

Changes to the State Pension Age

The impact of the Government's single-tier state pension reform is a research project funded by the Nuffield Foundation

The PPI is publishing a series of briefings to provide a detailed, comprehensive and independent analysis of the impact of introducing the single-tier state pension.

The first briefing (June 2013) described the main components of the Government's state reform plans and an initial analysis of the possible impact of the reforms on individuals. The second and third briefings (both published in October 2013) considered the management of the transition between the current system and the single-tier pension and the potential impact of a switch away from the triple-lock back to uprating by earnings. The fourth briefing being published alongside this one considers the abolition of contracting out.

Other analysis will cover:

- Government cost, spending and long-term retirement income implications.

For more information, please contact the PPI.

This briefing explores differences in life expectancy in the UK and the implications of changes to the State Pension Age.

The Government's proposals

The Pensions Bill proposes to implement a new single-tier state pension from April 2016 that will replace the current Basic State Pension (BSP) and the State Second Pension (S2P). It also makes proposals for increases to the State Pension Age.

The White Paper¹ illustrates the new pension as being set just above the current Guarantee Credit level, at £144 per week (in 2012/13 prices), although the actual level will not be set out in primary legislation, but will be announced by the Government of the day closer to the implementation date of April 2016. The changes will not apply to people who are over State Pension Age (SPA) in April 2016, including those people who reach State Pension Age between now and then.

The single-tier pension will lead to the end of new accrual of S2P and consequently contracting out from S2P.

Alongside the introduction of the single-tier the Government has also proposed a new framework to be used for setting the State Pension Age (SPA) in future.

Background

The SPA for women has been increasing from April 2010 in a series of steps to reach age 65 by November 2018 when it will be equal for both men and women. The SPA for women is increasing to 62 in 2014. Both men and women will then see their SPA increase to 66 by 2020.

Legislation to increase the SPA to age 67 in the mid 2030s and 68 by the mid 2040s for both sexes was enacted in 2007.² The Government has since included in the Pensions Bill a proposal to bring forward the increase of SPA to reach age 67 by the mid 2020s.³

This development reflects changes in the life expectancy of the general population. As life expectancy increases, the state pension would be paid to people for an increasing number of years if the SPA remained unchanged.

The report prepared by the Pensions Commission in 2006 outlined the requirement for the state pension to be sustainable and affordable in the long-term and to be fair between generations.⁴ Both recent changes to the SPA and provisions to review the SPA in the future represent developments to ensure that the state pension remains consistent with these requirements. The Pensions Bill, currently progressing through Parliament, outlines provisions for the SPA to be reviewed on an on-going basis.

Chart 1, reproduced from the House of Commons library note on the State Pension Age⁵, outlines the review process for SPA. The principle informing future changes to the SPA is that on average an individual should spend 'up to a third of their adult life in retirement'.⁶ For this purpose adult life is defined as starting at age 20.⁷ In the Autumn Statement 2013, the Chancellor illustrated this principle as implying that the SPA would increase to 68 by the mid 2030s and to 69 by the late 2040s.⁸

Other factors likely to be taken into account include healthy life expectancy, socio-economic, regional

variations and economic concerns such as labour market conditions for older workers.⁹ The Pensions Bill specifies that, as part of the review process, both the Government Actuary's Department and an independent committee must submit reports, which must be published before the end of the period of 6 years beginning with the day on which the previous reports were published, with the first reports being published before 7 May 2017.

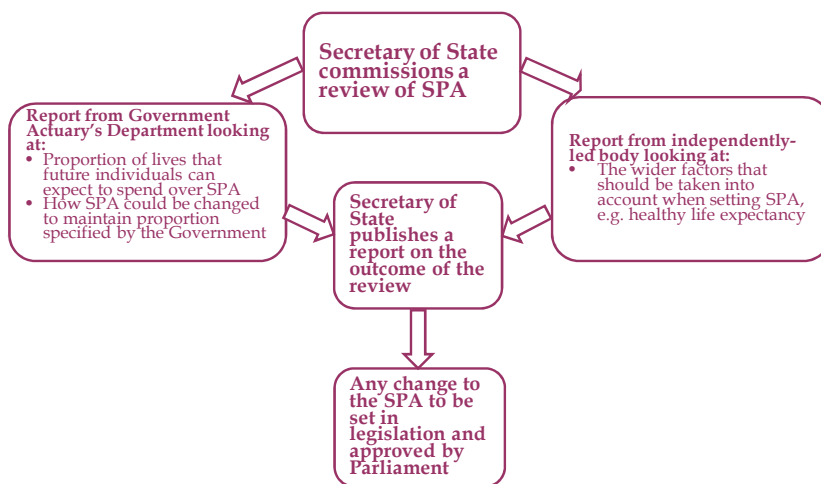
The review framework will look to give a minimum of ten years' notice to those individuals affected by future changes to the SPA.¹⁰

Period life expectancy

The Office for National Statistics (ONS) defines period life expectancy as:

*'Period life expectancy at a given age for an area is the average number of years a person would live, if he or she experienced the particular area's age-specific mortality rates for that time period throughout his or her life. It makes no allowance for any later actual or projected changes in mortality. In practice, death rates of the area are likely to change in the future so period life expectancy does not therefore give the number of years someone could actually expect to live. Also, people may live in other areas for at least some part of their lives.'*¹¹

Chart 1: Review process for setting SPA



For example, UK period life expectancy at birth takes a single year and uses the survival probabilities for all ages in that single year to reach an average lifespan. Therefore this is a snapshot of life expectancy at any one time and does not take account of the fact that, for instance, younger cohorts may have greater life expectancy at age 65 than current 65-year-olds.

Cohort life expectancy

The ONS defines cohort life expectancy as:

'Cohort life expectancies are calculated using age-specific mortality rates which allow for known or projected changes in mortality in later years and

*are thus regarded as a more appropriate measure of how long a person of a given age would be expected to live, on average, than period life expectancy.'*¹²

This allows for the fact that younger cohorts will tend to have greater life expectancies at a given age than people who are currently that age if recent trends of people being more likely to survive, and less likely to die, at each age continues. This can be seen and measured from past improvements to mortality, and calculations of cohort life expectancy look to take account of this.

Measures of life expectancy

Life expectancy will be one of the main factors that influences changes to the State Pension Age (SPA). However, life expectancy can be measured in different ways.

Life expectancy can be defined as how long someone is expected to live based on a set of probabilities of surviving from one age to the next; for instance, how many 65 year-olds are likely to survive to age 66. Once these probabilities are calculated, these are used to calculate the average lifespan.

There are two ways of calculating life expectancy, the period and cohort measures.

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Calculation of period v cohort life expectancy¹³

Period life expectancy in 2013 for a person aged 65 would be calculated using the mortality rate for age 65 in 2013, for age 66 in 2013, for age 67 in 2013 and so on.

Cohort life expectancy in 2013 for a person aged 65 would be calculated using the mortality rate for age 65 in 2013, for age 66 in 2014, for age 67 in 2015, for age 68 in 2016 and so on.

Chart 2 compares the period and cohort measures of males and females aged 65 in a given year. The difference between these two measures is between 2 and 3 years in the given years.

While the Department for Work and Pensions' (DWP) background note¹⁴ on calculating rises to the SPA states that the cohort measure of life expectancy should be used in setting SPA, some of the analysis used to consider the impact

of SPA increases—and which could potentially be used in the review process of SPA—is based on the period measure of life expectancy.

Chart 2: Comparison of period and cohort measures of life expectancy

Life expectancy (years) of individual aged 65 in the given year				
Year	Males		Females	
	Period measure	Cohort measure	Period measure	Cohort measure
2013	18.5	21.4	21.0	24.0
2023	20.6	22.6	23.0	25.2
2033	21.9	23.7	24.3	26.3
2043	22.9	24.8	25.3	27.3
2053	24	25.9	26.3	28.4

Source: ONS population projections

For example, healthy life expectancy refers to years spent in good or very good general health, and is often used alongside estimates of life expectancy to consider whether individuals will be able to have an active retirement.¹⁵ Measures of healthy life expectancy are often based on the period rather than the cohort measure of life expectancy—they are based on current levels of observed health in the population at different ages, and make no allowance for future changes. This makes the analysis useful for showing differences based on the current population—for example

how much of retirement is currently spent in good health and ill health—and how this has changed over time. But these estimates are less useful as a guide to future experience, where many factors are likely to change. Similarly, many estimates of how life expectancy varies by local area are also based on period life expectancy.

Chart 3: Period measures of life expectancy and healthy life expectancy provide an estimate of the proportion of life after age 65 spent in good health

Life expectancy and healthy life expectancy (years) at age 65, 2008-10						
	Life expectancy		Healthy life expectancy		Proportion of life over 65 spent in good health	
	Male	Female	Male	Female	Male	Female
United Kingdom	17.8	20.4	10.1	11.6	57%	57%
England	18.0	20.6	10.3	11.8	57%	57%
Scotland	16.6	19.2	8.6	10.8	52%	56%
Wales	17.5	20.2	10.3	10.0	59%	50%
Northern Ireland	17.3	20.1	9.5	10.8	55%	54%

Source: PPI analysis of ONS, *Health expectancies in the United Kingdom*

The use of the period measure risks significantly underestimating both the number of years of healthy life and life expectancy for future cohorts, and there is also the risk of confusion where the measures used to report life expectancy and healthy life expectancy are inconsistent. ONS figures using the period

measure calculate healthy life expectancy at birth to be 63.2 for males and 64.2 for females born in England in 2009-11¹⁶, with total life expectancy at birth at 78.9 years for males and 82.9 for females.¹⁷ But ONS cohort projections for individuals born in England in 2011 are 90.7 years for males and 94.0 years for females.

Although period measures of life expectancy are likely to underestimate future life expectancy, the period measures for life expectancy and healthy life expectancy at age 65 provide an estimate of the proportion of life after 65 spent in good or very good health. Chart 3 on page 2, shows measures of period life expectancy and healthy life expectancy at age 65 by country and sex, using ONS figures. These figures suggest that approximately 57% of life after age 65 is spent in good or very good health.

If it is assumed that the proportion of life spent in good or very good health will not change in the future, this proportion can be used in conjunction with cohort measures of life expectancy to give an indication of potential healthy life expectancy—in effect keeping constant the proportion of time spent over the age of 65 in good or very good health.

Chart 4: Estimates of male healthy life expectancy based on cohort measure of life expectancy

Life expectancy and healthy life expectancy*(years) of male aged 65 in the given year				
Year	Life expectancy	Healthy life expectancy with different assumptions regarding proportion of life over 65 spent in good health		
		57%	50%	65%
2013	21.4	12.2	10.7	13.9
2023	22.6	12.9	11.3	14.7
2033	23.7	13.5	11.9	15.4
2043	24.8	14.1	12.4	16.1
2053	25.9	14.8	13.0	16.8

* Healthy life expectancy figures are based on the assumption that approximately 57% of life after 65 is spent in good health
Source: PPI analysis of ONS, *Health expectancies in the United Kingdom* and ONS population projections

Chart 4 shows cohort measures of life expectancy and healthy life expectancy of males aged 65 in 2013 and 10-year intervals to 2053, based on applying the assumption that approximately 57% of life after age 65 is spent in good or very good health and that the proportion remains constant over time. Chart 5 shows the same measures for women aged 65 in 2013 and selected years.

However, the proportion of life spent in good or very good health after age 65 might decrease as life expectancy increases if, beyond a certain age, very few people experience good health. Similarly, other factors such as medical advances or lifestyle improvements might increase the proportion of life spent in good health after age 65. To reflect this uncertainty, Charts 4 and 5 also show estimates of healthy life expectancy if the proportion of years spent in good health after age 65 reduces to 50% or increases to 65%.

Chart 5: Estimates of female healthy life expectancy based on cohort measure of life expectancy

Life expectancy and healthy life expectancy*(years) of female aged 65 in the given year				
Year	Life expectancy	Healthy life expectancy with different assumptions regarding proportion of life over 65 spent in good health		
		57%	50%	65%
2013	24.0	13.7	12.0	15.6
2023	25.2	14.4	12.6	16.4
2033	26.3	15.0	13.2	17.1
2043	27.3	15.6	13.7	17.7
2053	28.4	16.2	14.2	18.5

* Healthy life expectancy figures are based on the assumption that approximately 57% of life after 65 is spent in good health
Source: PPI analysis of ONS, *Health expectancies in the United Kingdom* and ONS population projections

Estimates around life expectancy

Chart 6, on page 5, provides estimates of the year in which a third of adult life would be spent in retirement for the given State Pension Age (SPA). This indicates the trigger year, for each SPA, where future life expectancy would be a third of total adult lifetime (assumed to

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Chart 6: Year in which SPA would increase if the principle were applied

First year in which 33% of adult life* would be spend in retirement					
New SPA	United Kingdom	England	Scotland	Wales	Northern Ireland
66	2010	2009	2020	2012	2012
67	2021	2019	2033	2023	2024
68	2033	2032	2045	2036	2037
69	2046	2045	2057	2049	2050

* Adult life starts at age 20
Source: PPI analysis of ONS population projections

start at age 20). For instance, if these estimates are accurate and the principle is applied, we might expect the SPA in the United Kingdom (UK) to rise to 68 in 2033, provided no allowance is made for regional variations or other factors. These figures are based on PPI analysis of ONS cohort life expectancies.

The indication by the Government that SPA might increase to 68 by the mid 2030s and to 69 by the late 2040s is consistent with these estimates. The trigger year in which the SPA would need to increase to 68 to avoid more than a third of adult life being spent in retirement is 2033. The trigger year in which the SPA would need to increase to 69 to avoid more than a third of adult life being spent in retirement is 2046.

These figures mask differences between the sexes; for instance, for women the trigger year in which the SPA would need to increase to 67 to avoid more than a third of adult life being spent in retirement is 2010, while the equivalent year for men would be 2032.

In addition, these figures apply to the UK as a whole, and there are significant differences in estimates of life expectancy within the UK. While for England, 2032 is the trigger year in which the SPA would need to increase to 68 to avoid more than a third of adult life being spent in retirement, the first year in which this would happen in Scotland is 2045. For Wales and Northern Ireland, the trigger year in which the SPA would need to increase to 68 to avoid more than a

third of adult life being spent in retirement is 2036 and 2037 respectively.

The trigger year in which the SPA would need to increase to 69 to avoid more than a third of adult life being spent in retirement ranges from 2045 (England) to 2057 (Scotland).

The review process outlined in the Pensions Bill, currently being debated in Parliament, provides for regional differences to be taken into account. However, it is unlikely that there would be different SPAs for different areas of the UK as this may be unpopular and would be difficult to administer. If there continues to

be one SPA throughout the UK, individuals in Scotland, Wales and Northern Ireland, who retire at SPA, may experience shorter retirements and may spend a greater proportion of their retirement in ill health than individuals in England. In addition, there may be significant variation in life expectancy across regions and localities within each country of the UK as well as between the countries. For example, ONS reported that healthy life expectancy was higher in the South of England than in the North of England.¹⁸

However, regional differences in life expectancy and healthy life expectancy are themselves a significant issue that could be addressed by other policies. For example, organisations such as those that work in the field of public health are responsible for designing strategies to address health inequalities that could also affect life expectancy. Inequalities in life expectancy between different sections of the population could be addressed alongside changes in SPA and are not necessarily a reason not to increase SPA.

It is important that the public has confidence in the review process for the SPA as this has implications for a number of issues, such as an individual's payment of National Insurance contributions and their eligibility for other benefits such as Housing Benefit.

Conclusion

The White Paper outlined provisions for the State Pension Age (SPA) to be reviewed on a regular basis

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and, subject to Parliamentary progress, this will be enacted in the Pensions Act. The principle informing changes to the SPA is that an individual should spend no more than a third of their adult life in receipt of the state pension. Other factors likely to be taken into account include healthy life expectancy, socio-economic and regional variations and economic concerns.

Two ways of measuring life expectancy are often used - period and cohort life expectancy. Cohort life expectancy recognises the fact that younger cohorts will tend to have greater life expectancies at a given age than people who are currently that age if it is assumed that survival probability continues to increase. For this reason, the DWP states that the cohort measure of life expectancy should be used to calculate increases to SPA. Period measures of life expectancy, such as those often used to estimate healthy life expectancy or variations by region, are useful in highlighting differences, for example in health status or between regions. However, as they make no allowances for future changes, they tend to understate total life expectancy compared to ONS cohort based projections.

The indication by the Government that the SPA might increase to 68 by the mid 2030s and to 69 by the late 2040s is consistent with PPI estimates of cohort life expectancy.

However, there are differences in terms of life expectancy across countries within the UK. For instance, while in England, 2032 is the first year in which a third of adult life would be spent in retirement for the SPA of 68, this would not happen until 2045 in Scotland.

The review process outlined in the White Paper provides for regional differences to be taken into account. However, it is unlikely that there would be different SPAs for different areas of the UK. If there continues to be one SPA throughout the UK, individuals in Scotland, Wales and Northern Ireland, who retire at SPA, may spend a greater proportion of their retirement in ill health than individuals in

England. However, inequalities in life expectancy between different sections of the population could be addressed alongside changes in SPA, and are not necessarily a reason not to increase SPA.

The issues described above highlight the importance of ensuring that the review process for the SPA is independent and transparent and has the confidence of the public. As well as affecting an individual's receipt of the state pension, the SPA has implications for a range of issues such as an individual's payment of National Insurance contributions and their eligibility for other benefits such as Housing Benefit.

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- 1 DWP (2013) *The single-tier pension: a simple foundation for saving.*
 - 2 Pensions Act 2007 <http://www.legislation.gov.uk/ukpga/2007/22/contents>
 - 3 DWP (2013) *Reviewing the State Pension Age*
 - 4 Pensions Commission (2006) *A New Pension Settlement for the 21st century*
 - 5 House of Commons library (2013) *State Pension age – 2012 onwards*
 - 6 HM Treasury (2013) *Autumn Statement*
 - 7 DWP (2013) *The core principle underpinning future State Pension age rises: DWP background note*
 - 8 HM Treasury (2013) *Autumn Statement*
 - 9 DWP (2013) *The single-tier pension: a simple foundation for saving*
 - 10 DWP (2013) *The single-tier pension: a simple foundation for saving*
 - 11 <http://www.ons.gov.uk/ons/guide-method/method-quality-specific/population-and-migration/demography/guide-to-period-and-cohort-life-expectancy/index.html>
 - 12 <http://www.ons.gov.uk/ons/guide-method/method-quality-specific/population-and-migration/demography/guide-to-period-and-cohort-life-expectancy/index.html>
 - 13 <http://www.ons.gov.uk/ons/guide-method/method-quality-specific/population-and-migration/demography/guide-to-period-and-cohort-life-expectancy/index.html>
 - 14 DWP (2013) *The core principle underpinning future State Pension age rises: DWP background note*
 - 15 ONS *Guide to life expectancy in the United Kingdom*
 - 16 These figures include people who are in poor health and subsequently die before reaching State Pension – this also accounts for the low figure for healthy life expectancy at birth.
 - 17 ONS *Life Expectancy and Healthy Life Expectancy for males and females at birth in England 2009-11*
 - 18 <http://www.ons.gov.uk/ons/rel/disability-and-health-measurement/healthy-life-expectancy-at-birth-for-upper-tier-local-authorities--england/2009-11/sty-healthy-life-expectancy.html>

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