

<b>Title: Impact of the move to CPI for Occupational Pensions</b> <b>Lead department or agency:</b> DWP  <b>Other departments or agencies:</b>	<b>Impact Assessment (IA)</b>
	<b>IA No: DWP0014</b>
	<b>Date: 12<sup>th</sup> July 2011</b>
	<b>Stage: Final</b>
	<b>Source of intervention: Domestic</b>
	<b>Type of measure: Primary and Secondary Legislation</b>
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## Summary: Intervention and Options

### What is the problem under consideration? Why is government intervention necessary?

Legislation requires the Secretary of State to specify each year revaluation percentages based on "the percentage which appears to [him] to be the percentage increase in the general level of prices in Great Britain" over an annual inflation reference period ending on the latest 30 September. In previous years, the Retail Prices Index (RPI) had been used. The Chancellor of the Exchequer announced on 22<sup>nd</sup> June 2010 that for most benefits and pensions the Consumer Prices Index (CPI) would be used in future. CPI is considered a more appropriate measure and is used by the Government to set the Bank of England's inflation target.

### What are the policy objectives and the intended effects?

Using CPI for this and future Revaluation Orders is intended to ensure that the underlying purpose of the legislation, to track increases in the general level of prices, will be better met. The average rate of increase in CPI is expected to be lower than the increase in RPI, due to methodological differences in the way it is calculated. The percentages contained in the Revaluation Order are also used for the purposes of the statutory indexation of pensions in payment. For both statutory revaluation and statutory indexation, the legislation sets out the minimum provision which schemes must make. They may make more generous provisions under scheme rules.

### What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)

There are several measures of the level of general prices in Great Britain including RPI which has a longer historical background, and CPI which uses a more modern methodology that is consistent across EU countries. The Government considered only two options (a) continuing to use RPI for statutory revaluation and indexation purposes and (b) moving to the use of CPI in future. This decision was not taken for private pensions uprating in isolation. The Government has announced a consistent approach to the measurement of inflation for state benefits and public service pensions as well as for statutory private pensions uprating. Adopting CPI for private pensions uprating purposes means that the appropriate index will be used to measure prices in future.

**Will the policy be reviewed?** It will be reviewed. **If applicable, set review date:** October 2011

**What is the basis for this review?** A new revaluation order is produced every year, and this involves the Secretary of State forming a view on the increase in the general level of prices in the year ending 30<sup>th</sup> September. **If applicable, set sunset clause date:** Each order is, by its nature, effective for one year.


**Are there arrangements in place that will allow a systematic collection of monitoring information for future policy review?**

Yes

**Ministerial Sign-off** For final proposal stage Impact Assessments:

*I have read the Impact Assessment and I am satisfied that (a) it represents a fair and reasonable view of the expected costs, benefits and impact of the policy, and (b) the benefits justify the costs.*

Signed by the responsible Minister:



Date: 9<sup>th</sup> July 2011

# Summary: Analysis and Evidence

# Policy Option 1

## Description:

Price Base Year 2010	PV Base Year 2010	Time Period Years 60	Net Benefit (Present Value (PV)) (£m)		
			Low: Optional	High: Optional	Best Estimate: 0

COSTS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	Optional	3	Optional	Optional
High	Optional		Optional	Optional
Best Estimate	73,190		0	73,162

### Description and scale of key monetised costs by 'main affected groups'

The main cost of this policy is to members of private sector Defined Benefit pension schemes who will see the anticipated value of their pension rights reduced and the value of their total remuneration package changed in the short term.

### Other key non-monetised costs by 'main affected groups'

BENEFITS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	Optional	3	Optional	Optional
High	Optional		Optional	Optional
Best Estimate	73,190		0	73,162

### Description and scale of key monetised benefits by 'main affected groups'

The main benefit of this policy is to sponsors of Defined Benefit pension schemes who will see the value of their pension liabilities reduced

### Other key non-monetised benefits by 'main affected groups'

Some pension schemes may become more sustainable or affordable due to the reduction in pension scheme liabilities. The impact of company accounting standards will mean that the reduction in pension scheme liabilities is reported transparently and may have a beneficial impact on companies with substantial Defined Benefit liabilities - for example improved credit ratings and ability to pay dividends.

### Key assumptions/sensitivities/risks

Discount rate (%) 3.5%

The key approach to assessing the impact of this policy is to evaluate the impact on the pension liabilities of schemes by considering how the expected pension payments to representative individuals are changed.

Key assumptions are the difference between long run average RPI and CPI (1.2%), what scheme rules say about revaluation and indexation, the specification of representative members of pension schemes and the behaviour of scheme sponsors.

Direct impact on business (Equivalent Annual) £m):			In scope of OIOO?	Measure qualifies as
Costs:	Benefits: 3,342	Net: 3,342	Yes	OUT

## Enforcement, Implementation and Wider Impacts

What is the geographic coverage of the policy/option?			UK		
From what date will the policy be implemented?			01/i/2011		
Which organisation(s) will enforce the policy?			The Pensions Regulator		
What is the annual change in enforcement cost (£m)?			0		
Does enforcement comply with Hampton principles?			Yes		
Does implementation go beyond minimum EU requirements?			No		
What is the CO <sub>2</sub> equivalent change in greenhouse gas emissions? (Million tonnes CO <sub>2</sub> equivalent)			<b>Traded:</b> 0	<b>Non-traded:</b> 0	
Does the proposal have an impact on competition?			No		
What proportion (%) of Total PV costs/benefits is directly attributable to primary legislation, if applicable?			<b>Costs:</b> 3.1%	<b>Benefits:</b> 3.1%	
Distribution of annual cost (%) by organisation size (excl. Transition) (Constant Price)	<b>Micro</b>	< 20	<b>Small</b>	<b>Medium</b>	<b>Large</b>
Are any of these organisations exempt?	No	No	No	No	No

## Specific Impact Tests: Checklist

Does your policy option/proposal have an impact on...?	Impact	Page ref within IA
<b>Statutory equality duties</b> <sup>1</sup> <a href="#">Statutory Equality Duties Impact Test guidance</a>	No	
<b>Economic impacts</b>		
Competition <a href="#">Competition Assessment Impact Test guidance</a>	No	
Small firms <a href="#">Small Firms Impact Test guidance</a>	No	
<b>Environmental impacts</b>		
Greenhouse gas assessment <a href="#">Greenhouse Gas Assessment Impact Test guidance</a>	No	
Wider environmental issues <a href="#">Wider Environmental Issues Impact Test guidance</a>	No	
<b>Social impacts</b>		
Health and well-being <a href="#">Health and Well-being Impact Test guidance</a>	No	
Human rights <a href="#">Human Rights Impact Test guidance</a>	No	
Justice system <a href="#">Justice Impact Test guidance</a>	No	
Rural proofing <a href="#">Rural Proofing Impact Test guidance</a>	No	
<b>Sustainable development</b> <a href="#">Sustainable Development Impact Test guidance</a>	No	

<sup>1</sup> Public bodies including Whitehall departments are required to consider the impact of their policies and measures on race, disability and gender. It is intended to extend this consideration requirement under the Equality Act 2010 to cover age, sexual orientation, religion or belief and gender reassignment from April 2011 (to Great Britain only). The Toolkit provides advice on statutory equality duties for public authorities with a remit in Northern Ireland.

## Evidence Base (for summary sheets) – Notes

### References

No.	Legislation or publication
1	The Chancellor of the Exchequer's June budget speech <a href="http://www.hm-treasury.gov.uk/junebudget_speech.htm">http://www.hm-treasury.gov.uk/junebudget_speech.htm</a>
2	The Minister for Pension's written Ministerial statement on 8 <sup>th</sup> July <a href="http://www.publications.parliament.uk/pa/cm201011/cmhansrd/cm100708/wmstext/100708m0001.htm#10070869000014">http://www.publications.parliament.uk/pa/cm201011/cmhansrd/cm100708/wmstext/100708m0001.htm#10070869000014</a>
3	Chapter II of the Pension Schemes Act 1993
4	Sections 51 to 55 of the Pensions Act 1995
5	Consultation - <a href="http://www.dwp.gov.uk/docs/cpi-private-pensions-consultation.pdf">http://www.dwp.gov.uk/docs/cpi-private-pensions-consultation.pdf</a>
6	Previous Impact Assessment - <a href="http://www.dwp.gov.uk/docs/cpi-private-pensions-consultation-ia.pdf">http://www.dwp.gov.uk/docs/cpi-private-pensions-consultation-ia.pdf</a>

### Evidence Base

#### Annual profile of monetised costs and benefits\* - (£bn) constant prices

	Y <sub>0</sub>	Y <sub>1</sub>	Y <sub>2</sub>	Y <sub>3</sub>	Y <sub>4</sub>	Y <sub>5</sub>	Y <sub>6</sub>	Y <sub>7</sub>	Y <sub>8</sub>	Y <sub>9</sub>
<b>Transition costs</b>	74.0	0.44	0.26	0.11						
<b>Annual recurring cost</b>										
<b>Total annual costs</b>	74.0	0.44	0.26	0.11						
<b>Transition benefits</b>	74.0	0.44	0.26	0.11						
<b>Annual recurring benefits</b>										
<b>Total annual benefits</b>	74.0	0.44	0.26	0.11						

\* For non-monetised benefits please see summary pages and main evidence base section

## **Evidence base (for summary sheets)**

### **Problem under consideration**

Legislation in the Pension Schemes Act 1993 requires the Secretary of State each calendar year to specify by order revaluation percentages based on "the percentage which appears to [him] to be the percentage increase in the general level of prices in Great Britain" over an annual inflation reference period ending on the latest 30 September. In previous years, the Retail Prices Index (RPI) had been used to measure movements in the general level of prices. The Secretary of State no longer considers it the appropriate measure of inflation for this purpose. The Chancellor of the Exchequer announced on 22nd June that with the exception of the State Pension and Pension Credit, benefits, Tax Credits and public service pensions will in future be increased in line with consumer prices rather than retail prices. The Consumer Prices Index is used by the Government to set the Bank of England's inflation target.

### **Rationale for intervention**

Legislation requires the Government to make a judgment each year on the increase in prices over the previous 12 months. The Government has considered whether to continue to uprate according to the RPI measure of inflation, or whether it is more appropriate to use CPI as the best measure of movements in the general level of prices. Taking into account that the CPI is calculated in accordance with a common EU methodology to measure price levels and is the index used by the Government to set to Bank of England's inflation target, the Government has concluded that CPI should be used consistently for uprating purposes for state benefits, public service pensions and the statutory minimum revaluation and indexation of private pensions.

### **Policy objective**

The objective is to adopt the most appropriate measure of inflation. Additionally, the use of CPI for uprating purposes will assist some defined benefit occupational pension schemes to maintain adequate funding levels to meet future liabilities.

### **Description of options considered**

There are several measures of the level of general prices in Great Britain including RPI which has a longer historical background, and CPI which uses a more modern methodology that is consistent between EU countries. The Government considered only two options (a) continuing to use RPI for statutory revaluation and indexation purposes and (b) moving to the use of CPI in future. This decision was not taken for private pension uprating in isolation. The Government has announced a consistent approach to the measurement of inflation for state benefits and public service pensions as well as for statutory private pension uprating. Adopting CPI for private pension uprating purposes means that the more stable and appropriate index will be used to measure prices in future.

## Summary

The impact of this policy is to change the value of the pension liabilities of private sector defined benefit occupational pensions<sup>1</sup>. This effect takes place immediately in respect of the accrued liabilities (i.e. obligations to pay future pensions) that have already built up.

In the short term there will also be changes to the value of future pension accruals because the additional pension liabilities built up each year will be revalued and/or indexed by CPI rather than RPI. In the long term it is expected that companies, individuals and unions take account of the impact of this change in future negotiations about pay and terms, and once labour markets have had time to adjust, there will be no further impact.

Pensions are not paid out immediately so, although the impact on pension liabilities and funding levels occurs in the short term, the cash flow implications will extend many years into the future.

The policy consists of two stages, the change to CPI for the Revaluation Order and the measures in the Pensions Bill to exempt schemes with RPI linked revaluation and indexation from the statutory revaluation and indexation requirements.

## Immediate impact on the stock of pension liabilities

Pension schemes have already built up commitments to pay pensions. The position prior to the change in policy was that scheme sponsors anticipated these payments would be revalued and indexed in line with RPI. This policy changes the basis of the statutory minimum revaluation and indexation by linking them to CPI (subject to scheme rules).

The change in the Revaluation Order reduces the expected value of liabilities for those schemes that will index or revalue by reference to CPI in future. The estimated reduction in the expected value of existing pension liabilities is £71.6bn. This figure is calculated by treating all active members as deferred members, as scheme sponsors are able to close their pension scheme at any time, subject to consultation.

For some schemes however this change would have increased their liabilities. If their rules specify an RPI link they will have to pay CPI (the new statutory minimum) whenever it is higher than RPI but still have to pay RPI in other years, because that is what their scheme rules require.

The Government therefore decided to amend primary legislation to exempt schemes with RPI linked indexation in their rules from the requirement to index by CPI. This brings an additional £2.4bn of benefit to firms from further reduction in their liabilities, bringing the total immediate impact to £74bn. This compares to the previous estimate of the impact on the stock of pension liabilities which was £60.9bn.

The same issue arises in respect of schemes with RPI-linked revaluation in their rules since they will have to revalue by CPI whenever it is higher than RPI, but still revalue by RPI in other years. The resulting increase in their liabilities is estimated to be £20 million. In order to avoid this effect on such schemes, the Government has decided to amend legislation to exempt schemes with RPI linked revaluation in their rules from the requirement to revalue by CPI. This will be achieved by amendment to the Pensions Bill

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<sup>1</sup> For the avoidance of doubt, this impact assessment does not consider any impact of the change in the basis of indexation used for public service pensions.

## Impact on the flow of future pension liabilities

As well as the impact on existing pension liabilities there will be a short-term impact on pension rights yet to accrue, as due to the change from RPI to CPI the value of pension being accrued by employees has changed. For the purposes of this Impact Assessment the short term is defined as the period over which labour markets take to adjust to the change. During this period it is assumed that employers and employees have not fully renegotiated their remuneration arrangements in such a way as to adjust for the different value of pension accruals arising from these changes.

The benefit to an individual of an extra year of pension is made up of two components – the number of qualifying years and the final salary on which the pension is calculated. Firstly, they have an extra qualifying year which will increase the amount of pension payable. Secondly, the salary on which the pension is based is higher (making a reasonable assumption that pay increases), which in a DB scheme increases the value of all their accruals to date, not just the extra year.

The impact of the move from RPI to CPI on the value of an extra year accrual is to reduce the value of this additional year, as a year of CPI linked accrual is worth less than a year of RPI linked accrual.

However the value of another year of active service on the previously accrued pension is increased in value by the move from RPI to CPI for revaluation. If a member is not in active service, the rights they have accrued to date will be revalued by CPI. If, however, the member is still in active service, the benefit they receive from working an extra year (rather than being a deferred member) is effectively revaluation of the rights they have accrued to date calculated on their salary at the end of that year - this benefit is now greater because the difference between CPI and assumed salary growth will be greater than the difference between RPI and assumed salary growth. This means that individuals have a stronger incentive to remain in their pension scheme after the change to CPI because if they leave they will receive lower revaluation on their entire pension than they would have received under RPI– hence the benefit of the pension to the individual is higher.

The combined effect of these two components (given the assumptions we make about a typical individual and inflation rates) are such that the value of the extra pension from working an extra year is now a little greater than it was when pension increases were based on RPI. However it is expected that this change will be short lived as labour markets adjust.

Applying a three year period over which labour markets adjust, the short term impact is to *increase* pension liabilities by £0.79bn. This compares to the previous estimate of the change to CPI on the flow of future pension liabilities resulting in a *reduction* in liabilities of £22.1bn, based on labour markets adjusting over 15 years.

## Total impact

The total impact is found by summing the stock and flow impacts, i.e. costs (and equal benefits) of £73.2bn. This compares to the previous estimate which was £83bn. The cash flow of these impacts will be felt over many years and therefore the Equivalent Annual Net Cost to Business has been calculated over 39 years as £3.34bn.

## Details of analysis of costs and benefits of each option

The analytic approach taken to this analysis is the same as that discussed in the Impact Assessment published on 11<sup>th</sup> February 2011. Various aspects of the methodology, in particular to the way in which revaluation is applied to pension rights, and assumptions in this analysis have been updated to inform this final Impact Assessment. The consequence of these changes is to increase the immediate impact on historic pension accruals, but to reduce the impact on newly accruing pension rights over the next few years.

Overall, the impact of the policy is now estimated to be a little lower than previously estimated. This is primarily due to the findings of new research which has reduced the proportion of schemes we assume to be linked to the statutory minimum. The other changes have increased the estimated savings to industry, and partially offset the lower savings to industry as a consequence of the new assumptions about the proportion of schemes affected. For ease of reference this approach is summarised here with focus on things which have been updated since the earlier Impact Assessment.

## Difference between the inflation rates

The Office for National Statistics (ONS) publishes figures from CPI inflation going back to 1989 over which period the average annual rate of CPI inflation has been 2.73%. Over the same period the average annual rate of RPI inflation has been 3.44%<sup>2</sup>.

As CPI has only been calculated for a short period of time the historical averages may not be effective predictors of the long run relationship. DWP's core assumptions for long run CPI is that CPI inflation will be 2% (i.e. the Bank of England's target). Subsequent to the publication of the last Impact Assessment on this topic the Office for Budget Responsibility in its March 2011 report set out that the long run average gap between RPI and CPI should now be 1.2% - which implies a long run RPI average inflation rate of 3.2%. DWP has adopted these long term assumptions for this analysis.

Various sections of indexation and revaluation of rights are capped at either 2.5% or 5%. Neither indexation nor revaluation of pensions can be below 0%. It is therefore necessary to formulate an assumption about the average inflation rate, subject to these caps and a minimum rate of 0%. In order to do this the historic annual inflation series were scaled so that they produced an average rate consistent with the core DWP assumptions. Using these scaled data series the average rate of capped and collared inflation rates (ie the maximum and minimum inflation uprating which can be applied in different scenarios) can be calculated.

As some schemes have RPI indexation in their rules the effect of one part of the policy change here would be to require them to pay CPI whenever it exceeds RPI (and RPI in accordance with their rules otherwise). This is referred to as the 'CPI underpin'. Therefore an estimate of the maximum of RPI and CPI (also subject to caps and collars) is also needed. The scaled series described above can be used to produce this.

The inflation assumptions are summarised in Table 1.

**Table 1 – long run average inflation rate assumptions**

	No Collar	0% minimum	
		No Cap	2.5% cap
RPI	3.20%	2.19%	2.92%
CPI	2.00%	1.65%	1.97%
Maximum of RPI and CPI	3.31%	2.28%	3.01%

<sup>2</sup> Over the whole period for which RPI exists the average annual inflation rate has been 5.64%.



## Combinations of scheme rules

The Department for Work and Pensions has recently published a research report<sup>3</sup> which indicates the proportions of schemes that have explicit links to RPI in their rules or are linked to the statute. Drawing on that research the assumptions set out in Table 2 were used for this Impact Assessment. The assumptions used in the previous Impact Assessment were based on informal external analysis which was all that was available at the time.

**Table 2 - Assumption about proportion of schemes with particular indexation and revaluation rules**

		Revaluation	
		Rules state RPI	Rules link to statutory minimum
Indexation	Rules state RPI	25%	51%
	Rules link to statutory minimum	4%	19%

*Note: Figures may not sum to 100% due to rounding*

## Calculating the impact – Immediate term (ie impact on previously accrued pension)

As soon as this policy is introduced there will be a change in the expected value of the existing pension liabilities as the pension rights schemes anticipated revaluing and indexing by capped RPI inflation rate will now be revalued and indexed by the (typically lower) capped CPI inflation rate.

The basic modelling approach is to work out the effect of the policy on a representative individual and then to apply that impact to total scheme liabilities to get an estimate of the value of the transfer of expected future pension payments from scheme members to scheme sponsors.

Pensioner members are not affected by the change to revaluation (as they are already in receipt of their pension) but are potentially affected by the change to indexation. The total impact on pensioner members could therefore be less significant than that on deferred and active members.

DWP does not hold information on the age and gender distribution of members in private sector DB pension schemes. Therefore the assumptions (derived from PPF data) used in the previous Impact Assessment have been maintained. On the basis of this data the average pensioner member of a scheme is aged 68 and the average deferred member is aged 48.

The assumptions (based on ONS data<sup>4</sup>) are also maintained. 48 year old man is expected to live to 86, and a 48 year old woman to 89. A 68 year old man is expected to live to 87 and a 68 year old woman to 89.

To calculate the impact on indexation DWP applied the differences between the (capped and collared) inflation rates. To calculate the impact on revaluation DWP applied the differences between the (uncapped) inflation rates to revaluation (and then applying an aggregate cap). Applying a real discount rate of 3.5% allows calculation of the impact on the pension liabilities of this change for each combination of scheme rules.

<sup>3</sup> "Research exploring the effect of uprating by CPI on occupational pension schemes" published 16th June 2011 and available at <http://research.dwp.gov.uk/asd/asd5/wp-index.asp>

<sup>4</sup> Cohort expectations of life (years) Based on historical mortality rates from 1981 to 2008 and assumed calendar year mortality rates from the 2008-based principal projections. Produced by the Office for National Statistics

## Revaluation order

Table 3 and Table 4 illustrates these impacts for the change in the index used in the revaluation order.

**Table 3 - Impact on liabilities by gender and scheme rules type for deferred and active members**

Indexation	Statutory	RPI	Statutory	RPI
Revaluation	Statutory	Statutory	RPI	RPI
Male	-20.4%	-16.3%	-4.4%	0.5%
Female	-20.8%	-16.2%	-5.0%	0.5%

**Table 4 - Impact on liabilities by gender and scheme rules type for pensioner members**

Indexation	Statutory	RPI
Male	-2.6%	0.1%
Female	-2.9%	0.1%

The assumption that two thirds of scheme members are men has been maintained. These figures are combined with the scheme proportions in Table 2 to produce an overall reduction in extant pension liabilities of 6.5%. This is combined with the total pension liabilities figure taken from the previous Impact Assessment of £1.1tn to give a total reduction in liabilities of £71.6bn arising from the revaluation order.

This net figure can be broken down into an increase in liabilities of £1.1bn for those schemes with RPI linked revaluation and indexation and a reduction in liabilities of £72.7bn for other schemes.

## Including the Bill Measures

As can be seen from Table 3 and Table 4 some individuals benefit from the change from RPI indexation to CPI revaluation and indexation. This occurs if their scheme rules specify RPI linked indexation. Although CPI inflation is on average lower than RPI inflation it is not always lower. In those years where CPI is higher members of such schemes would therefore receive CPI linked increases, above the RPI increases they had previously anticipated. This is referred to as a 'CPI underpin'.

The Government is legislating to remove the CPI underpin by allowing those schemes that have an explicit reference to RPI in their rules to be exempt from the statutory revaluation and indexation requirement. Removing this effect changes the impacts on active and deferred members to those set out in Table 5 below. The impact on pension members in schemes with RPI indexation (the final column in Table 4 above is reduced to zero, and the impact on those with statutory indexation is unchanged.

**Table 5 - Impact on liabilities by gender and scheme rules type for deferred and active members – moving to CPI revaluation and indexation and removing CPI underpin**

Indexation	Statutory	RPI	Statutory	RPI	
Revaluation	Statutory	Statutory	RPI	RPI	
Male		-20.4%	-16.7%	-4.4%	0.0%
Female		-20.8%	-16.7%	-5.0%	0.0%

This increases the overall reduction in extant pension liabilities to 6.7%, i.e. £74.0bn

The 'CPI underpin' effect referred to above also applies to revaluation. In those instances where the scheme rules specify that the entitlements of deferred members be revalued by RPI, the scheme will actually have to revalue by CPI when the underpin applies. This underpin effect is estimated to increase the liabilities of the sponsoring employers of such schemes by around £20 million. The impact of the underpin on revaluation is less than that for indexation because revaluation is a 'point-to-point' measure over the entire period of revaluation whereas indexation is 'year-on-year', such that the likelihood of an individual member actually being affected by the CPI revaluation underpin is low (as it is less probable that CPI will exceed RPI over a longer period than it is that CPI will exceed RPI in a single year). In order to avoid this increase in liabilities, the Government is legislating to remove the effect of the 'CPI underpin'.

The basic approach to calculating the impact of the revaluation underpin is to work out the probability that CPI is greater than RPI in any given year, apply this to the liabilities affected (current active members of private sector DB schemes with RPI revaluation who go on to have short periods of deferment), and then increase these liabilities by the mean excess of CPI over RPI when the former is higher. The probability of CPI exceeding RPI in any given year is calculated from a set of stochastic simulations<sup>5</sup> of the values of RPI and CPI over the next 100 years as being 14.92%. In these cases, the excess of CPI over RPI is 2.68 percentage points. Applying this probability and mean difference to the liabilities of affected deferred members yields an increase in scheme liabilities of £20 million as a result of the revaluation underpin.

## Calculating the impact – Short term (ie impact on new pension accruals over the next few years)

For the purposes of this Impact Assessment the short term is defined as that period in which labour markets are not fully flexible. During this period it is assumed that employers and employees cannot fully renegotiate their remuneration arrangements in such a way as to adjust for the different value of pension accruals arising from these changes. For the purposes of this Impact Assessment DWP is using a working assumption that the short term is defined as 3 years.

The short term impact is evaluated by looking at the value of pension accruals in one year.

Table 6 is from the 2009 Occupational Pension Schemes Survey (published 2010)<sup>6</sup> and illustrates the typical accrual rates in pension schemes. This updates the data used in the previous Impact Assessment. For the purpose of this Impact Assessment only the private sector column is used. This data does not provide precise accrual rates so it is necessary to use it to make assumptions about the accrual rates used. The assumptions used are illustrated in Table 7.

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<sup>5</sup> Based upon analysis of stochastic data supplied by Barrie and Hibbert

<sup>6</sup> [http://www.statistics.gov.uk/downloads/theme\\_population/occ-pension-2009/opss2009final.pdf](http://www.statistics.gov.uk/downloads/theme_population/occ-pension-2009/opss2009final.pdf)

**Table 6 - Number of active members of defined benefit occupational pension schemes: by accrual rate, sector and funding status, 2009**

United Kingdom	Millions				
	Private total	Public		Public total <sup>3</sup>	Total <sup>2</sup>
		Funded	Unfunded		
50ths or better	0.1	--	--	0.0	0.1
Between 50ths and 60ths	0.1	--	--	--	0.1
60ths plus additional lump sum	0.2	--	--	0.5	0.7
60ths	1.1	1.0	0.1	1.2	2.3
80ths plus 3/80ths lump sum	0.4	0.5	2.4	2.9	3.2
Between 60ths and 80ths	0.2	--	--	0.2	0.5
80ths	0.1	--	--	0.6	0.7
Less generous than 80ths	0.0	0.0	0.0	0.0	0.0
Non response	0.1	0.0	0.0	0.0	0.1

1 .. Indicates cells that have been suppressed to protect confidentiality.

2 Excludes schemes with fewer than 12 members.

3 These columns contain members of public sector schemes where the scheme's funding status is unknown.

Source: Occupational Pension Schemes Survey

**Table 7 - Accrual rate assumptions**

Accrual Rate	%
1/50	13.6%
1/55	4.5%
1/60	68.2%
1/70	9.1%
1/80	4.5%
1/100	0.0%

The average earnings assumption of £34,750<sup>7</sup> is maintained from the previous Impact Assessment as is the earnings growth assumption of RPI+1.5%.

Earlier in the document the benefit to individuals of an extra year of pension is discussed. In summary, the consequence of the change from RPI to CPI is that the value of new pension accruals in a final salary scheme is now higher under CPI than it was under RPI. This is because the loss of pension from leaving the scheme is greater under CPI revaluation than it would have been had the pension been revalued by RPI. This is however largely offset by the lower value of an additional year of a CPI linked pension relative to an RPI linked pension.

The change in the value of a year's accrual can be combined with the total number of DB scheme members from Table 6 and the scheme proportions from Table 2 above. This results in move from RPI to CPI increasing accruing pension liabilities by £0.44bn in the first year following the change from RPI to CPI.

For the purposes of this Impact Assessment the period it takes for markets to fully adjust is assumed to be 3 years. As a simplifying assumption therefore it is assumed that the year 2 effect is two thirds of the year 1 effect, the year 3 effect is one third of the year 1 effect etc. This is a more rapid adjustment than assumed in the previous Impact Assessment.

In addition to this the number of active members of DB schemes is declining year on year. The assumptions used by DWP in its Pensim2 model (the same ones as used in the previous Impact Assessment) are set out in Table 8, which also illustrates the annual impact of the policy adjusted to take into account this decline

<sup>7</sup> DWP analysis of Annual Survey of Hours and Earnings data

**Table 8 - Short term impact of change in index accounting for reducing number of DB scheme members**

Year	Active members of schemes as % of active members in 2011	Impact (£bn constant prices)
2011	100%	-0.44
2012	87%	-0.26
2013	76%	-0.11

The Net Present Value of the short term impact of the policy is therefore £0.79bn (with a real discount rate of 3.5%)

## Calculating the impact – Long term

Over the longer term we would expect companies, individuals and unions to take account of the impact of this change to the value of staff pensions for future negotiations about pay and terms (i.e. the labour market will adjust to the change). For the purposes of this assessment the long term is defined as the period in which labour markets are fully flexible this is assumed to be 3 years.

In the long term, as labour markets can adjust<sup>8</sup>, it is not expected that there will be any significant change in the value of the total remuneration package offered to workers as a consequence of this change. As a result of the move from RPI to CPI indexation and revaluation it may be that the pension element of their remuneration has changed but in such circumstances the non-pension elements would have adjusted to keep total remuneration at the correct level for the given labour market. This is not to say that labour markets are perfectly efficient or always clear, it is merely to say that nothing in the policy change discussed here (indexation of pensions) will fundamentally change whatever labour market dynamics operate.

Given the above description there is no additional long term impact of this policy beyond the immediate and short term impacts discussed above.

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<sup>8</sup> There are many ways in which labour markets could adjust to these changes in pension arrangements and it would be impractical to articulate them all here. Precisely how, and how rapidly, labour markets will adjust is difficult to predict but it is implausible that, for example, the level remuneration of labour will be significantly different in, for instance, 2050 as a result of a change in pension indexation in 2010

## Annex 1: Post Implementation Review (PIR) Plan

<b>Basis of the review:</b>
<b>Review objective:</b>
<b>Review approach and rationale:</b>
<b>Baseline:</b>
<b>Success criteria:</b>
<b>Monitoring information arrangements:</b>
<b>Reasons for not planning a review:</b> Issuing a revaluation every year is a statutory duty on the Secretary of State, and part of making the order is reaching a view on the level of increase in the general level of prices for the year ending 30 <sup>th</sup> September. This is a regular annual activity and there is no scope for changing the process.