
# The UK Equity Bank

## Towards income security in old age

**Les Mayhew and David Smith**

June 2014

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**This report was first published in June 2014 © ILC-UK 2014**

## Acknowledgements

ILC-UK is grateful to Les Mayhew and David Smith, Faculty or Actuarial Science and Insurance at Cass Business School, for undertaking this research. They in turn are grateful to the savings institutions, financial advisors, academic colleagues and others for their time and suggestions on earlier incarnations of the concepts and ideas expressed therein. Special thanks go to Duncan O'Learly at DEMOS, to Jane Finnerty at SOLLA, Nick Kirwan at ILC-UK and to Just Retirement for their comments and suggestions. Any opinions, errors of fact or mis-representations are wholly the responsibility of the authors.

# Contents

# Foreword

This paper comes at a time when the challenge to ensure people have a secure income in retirement has never been greater. The steady shift away from defined benefit pension schemes means that many people will have smaller pension pots to live on, while demographic change means that these smaller pots will need to be stretched over increasingly long retirements.

To close the resulting gap, people will increasingly need to consider how best to use all their available assets to provide a secure income in retirement. Retired people have an estimated £1.4 trillion locked up in the value of their homes but, despite this wealth, far too many retired people have scarcely enough income to enjoy a comfortable, healthy retirement.

Unlocking a significant proportion of this wealth would have huge benefits for retired people themselves, but also local communities and society as a whole. However, downsizing is expensive and impractical for many, and traditional equity release products have so far failed to attract a wide audience.

This is why is why we need new solutions to help more people use the equity in their home. The Equity Bank is one such solution, turning home equity into a guaranteed lifetime income. Additional income in retirement would allow people to lead more fulfilling, healthier lives, be better able to afford to maintain their home, stay in their home for longer and help towards the cost of care should the need arise.

I therefore warmly welcome this new concept as an important stimulus to the debate about retirement income in the twenty first century and I strongly commend it to policymakers.

**Baroness Sally Greengross**

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# Abstract

It has long been maintained that the value stored in people's homes could be used to provide greater income in old age and hence improve living standards. This is the route sometimes taken by people in their early retirement years who choose to downsize and use the proceeds to enjoy their retirement with fewer income worries. However, there is also a sizeable group of older people on low incomes for whom moving house would be impractical but for whom a higher income could significantly help improve their day to day life and hence wellbeing – particularly older retirees who live alone and may have impending care needs. The proposed Equity Bank, described in this paper, is a state agency which helps people release income from their homes in the form of a lifelong annuity in return for selling a portion of the equity in their homes to the state in which the value of the annuity is recovered on the death of the recipient. This paper describes how it could work in practice with examples and estimates of the size of target population and the consequent cash flows both for the individual and the state. For the Equity Bank to make a real difference to people's well-being, it is important that the financial benefits are not eroded through higher taxes or the withdrawal of benefits. Suggestions on how this could be done are provided.

# 1. Introduction

An ageing population ushers in a completely new era requiring society to find new solutions to the funding of social care and providing for older people. It is widely accepted that this is not a temporary issue that will soon go away and that there are no quick economic or policy fixes.

The Office of National Statistics (ONS), for example, estimates that the population aged 75+ will double from 5m to 10m by 2040. In addition, there are good reasons to think future generations of pensioners will be worse off than this current one.

One reason is that the transition from defined benefit pension schemes to defined contribution arrangements is likely to result in smaller pensions in the future, and increasing longevity means that personal savings and investments will need to last much longer.

Another reason is that life expectancy is increasing faster in this age bracket than at any other age. For example, female life expectancy at age 70 and 80 will increase by one year to nine years and by two years to seven years respectively. Male life expectancy is increasing more quickly, though from a lower base, and is predicted to be the same as females by 2030.[1]

In addition, radical changes to pension rules in the last budget are likely to result in fewer people annuitising their pension savings so that income security, as well as smaller pension sizes, could become an issue. Partly as a result, analysts predict a looming income gap for some older people which could cause them to fall back on the state for financial support.

However, many falling into this category, though income poor, are asset rich in terms of housing wealth, suggesting that they could be lifted out of poverty if only they were able to draw down the value in their home.

They may have also reached a point in their lives where they have become 'stuck' in their present accommodation and are unable to move except at disproportionate cost and disruption.

We also know that older people have seen the value of their homes increase considerably, especially those that bought before 1995. The fact that we are passing through another cycle of house price increases only serves to reinforce this argument.

To put a scale on the value of UK residential property, housing equity owned by the 65+ population is estimated to be worth around £1.4 trillion or, put another way, £122,000 per person on average (source: ELSA[2]), but in households with a deceased partner, home equity could be twice this average.

Logic suggests that even if only relatively small amounts were to be released each year it would generate macroeconomic as well as personal benefits to users. For example, it would benefit local economies especially in places with disproportionate numbers of older people and income deprivation.

The commercial mechanism for releasing value in the home is known as equity release. It allows a person to retain use of their home, while also obtaining a lump sum or a steady stream of income.

In this paper we put forward a suggestion for a new type of scheme which we call the 'Equity Bank'. It differs from commercial schemes, which it would sit alongside, because it would be owned, though not necessarily operated, by the state and because it is designed to provide an income rather than a lump sum.

Several arguments are put forward for its creation. For example, the current equity release market is not meeting its potential; secondly, the cost can be high, especially if only small amounts of equity are released; and thirdly, the product itself is complex and so many potential customers do not feel they understand or trust the product.

1 See 'Gender Convergence in Life Expectancy and the Postponement of Death', North American Actuarial Journal, Volume 18, Special Issue 1, 2014, 'Longevity Risk and Capital Markets. See also 'Decomposition of Life Expectancy and Limits to Life', forthcoming 'Population Studies' (for more information contact authors).
2 English Longitudinal Study of Ageing (ELSA)

These points have been made often before but action has been limited. As a recent select committee report noted:

> *"The Government should work with the financial services industry to ensure such mechanisms [for releasing housing equity] are available and to improve confidence in them".*[3]

However, there is another argument for state participation which concerns the potential for wider interactions with the tax benefit system, which is why we believe it makes sense for the Equity Bank to be owned and maintained by central government. A further advantage is that borrowing and administration costs should be cheaper depending on how the scheme is designed and operated.

In what follows, we reflect on the commercial market for equity release and put forward the case for the Equity Bank in more detail. In section 2 we review and compare the change in house prices with general inflation and find that many in our target group will have accumulated considerable housing wealth; in section 3 we explain the scheme and suggest changes to the tax-benefit system. Section 4 briefly recaps and summarises the pros and cons of the scheme.

# 1.1 The current market for equity release

Equity release products have been available for many years. There are basically two types of commercially available products – lifetime mortgages and home reversion plans. Lifetime mortgages involve taking out a type of mortgage, with the loan accruing interest over time and being repayable on death or sale of the home.

In home reversion plans, financial providers purchase all or part of a customer's house, either through a lump sum payment or through regular payments. The customer remains in the home, rent-free, with a lifetime lease. At the end of the plan the property is sold and the sale proceeds are shared according to the remaining proportions of ownership.

According to the Equity Release Council, the typical purchaser is male, aged 65 to 74; the average amount released is £57,000, and the average value of the property is approximately £250,000.[4]

The life time cost of equity release is hard to compare with other types of loan because it depends on borrowing rates and when a property is sold. Costs include upfront administrative fees, valuations, legal costs, building insurance etc.

There are various reasons why home owners choose equity release but the most usual quoted in client surveys is in order to increase their incomes. Other, less common reasons include one-off purchases such as buying a new car or taking an expensive holiday.[5]

Given the above background and particularly the increases in property values, it is perhaps surprising to find that the commercial market has shrunk in recent years from 29,000 new plans in 2007 to 16,000 in 2011, although it is now slowly rising again reaching 19,000 in 2013.

This is smaller than required if it is to meet the financial challenges of an ageing population. Some of this downturn can be explained by the recession and the market will doubtless recover in time, although much will depend on future changes to the costs of borrowing. However, there are other factors hampering its development.

For example, negative perceptions about previous equity release products may have acted to constrain its growth. These date back to plans sold in the late 1980s which did not have the safeguards that exist on equity release products available today. As a result, some people lost money and so as a consequence many that might have benefited from its use since have not done so.

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3 Ready for Ageing? - Select Committee on Public Service and Demographic Change. http://www.parliament.uk/business/committees/committees-a-z/lords-select/public-services-committee/report-ready-for-ageing/
4 Source: Equity Release Council www.equityreleasecouncil.com/home/
5 Source: Just Retirement – The role of Housing Equity in Retirement Planning

Since then debate in the industry has centred on how to strengthen the market through the provision of independent financial information and advice, including clear industry standards on what purchasers of these products should expect and any safeguards or guarantees, and these are now in place.[6]

As financial products go, equity release is unsurpisingly complicated because it involves assumptions about future house prices, inflation and how long people will live, and so any moves to simplify how it works and make it more affordable are to be welcomed.

Research by the Joseph Rowntree Foundation identifies these and other issues as the reasons why an experiment in three local English councils produced disappointing results.[7] Involving an equity release provider, the scheme, called the Home Cash Plan, allowed low income older homeowners to release modest cash sums from their homes.

For a range of reasons take up was very low. Obstacles included the difficulty of identifying and contacting suitable potential customers and their subsequent misapprehension. Since then 'The Home Cash Plan' is now being offered nationally through Age UK Enterprises and First Stop and levels of interest are reported to have been better.

# 1.2 How the Equity Bank would work

For an older person, releasing equity is voluntary, but a difficulty arises when it comes to paying for residential or nursing care, especially if it results in the forced sale of a person's home.

Following the work of the Dilnot Commission[8], the Government is introducing the deferred payment scheme, the aim of which is to prevent people having to sell their home to pay for care during their lifetime. This is a local authority run scheme and similar to one already operating in New Zealand.[9]

However, our proposal is aimed at a different need. Although social care is one of the many uses to which equity release could be put, 'The Equity Bank' is designed to provide users with additional and guaranteed income until death and thus a higher level of income security.

It differs from the deferred payment scheme, from home cash plans or immediate needs annuities, because it is designed to produce an income at an earlier stage in the life cycle before people develop care needs.

Its main purpose would be to improve living standards in retirement, as well as making more money available for every day tasks and services such as help around the home, home maintenance, holidays, etc.

Our proposal is aimed at a sizeable group of older home owners who have relatively small incomes of, say, £10,000 per annum or less, consisting mainly of the state pension and limited additional sources.

A stereotypical user, for example, could be a widow living alone aged around 75 and eligible for means tested benefits such as Pension Credit or Council Tax Benefit – in other words *not* a typical purchaser of equity release products who tend to be younger.

A key question is why a person should take the income as an annuity rather than to draw down equity as and when it is needed? It could be maintained that certain individuals (e.g. someone in poor health) might be better off simply drawing down equity rather than risk purchasing an annuity.

Each case is likely to be different, but the argument against equity draw down is that the equity may run out and that borrowing costs will be higher. It is also aimed at a different need such as making significant purchases like buying a new car or making housing repairs.

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6 Equity Release Council, 'Code of conduct', www.equityreleasecouncil.com/ship-standards/code-of-conduct/ (accessed 12 Feb 2014).
7 Joseph Rowntree Foundation: http://www.jrf.org.uk/sites/files/jrf/equity-release-schemes-summary.pdf
8 Commission on Funding of Care and Support (2011) Fairer Care Funding - The Report of the Commission on Funding of Care and Support. http://www.dilnotcommission.dh.gov.uk/our-report/
9 NZ Residential Care Loan scheme: see http://www.workandincome.govt.nz/individuals/a-z-benefits/residential-care-loan.html

With an annuity it is easier to budget and less complicated to administer. The income would also be available and guaranteed right up to death, but, as with draw down there may be wider impacts on tax and benefit entitlements which need to be carefully evaluated.

The basic idea is that, after receiving the appropriate financial advice, an individual sells a portion of their home to the state in return for a guaranteed lifetime income. On death the property would be sold, the debt to the state paid and any remaining value passed to the person's estate.

Although an equivalent scheme could be developed for couple households, we argue that those living alone should be the starting point because it would be simpler, cleaner to operate and more targeted on need in the first instance.

In theory, the state could profit because of resulting changes in personal tax and the withdrawal of certain income related welfare benefits. However, it is important not to overstate this, especially if the loss of income were to undermine the scheme itself.

Such a scheme, if widely available, would require up front costs in the form of loans that would need to be re-paid on death. In examples provided, we show how it could be made more affordable by careful targeting.

Several advantages to the individual can be identified. Not only would the scheme provide higher income in retirement, it could also confer health benefits by making everyday expenditures more affordable, for example on home heating and adaptations, for help with every day tasks, general property maintenance and so on.

# 2. House prices versus cost of living

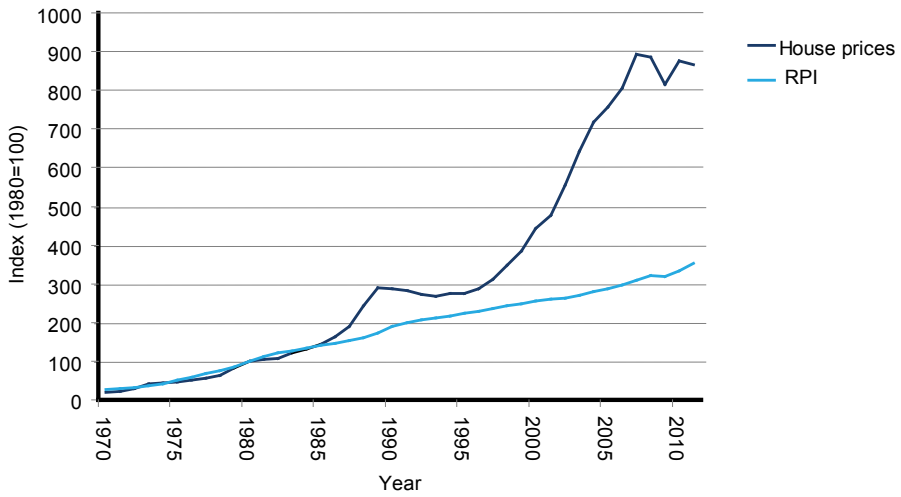
Although incomes among retired housholds have improved relative to non-retired housholds over the past three decades, retired households' income still remains much lower. In addition, averages tend to vary considerably between household types and circumstances such as whether individuals live alone or not, have access to occupational pensions or investment income and so on.[10]

The argument that value in the home could be used to improve standards of living in retirement or to pay for care is not new. What is less appreciated is the extent to which house values have outstripped the cost of living, especially for those that bought their homes in the 1980s or 1990s, hence opening up the possibility of generating a useful additional income. Part of the objective of this paper is to quantify exactly what might be possible.

Our measure of house prices is the House Price Index (HPI) and the the Retail Price Index (RPI) for living costs. Figure 1 shows the change in the HPI and RPI since 1970 (indexed at 1980=100). As can be seen, house prices have increased at a much faster rate than the RPI, albeit unevenly with the index in some years down on the previous year. This means the amount of gain will be dependent on the timing of house purchase and its eventual sale.

10 http://www.ons.gov.uk/ons/dcp171776_284355.pdf

**Figure 1:** Index of UK house prices versus RPI: 1970 to 2010




Since many people approaching or already in retirement today will have purchased their homes in the 1970s and 1980s, their financial gains will have been the greatest and these are the people we are mostly interested in.

Table 1 below shows changes in average house prices since 1980 versus living costs in the form of a ratio. It shows that house prices have risen more than eight-fold but the cost of living only three-fold.

Clear though the differences are, the extent of these gains and the ability to release some of this value will vary according to the type of property and area of the country. For example, properties in the south east of England have increased most in value and thus arguably offer the greatest potential. Thus, it is important to be more precise about who these individuals are and to both quantify and profile them in more detail.

**Table 1:** Comparison of House Price Inflation and Retail Price Index since 1980 (1980=100)

| Year | HPI (A) | RPI (B) | Ratio (A)/(B) |
|---|---|---|---|
| 1980 | 100 | 100 | 1.00 |
| 1985 | 144 | 142 | 1.02 |
| 1990 | 287 | 189 | 1.52 |
| 1995 | 276 | 223 | 1.24 |
| 2000 | 442 | 255 | 1.74 |
| 2005 | 758 | 287 | 2.64 |
| 2010 | 875 | 334 | 2.62 |

# 2.1 Target population

We have already suggested that the target population is likely to include people who are asset rich and income poor. However, within this broad definition there are different ways of defining members of this group. A more precise definition is provided by Figure 2, which is a contour map of wealth and assets in the 65+ population.[11]

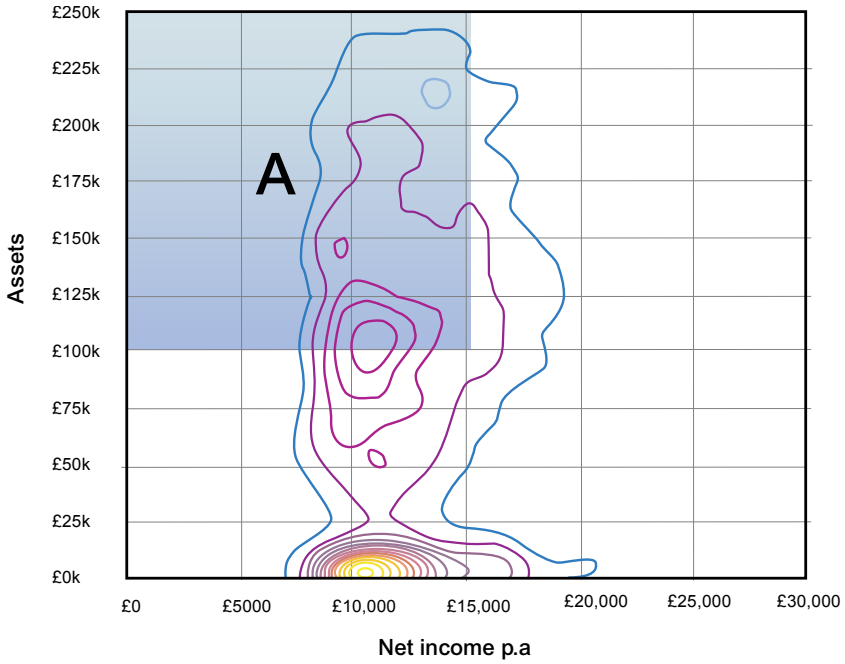
Wealth in this case is defined as all assets including savings, but by far the greatest proportion of all personal assets consists of housing wealth. The chart reveals an essentially bimodal distribution of wealth in which those with no housing equity at all are bunched together at the bottom with incomes which range from approximately £8,000 to £15,000 a year.

11 Based on data from the English Longitudinal Study of Ageing (ELSA)

The wealth of those with housing equity is more spread out but there is a prominent peak at around £100k which equates very roughly to half the value of the average home in a couple household. Importantly, Figure 2 also demonstrates that the distribution of wealth is considerably greater than the distribution of income, indicating a varying capacity to benefit from equity release.

Income by contrast tends to be concentrated within a much narrower band, peaking at between £10,000 and £12,000 per annum. In other words, it shows that while many people have considerable wealth, it does not automatically follow that they also have a high standard of living if their income is low.

**Figure 2:** Contour map showing the distribution of income and wealth. The highlighted area, A, comprises an estimated 2.6m individuals with assets of greater than £100,000 but incomes of less than £15,000.




If we consider the region of Figure 2 covered by A, these are people with incomes of less than £15,000 but assets worth more than £100,000. We term this group as 'asset rich and income poor'. We estimate their number to comprise 2.6m individuals of whom 1.4m are aged 65-74 and 1.2m are aged 75+. Of those aged 75+ around 400,000 are estimated to live alone.

This is our target group because: (a) they have equity to release; (b) their income is low and hence (c) they stand to benefit the most; and (d) payback periods would be shorter. Nevertheless, it could be argued that our scheme is unambitious and should range wider, as it could, at least potentially, increase tax receipts substantially.

However, if the scheme were suddenly introduced to a wider target group rather than phased in, Government borrowing would have to be higher and possibly also interest rates. In extreme circumstances, this could undermine the scheme and divert public expenditure away from other productive initiatives such as helping first time buyers.

In addition, this would have negative consequences if it were seen, as is likely, more as a tax raising measure than as a way of helping people. If, for example, the additional income were to be partly wiped out by higher taxes and the withdrawal of benefits, then customers would feel cheated. We return to this important issue in the next section.

For these reasons we suggest that the scheme should be phased in, possibly on a cohort basis – for example single homeowners turning age 75. A further advantage is that it would recognise that there is already a commercial market for equity release and it would not be sensible to stray into territories where the market is operating successfully.

# 3. How the Equity Bank works

Our proposal is that the Equity Bank would be a state agency, or a public agency that is underwritten by the state. Its primary function would be to enable people to release equity from their homes in return for an income which is payable for life.

For example, it could be run by a local authority with a mandate to run the scheme locally, although not necessarily in every area, and in effect be an extension of the Universal Deferred Payment Scheme.

With any annuity product a lump sum is paid in advance and the policyholder receives an income until they die. In contrast, through The Equity Bank, the income is received first and the payment is made following the user's death. The debt value is expressed as a percentage of the home value and is recovered from the person's estate.

Rates of return on investment and therefore the cost to the user would depend on Government borrowing costs, the costs of administration and consequential changes in taxes and benefits.

Theoretically, administration could also be integrated into the benefits system where recoverable loan arrangements already exist under the Social Fund, albeit for smaller amounts.[12] Alternatively it could be a role that falls to local councils as noted above.

There are possible variants in how the income amounts are calculated but we assume that the government would want them to retain their purchasing power and hence that the income payments will be linked to price inflation. Annex B provides further technical details of the model.

There is an argument that house inflation could be used to calculate changes in income payments but if house prices go down then so would the value of the income payments and we believe this extra volatility would not be welcomed.

While it is theoretically possible that price inflation could also be negative this is much less likely and would not be a problem as the pensioner would need less income if prices are decreasing in the economy.

To reduce the required number of variants needed to illustrate the results, Table 2 uses real rates of return i.e. we focus on the difference between the rates of return and price inflation, and in addition we have assumed that house price inflation is the same as price inflation.

Though the results are not quite identical a real interest rate of 1% could be used if price inflation is assumed to be 2% and investment return is 3% or if price inflation is assumed to be 5% and investment return is 6% and so on.

If it is assumed that house price inflation is higher than general price inflation, as has been historically the case, this will lead to a higher annuity rate for the same percentage of house ceded as the increase in the value of the home and hence payment on death will increase faster than the annuity payments.

The easiest way to demonstrate how the Equity Bank would work is an example in which we illustrate the costs of a loan and how long it would take for the state to re-coup its investment based on cash flows.

The model is based on ONS provisional life tables for 2010-2012 and so is representative of 'average lives' who will be a mix of people in different initial states of health, some healthy and some less so.

The cash flow consequences on government expenditure are then shown for different cohorts and a given population size (for simplicity 1,000 individuals) on an actuarially fair basis assuming no profit margin. From this we are able to estimate the impact on public expenditure, including outflows and inflows, and how many years it would take for the scheme to balance inflows and outflows.

12 Gross expenditure on discretionary and budgeting loans in 2011/12 was £860m in which recoveries exceeded out go by £26.2m.
Source: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/214337/2012-annual-report-social-fund.pdf

We base our analysis on females because they are more likely to be the sole survivor in cohabiting circumstances where equity is shared. Similar calculations are obviously possible for males but because males currently live for fewer years than females, cash flows will tend to breakeven sooner.

Table 2 (a)-(c) shows the cost of providing the income (i.e. the original amount of equity that would need to be released at different ages). Three price inflation linked options are considered providing an initial income of £2,000, £3,000 and £5,000 a year respectively.

Table 2 (a) shows the amount of equity needed to pay an income starting at £2,000 a year. It shows that a woman aged 75 would need to release £29,500 worth of equity to generate an income for life of £2,000 (escalating with RPI assumed at 2% p.a.). A younger woman aged 65, with longer life expectancy, would need to release £50,400 at the same interest rate.

It is seen that the cost of providing the income increases significantly at higher interest rates which is a reflection of the cost of borrowing for the Equity Bank to fund the scheme. For example, the £5,000 a year income in Table 2(c) where real interest rates are 5% for a 65 year old will cost £159,300 as compared with £116,000 at an interest rate of 1%.

This may initially appear to be a counter-intuitive result as when the real interest rate increases it costs more to get the same yearly income. Normally with annuities, the policyholder gets a higher income when interest rates are high but for this policy, as the payment is made at the end of the income stream, it is more valuable the lower the discount rate and hence less home equity needs to be ceded.

**Table 2:** Capital cost of a price inflation linked annuity based on different start ages and costs of borrowing for the Equity Bank: (a) £2,000 p.a.; (b) £3,000 p.a.; (c) £5,000 p.a. Amounts in the tables are the values of the capital needed to provide the given annuity at given real interest rates and ages.

| Age | 1% | 2% | 3% | 4% | 5% |
|---|---|---|---|---|---|
| 60 | 56.9 | 63.2 | 70.0 | 77.4 | 85.3 |
| 65 | 46.4 | 50.4 | 54.6 | 59.1 | 63.7 |
| 70 | 36.7 | 39.1 | 41.6 | 44.1 | 46.7 |
| 75 | 28.2 | 29.5 | 30.8 | 32.1 | 33.4 |

**(a) £2,000**

| Age | 1% | 2% | 3% | 4% | 5% |
|---|---|---|---|---|---|
| 60 | 85.4 | 94.9 | 105.1 | 116.1 | 127.9 |
| 65 | 69.6 | 75.6 | 82.0 | 88.6 | 95.6 |
| 70 | 55.1 | 58.7 | 62.4 | 66.1 | 70.0 |
| 75 | 42.3 | 44.2 | 46.1 | 48.1 | 50.0 |

**(b) £3,000**

| Age | 1% | 2% | 3% | 4% | 5% |
|---|---|---|---|---|---|
| 60 | 142.4 | 158.1 | 175.2 | 193.6 | 213.1 |
| 65 | 116.0 | 126.0 | 136.6 | 147.7 | 159.3 |
| 70 | 91.9 | 97.8 | 104 | 110.2 | 116.6 |
| 75 | 70.5 | 73.7 | 76.9 | 80.2 | 83.4 |

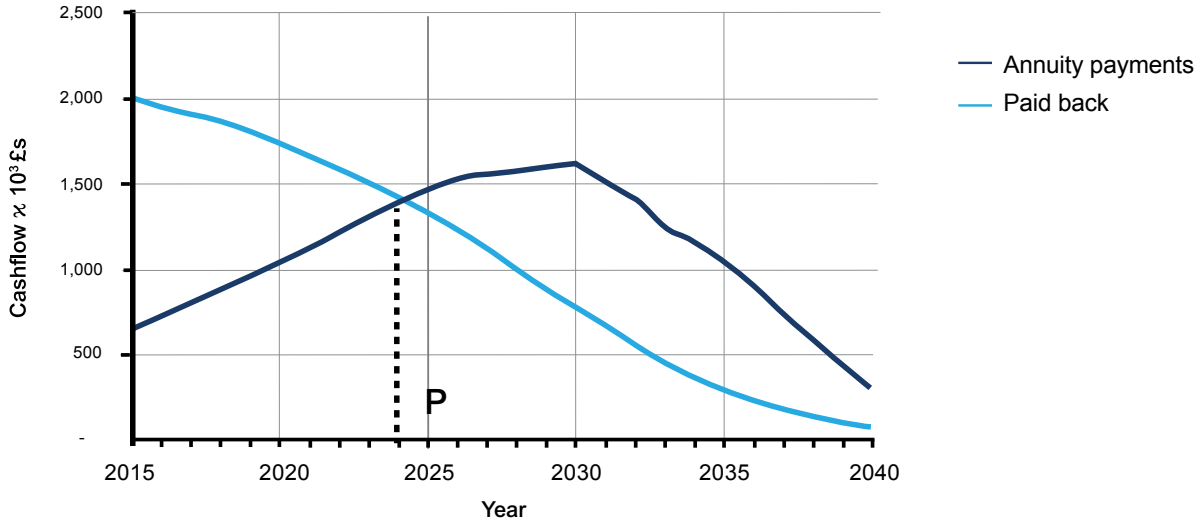
**(c) £5,000**

Bearing in mind the average equity owned by an older home owner living alone (see introduction), the average amount that people borrow will tend to be up to half this amount. Our model suggests that if real interest rates are low, say 2%,then a person releasing equity valued at £122,000, the average per person, would receive an annual income of: £3,860 (age 60), £4,840 (age 65), £6,250 (age 70), and £8,275 (age 75).

From the above we can see that the up-front costs of the scheme to the state are higher at younger ages because people live longer until the loan is recouped, and in addition the volumes of participants will be potentially greater. This suggests that the scheme should be introduced first at higher ages before being broadened to younger ages once the scheme is established.

Figure 3 shows the predicted cash flow out of and into the Equity Bank based on a caseload of 1,000 women age 75 and a start year of 2015. For an income worth initially £2,000 p.a. to each woman participating, the initial outlay is £2m, reducing to almost zero by 2040 as the remaining survivors reach 100 years old. As can be seen, inflows on the sale of equity build up gradually and exceed outflow in 2024 (point P) before peaking in 2030.

**Figure 3:** Chart showing cash flows for 1,000 women aged 75 in 2015 based on £2,000 annuity at 2% p.a.




Cash flow is important since it affects broader public expenditure choices, especially if it is introduced on a large scale with many more participants than in the example shown. Table 3 shows the break-even year (inflows equal outflows) based on the same start year as before of 2015.

It is seen that the time is extended for younger ages because loan costs are greater and the time of death is later. Hence there is a later switch between paying out income and recouping costs. Repayments start shortly after each person dies and there would need to be arrangements in place to compensate people dying in the early years of taking out a plan.

**Table 3:** Break-even year in cash flow terms by age based on providing an initial income of £2,000 p.a. and an interest rate of 2% p.a.

| Age | loan ('000s £s) | break-even year |
|---|---|---|
| 60 | 63.2 | 2033 |
| 65 | 50.4 | 2030 |
| 70 | 39.1 | 2027 |
| 75 | 29.5 | 2024 |

From a public expenditure standpoint, we conclude that the older the person then the quicker the scheme will generate positive cash-flows. For these reasons we suggest an initial start age of 75 years, but this could be extended to younger ages as experience is gained and as public finances allow in the light of trends in life expectancy and the housing market.

The scheme would be rolled out in the light of actual receipts and trends in future life expectancy. Based on the assumptions in Figure 3 and assuming 40,000 new applicants a year each with an annual starting income of £2,000 (see Annex A), calculations show a build up in expenditure to a maximum of around £300m per annum after nine years falling thereafter.

To repeat, the above illustrations only apply to people living alone. In co-habiting households, extra conditions may be needed to avoid loan periods becoming over-extended or the cost of loans adjusted accordingly depending on factors such as the age difference and gender of each partner in the co-habiting case. Different calculations are needed for these cases and are not considered here.

The Equity Bank is likely to be more popular in some areas of the country than others and its local impact is obviously dependent on the number of people fitting the preferred profile. This could be an argument for schemes to be based with local authorities as previously suggested.

A case study discussed in Annex A to this paper explores this possibility. Taken from a study of six London boroughs in 2011, it finds that of the 118,000 people aged 65+, an estimated 75,000 were home owners and of these, 36% lived in households on means tested benefits (our measure of low income).[13]

If we restrict our attention to home owners in larger properties (defined for illustrative purposes as living in a property rated as Council Tax Band D and above) and living alone then we estimate there are 8,400 people fitting these criteria. Of these people, 4,900 are aged 75+, or 4.1% of the older population.

Given our suggestion that the scheme would initially only include people turning aged 75 each year, the numbers are correspondingly much smaller. Based on the six councils, there were 5,800 people that turned 75 in 2011. Of these people, 717 lived alone in privately owned accommodation and of these, 311 were income poor. If all 311 took out an annuity worth £2,000, the cost in the first year would only be around £622,000 spread across six local authorities.

## 3.1 Equity release and interactions with the tax benefit system

All sums realised by any form of equity release are considered for benefit purposes as being capital or income. Our scheme is designed to produce a regular income and so benefit rules for treatment of capital would not apply. This would be the case if a person opted, say, for an equity drawdown product especially where the amounts drawn down put them above the capital limit for say Pension Credit purposes.

In contrast, a person using equity to generate an income may be liable to pay income tax and/or also receive reduced amounts of means tested state benefits depending on their level of income and wealth. However, income tax does not apply to equity drawdown products as long as it is from a person's main home. Clearly, the differing treatment under income tax rules could undermine the attractiveness of our proposal and therefore any social value.

The possible loss of revenue is captured in Figure 4. A fixed amount of equity is transferred to the state in exchange for a regular income. There are two accompanying flows: one is additional income tax to the Exchequer which is potentially due on any additional income; the second is a reduction in income related benefits flowing from the state to the individual.

For the average pensioner, the marginal rate of tax on additional income is 20% for income over the personal allowance. However, income related benefits such as Pension Credit and Council Tax Benefit are also withdrawn as income increases - Pension Credit at a higher withdrawal rate than Council Tax Benefit.[14] [15] A higher income could also result in the loss of certain health benefits such as help with dental costs.

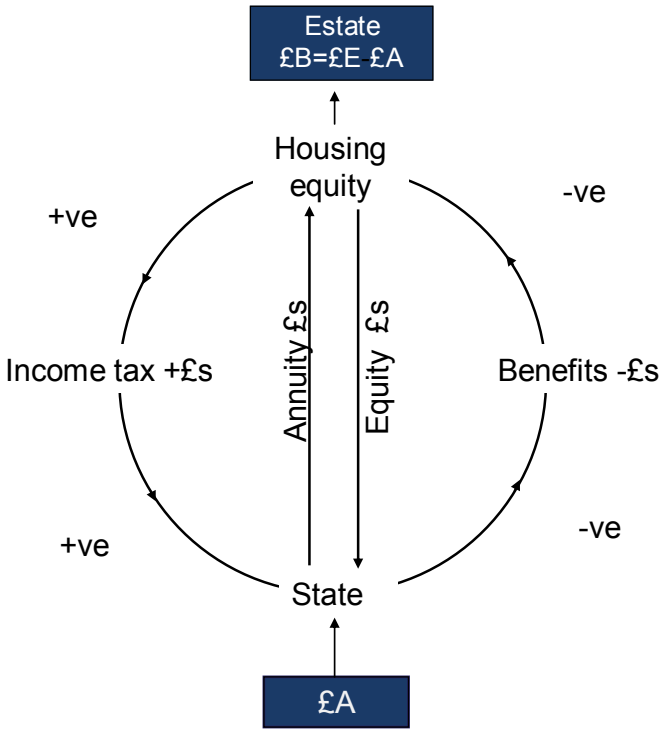
13 The source for this data is work undertaken for the six Olympic Boroughs in preparing for the 2011 Census carried out by Mayhew Harper Associated Ltd. (www.nkm.org). A summary report of the Olympic study can be found at: http://www.hackney.gov.uk/Assets/Documents/Six_borough_nkm_summary_population_analysis.pdf

14 Note that, although a new flat rate state pension is being introduced from 2016, it will not apply to existing pensioners and so Pension Credit will continue to be paid for years to come and to people in our target group

15 Responsibility for paying Council Tax Benefit paid to working age claimants is being transferred to local councils following the introduction of Universal Credit; however, rates for pensioners will remain at their current levels and rates will continue to be regulated nationally.

Conversely, certain benefits such as Disability Living Allowance, Attendance Allowance or Winter Fuel Payments are not means tested or subject to tax and therefore the problem appears to be limited to only a few benefits. In addition, our target group are over pension age and so any interactions with working age benefits are avoided. Overall the picture is therefore not as complicated as it might first appear and could potentially be addressed relatively simply.

**Figure 4:** Chart showing money flows in the system (Key: £E is value of home, £A is the equity released; £B is the residual value of the estate). Actual flows will depend on tax benefits rules.




Consider an average case of an older person living alone with modest savings. Two basic situations can be identified:

(a) People with incomes below £10,000 do not pay income tax but receive Pension Credit and help with Council Tax,

(b) People with taxable income over £10,000 pay income tax, do not receive Pension Credit and only reduced levels of help with Council Tax up to incomes of around £14,000.

Suppose a person decides to release equity from their home. In case (a) the financial benefit would be marginal as most of the available extra income would be offset not by tax but by the withdrawal of Pension Credit and Council Tax Benefit.

In case (b) a person would be unaffected by the withdrawal of Pension Credit and only partly affected by Council Tax Benefit; however, they would be affected by higher taxes due on the annuity.

Thus, a person whose income is £10,000 initially who uses her home to generate and additional income of £3,000 a year would only be around £2,000 a year better off after tax and withdrawal of Council Tax support.

In most circumstances therefore a financial advisor may conclude that capital draw down is the better option especially if taken in small lump sums. Such tax inconsistencies suggest that if the Government wishes to proceed with the scheme, then rules will require alteration in favour of equal tax treatment for this kind of arrangement.

There are several options but the most obvious would be to disregard income from released housing equity as long as the equity is released from their main home. This would put it on a par with draw-down products which, as noted, are also not counted as income for tax purposes.

Because of the high withdrawal rate of Pension Credit it also makes sense to disregard equity based income for the purposes of its calculation. The impact of withdrawal of Council Tax Benefit, however, is much less consequential and there are already deductions for people living alone or are registered disabled. Thus further work is needed to verify and cost these proposals.

# 4. Discussion

We have argued that there is a lacuna in the market for an income product based on the value in the home for older people who are asset rich and income poor. Although commercial equity release schemes are available, the market is small relative to potential need and has been declining of late (although it now appears to be improving again).

Over the next decade the number of older people is due to increase substantially, so using personal wealth more effectively to pay for day to day costs assumes greater importance. The difficulty is how to use the value in the home to provide a better income in older age without having to sell up and leave or pay higher taxes or see reduced benefits.

If these issues could be addressed, the quality of older people's lives could be significantly improved. It would enable them to meet higher household running costs and other personal needs such as paying for care. The scheme is not designed to replace the commercial market for equity release but to complement it. A purchaser under our proposed scheme will be higher than the average age of a typical equity release purchaser.

This group will include most notably people living alone, often female, currently in reasonable health, who are unable or unwilling to move home for practical or other reasons and are effectively trapped by their circumstances. This is in contrast to younger retirees in couple households who are more active and for which a better option might be to downsize and release capital that way.

The Equity Bank is not therefore a panacea. By definition, it does not help to deal with the income needs of people that do *not* own their own homes but have only modest pensions. In other work we have proposed the introduction of Personal Care Savings Bonds, a paper on which can be found on the ILC-UK web site.[16]

In any government-guaranteed scheme it is important to recognise the potential impacts on public expenditure which is why we have set out the options in some detail. The effects will depend on the qualifying age and whether the scheme is limited to specific cohorts (e.g. persons turning aged 75).

As a rough generalisation, a person initially receiving £3,000 p.a. would need to release about £46,000 of equity assuming interest rates of 3%, or about 19% of the average value of a home. This compares with an average of £57,000 released in commercial schemes according to the Equity Release Council.

By Government expenditure standards, and given the huge size of the welfare bill, these are small amounts, so there is considerable scope in our view to pilot the scheme and limit the Government's exposure should the scheme not go to plan.

One of the justifications for the Equity Bank is that it could help people to pay for care needs provided in their own homes which would not otherwise have been affordable out of their normal retirement income. In this event, a possible issue for the Government would arise if the reduction in assets through depleting home equity resulted in an individual triggering entitlement to state support for their social care.

16 Personal Care Savings Bonds - a new way of saving towards social care in later life
http://www.ilcuk.org.uk/index.php/publications/publication_details/personal_care_savings_bonds_a_new_way_of_saving_towards_social_care_in_late

This would depend on two factors: the terms under which capital assets are converted to income and secondly the treatment of assets and income in the social care means test itself. It turns out the means test is more important in this regard than the terms under which equity released.

Assuming individuals had assets of around £100,000 from which to generate additional income, then as long as the additional income is less than about £5,000 a year there should not be a problem. However, in other publications we have recommended that the social care means test should be greatly simplified and hence this issue merits further analysis.[17]

For people participating in the scheme financial advice would be essential. This would need to take account not only financial factors but also non-financial considerations (such as personal health, co-habitation status, existing income and so on). There would need to be safeguards for people that died prematurely as there are with standard annuities and more generous terms for people that are already sick or disabled.

Other key issues are also raised by our analysis such as how to deal with inflation. We think that the loan should be linked to housing inflation while the income payments should be linked and hence rise with RPI. The alternative would be to link the income payments to house inflation but then the amounts could go down as well as up. In addition, house price swings can vary considerably in different parts of the country.

Some will be concerned that if house prices do rise they will lose out as for most of the last three decades house prices have been rising faster than general inflation. However it is worth pointing out that the value of the remaining equity in their homes will also have increased by the time the property is sold and so their heirs will also have benefited.

The value to the individual therefore needs to be set in the context of the alternative uses to which the foregone equity would have been put if it were not for improving a person's standard of living – this could include a larger estate for their heirs or greater exposure to inheritance tax.

17 "We need a step-change in the way people plan for social care…" Unlocking the potential, Les Mayhew And Duncan O'Leary, DEMOS 2014. http://www.demos.co.uk/files/Unlocking_potential_-_web.pdf?1393180449

# 4.1 Pros and cons of the Equity Bank – a summary

It is helpful to summarise these points by listing the potential and wider impacts of the Equity Bank for key stake-holders of which there are four – older people, the Government, heirs to an estate, and commercial providers of equity release products. The following sets out the pros and cons for each.

### Older people

Pros:

- Older people who are asset rich and income poor are able to convert part of their assets to income. This will allow them to have a more comfortable retirement and fewer financial worries,
- Assuming that the income is inflation protected (either linked to inflation or house prices (though this could lead to a more volatile income)) the improvement will be durable,
- The asset income exchange can be priced with only an allowance for administration costs, hence giving higher income than if bought from a commercial provider,
- Individuals normally trust government financial institutions more than commercial firms and so should enjoy greater peace of mind,
- Unless the whole value of the home is used, users will still benefit from rising house prices.

Cons:

- They will pass less on to their heirs,
- Equity release is a big step and individuals will need financial advice on which are the best options,
- If the income is not directly linked to house prices then users may feel that they did not get a 'fair share' assuming they have given up a percentage of their home.

### The Government

Pros:

- The Equity Bank will help reduce pensioner poverty and improve well-being and help people to remain in their homes for longer and keep them in better order,
- It will help make a contribution to care costs when and if they are required, and help moderate growth in state funded social care,
- If house prices go up this could be an additional source of profit for Government (but only if a percentage of the home and not a fixed sum is transferred into state ownership).

Cons:

- If house prices go up a lot there could be pressure to increase income but not the other way around, in which case Government would be faced with difficult choices (again, only if a percentage of the home is given up),
- If a person dies early there could be pressure on compensation to heirs (but again not the other way around). The scheme could be designed to avoid large financial loss but this would mean generating less income,

- Heirs may contest that their elderly relation did not understand what they were doing, which underlines the necessity for good financial advice,
- There is an upfront cost and depending on the age offered there could take several years to break even.

## Heirs

Pros:

- Heirs would see a member of family with more income in old age and potentially take some financial pressure from their shoulders,
- If family member has to go into care the net cost of the equity release will be lower than expected due to it being more likely that the government will fund more of the care costs due to means testing.

Cons:

- Heirs would lose some of their inheritance – this would be particularly distressing if a family member dies early unless there is protection built in for early death.

## Commercial Equity Release Providers

Pros:

- If equity release becomes more popular as a result of the introduction of the Equity Bank, commercial providers might receive more business from those outside the qualifying criteria,
- The Government may decide to franchise the product in which case commercial providers could compete with, as well as against, the Equity Bank.

Cons:

- They would be up against a new competitor that can borrow money cheaper, has a different pricing mechanism and has a better 'brand' of trust so sales will be harder.

# ANNEX A:
# Segmenting the market: A case study

This annex seeks to identify the market for a product which pays an income based on the value of the home. The paper has suggested a very specific profile for people that might benefit, namely those aged 75+, living alone in privately owned larger properties whose income is low enough for them to qualify for means tested benefits.

For this purpose we make use of a study conducted for the six Olympic Boroughs in 2011 (Barking and Dagenham, Greenwich, Hackney Newham, Tower Hamlets, and Waltham Forest). Whilst not necessarily representative of the whole country it is able to put a figure on the size of the market in an area and the scale of the potential costs.[18]

Our measure of low income is based on entitlement to means tested benefits: either Housing Benefit or Council Tax Benefit. Our proxy for home ownership is housing tenure (*not* living in social housing), and for housing equity the Council Tax Band.[19] As our demographic baseline, we consider the whole 65+ population but base the analysis of our target group on the following four segmentation factors.

These are: (i) whether living alone, (ii) whether aged 75+, (iii) living in private housing tenure, and (iv) Council Tax band D or above. The first two columns in Table A1 show the segmentation category and the number of people in each sub-group. The next four columns show each segmentation factor in turn and the final column shows the percentage of each risk group in receipt of means tested benefits (our test for low income). When a risk factor applies it is denoted in each row and column by the letter 'Y'.

The numbers at the foot of the table give the total population and the number of older people that can be linked to each of the segmentation factors. So for example, there are 117,853 people aged 65+ living in these boroughs out of a total of 1.5m residents. Of these, 34.9% live alone (i.e. 41,150/117,853 x 100), 45.8% are aged 75+, 36.2% live in social housing and 81.7% in band D or above.

The table shows that the first eight risk groups, comprising 42,622 persons, all living in social housing have the highest probability of being in receipt of means tested benefits. The percentage in these cases ranges from 70.9% to 83.5% (see final column). This compares with an average of 50.6% for the entire older population of these boroughs (see bottom cell, right hand corner).

By definition nobody in these sub-groups that live in social housing have equity to release. However, in the lower eight rows of the table we find a further 75,231 people living in private accommodation most of whom are home owners, although some will live in rented accommodation or care homes. The percentage living in households on means tested benefits in their case ranges from 15.5% to 49.6% (see final column rows 9 to 16).

18 Based on work undertaken for the six Olympic Boroughs in preparing for the 2011 Census by Mayhew Harper Associates Ltd (www.nkm.org).
A summary report of the Olympic study can be found at: http://www.hackney.gov.uk/Assets/Documents/Six_borough_nkm_summary_population_analysis.pdf

19 Council Tax is a tax on domestic property collected by the local council. The money pays for local services such as schools, rubbish collection, roads and street lighting.
The Council Tax levied is based on the valuation of each home and ranges from band A (lowest value) to band H (highest value).

**Table A1:** Risk ladder segmenting the 65+ population living in six London boroughs according to habitation status, age, housing tenure and Council Tax Band

| Risk category | Number living in each category | Living alone | Aged 75+ | Social housing | Tax band D or higher | % living in benefit households |
|---|---|---|---|---|---|---|
| 1 | 648 | | Y | Y | | 83.5 |
| 2 | 8,463 | Y | | Y | Y | 82.4 |
| 3 | 1,223 | | | Y | | 81.7 |
| 4 | 10,901 | Y | Y | Y | Y | 80.7 |
| 5 | 8,527 | | Y | Y | Y | 72.2 |
| 6 | 153 | Y | | Y | | 71.9 |
| 7 | 178 | Y | Y | Y | | 71.3 |
| 8 | 12,529 | | | Y | Y | 70.9 |
| 9 | 9,857 | Y | Y | | Y | 49.6 |
| 10 | 7,644 | Y | | | Y | 45.3 |
| 11 | 15,141 | | Y | | Y | 40.5 |
| 12 | 23,219 | | | | Y | 36.5 |
| 13 | 6,527 | | Y | | | 24.1 |
| 14 | 2,168 | Y | Y | | | 23.9 |
| 15 | 8,883 | | | | | 20.2 |
| 16 | 1,792 | Y | | | | 15.5 |
| **Total** | **117,853** | **41,156** | **53,947** | **42,622** | **96,281** | **50.6** |

The given segmentation factors statistically explain 87% of the variance in mean tested benefits receipt and so are highly predictive of older people on low income. As an aid to targeting the low income asset owning population, further analysis shows that a person is:

- 1.4 times more likely to be on benefits if they live alone
- 1.1 times more likely to be on benefits if they are aged 75+
- 4.8 times more likely to be on benefits if they live in social housing
- 2.1 times more likely to be on benefits if they live in a property tax banded D or above

as compared to a person who has none of these factors applying to them.

These factors are multiplicative so that if they live alone, own their own property, are aged 75+ and in a tax banded property D or above, the odds of being on benefits would be 1.4 x 1.1 x 2.1 = 3.2 times greater than if these factors did not apply. The odds are higher in higher bands because the level of Council Tax is greater. The table demonstrates that despite being asset rich it does not mean that an older person has no financial worries.

Thus we can note that, while the most predictive variable for older people on low income is social housing tenure, low income is still prevalent in the private property sector, especially where a person lives alone or is aged 75+.

Let us consider potential risk groups with most to gain from releasing equity. Assume for illustration that the cut off age for the scheme is age 75, and that all those in private sector accommodation are home owners. Two sub groups can be identified:

(a) Age 75+ living alone in tax band D and above

Row 9 shows that there are 9,857 in this group (equating to 8.3% of this population) of whom 49.6% live in households receiving means tested benefits. This suggests that roughly half of this sub-group could potentially benefit from releasing equity.

(b) Age 75+ cohabiting and in tax band D and above

Row 11 shows that there are 15,141 people in this group (equating to 12.8%) all of whom are cohabiting. Of these 40.5% live in households on means tested benefits. Assuming equity is shared among couple households equally then approximately 3,000 of this group could potentially benefit from the scheme if it were extended to couple households.

This gives a combined total of around 8,000 people altogether, or 7% of the 75+ population covered by these London boroughs. Nationally this would equate to around 400,000 people. However, if we restrict the market to the number turning 75 each year then this number falls to under 40,000.

The annual cost of the scheme would therefore depend on how many of these individuals chose to join the scheme each year. The figure of 40,000 may be compared with the current market for equity release which is currently running at around 19,000 new plans a year.

We have not factored into this comparison the fact that some may already have equity release plans in place and some may not have paid off their mortgages and so the figure of 40,000 should be regarded as an upper limit. However, it is not possible to determine how many of the remainder would benefit from drawdown or an annuity because this depends on individual factors.

# ANNEX B:
# Calculating the value of an annuity

The scheme can be seen as a form of an annuity. With an annuity product there is a sum paid in advance and the policyholder receives income until they die. With our proposed product the income is received first and the payment is made following the user's death. In monetary terms the amount that will be paid is unknown though it is known in terms of house prices.

We assume that the income received is linked to price inflation

Define

| | |
|---|---|
| $x$ | as age |
| $Pinf$ | as annual price inflation |
| $Hinf$ | as annual house inflation |
| $i$ | is interest rate required |
| $l_x$ | as the number of lives aged $x$ in a stable population made up of the mortality rates of the population |
| $Inc$ | as the amount of income received in the first year |

## Benefit received

Assume that income is received at start of the year

1st payment is hence $Inc$

The second payment is $Inc \times (1 + Pinf)$ assuming that the person is still alive

The third payment is $Inc \times (1 + Pinf)^2$, etc.

The probability that someone aged x at the start is alive in $t$ years is $\frac{l_{x+t}}{l_x}$

The present value of the income stream is therefore:

$$Inc\left[1+\frac{l_{x+1}}{l_x}\left(\frac{1+\text{P inf}}{1+i}\right)+\frac{l_{x+2}}{l_x}\left(\frac{1+\text{P inf}}{1+i}\right)^2+\frac{l_{x+3}}{l_x}\left(\frac{1+\text{P inf}}{1+i}\right)^3+\ldots\right]$$

Which in standard actuarial notation can be written as:

$Inc \times \ddot{a}_x$ with interest rate = $\left(\frac{1+i}{1+P\text{inf}}\right)-1$

## Payment

We assume that as the person is giving up the appreciation in their home value for the part that has been used for equity release, the later the payment is made the greater the value of the home (assuming that house price inflation is positive over the duration). Assuming that the monetary value of the home given up at the start of the contract is X and that the value is taken at the end of the year of death then the value of the payment is:

$$X\left[\frac{l_{x+1}-l_x}{l_x}\left(\frac{1+H\text{inf}}{1+i}\right)+\frac{l_{x+2}-l_{x+1}}{l_x}\left(\frac{1+H\text{inf}}{1+i}\right)^2+\frac{l_{x+3}-l_{x+2}}{l_x}\left(\frac{1+H\text{inf}}{1+i}\right)^3+\ldots\right]$$

Which in standard actuarial notation can be written as:

$X \times A_x$ with interest rate = $\left(\frac{1+i}{1+H\text{inf}}\right)-1$

## The cost of the arrangement

To determine X we need to calculate:

$$X = \frac{Inc \times \ddot{a}_x}{A_x}$$

This can then be expressed as a percentage of current home value.

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