ROYAL LONDON POLICY PAPER 31

The Lifetime Allowance ‘timebomb’ – why more than a million workers need to know what it is and what to do about it

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The Lifetime Allowance 'timebomb': why more than a million workers need to know what it is and what to do about it

1. Introduction

Since 2006, as part of pensions 'simplification', there has been a limit on the amount of pension saving which an individual can undertake over their lifetime with the benefit of pension tax relief. This is known as the Lifetime Allowance or LTA. There is no prohibition on going above the LTA, but this will generate a tax charge which attempts (broadly) to recoup the tax relief which has been awarded in respect of any slice of pension wealth in excess of the LTA. This includes the value of any employer contributions.

Table 1 shows the way in which the LTA has been repeatedly cut in recent years until 2018/19 when the policy switched to annual indexation in line with the Consumer Prices Index.

Table 1. Level of Lifetime Allowance 2010/11-2019/20

Year(s)	LTA
2010/11 & 2011/12	£1,800,000
2012/13 & 2013/14	£1,500,000
2014/15 & 2015/16	£1,250,000
2016/17 & 2017/18	£1,000,000
2018/19	£1,030,000
2019/20	£1,055,000

The tightening of the LTA is shown in Figure 1, which simply divides the LTA for each year since 2010 by the national average wage for the year in question. This provides a measure of the relative generosity (or otherwise) of the LTA.

Figure 1. Lifetime Allowance as a multiple of national average earnings, 2010-2018

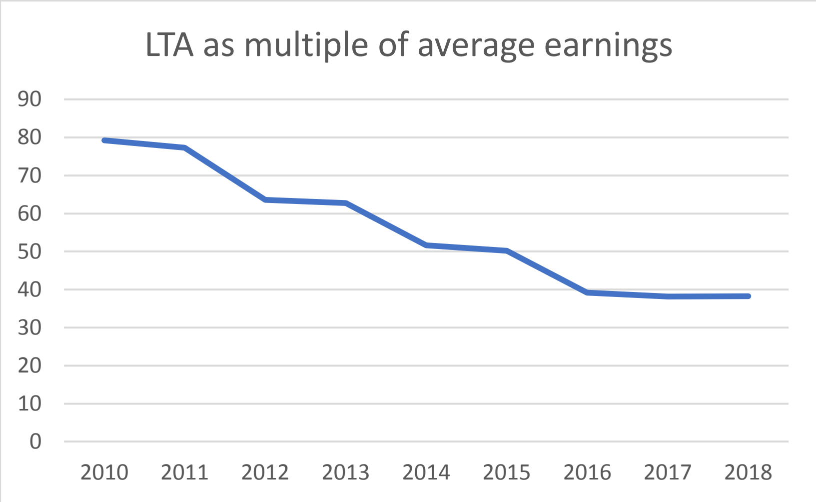

Figure 1 shows that in 2010, when the LTA peaked at £1.8m, it represented roughly eighty times the national average wage. Since then, the multiple has fallen in steps and now stands at a little under forty times the average wage. This means that the LTA is, in effect, twice as tough as it was at the start of this decade. Looking forward, if we assume that pension contributions and pension rights will tend to rise over time in line with average earnings, and that the LTA will only rise (at best) in line with CPI, the line in Figure 1 is likely to continue to drift down.

There are several reasons why individuals may wish to be aware of the LTA:

- If they have unwittingly exceeded the LTA, they may face a substantial and unexpected tax bill;
- They may be able to apply for 'protection' against reductions in the LTA which would reduce their chance of facing a tax charge. Appendix 1 provides a summary of the difference forms of 'protection' which are available;
- If they are at risk of exceeding the LTA, they may wish to consider whether other forms of saving or investing would be more tax-efficient;

However, there is good reason to believe that many people who might be affected by the LTA may not be aware of this. This is for a number of reasons:

The way in which the pension rights are valued for the purposes of LTA is far from intuitive, particularly with regard to Defined Benefit pension rights; in essence, regular DB income has to be multiplied by a factor of twenty and then added to lump sums and DC rights to work out how much has to be tested against the LTA; it is easy to imagine situations in which someone with long-service at a decent wage in a salary-related pension scheme could reach or exceed the LTA without realising they had pension rights valued for these purposes at over a million pounds;

The way in which pensions are tested against the LTA depends on the concept of a 'Benefit Crystallisation Event' (BCE). This is one of a list of points in time at which pension rights are valued and a percentage of the prevailing LTA is used up. This can be a highly complex process, especially where individuals have multiple sources and types of pension wealth.

What is not known however is how many of today's working age population are likely to face LTA issues over the course of their working life. Figures are occasionally released by HMRC (generally under the Freedom of Information Act) for the numbers of people who exceed the LTA each year and how much they have had to pay in tax charges. For example, in 2016/17 2,410 people had to pay a tax charge for exceeding the LTA, and the amount raised by these charges was £110m.[1]

But this gives us little or no idea how many people will exceed the LTA in the future. It also does not tell us how many people have realised they will exceed the LTA and have changed their behaviour to avoid this happening.

The purpose of this paper is to fill this gap in our knowledge.

We aim to provide – for the first time - a broad estimate of the number of people in the working age population who are likely to face LTA issues based on their current pension wealth and pension scheme membership. We also look at what sorts of people are likely to be affected, and this in turn can help to suggest which groups need to be alerted and should be seeking financial advice.

In the next section we describe the data source that we have used – the Wealth and Assets Survey – to derive these estimates and set out our methods. We then present our results as to how many of today's working age population are at risk of an LTA breach, and who they are. Finally, we offer some recommendations for policy makers.

[1] FOI inquiry by Retirement Advantage, report in the Financial Times May 2nd 2018, https://www.ft.com/content/fea9ba32-4c7f-11e8-8a8e-22951a2d8493

2. Data and Methods

a) The Wealth and Assets Survey

For the purposes of this research we ideally needed a data source which had two characteristics:

- It included information for the whole working age population of accumulated pension wealth, distinguishing between Defined Benefit and Defined Contribution pensions, as these are valued differently for tax relief purposes;

- It followed people over time, giving us some idea of the *evolution* of pension wealth, and enabling us to project future wealth;

The only data source which meets both of these objectives is the Wealth and Assets Survey (WAS). WAS has been undertaken in Great Britain over five biennial 'waves' since 2006, with Wave 5 fieldwork undertaken in the period from 2014-2016. As well as providing detailed information on pensions wealth and other sources of wealth, WAS attempts to re-interview the same people at each succeeding wave (as well as replenishing the sample at each wave with new interviewees because of sample attrition, death etc).

The main focus of our research is the most recent wave – Wave 5 – but we also undertake comparisons with the same individuals where they were interviewed in Wave 1, around eight years earlier. We exclude individuals who are retired as we are largely interested in projecting the future LTA issues of the working age population. Including only non-retired adults who were interviewed in both waves gives us a sample size for our analysis of just under 17,000 individuals interviewed in Wave 5, of whom around 7,700 were also interviewed in Wave 1. This sample can be scaled up to estimates that are representative of the GB population by using individual-specific weights which are supplied as part of the WAS dataset.

b) Pension wealth in the WAS

The WAS identifies each individual's total pension wealth as the sum of nine categories:

- Occupational Defined Benefit pension rights from current employment
- Occupational Defined Contribution pension rights from current employment
- Pension rights from Additional Voluntary Contributions (AVCs)
- Personal Pension funds
- 'Retained' (ie deferred) rights from Occupational DB pensions
- 'Retained' rights from Occupational DC pensions
- Unspent balances in drawdown accounts

- The capital value of existing pensions in payment (eg the remaining value of an annuity in payment)
- Pension wealth from a former spouse (eg rights under pension sharing orders after divorce)

WAS uses age- and sex- specific annuity rates to convert pension income into a capital value so as to work out pension wealth. But for purposes of testing against the LTA, a different approach is used by HMRC. Regular pension income (for example from a salary-related pension) is simply multiplied by a factor of twenty to gives a capital value to test against the LTA. We have therefore had to adjust the WAS data to match the HMRC rules, rather than just use the raw WAS data on the value of pension wealth.

c) Projecting pension wealth

For each non-retired individual in our data we have sought to estimate what their pension wealth will be at retirement. We have defined this as their state pension age, based on current legislation, except that we have assumed that the recommendations of the 'Cridland' review will be implemented which brings forward state pension age to 68 by 2039.

We have then taken information about current pension wealth (in Wave 5), and about pension wealth eight years earlier (in Wave 1), and have sought to extrapolate potential pension wealth at retirement. We have used different approaches for different components of total pension wealth as follows:

- *Active membership of DB pensions* – between Wave 1 and Wave 5 individuals will generally have built up further years of service in their DB scheme and may have enjoyed real wage increases; we assume that the annual amount of increase in DB rights between the two waves continues to retirement;

- *Deferred DB rights* – we assume that these will simply be increased each year in line with inflation; as our baseline assumption is that the LTA will also be increased in line with inflation, we assume that the value of these rights is fixed in real terms;

- *Active DC rights* – where someone is actively contributing to a DC pension, we assume that they will continue to do so at a rate which depends on their earnings, and that their earnings will grow at a real rate of 1.25% per year; their DC pot therefore grows in real terms both because of real wage growth combined with additional years of service and because of the real returns on the money invested;

- *Old DC rights* – we assume that any existing DC pots will grow at an annual rate of 2.5% above inflation; this has the merit of being the same rate of growth used by the WAS itself in some of its own analysis; we do however test the sensitivity of our results to different assumptions about real returns to DC funds, and the results of this sensitivity analysis are shown in Appendix 2;

Inevitably, these assumptions are all rather stylised and, for any individual, could be either excessively optimistic or excessively pessimistic. Some of the reasons why our method might lead to estimates that are too high include:

- We assume that those in open DB schemes will continue to accumulate rights under those schemes up to retirement. For those in the private sector (a minority), the trend of closures in DB schemes means that there is limited chance of them going on accruing DB rights in the long-term;

- We assume that people go on working right up to pension age, whereas a proportion will, through choice or necessity, cease work sooner than this; for example, research from the TUC suggested that around 1 in 8 workers are forced to stop working before state pension age due to ill-health or disability;

On the other hand, our assumptions may generate final pension wealth which is too low because:

- We cut off at state pension age, but younger workers are likely to be working on into their late 60s; there are already over a million people in work past the age of 65 and this number seems set to rise;

- For younger workers in particular, we do not take account of future career progression, beyond standard rates of real earnings growth; we know that pension saving tends to be 'end loaded' over the working life, so we may be understating the extent to which today's younger workers will eventually build up large pension pots, especially as they advance in their career;

- The fieldwork was undertaken when mandatory savings rates under automatic enrolment were just 2%, compared with the 8% that will apply from April 2019, and before millions of workers in small firms had been enrolled; whilst the overlap between those recently automatically enrolled and those at risk of breaching LTA limits is probably quite limited, we are missing out on the higher rates of pension saving which will be brought about by AE;

d) Assumptions about the LTA

The current value of the Lifetime Allowance is £1.03m which is the threshold we have used for the purposes of this analysis. However, what matters for our analysis is not the current LTA but what it will be at pension age for each member of our sample. In recent years we have seen three separate phases of policy on the LTA:

- A period of significant cuts from £1.8m to £1.5m to £1.25m and to £1m over the period from 2010 to 2016;

- Several years where the LTA was frozen in cash terms from one year to the next, most recently in 2017/18, where the limit remained at £1m;

- The current policy of indexation in line with the Consumer Prices Index, a policy which has now been in effect for two years.

It seemed to us that the most sensible central assumption was to assume that the current policy – namely CPI indexation – would continue indefinitely. It is however worth saying that the current Chancellor has described the cost of pension tax relief as 'eye-wateringly expensive' and has specifically mooted changes to the annual and lifetime allowances. If the LTA were to be cut in real terms in the future, this would mean that the estimates in this paper of the number of people of working age at risk of being caught by the LTA would need to be increased.

e) Those already over the LTA

As would be expected, there are some individuals of working age in our sample who have pension wealth which is already in excess of the current LTA of £1.03m. In some cases, this is the LTA which applies to them and they may, as a result, be facing a tax charge. In other cases, they may have 'locked in' to a higher LTA limit dating back to when the LTA was £1.8m, £1.5m or £1.25m. In brief, on each occasion when the LTA has been cut, individuals have been able to apply for either 'Fixed Protection' (which locks their LTA at the old level) or 'Individual Protection' (which gives them a personalised LTA based on their pension wealth at that point in time). An FOI reply to Royal London in February 2019 suggests that around 100,000 people have applied for Fixed Protection and 34,000 have applied for Individual Protection. We explain more about the different protections available in Appendix 1.

3. Results

All of the results in this section are based on the sample of around 7,700 non-retired individuals who were successfully interviewed in both Wave 1 and Wave 5 of the Wealth and Assets Survey. The results are scaled up to be representative of the GB population by means of the 'longitudinal' weights supplied as part of the data set for those present in both waves.

a) Current non-retired population over the LTA

We start by estimating how many non-retired people in our sample had already built up pension rights in excess of the LTA. Note that most of those people will not yet have 'crystallised' these pension rights and indeed may still be adding to them.

Table 2 shows the total figure for those already over the LTA, broken down by age group.

Table 2. Non-retired individuals with accrued pension rights in excess of the LTA in Wave 5

Age Group	Number of people
Under 50	62,000
50-54	46,000
55-59	77,000
60-64	56,000
65 and over	49,000
TOTAL	**290,000**

Source: Royal London calculations based on Wealth and Assets Survey, Wave 5

Perhaps the most surprising feature of Table 2 is that the number of non-retired people who are already over the LTA is roughly 290,000. As we saw in the previous section, less than half this number have applied for any sort of 'protection' against previous cuts in the LTA (and thereby locked in to a higher level of LTA), and only a few thousand a year are currently facing LTA charges for having actually crystallised pension wealth above the LTA.

This suggests that there is a risk of an 'LTA timebomb' of people who already have pension rights valued at in excess of the LTA and have taken no action to avoid potentially large tax bills when they crystallise those pension rights. Although it is still possible to apply for Fixed Protection or Individual Protection against the most recent cut in the LTA, this would be of limited or no benefit to those who had continued to accrue pension rights since April 2016 when the LTA was last reduced.

To better understand the position of those who are already over the LTA, we can categorise them according to the type of pension rights they are currently building up, and this is shown in Table 3.

Table 3. Pension position of non-retired individuals with pension wealth over the LTA in Wave 5

Type of pension rights	Number of people
Still building up Defined Benefit rights	130,000
Past DB rights but no current DB accrual	90,000
No past or present DB accrual	70,000
TOTAL	**290,000**

Source: As Table 2 – note, individual rows may not sum to total because of rounding.

What is very striking about Table 3 is that it is Defined Benefit accrual which is the dominant factor for those who are already over the LTA. But it is equally striking that nearly half of those over the LTA are still adding to their pension wealth. If these individuals do not have any form of protection against the reduction in the LTA to its current level, they could be set to face potentially large tax bills when they draw their DB pension.

To give a further idea as to who some of these people are, around three quarters of the 130,000 people shown in the first row of Table 3 are people who were active members of a DB scheme in both Wave 1 and Wave 5 of the survey – that is, over an eight-year period. Looking just at this group, their average gross annual pay in Wave 5 (2014-16) was £85,000. This suggests that a combination of a relatively high wage and long service in a Defined Benefit pension scheme is leading significant numbers of people to build up rights which exceed the Lifetime Allowance and that some of these people may be unaware of the tax implications of their situation. Indeed, some may be making additional voluntary contributions (AVCs) which could make matters worse. Going forward, the large majority of those accruing new DB rights are likely to be in the public sector.

b) Current non-retired population not currently over the LTA but projected to be so by retirement

Given the complex way in which pension rights are tested against the Lifetime Allowance, it is reasonable to suppose that most people would have little idea whether or not they were affected by this issue. But with the LTA having been dramatically cut in recent years and set to do no more than keep pace with inflation in future, there is good reason to think that significant numbers of people who may not necessarily think themselves rich (or be accessing financial advice) could be affected in future. In this section we seek to estimate the scale of this issue for today's working age population and look in more detail at the groups most likely to be affected.

Table 4 shows our estimate of the number of people whose pension wealth does not currently put them above the LTA but who we project to exceed the LTA by retirement, based on the assumptions set out in Section 2.

Table 4. Non-retired individuals with accrued pension rights under the LTA in Wave 5, but projected to exceed the LTA by retirement

Age Group	Number of people
Under 30	280,000
30-39	420,000
40-49	330,000
50 and over	220,000
TOTAL	**1,250,000**

Source: Royal London calculations based on Wealth and Assets Survey, Waves 1 & 5

Table 4 shows that we estimate that around 1.25 million non-retired adults are set to see their pension wealth pass the Lifetime Allowance limit by the time they retire. They are spread across the age distribution, with around half of these people currently being under the age of forty. Whilst the two numbers are not directly comparable, it is instructive to note that the latest official figures showed just over 2,000 people actually exceeding the LTA and paying a tax charge in the latest year for which figures are available. If our projections are even broadly accurate, the LTA is set to become an issue of concern to vastly more people than ever before.

To explore who these people are in more detail, we can disaggregate our 1.25 million estimate in a number of ways:

a) *Type of pension rights*

Table 5. Pension position of non-retired individuals with pension wealth under the LTA now, but over the LTA at retirement

Type of pension rights	Number of people
Still building up Defined Benefit rights	820,000
Past DB rights but no current DB accrual	70,000
No past or present DB accrual	360,000
TOTAL	**1,250,000**

Source: As Table 4

Given the widespread perception that DB pensions are on their way out, it may be surprising to see in Table 4 that around two thirds of those we expect to exceed the LTA are still building up DB rights. It is however worth saying that even in 2019 there are still more than a million private sector workers building up new DB rights and over six million public sector workers also accruing DB rights. Very roughly, the top 1 in 9 of these may therefore need to think about LTA issues2.

b) *Earnings*

To give a feel for the sort of people who may have to think about LTA issues in future, we can also look at their typical earnings levels at different points in their career, and this information is shown in Table 6 for those in paid employment (as opposed to self-employment or living off unearned income).

Table 6. Average earnings in Wave 5 by age group for employees not currently over LTA but projected to be so by retirement

Age group	Average annual earnings
30-34	£64,000
35-39	£77,000
40-44	£91,000
45-49	£67,000
50-54	£74,000
55-59	£61,000

Source: As Table 4

[2] Comparing the grossed up version of the WAS data against the occupational pension schemes survey suggests that this data source has too many active members of private sector DB schemes (and somewhat too few public sector members). It is possible that there is some misreporting by respondents of deferred membership (perhaps with a current employer) as active membership. This could lead to some overstatement of the projected future pension rights of this group, particularly for those further from retirement.

Perhaps not surprisingly, the people we are talking about are generally relatively high earners, typically earning at least double the national average wage and in some cases three times the average wage. The lower earnings figures for the older groups may reflect the fact that they have built up substantial pension rights from previous employment and that this is the main cause of their high overall pension wealth, rather than the more modest sums that they are probably now contributing each year.

c) Gender

In Table 7 we look at the gender of those who are not currently over the LTA but are projected to be so by the time they retire. For comparison, we also show the gender of the non-retired population in our sample who are already over the LTA.

Table 7. Gender of non-retired population who a) are not currently over the LTA but are projected to be so and b) are already over the LTA

	Not currently over LTA, but projected to be so	Already over LTA
Male	840,000 (67%)	240,000 (83%)
Female	410,000 (33%)	50,000 (17%)
TOTAL	**1,250,000**	**290,000**

As might be expected on the basis of the gender pay gap, it is men who are more likely to find themselves above the LTA than women. But what is interesting about our projections is that women make up a much higher proportion of those who are set to exceed the LTA (around 1/3) than those who are already over the LTA (around 1/6). One potential explanation for this is that open DB schemes will in future be almost exclusively the preserve of those working in the public sector, and there is a higher proportion of women in senior positions within the public sector than in the private sector.

4. Discussion and conclusions

This research provides estimates for the first time the number of people in today's workforce who may face LTA issues later in life. These estimates are, inevitably, to some extent speculative and subject to a large margin of uncertainty. For example, for younger workers we are having to make assumptions about their future earnings and pension contributions, as well as about the performance of those investments, over a period of several decades. On the other hand, there are some suggestions from the Chancellor and others that the current Lifetime Allowance may be unduly lax and that further cuts may be in the pipeline. It does not seem unreasonable therefore to think that LTA issues may be important to significant numbers of workers across the age spectrum in the coming decades. Many of these workers will not be the 'super-rich', as shown by the average earnings figures in Table 6. Two particular groups stand out from our analysis:

- **Relatively senior professionals in the public sector with long service** who will continue to have access to a salary-related pension. Ironically, one of the consequences of public service pension ages being raised in many cases from 60 to 65 or more is that such workers will now have several more years in which to build up a DB pension which could exceed the LTA;[3]

- **Younger workers contributing to a DC pension pot over a working life of half a century, with a decent wage and a meaningful contribution from their employer**; although employer contributions into DC pensions have tended to be much lower than those into DB pensions, there are still plenty of employers offering a substantial pension contribution, in some cases offering a 'double match' of their workers' contributions; although the restrictions on tax-relieved annual contributions for the very highest earners will cap their ability to build up a very large pension pot, these restrictions do not bite at the sort of average earnings levels shown in Table 6. Perhaps surprisingly, it may not be the very top earners who have to worry about the LTA, because their annual contributions will be heavily capped, it may be those below the top earnings bands who most need to be aware of this issue.

Probably the most important policy conclusion of this research is that – even on current policy – the LTA is likely to affect far more people in future than has ever been the case in the past. Yet it seems likely that very few of those likely to be affected in future will have any idea of that fact. Our research suggests that around 290,000 people of working age have *already* built up pension rights over the LTA and could be in line for hefty tax bills to the

[3] Note however that it does not follow that individuals should necessarily respond to the risk of an LTA tax charge by opting out of their workplace pension. In some cases, the value of the large employer contribution more than offsets the fact that the worker is no longer benefiting from pension tax relief. We discuss this in more detail in Royal London 'good with your money' guide 9: 'Why saving beyond pension tax relief limits might not be a bad idea' which can be downloaded at https://www.royallondon.com/media/good-with-your-money-guides/

extent that they have not applied for protection against past cuts in the LTA. If our estimates are broadly accurate, five times as many people could be in that position in future.

Given that the extent to which an individual has exceeded the LTA will depend on their pension rights across multiple pension schemes, it is unlikely that an individual employer, individual pension scheme or individual pension provider will know for sure whether someone is over the LTA (or set to be so) across all of their pensions. It may be that the proposed Pensions Dashboard, which will aggregate all pension rights into a single place, could provide a means by which individuals could see how far the LTA is likely to be an issue for them. But the system is so complex that it is hard to see this information being displayed on such a Dashboard for many years to come. In addition, the fact that the way Defined Benefit pension rights are valued for tax relief purposes is different to the way they are valued for transfer purposes could create real confusion.

If the goal is to make sure that individuals do not benefit from 'too much' tax relief over the course of their working life, it is becoming increasingly questionable whether the current combination of an Annual Allowance limit and a Lifetime Allowance limit can be justified. This argument becomes more acute in light of this research which shows just how many people may be affected by this issue but may be entirely unaware of that fact.

In the short-term, making people more aware of their risk of a large tax bill from exceeding the LTA would be a valuable step forward, as would ensuring that people get financial advice not just at retirement but also as they are building up their pensions. But in the long-term a more radical reform which ditches the LTA altogether in favour of, for example, a simple, single, lower Annual Allowance, might be a much cleaner way to proceed.

Appendix 1 – 'Protection' against cuts in the Lifetime Allowance

As shown in Table 1, the LTA has been cut substantially in recent years, with major cuts happening in 2012, 2014 and 2016. Cutting the LTA clearly creates an issue for those who were under the old LTA but are above the new LTA, and transitional protection was introduced for such people to prevent them facing what would, in effect, have been a retrospective tax charge. Protection was also available to help those who, for example, might have built up a significant DC pot which could exceed the reduced LTA simply via investment growth.

The two main forms of protection currently available are:

A) Fixed Protection

Under Fixed Protection (FP), an individual can apply to have their own LTA set at the rate it stood at before the cut was made. Those who benefit from FP2012 therefore have an LTA of £1.8m, from FP2014 an LTA of £1.5m and FP2016 an LTA of £1.25m. Applications for FP2012 and FP2014 are now closed, but at time of writing it is still possible to apply for FP2016. However, one of the conditions of retaining Fixed Protection is that no further pension contributions can be made. Once you have successfully applied for Fixed Protection you are effectively saying that your active saving into pensions is at an end.

B) Individual Protection

An alternative form of protection, Individual Protection (IP), was introduced to help those who may have had pension wealth under the old LTA but who anticipated that their pension wealth might grow and exceed the old LTA in future. Individuals could apply for their own 'individual' level of LTA which was set at the lower of their accumulated pension wealth or the old LTA. The deadline has now passed for IP 2014, but it is still possible to apply for IP 2016.

In addition to Fixed Protection and Individual Protection, there are two other older forms of protection which are no longer available to new applicants, but which are held by some people who had large amounts of pension wealth in the past. These are:

i) Primary Protection

Where members had pension wealth worth more than £1.5m in April 2006 (when the LTA was introduced), they could apply for 'Primary Protection' to reduce or eliminate the chance that they could face an LTA tax charge. Applications for Primary Protection had to be made by April 2009.

ii) Enhanced Protection

Enhanced Protection was available to those who had pension rights before April 2006 and who anticipated that their rights might in future exceed the LTA. It gives full protection from LTA charges. Anyone who chose Enhanced Protection had to stop being a member of all registered pension schemes with effect from April 2006.

Because the main focus of our paper is on the future impact of the LTA for today's working age population, and in particular including those who are still accruing pension rights, we do not discuss Primary Protection or Enhanced Protection in the body of this paper.

Appendix 2 – Sensitivity analysis

Any analysis of this sort is inevitably based on a series of assumptions, and in some cases these assumptions relate to the future growth of earnings and investments for decades to come.

A key assumption in this analysis is the rate of real growth of funds held in DC pension schemes. With the continued closure of private sector DB schemes, the bulk of the workforce will in future build up rights only in Defined Contribution arrangements. The rate of growth of those investments is therefore crucial to the extent to which people will in future face LTA issues.

For the purposes of this paper we have made an assumption that, over the long-run, DC investments will grow at 2.5 % per year above inflation. Given that the LTA is assumed to be pegged to the rate of inflation, real investment growth will, each year, bring more and more people into the scope of the LTA.

But what difference would it make to our numbers if the real rate of growth was higher or lower than we have assumed. The sensitivity of our numbers to the assumption around investment growth is shown in Table A1.

Table A1. Estimated number of non-retired people currently below the LTA but projected to be over the LTA at retirement, based on alternative assumptions about real rates of return.

Real rate of return (pa)	Number of people projected to be over LTA
1.5%	1,100,000
2.5% (central assumption)	**1,250,000**
3.5%	1,410,000

Not surprisingly, if DC pots grow more rapidly than we have assumed, then more people will find that they have to worry about the Lifetime Allowance. We estimate that each additional 1% on the real rate of return adds roughly 150,000 to the number of today's workers who need to worry about the LTA in the future. But Table A1 shows that even with historically low levels of real returns over the long run, rates of return lower than we have assumed, we could still expect to see over a million of today's workers affected by LTA issues.