholders in respect of their shares.

Although we excluded pensions in estimating the scale of the liquidity above, pension wealth is widely viewed as a significant component of personal wealth. Consequently, the possibility of imposing a withholding tax on pensions to minimise liquidity concerns is worth exploring in some depth. However, as pensions have been fully exempted from other wealth taxes, this of course means that liquidity issues with respect to pensions have not been a large concern in practice – another reason for exploring them in some depth here. As described in more detail by Chamberlain (2021) and Ramm and Eames (2020), in the UK, pension schemes take one of two main forms: defined contribution (DC) schemes and defined benefit (DB) schemes. However, there are also unregistered pensions and some taxpayers may participate in other forms of deferred compensation arrangements including stock options and restricted stock, which may, by their terms, restrict access to the assets for many years and/or are contingent on factors such as future performance.[57] Such arrangements also raise liquidity (and valuation) issues.

If pension rights are included in the base for a wealth tax, and in particular before the rights holder is able to draw on the funds, then it would be desirable from a liquidity perspective to provide either for the possibility of deferral of tax until retirement/the pension could be accessed – as recommended by Advani et al. (2020, p. 65) – or for the possibility of payment from the pension fund/trustees on the taxpayer's behalf, in light of the taxpayer's total wealth. In recommending deferral of tax on pensions until retirement/access, Advani et al. (2020, p. 65) estimated that almost three-quarters of a one-off wealth tax of 5 per cent on pensions would be paid within 15 years because most people with significant pension wealth are already near retirement age.

The latter option (i.e. a withholding tax paid by the pension fund/trustee on the taxpayer's behalf) would be easier (though likely not easy) to administer for DC plans. Ideally, it would require something equivalent to an entirely new form of PAYE code for each individual to enable the correct withholding/levy taking into account the individual's total wealth year-on-year including pensions. But this raises complex exchange of information problems between individual and pension provider and would likely be difficult to get right on a timely basis (owing to, for example, valuation difficulties with assets generally) and costly to administer.[58] A simpler option would be to have one or perhaps two standard withholding rates, possibly depending upon the value of the pension assets (e.g. 2 per cent below £250,000 and 3 per cent above that). Such a system has some similarities to the former interest income withholding tax regime mentioned earlier. Returning again to the beer tax point, it also is not necessary to attempt to withhold the exact amount of wealth tax due in respect of the pension assets. If an amount was over-withheld or under-withheld, this could be sorted out in the end-of-year form or return when the taxpayer is required to report on total wealth and remit total tax owing above tax already paid via instalments and withholdings (including on pension rights). If tax was withheld, presumably the amount withheld would need to be treated as a taxable withdrawal, subject to income tax. This would be similar to a business person taking funds from the business in the form of dividends or salary to pay tax on the business assets.

This leaves the more difficult treatment of DB pension rights, where the employee does not have an identifiable pot and the benefits to each pension holder will vary considerably depending upon how long that person lives post-retirement. An alternative to deferring the tax or levying a withholding tax on these schemes would be to impose a separate levy on the underlying pension fund as a proxy for taxing individuals' DB pension rights. Such a proxy tax could be extended to DC schemes and private pensions (e.g. self-invested personal pensions) if desired, for example to simplify the administration. An example of such a tax is the Pension Levy imposed by Ireland from 2011–15. Presumably a tax on the pension fund itself would not necessitate a tax charge on individual members as it would be a

[57] Mitha, 2020.

[58] See also Troup, Barnett and Bullock (2020).

separate tax from a wealth tax and levied on a different tax unit (i.e. the pension fund itself and not the members). Levying a charge on the DB pension fund likely would lead to a reduction in benefits payable under the scheme – which provides a rough parallel to tax withholding reducing individuals' pension pots under DC schemes – or possibly could be met through additional contributions from employers/employees to maintain the level of benefits. Anecdotally, it appears that many Irish pension funds subject to the Irish pension levy responded by reducing members' benefits entitlements. A pension levy is an imperfect substitute for taxing individuals on their DB pension rights, however, because it would not take account of each particular individual's total wealth and thus is a blunt instrument from the perspective of a tax on total wealth.

Such a proxy tax may have other knock-on effects as well. It is likely to be framed as a 'raid' on pensions, and in particular the pensions of public sector workers, which would be unpopular with those workers and politically challenging to implement – though if it was instituted along with a wealth tax that argument would have less force.[59] If the DB pension fund is in a deficit, as many funds are, then taxing that fund will further increase the deficit; this may well affect the long-term viability of such schemes. As noted by Ramm and Eames (2020), DB schemes are increasingly uncommon in the private sector because of their cost and the substantial risk of a shortfall in funds available given increasing life expectancy. Media reports suggest the COVID-19 pandemic has put even greater pressure on the viability of pension schemes and the Pension Protection Fund meant to step in to protect pensions in the event of a business insolvency. It is also worth noting that the scope for accumulating large DB pension pots under the public service pension schemes has been significantly reduced by the changes to civil service benefit entitlements introduced by the 2010 Coalition Government.[60] Levying a proxy tax on the accrued pension rights under DB pension schemes, either on the fund or on the taxpayer directly, would likely further reduce the attractiveness and long-term viability of such schemes.

In summary, pension rights raise significant liquidity (and other) concerns for a net wealth tax but such rights have generally been exempted from wealth taxes in practice and were exempted in our estimates of the scale of the liquidity problem. Further, the extent of wealth held in pensions was facilitated by previously generous tax relief, which has been increasingly withdrawn over the years and could be reduced even further to provide substantial funds to shore up the public finances post-pandemic, for example by restricting the income tax and NIC relief on pension contributions for high-income taxpayers in particular, reducing the annual and lifetime contribution limits, levying NICs on pension payments received, and abolishing the 25 per cent tax-free lump sum withdrawal. It appears possible to raise substantial revenue through such income tax changes – which would also reduce the significance of pension rights as a component of personal wealth. It should be emphasised that a wealth tax on the value of a pension has a different purpose and a different base than an income tax on pension receipts. As highlighted in the previous section, there is no objection in principle to levying multiple forms of taxes on different bases. If a wealth tax charge on pensions was pursued, a tax withholding mechanism on DC pension funds in combination with a proxy tax on DB pension funds could substantially address liquidity concerns, possibly in combination with the other solutions discussed in this paper and especially deferral of tax payable on pensions until retirement/the pension can be accessed, as advocated by Advani et al. (2020, pp. 64–66).

4.6 | Sale of asset to pay tax

A sale of assets to pay wealth tax in respect of those assets is another option to address liquidity concerns. With many assets, this is not especially problematic, such as a partial disposition of quoted

[59] See Rowlingson et al. (2021) and Perret (2021).

[60] Mitha, 2020.

securities. With other assets (selling a house, for example), this could be a very costly process, both for the financial cost (stamp duty in particular) but also the large time investment required. It would be extremely inefficient for such a family to have to move house purely to meet a wealth tax. But if the tax provides an incentive for single adults over SPA to downsize, this may not necessarily be objectionable. Another concern is that a tax-driven sale may mean the taxpayer sells assets at inopportune times or at a low 'fire sale' price, perhaps resulting in a loss.

Sandford et al. (1975, pp. 203–206) consider at some length the sale of part of a business, year on year, as well as the sale of a sizeable part or the whole business, as possible ways to address liquidity concerns with this particular form of wealth. They point out, however, that it may not be easy for controlling shareholders to find buyers, and especially institutional investors, for only a part of the business given the lack of protection for, and typical complaints of, minority shareholders.[61] They also argue that whilst it would be no loss for a wealth tax to hasten the demise of inefficient firms, it would be undesirable if a wealth tax had the long-term effect of reducing the number and scope of closely owned businesses.[62] The Meade Committee thought greater access to alternative sources of capital to overcome imperfections in the capital markets was preferable to special concessions for private businesses and farms, and similarly argued for better safeguards for minor shareholders as one important step.[63] The Committee also highlighted examples of then existing institutions that provided equity funding to private businesses 'without threatening their managerial independence'.[64]

Thus, the ability to pay wealth tax from a sale of assets is likely to be one solution to liquidity problems but not a complete one.

4.7 | Borrowing/financing

Taxpayers may be able to borrow money to pay the tax, for example through personal loans, home equity or pension release. This option is particularly relevant for farmers, business owners and those single adults over SPA who may be potentially vulnerable to liquidity issues. Such borrowing may not be especially easy to do (e.g. in a credit crunch) and could be costly even in a period of historically low interest rates in general. In the case of a house, for example, although in principle the household could withdraw home equity, this might be difficult for those with low income – not only single adults over SPA but also working-age families who have temporarily low income. Further, the harder an asset is to value (e.g. shares in a private business), the more difficult it will be to borrow against it.

Advani et al. (2020, p. 64) flagged the possibility of taxpayers borrowing on the security of their illiquid assets, especially land, in the context of their one-off wealth tax proposal. They also note that it would likely be harder for individuals to borrow to pay an indefinite annual wealth tax.[65] Sandford et al. (1975, pp. 201–2) consider the borrowing option at some length in the context of closely owned businesses. They draw no general conclusion on the desirability of borrowing to pay wealth tax, but comment that a business owner's willingness to borrow would depend on both temperament and views on future business prospects as well as prevailing interest rates. Further, the borrowing might raise other problems: it might affect the business owner's freedom to manage, lenders may insist on an equity interest, and the borrowing may need to increase year after year unless other sources can be found to pay the tax.[66] Borrowing will also reduce the yield from future net wealth tax if the

[61] Sandford et al., 1975, p. 203.

[62] Sandford et al., 1975, pp. 205–6.

[63] Meade, 1978, pp. 359–60.

[64] Meade, 1978, p. 360.

[65] Advani et al., 2020, p. 100.

[66] Sandford et al., 1975, p. 202.

(accumulating) debt is deductible from the tax base. Clark and Fu (2020) cite recent survey evidence indicating that a significant portion of the agricultural sector in the UK is operating at a loss and has difficulty paying short-term debts, which has contributed to levels of borrowing in this sector nearly doubling between 2006 and 2015.

4.8 | Deferral of tax/payment plans

Payment plans of various designs could be used where the tax liability is determined but, for various reasons, it is thought best not to require the tax to be paid immediately, for example in the case of taxing problematic assets from a liquidity perspective, such as pensions and other forms of deferred compensation arrangements, primary residences and business/agricultural property. Payment plans and long-term deferrals reduce immediate government revenue but represent a potentially useful mechanism to address liquidity concerns for individual taxpayers.

Advani et al. (2020, pp. 64–66) proposed a one-off wealth tax to be payable over five years without penalty or excessive interest and with the possibility of further deferral (e.g. with the tax on pensions payable at retirement). However, they argue that a general spreading payment of tax over multiple years is not really a viable option for an indefinite annual wealth tax unless there is some prospect that an individual's liquidity will improve.[67] Boadway et al. (2010, p. 788) thought it sensible 'to allow taxpayers to smooth their payments over a number of years with interest payable on the outstanding liabilities'. In the context of advocating for replacing the UK's council tax and stamp duty land tax with a land value tax (LVT), McLean (2018, pp. 196 and 201) suggested that the 'Devon widow' unable to pay the LVT after all relevant benefits have been taken into account could defer her tax liability at zero real interest until she dies or her house is sold. He notes that those who would do less well under such arrangements are not the 'Devon widow' herself 'but the sons and daughters, nephews and nieces, of Devon widows, a less generically deserving class'.[68] In this respect, ongoing deferral of wealth tax for a potentially long period until payment on death begins to look like another form of inheritance tax.

Similarly, as already discussed above under business property, the 1974 Green Paper suggested the possibility of deferred payment until the earliest of when the business owner sells the business assets, retires or dies – though with the caveat that this was to be allowed when taxpayers have no other assets out of which they could reasonably pay the tax.[69] There is a risk that deferral may then give rise to a lock-in effect, leading the taxpayer to put off sale or retirement to avoid triggering the tax payment. The Meade Committee also raised the possibility of deferral,[70] as did Boadway et al. (2010, p. 754). Sandford et al. (1975, p. 202), commenting on the Green Paper deferral proposal, noted that deferred payment of tax raised similar issues as borrowing to pay tax, but raised other issues as well, including that the then Inland Revenue (now HMRC) may need special powers (e.g. under bankruptcy laws) to deal with a situation in which the unpaid tax grew 'at a frightening rate' at the then prevailing interest rates, such that it became a high proportion of the taxpayer's net wealth. These authors later describe the Green Paper deferral proposal as potentially 'lethal' and sounding 'the death knell of private enterprise'.[71] As with general borrowing to pay an annual wealth tax, even in the present times of historically low interest rates, a taxpayer who defers paying an annual wealth tax year-on-year risks building up a substantial debt over time. For example, using the current HMRC official rate of interest

[67] Advani et al., 2020, p. 100.

[68] McLean, 2018, p. 196.

[69] HMSO, 1974, p. 11.

[70] Meade, 1978, pp. 362–63.

[71] Sandford et al., 1975, p. 279.

of 2.5 per cent used for employment benefit purposes, an annual wealth tax of £3,000 that increases each year by the official rate and where payment is deferred with interest at that same percentage levied on the deferred amount builds to £33,685 by year ten. Sandford et al. (1975, p. 227) expressed concern over the psychological effect on a farmer who sees his annual debt mounting at an increasing rate.

According to the OECD, specific wealth tax provisions allowing payment deferral or payments in instalments over future years are rare in practice, but provisions of this nature for taxes generally may be available instead.[72] In the UK, as a general matter, taxpayers unable to pay taxes owing can enter into a ‘Time to Pay Arrangement’ with HMRC to pay the tax owed via instalments, with interest. HMRC also operates a self-assessment payment helpline and a general Payment Support Service.[73] As Boadway et al. (2010, pp. 757 and 799) note, payment of inheritance tax can be problematic because IHT must be paid before grant of probate; they suggested further work be done on this issue. However, payment by instalments in equal amounts over ten years is permitted for IHT purposes where the tax is attributable to certain types of property including land and buildings, shares and securities, and a business or interest in a business.[74] CGT can also be paid by instalments, for example on gifts of land and unquoted shares or securities, with immediate payment of outstanding tax and interest required if the assets are sold.[75]

A growing deferred tax liability also could give rise to issues of interaction with other taxes, with taxpayers likely to demand some relief, for example, on IHT to the extent IHT relief is not otherwise available, such as for pensions or business/agricultural property. Further, from a political economy perspective, taxpayers may choose to defer payment with the hope that the tax will be repealed in the future (e.g. on a change of government) with the result that they will escape paying the tax.[76] Deferrals also are problematic from a liquidity perspective if taxpayers owing deferred taxes leave the UK. It may be necessary to require payment of tax immediately or soon after exit, but this could perhaps be mitigated by the posting of appropriate security.

Another way to mitigate liquidity concerns for some taxpayers is to require payments of the wealth tax *in advance* at regular intervals (e.g. monthly, quarterly or semi-annual instalments). This could assist taxpayers in managing and planning their cash flows with regular, smaller tax payments rather than one large end-of-year payment. But other taxpayers who currently have low liquidity would be expected to struggle to make an advance tax payment for next year so this may be of limited assistance overall. In the UK, pre-payment of tax by instalments during the year is already a feature under self-assessment income tax, council tax and for large corporate taxpayers, and was noted by Sandford et al. (1975, pp. 181 and 246) as a feature of Continental wealth taxes. In Argentina, individuals and estates are required to pay five monthly instalments as advance payments equal to 20 per cent of the wealth tax assessed for the previous year.[77] In Uruguay, advance payments in September, October and December must be made (20 per cent, 30 per cent and 50 per cent of the wealth tax paid in the previous year, respectively[78]).

[72] OECD, 2018, p. 89.

[73] See https://www.gov.uk/difficulties-paying-hmrc.

[74] See IHTA 1984 s 227 et seq.

[75] See Taxation of Chargeable Gains Act (TCGA) 1992 s 280 et seq.

[76] See also Rowlingson et al., 2021.

[77] See IBFD Country Tax Guides, Argentina, para 5.1.3.

[78] See IBFD Country Tax Guides, Uruguay, para 5.1.

4.9 Payment in specie

Payment in specie involves paying the wealth tax by transferring assets (rather than money) outright to the government. This is quite a controversial option, and one unlikely to be popular with the public.[79] However, in the UK, this mechanism for payment is already an option for IHT, for example, for land and buildings capable of producing a public benefit and where an appropriate recipient can be found (e.g. National Trust or national park authorities), objects in such a building, and works of art.[80] HMRC is empowered to accept property in whole or part satisfaction of a liability to tax and interest.[81] This option is potentially relevant for taxpayers with such assets, and particularly for business owners and farmers, who we have identified as among those particularly vulnerable to liquidity issues. However, Clark and Fu (2020, p. 13) highlight that the possibility of breaking up farming property is a high priority concern for owners of such property, 'most significantly in order to preserve its sustainability, but also due to the generational tradition and sentiment, in which it is anticipated that a farm will be maintained within a family across generations'. They further note that in the context of divorce law the courts have shown a marked reluctance to break up farm properties, preferring alternative means of arriving at settlements including external borrowing. It should also be noted that payment in specie would presumably lead to a potentially large CGT charge on the assets transferred to the government – assuming the assets have increased in value – as would be the case on an outright sale of assets. An outright sale of the assets would provide the funds to pay both the CGT and wealth tax. Payment of the wealth tax in specie, however, solves the liquidity issue in respect of the wealth tax but does not address the payment of the resulting CGT liability – though possibly the CGT could also be paid in specie.

Saez and Zucman (2019b) advocate the option of payment in specie for their wealth tax on billionaires. Daly et al. (2021) also note that the Meade Committee floated the possibility of payment in specie for private businesses and also agricultural property. Saez and Zucman (2019b, pp. 32–34) suggest that taxpayers could transfer shares of large private businesses to the tax authorities year-on-year if necessary to mitigate both liquidity and valuation concerns.[82] The government would then be able to sell the holdings to the highest bidder. However, they have in mind a large exemption threshold so their focus is on a relatively small number taxpayers (c.75,000 families)[83] with very valuable private businesses (e.g. an unprofitable but highly valuable start up). We know from the literature on small business in the UK that millions of UK taxpayers operate as self-employed persons or owner-managers of small private companies. According to Adam and Miller (2020, p. 103), in 2015–16, 4.9 million people were operating through self-employment, with the majority (4.1 million) sole traders. In 2014–15, there were 1.6 million owner-managers of companies with either one or two directors. Further, we also know that there is a great deal of heterogeneity within the small business population and, importantly, that 'most businesses owners, while conducting perfectly respectable trades, are not employing others, investing or growing'.[84] Advani et al. (2020, p. 59), however, argue that as the revenue of a great many small businesses is essentially remuneration for the owner's own services, the value of the business for a wealth tax that excludes human capital from the base should be nil (apart from assets owned as part of the business, etc.). This would significantly reduce the scope of liquidity issues in respect of private businesses and the need for an in specie payment solution.

In any event, it is unlikely to be an attractive option for the government to take an equity interest in a large number of very small businesses in lieu of payment of wealth tax, not to mention that it would be

[79] See also Rowlingson et al., 2021.

[80] See Loutzenhiser (2019, p. 1052).

[81] See IHTA 1984 s 230 et seq.

[82] See also Daly et al. (2021).

[83] Saez and Zucman, 2019b, pp. 33–34.

[84] Adam and Miller 2020, p. 97.

practically challenging given that so many operate in unincorporated form. It might be more attractive for the government to consider accepting in specie payment of wealth tax in respect of a smaller, more targeted population of businesses, such as high-growth potential companies. However, this would involve the government essentially operating like a venture capital firm in needing to identify and assess such businesses, and the operational costs of administering the tax would be increased. On this point, it should be noted that the UK government recently offered bail-out loans to early-stage, high-growth potential companies struggling during the COVID-19 pandemic under the new Future Fund scheme, with the loans automatically converting into equity at a discount if the loans are not repaid within three years. This sector appears much more attractive to consider in specie payments for wealth tax. However, the Future Fund scheme is a fairly limited scheme and Chancellor Rishi Sunak is reported to be reluctant to be seen as the Tory chancellor who presided over mass nationalisation.[85] As with the deferred tax solution, there is also a risk that requiring in specie payments on annual business would grow to a significant amount over time. For example, assuming a 2 per cent wealth tax charge on a shareholder with a 100 per cent interest in a business, if the wealth tax was levied annually the shareholder's interest would be reduced after ten years to 82 per cent.

Payment in specie may be a useful 'last resort' option for dealing with liquidity issues for some taxpayers, but is likely to be very unpopular with the public, difficult to scale up to annual net wealth tax on a large number of private businesses and agricultural holdings, could potentially trigger liquidity issues for CGT, and would create administrative issues for the government.

5 | CONCLUSION

To conclude, liquidity can be an issue under net wealth taxes but it is not a universal one. The scale of the liquidity problem is predominantly determined by the conceptual approach, and design issues, such as the definition of wealth subject to the tax, the policy regarding pensions, the tax unit, the rate of tax, and the threshold at which tax becomes due. We have attempted to highlight the effect of these various issues here.

Our evidence suggests that farmers and business owners may be particularly vulnerable to experiencing low liquidity. The extent to which these groups are over-represented in the low-liquidity group varies according to threshold set. In contrast, the evidence we put forward majorly contradicts the typical narrative regarding single pensioners, particularly at higher thresholds where single pensioners are found to be under-represented in the low-liquidity group. Further analysis on who is likely to experience liquidity difficulties is justified when details on the tax design are clarified. We encourage further debate on the conceptualisation of the liquidity problem.

A number of potential solutions to address liquidity issues have been identified. However, some solutions adopted currently or historically internationally are regressive, non-neutral and poorly targeted, such as large general exemption thresholds, exemptions for problematic assets, and ceilings/caps. Our preferred potential solutions include recognising a net wealth tax can be paid out of income or by sale of assets, by withholding tax (e.g. by pension providers), by borrowing/financing, deferred payment arrangements and, possibly in limited circumstances, payment in specie.

ACKNOWLEDGEMENTS

The authors would like to thank Sam Mitha and anonymous reviewers for helpful comments. This work contains statistical data from the ONS that are Crown Copyright. The use of the ONS statistical data in this work does not imply the endorsement of the ONS in relation to the interpretation or analysis of the statistical data. This work uses research datasets that may not exactly reproduce National Statistics aggregates. All views expressed, and errors or omissions made, are the authors' own.

[85] 'UK government eyes stakes in start-ups to keep them afloat', *Financial Times* (9 June 2020). See also Mitha (2020).

A previous version of this work circulated as Wealth Tax Commission Background Paper No. 10. The Wealth Tax Commission acknowledges funding from the Economic and Social Research Council (ESRC) through CAGE at Warwick (ES/L011719/1) and a COVID-19 Rapid Response Grant (ES/V012657/1), and from the LSE International Inequalities Institute AFSEE COVID-19 fund. Elizabeth Mann acknowledges funding from the Leverhulme Trust.

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How to cite this article: Loutzenhiser, G. & Mann, E. (2021), Liquidity issues: solutions for the asset rich, cash poor. *Fiscal Studies*, 42:651–675.
https://doi.org/10.1111/1475-5890.12281