Finance for the Future[1]

The QuEST for a Green New Deal

October 2021

How do we pay for it?

It is likely that the biggest impediment to the delivery of the Green New Deal[2] is the question beloved of every journalist and asked of every politician and activist who has the temerity to propose something so transformational, which is 'But how are you going to pay for it?' It seems that very few of those to whom this question is addressed can answer it in detail. In this paper we propose how this payment might be funded, and how those proposing a Green New Deal can as a consequence confidently answer that question. Because this proposal combines tax reform, new forms of saving and green quantitative easing we suggest that it is the answer to the QuEST for funding for a Green New Deal.

Background

The suggestion that we make for funding the Green New Deal is based on a number of observations and assumptions. The most important are:

1) That quantitative easing (QE) has been used to almost entirely fund the Covid crisis without any claim being made on what is colloquially called 'taxpayer money'[3]. In the UK

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[1] This note has been published by Finance for the Future LLP, 33 Kingsley Walk, Ely, Cambridgeshire, CB6 3BZ. Finance for the Future has company number OC329502 and is registered at the above address. https://www.financeforthefuture.com/ Contact rm@financeforthefuture.com

[2] See https://greennewdealgroup.org/ for more information on the Green New Deal

[3] This is a term whose economic credibility we would question. See https://www.taxresearch.org.uk/Blog/2021/09/23/whatever-keir-starmer-might-say-there-is-no-such-thing-as-taxpayer-money/

more than £400 billion of new money[4] has been created[5] for this purpose and no one is suggesting that this is the current cause of any inflation risk that the UK faces.

2) That there have been substantial increases in personal wealth over the last decade - likely to be in excess of £7 trillion - the vast majority of which growth has gone to a small part of the population. In 2008 total UK wealth including pensions was £8.4 trillion. In 2018 it was £14.6 trillion[6]. Between 2011 and 2018 the increase in wealth was equivalent to 39% of total UK national income in that period[7]. It is likely that the quantitative easing used to fund Covid has considerably increased this personal wealth[8] the increase in which is very largely untaxed[9].

3) This growth in wealth has created what has been called a 'savings glut' amongst the wealthy[10] which is not producing a matching investment boom, but which is fuelling inequality and significant structural problems within the economy and society.

4) Research by Richard Murphy and academic colleagues has shown that over 80% of these savings are placed in tax incentivised assets i.e. pension, ISAs and domestic homes. This suggests tax reliefs have very a powerful influence on how people save[11].

5) Government can only be funded in one of three ways[12]:
    a) Tax
    b) Borrowing

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[4] See https://www.bankofengland.co.uk/asset-purchase-facility/2021/2021-q2

[5] See https://www.bankofengland.co.uk/monetary-policy/quantitative-easing

[6] See https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/incomeandwealth/bulletins/totalwealthingreatbritain/april2016tomarch2018 and related ONS reports

[7] See http://www.taxresearch.org.uk/documents/wealthtaxdata420.pdf

[8] For a detailed explanation see Chapter 4 of Richard Murphy's book 'Money for nothing and my Tweets for free' available free from https://www.taxresearch.org.uk/Blog/2021/04/14/mfnamtff/

[9] See https://www.taxresearch.org.uk/Blog/2020/04/22/tax-after-coronavirus-tacs-there-is-significant-room-for-wealth-taxation-in-the-uk/

[10] For a recent US analysis of this, which would appear to be directly translatable to the UK, see https://scholar.harvard.edu/files/straub/files/mss_richsavingglut.pdf. For an explanation as to the social consequences of this, and the reasons why this failed to give rise to a matching boost in investment but instead to structural problems within the economy and society see https://www.kansascityfed.org/documents/8337/JH_paper_Sufi_3.pdf which is summarised by Richard Murphy here https://www.taxresearch.org.uk/Blog/2021/09/01/low-interest-rates-are-driving-inequality-ever-upward-and-its-time-we-started-to-tackle-this/

[11] See https://eprints.whiterose.ac.uk/153627/10/modern_monetary_theory_and_the_changing_role_of_tax_in_society.pdf

[12] ibid

c) Money creation, whether through quantitative easing or by central bank overdraft[13].

Some associate this last suggestion with what is described as modern monetary theory[14] but in reality the capacity of the government to create money at will has existed since 1866[15] and is simply based on principles of modern banking confirmed to be correct by the Bank of England in 2014[16].

6) As has been noted, spending on the Covid crisis has been almost entirely funded by quantitative easing[17]. That involves money creation, and that new money necessarily increases savings[18]. This is the unavoidable consequence of government's running deficits[19]. It has been suggested that private savings in the UK have increased by around £200 billion during the Covid period, and this may have increased now[20]. A substantial part of this sum is currently held in cash, but that part which has been invested has helped keep the stock exchange inflated despite all the uncertainty of the Covid era[21]. Those savings have yet to find a constructive use.

7) UK tax subsidies to savings have a cost exceeding £60 billion a year[22], and could be somewhat more depending on the assumptions made.

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13 This idea that the government might run an overdraft with the Bank of England appears to be radical in the current political climate where there is so much opposition to what is called government borrowing. However, doing so has been legal and indeed normal since 1866 when the Exchequer and Audit Departments Act was first passed. It was most recently updated in 2001 and still regulates many aspects of government financing. The overdraft element of this funding is called The Ways and Means Account, using the obscure language of government, and was commonly overdrawn to provide a form of funding for the government until 2009 when quantitative easing began to take its place instead.

14 See https://www.investopedia.com/modern-monetary-theory-mmt-4588060

15 See https://www.taxresearch.org.uk/Blog/2020/12/22/uk-law-has-already-enacted-modern-monetary-theory-and-was-last-updated-to-do-so-in-2000/

16 See https://www.bankofengland.co.uk/-/media/boe/files/quarterly-bulletin/2014/quarterly-bulletin-2014-q1.pdf

17 The House of Lords considered this issue here: https://committees.parliament.uk/publications/6725/documents/71894/default/ See charts on page 12, for example.

18 For a detailed explanation see Chapter 4 of Richard Murphy's book 'Money for nothing and my Tweets for free' available free from https://www.taxresearch.org.uk/Blog/2021/04/14/mfnamtff/

19 Again, explained in Chapter 4 of Richard Murphy's book 'Money for nothing and my Tweets for free' available free from https://www.taxresearch.org.uk/Blog/2021/04/14/mfnamtff/ which is free to download.

20 https://www.theguardian.com/money/2021/jun/30/covid-savings-britain-built-up-second-highest-level-on-record-in-early-2021

21 See https://www.google.com/finance/quote/UKX:INDEXFTSE?sa=X&ved=2ahUKEwjOpKT85qHzAhUJXsAKHWE-A9sQ3ecFegQIDRAa&window=5Y Comment made in September 2021

22 £53.7 billion for pension tax reliefs in 2017/18 in the UK https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/833859/Tab

8) The Green New Deal might cost between £50 billion and £100 billion a year in infrastructure and related spending (e.g. training), depending on the ambition of those making the estimate. Current proposals for Green New Deals and their suggested costs are summarised in Appendix 1 to this note.

9) It is generally assumed that most government borrowing[23] is in the form of bonds, or gilts and central bank reserve accounts[24] but in practice more than £200 billion of what is described as the UK's National Debt represents sums saved with National Savings and Investments. This government owned savings institution says it has 25 million customers, with an average balance of £8,000 each[25]. This part of government funding has been little understood and has been largely ignored for a long time. The sums saved with National Savings and Investments are less than those saved in ISAs, where approximately £600 billion is saved with an average balance of about £6,000[26], but remains significant nonetheless.

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le_6_Cost_of_Pension_Tax_and_NICs_Relief__2012-13_to_2017-18_.pdf and likely more now. ISA tax reliefs cost approximately £3.5 billion a year. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/930743/Oct20_tax_reliefs_bulletin_v7_-_Accessible_Final.pdf Other subsidies through reduced tax rates on savings and for other savings schemes make up the rest of this estimate.

[23] There are reasons to doubt that there is as such any government borrowing and that instead all the balances in question are actually simply savings balances, as National Savings and Investment Accounts are and more than £800 billion of central bank reserve accounts must be since they are no more than sums held on deposit with the Bank of England. See https://www.taxresearch.org.uk/Blog/2021/03/02/the-national-debt-paranoia/ for some discussion

[24] Central bank reserve accounts are the accounts that all the UK's regulated banks hold with the Bank of England. They are the accounts that are used to make payments from the government into the economy, and the accounts through which tax and other government revenues flow back to the government. But, as importantly they are the accounts that the banks use to pay each other when an account holder in one bank makes a payment to an account holder in another bank. They are, therefore, central not just to the government's relationship with the banking system but the banks' relationship with each other. The UK's banks have to hold deposits on these accounts as a condition of being regulated to undertake banking activity in the UK. By convention the banks are pad interest on these deposits that they hold with the Bank of England at the Bank or England base interest rate, which is at the time of writing is 0.1%. However, this is not a legal requirement and the Bank of England could decide to pay a different rate, or none at all.

[25] Data from https://nsandi-corporate.com/sites/default/files/2021-08/NS%26I_Annual_Report_2020_21_digital_final.pdf

[26] See https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/894771/ISA_Statistics_Release_June_2020.pdf

10) In 2010, we created the concept of Green Quantitative Easing[27]. This differs from standard QE in that the debt that would be bought by Bank of England is issued by a government run National Investment Bank, with the proceeds used to fund investment in the green economy, whether state or privately run[28].

False Constraints

We do not accept many of the representations within the mainstream economic narrative with regard to government debt, quantitative easing and the nature of money, or of the role of taxation[29]. That is not surprising: many ideas relating to these issues are contested by economists. However, we accept that there is a mainstream economic narrative. Most politicians and commentators think that this narrative imposes constraints on government activity. A concern about government debt is a major part of the mainstream economic narrative.

For example, in September 2021 the Labour Shadow Chancellor, Rachel Reeves MP, suggested that if elected to office her party would commit itself to a target of balancing the government's budget, excluding investment for infrastructure, with public debt falling as a share of national income[30]. As the Financial Times noted, this is expected to be the same post Covid spending rule that the current UK Chancellor, Rishi Sunak is thought likely to announce in October 2021[31].

Reeves has, however, set herself a problem. She has said that she will also spend £28 billion a year on green investment[32]. Analysis of much thinking on the Green New Deal (see Appendix 1) suggests that this will be insufficient to meet any UK government's Paris aligned climate targets[33], but unless there is reasonable economic growth and no further unexpected government spending, finding that sum for investment within this spending constraint will be hard. It is for this reason that we have looked for alternative mechanisms to fund the Green New Deal.

Our proposal

[27] For a fuller explanation see https://www.financeforthefuture.com/GreenQuEasing.pdf

[28] There is more discussion on this issue here https://www.taxresearch.org.uk/Blog/2015/03/12/how-green-infrastructure-quantitative-easing-would-work/

[29] See https://www.taxresearch.org.uk/Blog/2021/09/13/tax-and-modern-monetary-theory/ for explanation.

[30] See https://www.ft.com/content/5dcfa73d-5a39-4f95-b8b3-b706bf9239ce

[31] ibid

[32] See https://www.bbc.co.uk/news/uk-politics-58699072

[33] See https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement

Our new narrative proposes that we should 'save for the planet'[34] with the proceeds being used to fund the Green New Deal. Our proposal is in a number of parts.

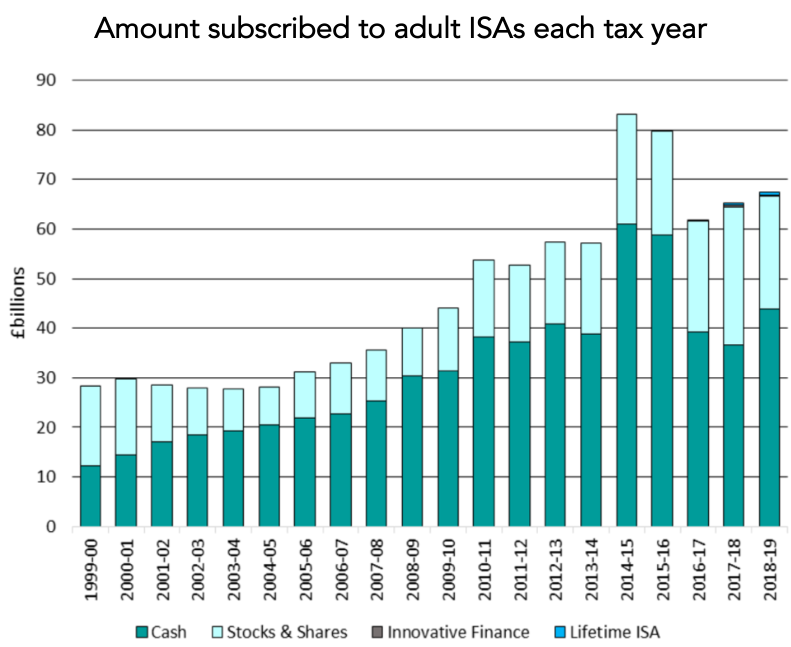
a. Change the law on ISA saving

There are currently four types of Individual Savings Accounts (ISAs)[35]:

- Cash ISAs
- Stocks and shares ISAs
- Innovative finance ISAs
- Lifetime ISAs

A taxpayer does not pay tax on interest on cash in an ISA or on income or capital gains from investments in any other form of ISA. Each tax year[36] a person is allowed to save up to £20,000 in ISAs. The money can be spread across the four types of ISA available subject to a maximum of £4,000 being saved in a lifetime ISA. By far the most important types of ISA are cash and stocks and shares ISAs.

ISAs attract considerable funds:



[34] It is our intention to build several narratives supported by slogans and marketing ideas to support this idea.

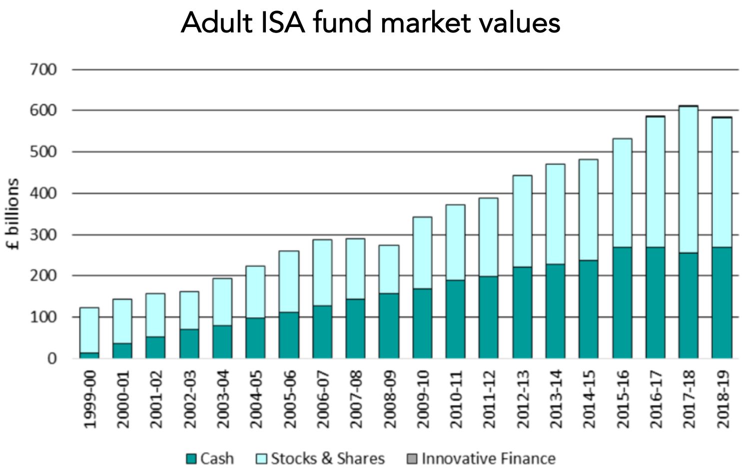
[35] See https://www.gov.uk/individual-savings-accounts/how-isas-work

[36] A tax year runs from 6 April one year to 5 April the next year in the UK

Source: HM Revenue & Customs[37]

The average subscription was £6,049 in 2018/19, a sum way beyond the means of most UK households.

Total funds in ISAs are according to latest statistics:



Source: HM Revenue & Customs[38]

It is apparent from this data that some of the subscriptions noted above must represent funds recycled from old ISA accounts given the data on total sums invested. That is inevitable since many cash-based ISAs have time limited conditions attached to them by their providers that make them unattractive to savers after an initial period of saving. That does not alter the logic within the proposal we are making: whilst the suggestion we are making will only apply to new ISA funds we will be actively encouraging the recycling funds from the old style ISA arrangements previously noted into the new style ISAs that we propose. The transition will clearly take some time to achieve.

[37] See https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/894771/ISA_Statistics_Release_June_2020.pdf

[38] ibid

As has been noted by the Bank of England, in August 2021 the average interest rate on easily accessible savings accounts was 0.09% per annum, a record low[39]. Despite that £9.1 billion was saved in that month, which whilst below the rate seen in the same month in 2020 was almost double the pre-pandemic normal rate of saving[40]. A significant part of this sum is likely to have been saved in ISA accounts.

It is our suggestion that the rules with regard to ISA saving be changed. The savings limits should continue, but under our proposal ISA savings should only be permitted in accounts that are linked to the Green New Deal. All other existing ISA opportunities should cease to be available. This will require change in tax legislation which could be done in any Finance Act, and one is enacted each year.

b. Create a new Green Investment Bank to use ISA savings that account holders wish to save with the government

In the case of cash deposits we suggest that all cash savings under the new ISA arrangements should be saved with a new National Investment Bank (NIB). This could be linked for practical purposes to the National Savings and Investments platform. However, we also suggest that these new ISA savings products should be accessible via all the normal savings outlets used by most people, including their own banks, to whom introductory commissions would be made for funds saved in this way, which is commonplace within financial services.

It is our suggestion that interest should be paid on these new ISA accounts at a rate above the average for the market. We currently suggest that a rate of maybe one per cent per annum should be paid, or more than ten times the current average rate on easy-access deposit accounts according to the Bank of England and more than twice the average rate payable on term deposits in October 2021[41].

We make this suggestion for these reasons:

- Low market rates of interest on savings reflect a savings glut but penalise smaller savers who can access ISA accounts, and appear to be very keen on them;
- The rate is less than that charged by HM Treasury on loans within the government sector (see below). This implies that this rate will impose no real cost on borrowers within the

[39] https://www.bankofengland.co.uk/statistics/effective-interest-rates/2021/august-2021
[40] https://www.bankofengland.co.uk/statistics/money-and-credit/2021/august-2021
[41] https://www.bankofengland.co.uk/statistics/effective-interest-rates/2021/august-2021

state sector who will make use of the funds these ISAs will make available for investment purposes;
- The rate is affordable. If this sum was paid on all new ISA deposits, and assuming they continued to accumulate at a rate of about £70 billion a year (as noted in the first chart, above), and assuming none of the activities for which the funds were used generated returns of their own (which is exceptionally unlikely) the cost would be £700 million in the first year. The cost of existing annual savings subsidies to ISAs is five times that amount and this sum is just one 85th of the present total annual tax subsidies to savings, as previously noted.

We anticipate that this interest rate would attract considerable interest from savers.

We note that a recent initial green gilt issue[42] by HM Treasury raised £10 billion of funds at a rate of 0.87% (which is less than the current prevailing cost of gilt issues) and was ten times over-subscribed[43]. Although gilts are generally only suitable investment vehicles for large scale investors such as pension funds, insurance companies and banks, our proposed rate for individual savers of 1% is not, as a result, unreasonable.

c. Require that ISA savings with the NIB be used for the Green New Deal

This NIB will be stated owned and will have the task of making loans onwards to:

- Government departments;
- Local authorities;
- Mayors;
- Devolved governments;
- Health trusts;
- Housing associations;
- Network Rail;
- Other government related authorities;
- Private sector organisations that meet criteria laid down in a 'green taxonomy'[44] which would define exactly what constitutes a green investment.

[42] Green gilt issues are not like the savings accounts that we are proposing in this note, although the difference is largely one of scale. Gilts are designed for the savings market managed by finance market professionals and what we are suggesting are savings accounts that might even be called bonds if they have notice periods of more than a year but which are specifically aimed at individual savers.

[43] See https://www.ft.com/content/94d604a9-50b9-49f1-b377-a7b6e4083d01

[44] The UK Treasury is at present preparing a Green Taxonomy which defines what activities might be considered green for investment purposes. https://www.ftadviser.com/regulation/2021/06/09/government-creates-working-group-for-green-taxonomy/ It will match the EU's green taxonomy which is already quite well developed,

The organisations will be required to use funds for purposes approved as consistent with the Green New Deal. This is what a green taxonomy defines. It is likely that this will mean that the funds are used for:

- Building insulation;
- Energy saving measures;
- Heat pumps;
- New generation capacity;
- The creation of battery and other energy storage capacity;
- Sustainable transport systems across the spectrum of transport needs;
- Flood defences;
- Sustainable housebuilding;
- Recycling and minimising raw material use;
- Measures to improve biodiversity;
- Sustainable agriculture;
- Research and development in related fields;
- The making of strategic investments in private sector partners;
- The making of loans to private sector partners consistent with the green taxonomy.

The recipient organisations will pay interest on the loans provided to them by the National Investment Bank. We note that recent loan charges to local authorities from the Public Works Loan Board[45] are at rates of between about 1.5% and 1.8% per annum. As such it is likely that the NIB will generate more than sufficient income from these loans to cover the interest costs it will have to pay on the ISA funds deposited with at the 1% interest rate that we propose.

The loans are not alternatives to grants: it is presumed that they will be used for revenue generating opportunities, which does not preclude central government being the source of some of that revenue for the organisations making use of these funds e.g. local authorities.

d. Provide a guarantee on the capital of those with cash ISA accounts

One of the most important initiatives that has stabilised savings markets in recent years, and most especially since the failure of Northern Rock in 2007[46], has been the Financial Services Compensation Scheme. This arrangement ensures that depositors in UK banks enjoy a

although not yet in use. https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/eu-taxonomy-sustainable-activities_en

45 https://pwlb.gov.uk/responsibilities/local-authority-lending/current-data/

46 https://www.theguardian.com/business/2008/mar/26/northernrock

government guarantee that their funds will be refunded to them if they save up to £85,000 in any one institution and it fails with them suffering a loss as a consequence[47]. This guarantee would apply to the ISA accounts that we are proposing to that limit. We think it very unlikely that this guarantee would ever have to be called upon since the National Investment Bank that we propose should always have an income more than its spending but in the next section we discuss how this guarantee could be funded if it ever proved necessary to call upon it.

e. Funding the guarantee on cash ISAs with green quantitative easing

If the cash ISA accounts on offer from a NIB were to be available with fairly short-term notice periods there would be a concern that the NIB might be undertaking the standard banker's trick of 'borrowing short' and then 'lending long'.

There is nothing unusual about this. It is, for example, what building societies have always done, with their depositors usually enjoying relatively short repayment notice periods on their funds, but the mortgages that the societies fund using those deposits often having repayment periods of twenty-five or more years attached to them. The risk in this situation is that there can be a liquidity crisis in such a bank if the demand for repayment by depositors exceeds cash available from repayments by borrowers. We think that this situation is unlikely to occur: as the chart of historic ISA fund balances shows these have risen almost continually.

In conventional banks this risk is now covered by the considerably increased demands for capital that have been imposed on these institutions since the 2008 financial crisis[48]. The NIB can cover it in a different way. If there ever was a need for capital for this reason it could issue debt of its own which could be purchased by the Bank of England using the process we describe as green quantitative easing[49]. In this way the capital for this Bank can be supplied without it actually having to be initially funded by either the government, Bank of England, subscription from financial institutions or taxpayers. This same arrangement could be called upon if any of the loans made by the NIB were not repaid to it for any reason e.g. because the agency borrowing the money failed.

[47] https://www.bankofengland.co.uk/prudential-regulation/authorisations/financial-services-compensation-scheme

[48] See, for example https://www.bankofengland.co.uk/-/media/boe/files/news/2017/september/the-financial-crisis-10-years-on-fact-sheet.pdf

[49] https://www.financeforthefuture.com/GreenQuEasing.pdf

f. New ISAs and shares

It is our belief that the new ISA we are describing will have greatest appeal to those seeking to save cash on deposit who also wish to know that the funds in question will be used for a socially and environmentally useful purpose, which cannot be said to be the case with almost any existing deposit arrangement[50]. However, we recognise that there are those who have saved in shares within an ISA to date and might still wish to do so.

We suggest that this should still be possible, but that a quite narrowly defined taxonomy of activities should be permitted for the use of the funds raised by the shares and corporate bonds[51] that might be permitted to be held in such ISAs. We acknowledge that more work is required on this issue as many green taxonomies are still in their relative infancy at present. In particular, we suggest that any such shares should have been issued specifically to fund new employment generating activities linked to the Green New Deal. We note that this may well make it easier to include specific corporate bonds issued by companies within the taxonomy rather than the shares of companies. This is because the use of share capital cannot easily be prescribed in a way that could guarantee its use for projects limited to a Green New Deal. This issue requires further research.

We recognise that the extension of green ISAs to private sector funding will appeal to some, and in particular those with a greater appetite for risk or a desire for the higher level of reward

[50] The amount of cash on bank balance sheets has increased considerably since 2008. The issue is discussed in this paper https://www.bankofengland.co.uk/-/media/boe/files/paper/2020/the-central-bank-balance-sheet-as-a-policy-tool-past-present-and-future.pdf. This has considerably increased the likely resilience of banks, but the reality is that banks do not need cash to lend money: all loans from High Street banks are actually made out of new money created for the purpose. See this explanation from the Bank of England https://www.bankofengland.co.uk/quarterly-bulletin/2014/q1/money-creation-in-the-modern-economy. The consequence is that cash savings are almost economically redundant in most cases within the banking system, which partly explains why High Street banks are so unwilling to now pay for them, which fact is reflected in exceptionally low interest rates. This, though, is not the case for conventional building societies and institutions like the NIB that we propose which do actually lend out the cash deposited with them as the public usually imagine to be the case with High Street banks, but which does not actually happen in those institutions as the public imagine. As a result, cash on deposit with those High Street banks serves almost no social purpose at all. This would become a major marketing theme of the NIB.

[51] Corporate bonds are a type of debt security issued by a firm and sold to investors, usually via a stock exchange. They earn interest, usually at a fixed rate. This is paid whether the company is profitable or not. In contrast shares earn dividends that can only be paid when there are profits available for that purpose. Bonds tend to be a cheaper form of finance for companies than shares as a result, and also have a more favourable tax treatment within companies themselves, which also adds to their appeal to the company issuing them. They have the advantage for our purposes that the use of the funds loaned can be specified, which is much harder to achieve in the case of shares.

that this form of saving is likely to generate for the investor. However, for the sake of the credibility for this proposal as a whole significant care over this issue will be required, which is why we simply leave it open as a possibility at this stage.

g. Extending the scheme to pension funds

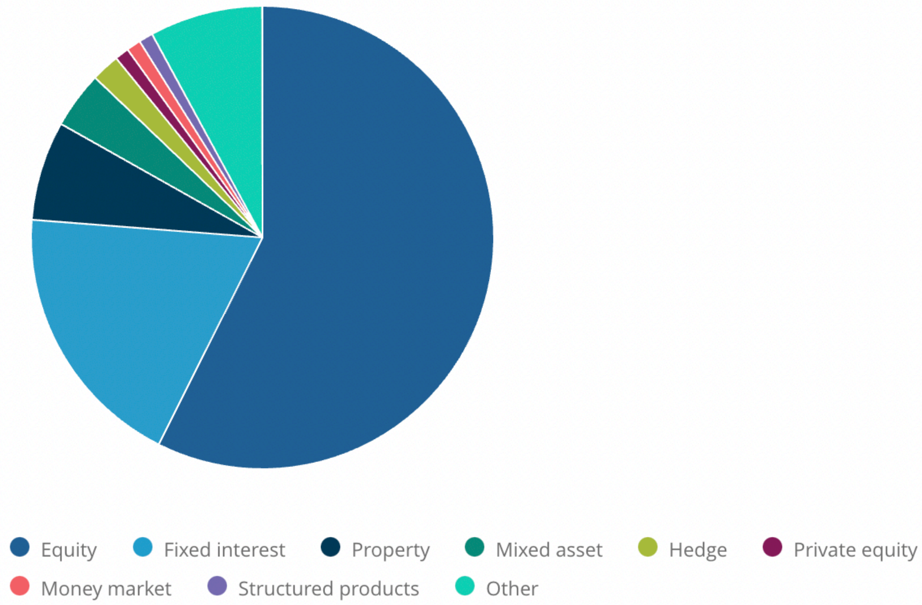
The focus of this note is on the funding that might be raised annually for the Green New Deal from ISA investors as they inject new funds into the ISAs that we describe or reallocate funds from exiting ISA accounts into these new accounts. However, the idea that we propose could be extended.

As we have already noted, most tax reliefs for saving in the UK go to those investing in pension funds. Whilst some of these reliefs go to those on low income the majority go to those with significantly above average earnings.

The investment of these funds varies depending on the type of fund of which a person is a member (NB: the following analysis does not include personal pension funds for which data does not appear to be available). The investment mix of public sector funds, is according to the Office for National Statistics[52] as follows:

52 https://www.ons.gov.uk/economy/investmentspensionsandtrusts/articles/ukpensionsurveys/redevelopmentand2019results

Asset classes held in pooled vehicles by public sector DBH schemes, UK, end-2019



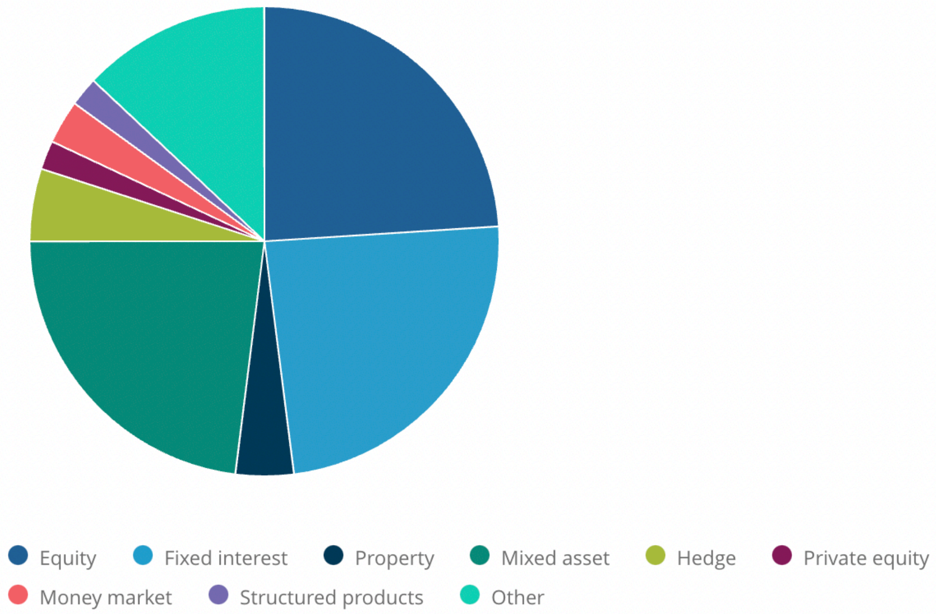
Source: Office for National Statistics – Financial Survey of Pension Schemes

DBH stands for defined benefit[53] and hybrid schemes, i.e. this includes some defined contribution schemes.

In the private sector the same DBH schemes have a very different investment profile:

[53] A defined benefit pension scheme means that the pension fund member gets a pre-determined pension based on something other than pension fund performance e.g. a fixed proportion of their salary for the years that they worked for an employer.

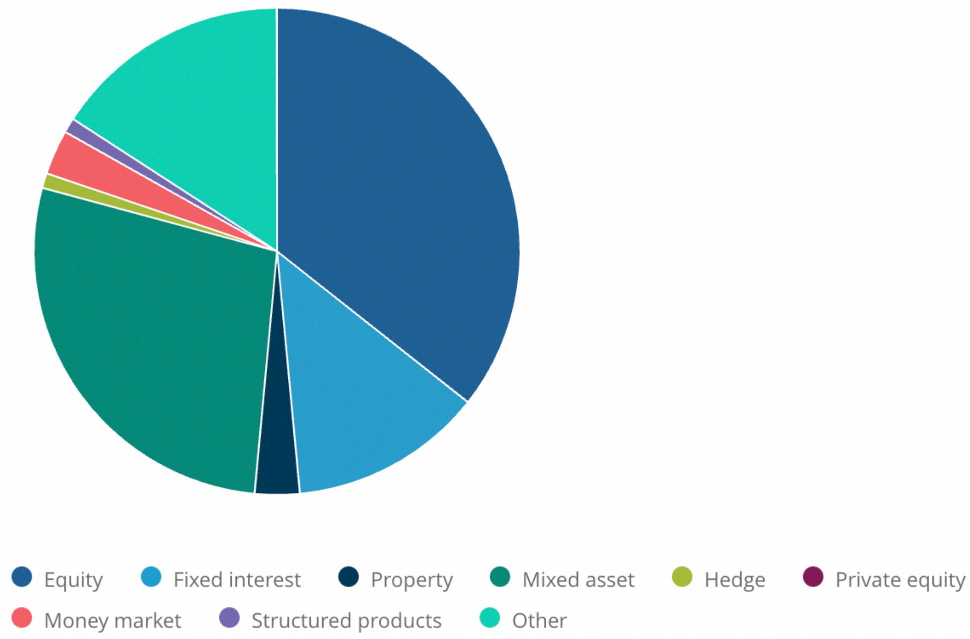
Asset classes held in pooled vehicles by private sector DBH schemes, UK, end-2019



Source: Office for National Statistics – Financial Survey of Pension Schemes

However, in the case of what are called defined contribution schemes, where no pay-out from the fund is guaranteed and the pension paid is entirely dependent upon the performance of the pension fund's investments, the investment profile is quite different:

Asset classes held in pooled vehicles by private sector DC schemes, UK, end-2019



Source: Office for National Statistics – Financial Survey of Pension Schemes

Significantly more shares and significantly less fixed interest debt (whether issued by companies or government bonds) is held by these funds but what is true is that in all these examples is that significant fixed interest debt (much of which is government debt according to the Office for National Statistics) is held. This means that pension funds might want to provide the option to their members of saving in NIB accounts of the type we have already described for ISAs as these accounts would be fixed interest debt for pension purposes.

We also think that these types of accounts might provide a real alternative for those who have pension arrangements but who are worried about saving in shares. In 2018 a study found that the US based S&P 500 index had global warming of 4.9°C implicit within it and the MSCI World Equity Index was worse, with 5°C global warming implicit within the behaviour of the companies making it up[54]. These levels of change are, of course, unsustainable if we are to meet climate targets and do suggest that significant change in the behaviour of companies in whom pension funds invest is urgently required. The option of saving in ways that does not involve the ownership of such shares is one way to address this issue for the ethically

[54] See https://www.mirova.com/sites/default/files/2019-05/EstimatingPortfolioCoherenceWithClimateScenarios2018_0.pdf

concerned pension saver. Making the NIB accounts that we propose for ISA use available for pension saving is one way in which this option might be made available. It could be made a statutory requirement that it do so.

In addition, we are suggesting that pension tax relief rules should be changed so that in exchange for the tax relief offered on all pension investment, at least 25% of all new pension fund contributions (but, we stress, not existing pension funds) should be invested in the portfolio of assets available within green ISAs so that they too are linked to the funding of the Green New Deal.

Estimating the precise amount invested in pension funds each year is hard because of the variety of funds that exist but it seems likely that at least £30 billion a year is invested by individuals, more than £15 billion a year is saved by those now encouraged to make minimum contributions a year by law, and that more than £50 billion a year is contributed via other employer schemes, with a combined annual contribution exceeding £100 billion as a result. The cost of the range of tax reliefs on these contributions – at more than £50 billion a year – shows how generously they are subsidised by income tax, national insurance and corporation tax reliefs. In that circumstance the suggested condition appears entirely reasonable and should help the rebalancing of share portfolios, albeit by nothing like the overall required amount.

h. Extending the idea

Finally, we note that whilst we have promoted this idea within the context of the Green New Deal we do not think this the limit of the idea.

We think that it is also possible that the form of funding that we note in this paper could also be used for other socially useful infrastructure ideas not directly related to the climate change agenda. For example, we think that in due course investment in the NHS, education and other activities could attract their own funds through ISA and pension savings of the sort that we note. The advantage of this is that these would then be moved out of the government's current spending plans and so release funds within that programme for other essential revenue spending on day-to-day matters of priority.

We do, however, stress that we think funds of the type that we propose should only be used for investment and related training purposes, but we are aware that as a result of removing these costs from routine forms of government budgeting more funds for revenue spending on the provision of services might become available.

i. One final point

There is a small accounting point to mention. This is to note that our argument in this briefing is based on the idea that the savings accounts that we propose are not to be considered a part of the national debt. Although the accounts that we propose will be held with a government owned bank, and they will be guaranteed using the Financial Services Compensation Scheme (just like all other bank accounts are whether in the state or private sectors) and although the current products of National Savings and Investments are considered to be part of the national debt, we suggest that the accounts that we propose be made available by a National Investment Bank should not be considered to form part of the national debt.

Our reason for saying so is that there is precedent for this. As a matter of fact the bank deposits held by people, companies, pension funds and others with the various banks (such as RBS, NatWest, Lloyds and others) that were nationalised after the 2008 global financial crisis were not treated as part of the national debt for normal reporting purposes. This is despite the fact that similar accounts with National Savings and Investments are treated as national debt. We think that this inconsistency makes no sense and does anyway confuse people as to the true nature of the national debt. We think that very few people saving with National Savings and Investments do, for example, think that they are creating the debt problem that governments say they must solve. We agree with them: they are not. As a result we suggest that there should now be a consistent treatment that excludes savings held with the government from the normally reported figure for UK national debt since its inclusion in that debt figure is deeply misleading as was agreed to be the case with regard to the nationalised High Street banks.

Appendix 1

Estimates of the funding required for a Green New Deal

Definitions vary as to what constitutes a Green New Deal. So too therefore do the estimates of the funding that a Green New Deal might require. We use estimates in a range from £50-£100 billion a year. This range is based on the following reports:

1. **The Committee on Climate Change**, which advises the UK and devolved governments on emissions targets and reducing greenhouse gas emissions, state that the UK will require an immediate scale up in action across the economy, building an annual investment programme reaching around £50 billion per year by 2030[55].

2. The **Green New Deal Group's** pull together of research estimating the cost of decarbonising and making energy efficient the UK's existing and new buildings, providing other low UK carbon infrastructure and creating a sustainable transport system would need a total possible annual spend of £117 billion per year through to 2030[56].

3. The **New Economics Foundation** estimated that required spending on the climate emergency each year to be between £40 billion to £100 billion[57].

4. The grass roots group **Green New Deal UK** estimated that £68 billion per year would be needed, focussing on green and digital infrastructure, research and development, energy and care work during the next decade[58].

5. **Greenpeace** has calculated that an extra £73 billion of public investment is needed over the next three years (or around an extra £25 billion per year) in green homes, clean transport, nature, circular economy and support for workers to transition to green jobs[59].

6. The **International Monetary Fund** says that "The transition to net-zero greenhouse gas emissions requires unprecedented change by companies and governments, as well as additional investment of as much as $20 trillion over the next two decades. Strong fiscal policies, complemented by a broad range of regulatory and financial policies, will be

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55 https://www.theccc.org.uk/wp-content/uploads/2020/12/Policies-for-the-Sixth-Carbon-Budget-and-Net-Zero.pdf

56 https://greennewdealgroup.org/wp-content/uploads/2018/09/GNDJobsReport9-18.pdf

57 https://neweconomics.org/uploads/files/Five_ways_to_fund_GND.pdf

58 https://www.theguardian.com/environment/2021/apr/20/green-stimulus-plan-uk-jobs-green-new-deal

59 https://www.greenpeace.org.uk/wp-content/uploads/2021/09/Greenpeace-UK-spending-review-and-budget-Autumn-2021.pdf

necessary to facilitate the green transition." That is approximately £14.8 trillion, or £740 billion a year. Based on the UK's share of world GDP (approximately 3.3%[60]) that means that UK's share might be £24 billion a year. All other estimates suggest that spending must be front end loaded, and so we presume that this spend might be double that sum if, as is required, most will be in the first decade of any programme of change[61].

[60] https://www.worldometers.info/gdp/gdp-by-country/

[61] https://content.govdelivery.com/accounts/USIMF/bulletins/2f5d480