Title: Impact of the move to CPI for Occupational Pensions **Lead department or agency:** DWP **Other departments or agencies:**	Impact Assessment (IA) **IA No:** DWP0014 **Date: 11th February 2011** **Stage:** Final **Source of intervention:** Domestic **Type of measure:** Primary and Secondary Legislation

Summary: Intervention and Options

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

Primary legislation 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. This index has proved volatile in recent years and the Secretary of State no longer considers it the foremost measure of inflation. 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 (CPI) 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.

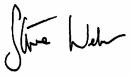
What policy options have been considered? Please justify preferred option (further details in Evidence Base)

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 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 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.

When will the policy be reviewed to establish its impact and the extent to which the policy objectives have been achieved?	It will be reviewed annually when the Revaluation Order is made
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: 11th February 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)) (£bn)		
			Low: N/A	**High:** N/A	**Best Estimate: 0**

COSTS (£bn)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	Optional	15	Optional	**Optional**
High	Optional		Optional	**Optional**
Best Estimate	85.9		0	**83.0**

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 reduced in the short term.

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

BENEFITS (£bn)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	Optional	15	Optional	**Optional**
High	Optional		Optional	**Optional**
Best Estimate	85.9		0	**83.0**

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 and the cost of the total remuneration package for their employees reduced in the short term.

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% real

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 (0.87%), what scheme rules say about indexation, the specification of representative members of pension schemes and the behaviour of scheme sponsors.

Impact on admin burden (AB) (£m): £0			Impact on policy cost savings (£m):	In scope
New AB:	**AB savings:**	**Net:** £0	**Policy cost savings:** N/A	Yes

Enforcement, Implementation and Wider Impacts

What is the geographic coverage of the policy/option?			UK		
From what date will the policy be implemented?			01/01/2011		
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_2 equivalent change in greenhouse gas emissions? (Million tonnes CO_2 equivalent)			**Traded:** 0	**Non-traded:** 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?			**Costs:** 6.1%	**Benefits:** 6.1%	
Annual cost (£m) per organisation (excl. Transition) (Constant Price)	**Micro** 0	**< 20** 0	**Small** 0	**Medium** 0	**Large** 0
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**
Statutory equality duties Statutory Equality Duties Impact Test guidance	No	
Economic impacts		
Competition Competition Assessment Impact Test guidance	No	
Small firms Small Firms Impact Test guidance	No	
Environmental impacts		
Greenhouse gas assessment Greenhouse Gas Assessment Impact Test guidance	No	
Wider environmental issues Wider Environmental Issues Impact Test guidance	No	
Social impacts		
Health and well-being Health and Well-being Impact Test guidance	No	
Human rights Human Rights Impact Test guidance	No	
Justice system Justice Impact Test guidance	No	
Rural proofing Rural Proofing Impact Test guidance	No	
Sustainable development Sustainable Development Impact Test guidance	No	

Evidence Base (for summary sheets)

References

No.	Legislation or publication
1	The Chancellor of the Exchequer's June budget speech http://www.hm-treasury.gov.uk/junebudget_speech.htm
2	The Minister for Pension's written Ministerial statement on 8th July http://www.publications.parliament.uk/pa/cm201011/cmhansrd/cm100708/wmstext/100708m0001.htm#10070869000014
3	Chapter II of the Pension Schemes Act 1993
4	Sections 51 to 55 of the Pensions Act 1995

Evidence Base

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

The benefits in this section relate to changes in the pension liabilities for firms, including those liabilities that they currently have (the Y_0 effect) and those additional liabilities which they incur to members over the next few years (the Y_1-Y_{15} effect). It is unlikely that this change to pension regulation will persistently change the overall remuneration of labour and therefore the long term effect (Y_{16} onwards) is treated as zero.

NB the table relates to changes in pension liabilities as a result of the policy, the timing of the actual cash flows will differ from those shown here.

Annual profile costs and benefits - (£bn) constant prices

	Y_0	Y_1	Y_2	Y_3	Y_4	Y_5	Y_6	Y_7	Y_8	Y_9	Y_{10}	Y_{11}	Y_{12}	Y_{13}	Y_{14}	Y_{15}
Transition costs	60.9	4.5	3.7	3.0	2.6	2.3	1.9	1.6	1.4	1.2	0.9	0.8	0.5	0.4	0.2	0.1
Annual recurring cost																
Total annual costs																
Transition benefits	60.9	4.5	3.7	3.0	2.6	2.3	1.9	1.6	1.4	1.2	0.9	0.8	0.5	0.4	0.2	0.1
Annual recurring benefits																
Total annual benefits																

Evidence Base (for summary sheets)

Problem under consideration

Primary legislation 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. This index has proved volatile in recent years and the Secretary of State no longer considers it the foremost measure of inflation. 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 effectively 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 expected value of the pension liabilities of providers of private sector defined benefit occupational pensions[1]. This effect takes place immediately in respect of the accrued liabilities (i.e. obligations to pay future pensions) that firms have already built up. In the short term there will also be an effect of a reduced value of pension accruals because the additional pension liabilities sponsors build up in that year will be uprated by CPI rather than RPI. 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 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 and Savings Bill to exempt schemes with RPI linked indexation from the statutory 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 that these payments would be revalued and indexed (in accordance with scheme rules) in line with RPI. This policy changes the basis of revaluation and indexation for these schemes by linking them to CPI and consequently changes the assumptions used to calculate future liabilities in respect of pensions already accrued.

The change in the Revaluation Order reduces the expected value of liabilities for those schemes that have links to the statutory minima in their rules. The estimated reduction in the expected value of existing pension liabilities is £58.8bn.

For some schemes however this change will increase their liabilities (as their rules specify RPI indexation, meaning they will have to pay CPI whenever it is higher than RPI but still have to pay RPI in other years). The estimated increase in the expected value of existing pension liabilities is £1.3bn.

The second stage of the policy, exempting schemes with RPI linked indexation from the requirement to index by CPI, cancels out this £1.3bn effect for those schemes with RPI linked revaluation and indexation. It also brings an additional £2.0bn for members of those schemes which had statutory linked revaluation but RPI linked indexation because schemes will not have to index payments by the higher of RPI or CPI for these scheme members after they retire.

The overall impact (once both stages of the policy are implemented) on the stock of pension liabilities is therefore a reduction of £60.9bn. This is summarised in Table 1 below. The cash flow implications of these changes will be spread over many years depending on the specific demographics of members of the scheme.

[1] 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.

Table 1 - Summary of impact of the policy on the stock of pension liabilities

	Costs		Benefits	
	To scheme members	**To scheme sponsors**	**To scheme members**	**To scheme sponsors**
Revaluation Order	£58.8bn –from reduced value of pension rights	£1.3bn – from increased value of pension liabilities	£1.3bn –from increased value of pension rights	£58.8bn – from reduced value of pension liabilities
	£60.1bn in total		£60.1bn in total	
Bill Measures	£1.3bn – from reversing the increased pension rights from the Revaluation Order + £2.0bn – from reducing pension rights for members of those schemes with RPI linked indexation and statutory revaluation = £ 3.3bn			£1.3bn – from reversing the increase pension liabilities from the Revaluation Order + £2.0bn –from reducing pension rights for members of those schemes with RPI linked indexation and statutory revaluation = £ 3.3bn
Total package	£60.9bn (=£58.8bn + £2bn + £1.3bn - £1.3bn)	£0 (=£1.3bn - £1.3bn)	£0 (=£1.3bn - £1.3bn)	£60.9bn (=£58.8bn + £2bn + £1.3bn - £1.3bn)

Numbers may not sum due to rounding

Impact on the flow of future pension liabilities

As well as the impact on the stock of pension liabilities there will be an impact on the flow of pension liabilities in the short term (i.e. the value of newly accruing rights will be less than would have been the case had the change to using CPI for revaluation/indexation not been made). However it is expected that this change will be short lived as labour markets adjust.

These changes are similar to those discussed above, schemes linked to the statutory minima will see a reduction in the value of the accruing liabilities each year. Schemes linked to RPI will see an increase in the value of the accruing liabilities each year since they will have to pay CPI in those years when CPI is higher than RPI.

Introducing the Revaluation Order will impose costs (set on in the second column in Table 2) with a net present value of £22.0bn as the pension liabilities schemes add during the year will be linked to CPI rather than RPI.

Exempting schemes with RPI linked indexation from the requirement to index by CPI will impose costs of £150mn on scheme members who would, otherwise, have had an increase of the best of RPI or CPI in the indexation of their pensions. (although some of these will come from taking away gains scheme members made from the Revaluation Order changes).

The overall short term impact (once both stages of the policy are implemented) on the flow of accruing pension liabilities is therefore a reduction of £22.1bn in net present value terms

Total impact

The total impact is found by summing the stock and flow impacts, i.e. costs (and equal benefits) of £83.0bn. The cash flow of these impacts will be felt over many years.

For regulatory purposes it is helpful to convert this to an annual equivalent. The average annual benefits in the period to 2025 are £5.7bn. Please note that this figure does not relate to the cash flows of firms or the pensions of scheme members and is provided purely and solely for illustrative purposes.

Table 2 - Short term impact

Year	Impact of revaluation order £bn (constant prices)	Impact of revaluation order + removal of CPI underpin £bn (constant prices)
2011	4.48	4.51
2012	3.64	3.67
2013	2.96	2.97
2014	2.62	2.64
2015	2.24	2.25
2016	1.92	1.94
2017	1.58	1.60
2018	1.38	1.39
2019	1.17	1.18
2020	0.87	0.88
2021	0.75	0.76
2022	0.54	0.55
2023	0.37	0.37
2024	0.22	0.23
2025	0.11	0.11

Illustrative cash-flow impacts on individuals

The analysis in the details of analysis section below is based on a specified representative individual. The way the representative individual is specified is discussed below, but in summary the average pensioner member of a scheme is aged 68 and the average deferred member is aged 48. A 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.

This section illustrates how such an individual's accrued pension would differ under RPI and CPI linked indexation. The individual is assumed to have started working for their employer in 1990[2] and remained in the pension scheme since then, leaving the scheme in 2010[3]. The scheme provides capped and collared RPI linked indexation in line with the legislation.

Schemes may have in their rules an explicit reference to indexation or a link to the statutory indexation. This provides four possible combinations for the situation for schemes. DWP does not hold reliable information on the proportion of schemes in each category but based on an informal survey carried out by KPMG has formulated assumptions for the proportions. These are illustrated in Table 3. DWP has commissioned a research project to better inform the proportions in Table 3 but this was not available in time to inform this impact assessment.

Table 3 - Assumption about proportion of schemes in each situation

		Revaluation	
		Rules state RPI	Rules link to statutory minimum
Indexation	Rules state RPI	20%	60%
	Rules link to statutory minimum	0%	20%

[2] Using 1990 as the start of employment gives a plausible balance of pre-1997 rights (not indexed) and post-1997 rights (indexed). All rights will be revalued.

[3] For assessing the value of the accrued pension this is the correct calculation. Additional pension earned by a member staying in the scheme another year (e.g. extra years' accruals and pay rises of the salary used in pension calculations) are accruals in future years. This is discussed in the detailed section below.

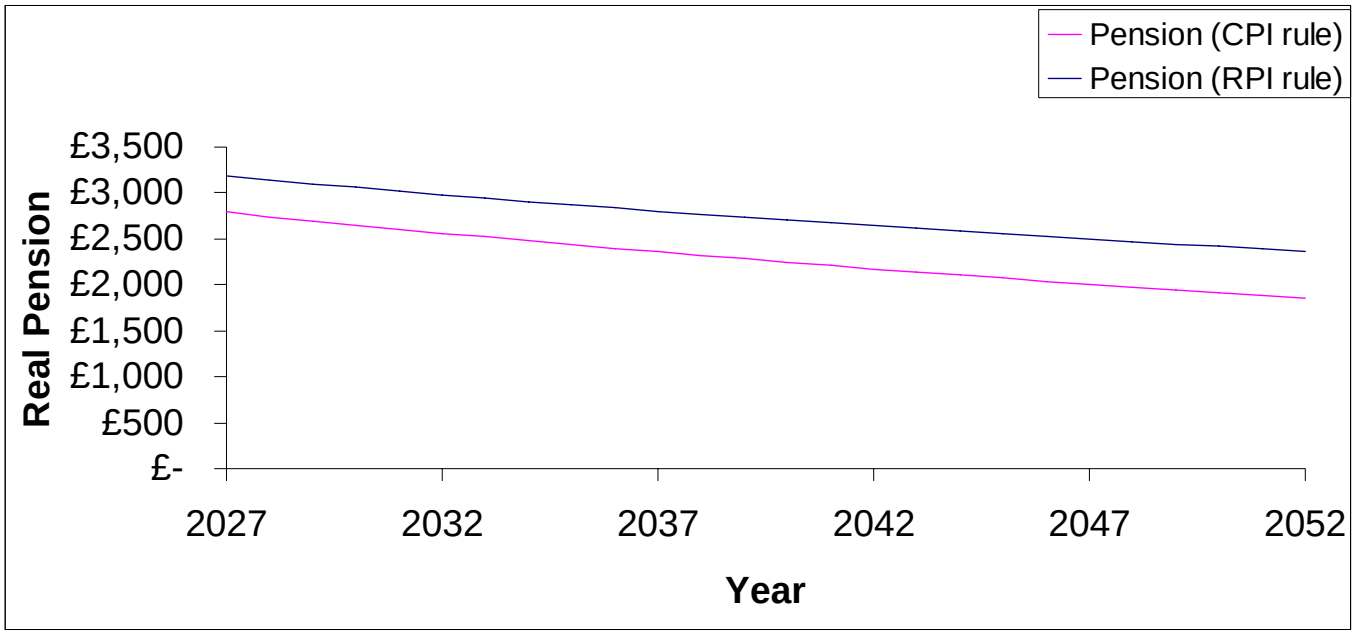
Scheme with statutory revaluation and indexation

The first illustration considers a scheme with revaluation and indexation linked directly to statute. For such a scheme both revaluation and indexation will be based on CPI going forward.

Figure 1 illustrates the real pension the individual would have under RPI linked revaluation and indexation (the blue line) and CPI linked revaluation and indexation (the pink line). The real value of the (RPI linked) pension declines over time as a result of the cap on indexation.

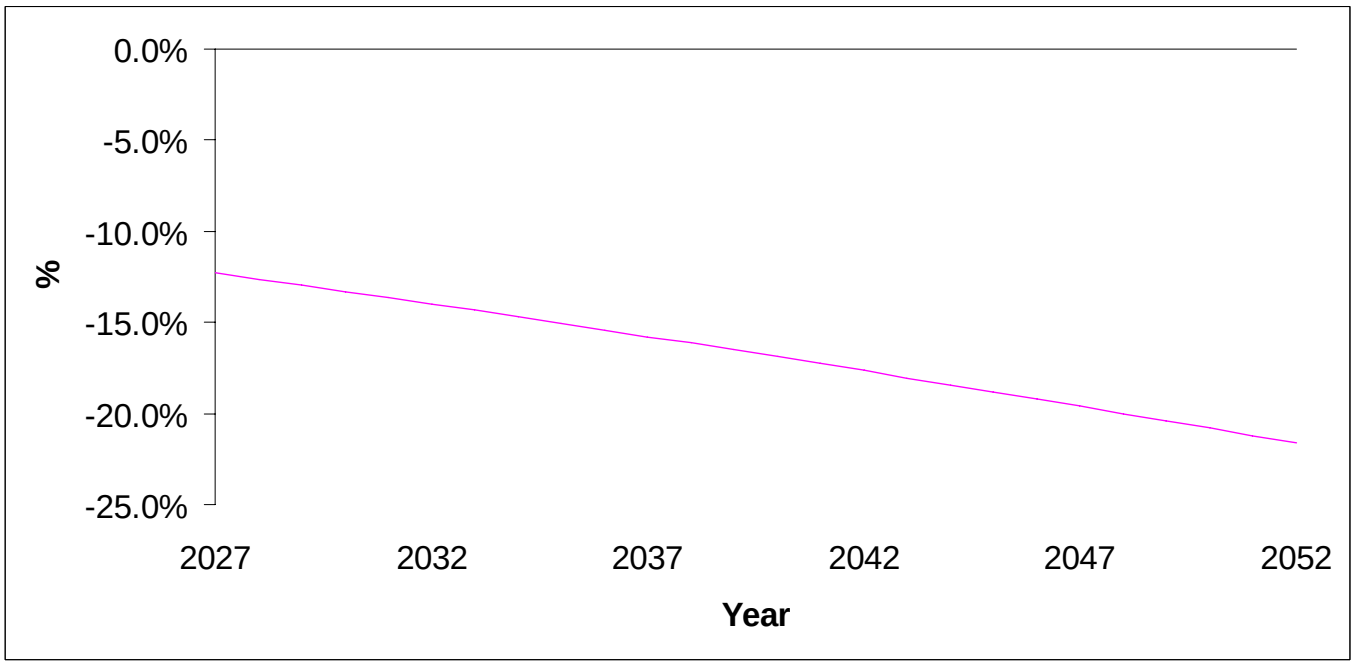
The initial value of the CPI linked pension is lower than that of the RPI linked pension as the revaluation will be lower. The CPI pension also continues to decline faster than the RPI linked pension due to the impact of indexation. Figure 2 illustrates the individuals pension with revaluation and indexation under CPI as a percentage of what it would have been under RPI revaluation and indexation.

Figure 1 - Changing revaluation and indexation from RPI to CPI – real impact on pension



Source: DWP Modelling

Figure 2 - Changing revaluation and indexation from RPI to CPI – percentage impact on pension



Source: DWP Modelling

Scheme with statutory minimum revaluation and RPI linked indexation

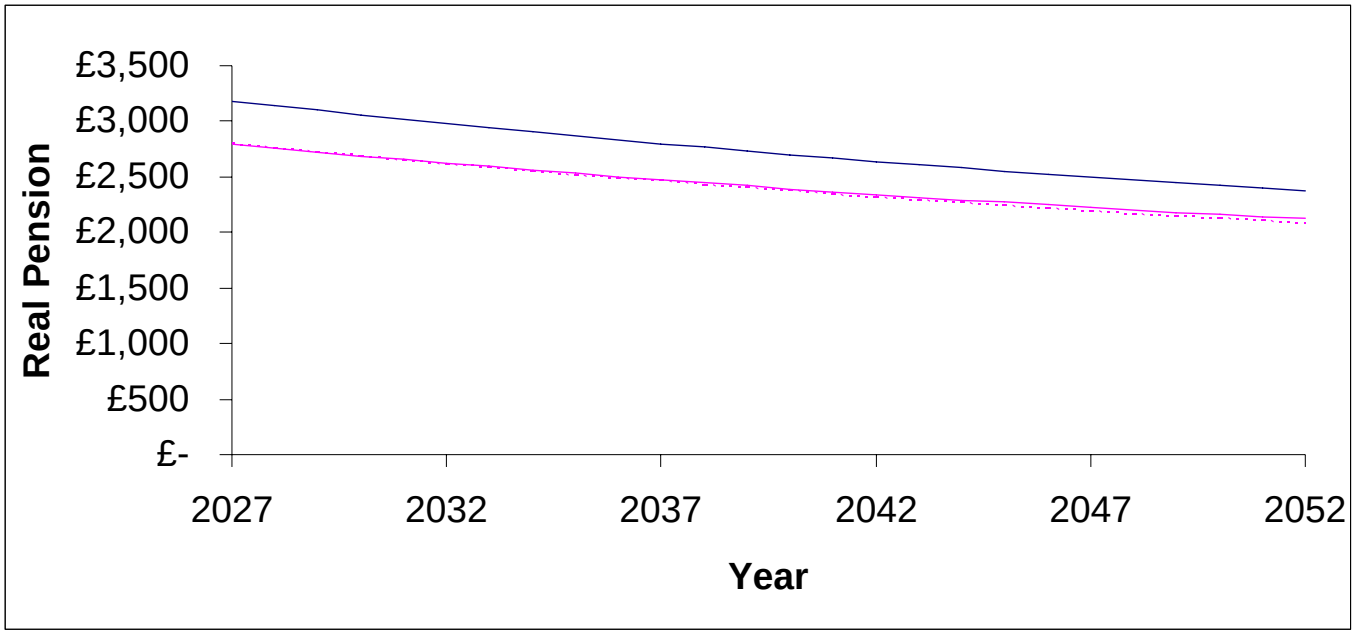
The next illustration is of a scheme where the revaluation of pensions is in line with the statutory minimum (and so moves to CPI linked indexation following the introduction of the Revaluation Order).

However indexation in the scheme rules refers directly to RPI and so the Revaluation Order means that the individual receives the best of (capped and collared) CPI or RPI.

The pension this individual would have received under RPI linked revaluation and indexation is illustrated in Figure 3 with the real pension (the solid blue line) declining year on year as a result of the caps on indexation. Moving to CPI linked revaluation reduces the initial pension although over-time the gap narrows (the solid pink line) as the firm will be offering the highest of (capped and collared) CPI and RPI. This narrowing can be more easily seen in Figure 4 which shows the percentage change.

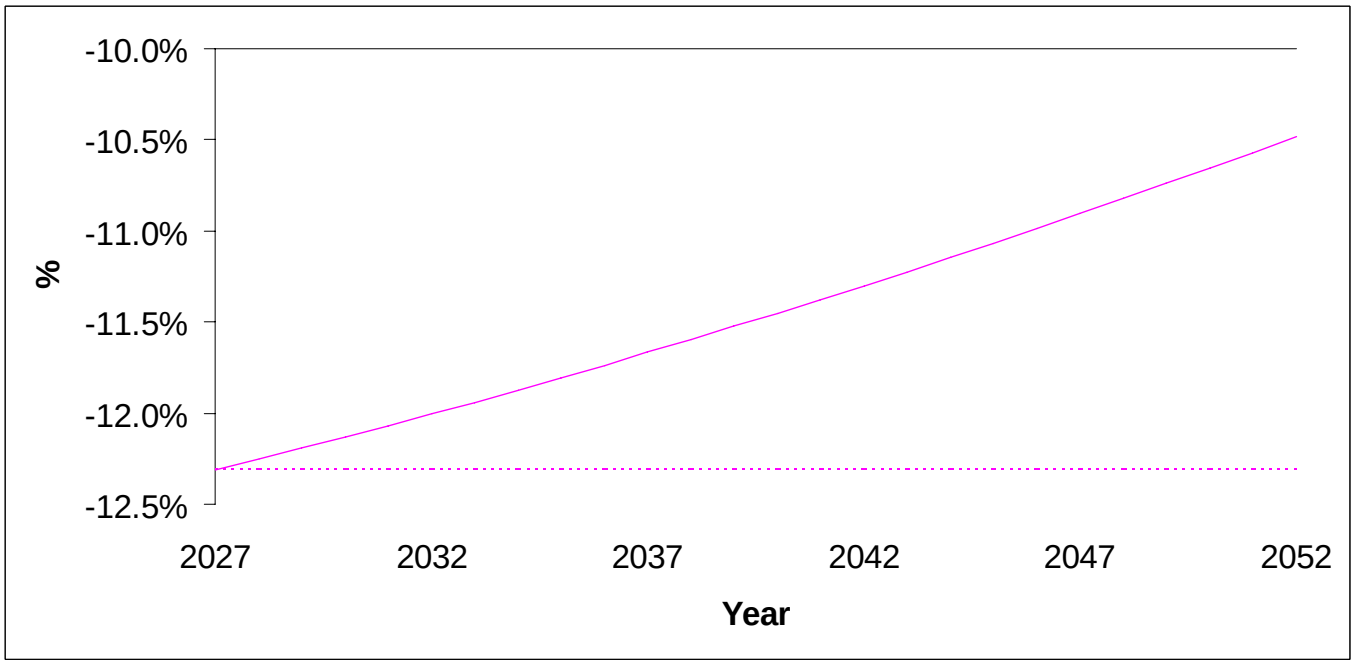
The measures contained in the Bill will remove the CPI underpin effect, in which case the pension the individual will received (and the percentage loss year on year) is illustrated by the dashed pink line.

Figure 3 - Changing revaluation from RPI to CPI and introduction of a CPI underpin - real impact on pension



Source: DWP Modelling

Figure 4 - Changing revaluation from RPI to CPI and introduction of CPI indexation underpin - percentage impact on pension



Source: DWP Modelling

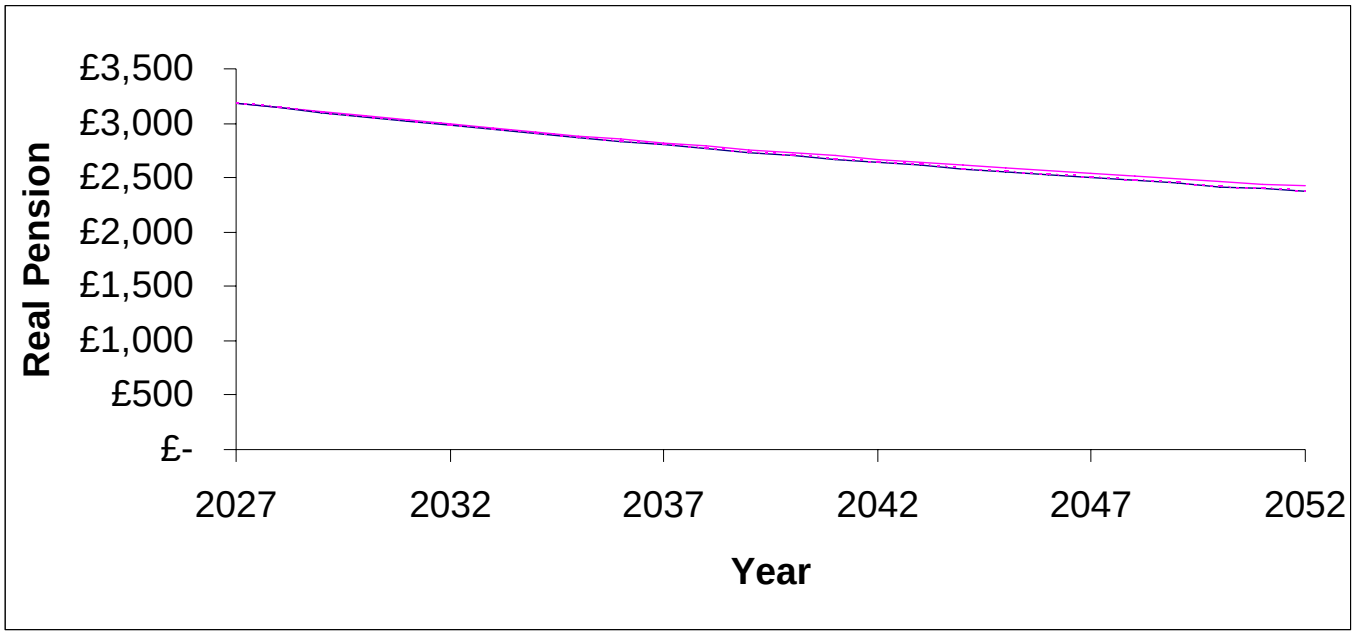
Schemes with RPI linked revaluation and RPI linked indexation

The final[4] case to consider is that of members of schemes with RPI revaluation and RPI indexation explicitly in the rules. In this case there is no difference in the initial pension, this occurs because revaluation applies to the average rate of inflation and, whilst CPI can be higher than RPI on some occasions in the long run the average rate is lower. Therefore the obligation to revalue by CPI will be met by companies revaluing by RPI for all but short periods of revaluation (which is not the example in this illustration).

The pension in payment each year increases slightly relative to the RPI pension as, in those years where CPI exceeds RPI, the scheme needs to pay out CPI, whereas it pays out RPI in other years. This is illustrated in Figure 5 and Figure 6.

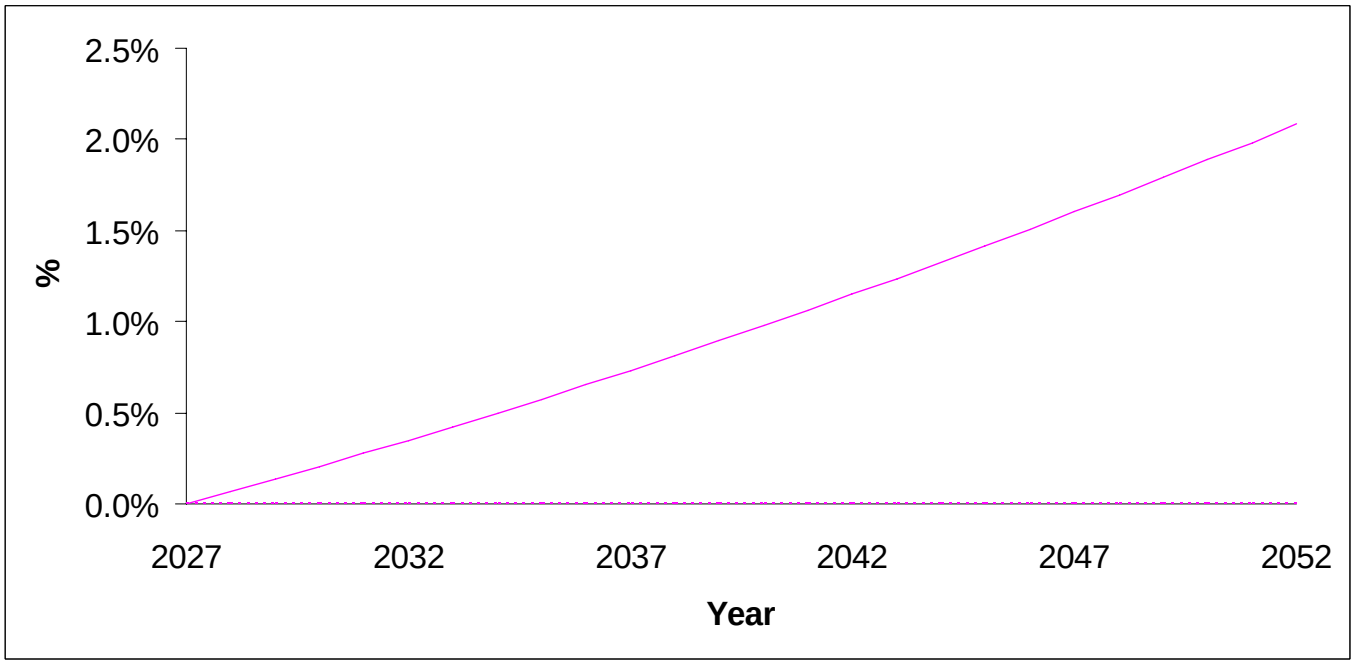
The measure in the Bill to remove the CPI means that there will be no impact on such schemes, they will effectively pay RPI indexation and revaluation, so the payment will be as shown for RPI indexation (the blue line) in Figure 6.

Figure 5 - CPI underpin of revaluation and indexation - real impact on pension



Source: DWP Modelling

Figure 6 - CPI underpin of revaluation and indexation - percentage impact on pension



[4] The case of schemes with explicit links to RPI for revaluation and statutory minimum indexation is not considered as DWP's evidence suggests there are very few such schemes in existence.

Source: DWP Modelling

These impacts have been calculated on the basis of a representative individual and on the basis of the schemes applying revaluation and indexation subject to the statutory caps. It is possible therefore that they understate the impact on many individuals (for instance those in schemes with uncapped indexation) but for the purposes of assessing the impact of the change in the statutory minimum requirements the assumption of capped indexation and revaluation has been retained.

Details of analysis of costs and benefits of each option

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 2.7%. Over the same period the average annual rate of RPI inflation has been 3.38%[5].

As CPI has only existed for a short period of time the historical averages may not be effective predictors of the long run relationship. DWP's core assumptions for RPI and CPI (as used for benefit forecasting) have been that CPI inflation will be 2%[6] and RPI inflation will be 2.87%, of which 0.8 percentage points are due to the 'formula effect'[7] and 0.07 percentage points are due to the assumption that housing costs (included in RPI but not CPI) grow faster than the generality of prices. These assumptions have been maintained for this impact assessment.

The policy change is to the use of inflation indices for two purposes, revaluation and indexation. Indexation relates to pensions in payment and is the amount by which the pension in payment is increased, in nominal terms, each year. Revaluation relates to the pensions of members who have left the scheme but not yet started to draw their pension. When the pension is drawn the value is increased by the sum total year on year of inflation between the point of exit from the scheme and the point at which the pension is drawn (subject to a cap and collar on the average annual inflation rate).

The statutory requirements for indexation and revaluation are subject to caps and collars on the inflation rates used. Before 1997 there was no statutory requirement to index private occupational pensions. In 1997 a statutory requirement to index pensions in payment (arising from accruals from 1997 onwards) by inflation (capped at 5%) was introduced. For accruals from 2005 onwards the cap was reduced to 2.5%. The revaluation cap was reduced from 5% to 2.5% in 2009. 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 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.

Table 4 sets out the inflation assumptions used in this analysis calculated as described above.

Table 4 - inflation rate assumptions

	No collar	Minimum at 0%	
	No cap	Capped at 2.5%	Capped at 5%
RPI	2.87%	2.12%	2.67%
CPI	2%	1.62%	1.97%
Maximum of RPI and CPI	3.02%	2.22%	2.77%

[5] Over the whole period for which RPI exists the average annual inflation rate has been 5.66%.

[6] i.e. an assumption that in the long run the Bank of England successfully achieves the inflation target it has been given.

[7] RPI and CPI are calculated using a different statistical methodology and different baskets of goods. The difference between the two inflation rates due to the statistical methodology is referred to as the 'formula effect'. More detail on the difference between RPI and CPI is provided by ONS. www.ons.gov.uk

Combinations of scheme rules

For the purposes of assessing the value of pension liabilities all active[8] members are treated as deferred. The reason for this is that as scheme sponsors are under no obligation to continue to keep a pension scheme open it would be inappropriate to treat any extra pension individuals accrue in the future (for instance from a pay rise increasing the 'final salary' used in a final salary scheme) as part of their current pension wealth. If an open pension scheme were closed all of its members become deferred (i.e. receive revaluation of their pensions). If active members are treated as having additional pension beyond the revaluation then, when a scheme is closed (legally and with no violation of accrued rights), they would appear to have seen a reduction in their pension wealth (as the expected future pay rises are replaced by expected future revaluation).

As illustrated in Table 3 DWP has formulated a view about the proportion of schemes that have particular treatments of revaluation and indexation.

Different treatment by gender

Female life expectancy is longer than male life expectancy so, for a given work history, salary and pension scheme membership the value of female pension accruals will be greater than the value of male pension accruals. However typically more men than women are members of private sector Defined Benefit (DB) pension schemes, male earnings are higher than female earnings and male working patterns mean that men accrue more pension rights than women.

Calculating the impact – Revaluation Order

There are three timeframes in which it is necessary to consider the impact of the policy. The immediate impact, the short term (for these purposes defined as that period in which labour markets cannot adjust) and the long term (defined as that period in which labour markets can adjust).

Immediate term

As soon as this policy is introduced there will be a change in the expected value of the stock of pension liabilities of scheme sponsors as pensions they had anticipated revaluing and indexing by the RPI inflation rate will now be revalued and indexed by the (typically lower) 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.

As noted above for the purposes of working out the immediate effects deferred and active individuals are in the same situation, they have a set of rights to a pension they have already accrued which will, if no further accruals happen, be revalued until they receive a pension which is subsequently indexed.

Pensioner members are not affected by the change to revaluation (as they are already in receipt of their pension) but are 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 data from those schemes that are receiving compensation from the PPF is used as a proxy measure. On the basis of this data the average pensioner member of a scheme is aged 68 and the average deferred member is aged 48.

Using data from ONS[9] the life expectancy of the representative pensioner and active/deferred individuals are calculated. A 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)[10]. Applying a real

[8] Member of pension schemes can currently be either active, deferred or pensioners. Active members are still employed by the pension provider and in a scheme open to new accruals. Deferred members have left the scheme but not yet started to claim their pension. Pensioner members are receiving their pension.

[9] 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

[10] This difference in treatment is because the caps apply differently to indexation and revaluation

discount rate[11] of 3.5%[12] allows calculation of the impact on the pension liabilities of this change for each combination of scheme rules. These are illustrated in Table 5 showing the different impacts on men and women.

Table 5 - 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	-15.36%	-11.74%	-3.48%	0.65%
Female	-15.73%	-11.66%	-3.91%	0.74%

Table 6 - Impact on liabilities by gender and scheme rules type for pensioner members

Indexation	Statutory	RPI
Male	-2.35%	0.12%
Female	-2.61%	0.16%

It has been assumed that two thirds of scheme members are men, although the sensitivity of the conclusions to this assumption is relatively small since the extra impact on women happens towards the end of their lives and the effect of discounting significantly reduces the impact of this on the expected value of the pension liabilities.

Applying the scheme proportions in Table 3 and the gender proportions to the percentage impacts in Table 5 gives an immediate average reduction in pension liabilities relating to deferred and active members of 10%. Applying the scheme proportions in Table 3 and the gender proportions to the percentage impacts in Table 6 gives an immediate average reduction in pension liabilities relating to pensioner members of 0.38%.

Purple Book 2009[13] gives the total value of pension liabilities as £1.1tn. In order to calculate the overall impact of the policy it is necessary to split these liabilities between pensioner and active / deferred members. Again DWP does not hold the data for this across private sector DB schemes. However the Young review[14] looked at those schemes which are in Financial Assistance Scheme and found that 50% of liabilities are attributable to pensioner members. This is used as the assumption here.

Therefore the overall net impact is an immediate 10% reduction in the active/deferred liabilities (i.e. £55.4bn) and an immediate 0.38% reduction in the pensioner liabilities (i.e. £2.1bn). A total reduction of £57.5bn in the value of pension liabilities.

This net figure however can be broken down to an increase in liabilities of £1.3bn (for active and deferred members those schemes where indexation and revaluation are RPI in the rules and for pensioner members in those schemes where RPI is in the rules) and a reduction in liabilities of £58.8bn (for other schemes).

For the avoidance of doubt the pension liabilities is the present value of the future pension payments schemes have to make. The timing of any cash flows resulting from changes to liabilities can vary significantly and could take many decades to fully materialise.

Short term

For the purposes of this note 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 lower value of pension accruals arising from these changes. For the purposes of this Impact Assessment the short term is defined as 15 years

In order to investigate the short term impact it is necessary to look at the level of pension accruals which occur in a given year. Table 7 is from the 2009 Occupational Pension Scheme Survey and illustrates the typical accrual rates in pension schemes. 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 8.

[11] Discounting is a way of converting cash flows into a present value. Further detail on discounting can be found in HMT's Green Book - http://www.hm-treasury.gov.uk/data_greenbook_index.htm
[12] This implies a nominal discount rate of 6.37% given RPI inflation of 2.87%
[13] http://www.pensionprotectionfund.org.uk/Pages/ThePurpleBook.aspx
[14] http://webarchive.nationalarchives.gov.uk/+/http://www.dwp.gov.uk/docs/review-of-assets-dec-07.pdf

The average income of a man who is an active member of a private sector DB pension scheme is approximately £39,500 and the average income of a woman who is an active member of a DB pension scheme is £25,000[15]. Approximately two thirds of active scheme members are men[15] making the average earnings £34,750. Combining this with the figures in Table 8 give the average annual pensions accrual rate of 1/62 plus the increase in accrued rights resulting from any real pay-rise (assumed to be 1.5%, so a nominal pay rise of RPI+1.5%). The assumptions in the immediate impacts section about the average age and life expectancy of active members of pension schemes are maintained so this additional accrual will be revalued for 17 years and then paid and indexed for 23 years.

For those schemes with statutory minimum revaluation and indexation the total value of that annual pension accrual is approximately £7,250 under RPI revaluation indexation and £4,750 under CPI revaluation and indexation. There are 2.5m active members of DB pension schemes (see Table 7) 20% of which have statutory minimum indexation and revaluation giving a total reduction in accruing pension liabilities of £1.2bn in year 1.

For those schemes with statutory minimum revaluation and indexation linked to RPI the total value of that annual pension accrual is approximately £7,250 under RPI revaluation and £5,000 under CPI revaluation. 60% of the 2.5m active members of DB schemes fall into this category (see Table 6) giving a total reduction in accruing pension liabilities of £3.2bn in year 1.

For those schemes with RPI linked revaluation and RPI linked indexation the total value of that annual pension accrual is approximately £7,250 under pre-reform revaluation and very slightly higher under CPI revaluation (due to the CPI underpin effect). This applies to 20% of schemes and gives a total increase in accruing pension liabilities of £0.03bn in year 1.

Table 7 - Number of active members of defined benefit occupational pension schemes: by accrual rate, sector and funding status, 2008

United Kingdom Millions

	Private total	Public		Public total[2]	Total[2]
		Funded	Unfunded		
50ths or better	0.1	0.0	0.0	0.0	0.1
Between 50ths and 60ths	0.2	0.0	0.0	0.0	0.2
60ths plus an additional lump sum	..	..	..	..	..
60ths	1.4	0.9	0.2	1.1	2.5
80ths plus 3/80ths lump sum	0.3	0.6	2.9	3.5	3.8
Between 60ths and 80ths	0.2	0.0	0.2	0.2	0.4
80ths	0.2	0.4	0.0	0.4	0.6
Less generous than 80ths	0.1	0.0	0.0	0.0	0.1
Non response	..	..	..	..	..

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

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

Source: Occupational Pension Schemes Survey

Table 8 - Accrual rate assumptions

Accrual Rate	%
$^1/_{50}$	4.0%
$^1/_{55}$	8.0%
$^1/_{60}$	68.0%
$^1/_{70}$	8.0%

[15] DWP analysis of Annual Survey of Hours and Earnings data.

1/80	8.0%
1/100	4.0%

Combining these three effects produces a total year 1 net reduction in accruing pension liabilities of £4.48bn. For the purposes of this Impact Assessment the period it takes for markets to fully adjust is assumed to be 15 years. As a simplifying assumption therefore it is assumed that the year 2 effect is fourteen fifteenths of the year 1 effect, the year 3 effect is thirteen fifteenths of the year 1 effect etc. The short term effects arising from this are set out in Table 9.

In addition to this the number of active members of DB schemes is declining year on year. For the purposes of working out the impact of this policy therefore the impact will decline faster than that shown in Table 9. The assumptions used by DWP in its Pensim2 model are set out in Table 10 which also illustrates the impact of the policy adjusted to take into account this decline.

Table 9 - Short term impact of change in index

Year	Impact (£bn constant prices)
2011	4.48
2012	4.18
2013	3.89
2014	3.59
2015	3.29
2016	2.99
2017	2.69
2018	2.39
2019	2.09
2020	1.79
2021	1.49
2022	1.20
2023	0.90
2024	0.60
2025	0.30

Table 10 - 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%	4.48
2012	87%	3.64
2013	76%	2.96
2014	73%	2.62
2015	68%	2.24
2016	64%	1.92
2017	59%	1.58
2018	58%	1.38
2019	56%	1.17
2020	49%	0.87
2021	50%	0.75
2022	45%	0.54
2023	41%	0.37

2024	38%	0.22
2025	35%	0.11

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 note the long term is defined as that period in which labour markets are fully flexible. For the purposes of this impact assessment the assumption is that this adjustment takes place over a period of 15 years. Using a longer period would increase the costs and benefits of this policy somewhat but the order of magnitude of the changes would be as set out here.

In the long term, as labour markets can adjust[16], 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 is lower 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 already discussed.

Calculating the impact –removing CPI underpin

As can be seen from Table 5 and Table 6 some individuals benefit from the change from RPI indexation to CPI 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, and it is also possible that the RPI figure specified under the rules is not measured at the same date as CPI for statutory purposes. 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 consulting on removing the CPI underpin by allowing those schemes the have an explicit reference to RPI in their rules to be exempt from the statutory indexation requirement.

Immediate term

This policy will have an impact on those individuals with RPI linked indexation in their rules, this is assumed to be 80% of scheme members (see Table 3 above). The effect of this change would be to remove the extra these individuals gain through indexation by the best of RPI and CPI and revert to the situation where they receive RPI linked pensions only.

Including these changes the impact on a typical individual in each type of scheme (Table 5 and Table 6 above) can be revised. Table 11[17] shows the impact of an active / deferred scheme member and Table 12 shows the impact for a pensioner member of the change in indexation policy when the CPI underpin is removed.

Table 11 - 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	RPI
Revaluation	Statutory	Statutory	RPI

[16] 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. The most obvious change would perhaps be within pensions with, for instance, scheme accrual rates being adjusted to return the value of pension accruals (with CPI and a higher accrual rate) to that it was previously (with RPI and a lower accrual rate). Alternatively wages could be increased to compensate for the reduced generosity of the pension scheme. Precisely how 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 2050 as a result of a change in pension indexation in 2010.

[17] Because revaluation applies to the average inflation rate over the period rather than they year by year inflation rate it is assumed that there is no positive effect from getting the 'best of both' for revaluation. In practice for people with small periods of deferment there will be a small benefit but this is disregarded here as immaterial given the already significant assumptions made in these calculations.

Male	-15.36%	-12.31%	0%
Female	-15.73%	-12.31%	0%

Table 12 - Impact on liabilities by gender and scheme rules type for pensioner members – moving to CPI revaluation and indexation and removing CPI underpin

Indexation	Statutory	RPI
Male	-2.35%	0%
Female	-2.61%	0%

Applying the scheme proportions in Table 3 above and the assumption that 80% of scheme members are male to the percentage impacts in Table 11 gives an average reduction in pension liabilities relating to deferred and active members of 10.5%. Applying the scheme proportions in Table 3 above and the gender proportions to the percentage impacts in Table 12 gives an average reduction in pension liabilities relating to pensioner members of 0.49%. This gives a total reduction in scheme liabilities (from both the Revaluation Order and the exemption from indexation requirements of RPI linked schemes) of £60.9bn with no schemes seeing increased liabilities[18]. These reduced liabilities will translate into reduced pensions for members, relative to those they would have anticipated having but for these changes, over the course of their lifetimes.

Short term

The same definition of short term and long is used as discussed above

To assess the short term impact it is necessary to look at how the impacts calculated in the short term from the Revaluation Order are adjusted by this change which removes the 'CPI underpin'.

The first effect is to remove the additional £0.03bn in year 1 increased value of accruing pension rights received by members as they will now be receiving only RPI rather than the best of RPI and CPI.

In addition for those schemes with CPI linked revaluation and RPI linked indexation there will be an additional reduction in accruing liabilities resulting from the indexation now being only on the basis of RPI, rather than RPI and CPI.

Again the assumption is that these effects decline by one fifteenth every year for labour market conditions adapting to the new arrangements and by a further amount for the decline in active DB membership as set out in Table 10 above. This give us an impact of the measures to remove the 'CPI underpin' as set out in Table 13.

Table 13 - Impact of measures to remove CPI underpin

Year	Impact £bn constant prices
2011	0.030
2012	0.024
2013	0.020
2014	0.018
2015	0.015
2016	0.013
2017	0.011
2018	0.009
2019	0.008
2020	0.006
2021	0.005
2022	0.004
2023	0.002
2024	0.002
2025	0.001

[18] This difference in treatment is because the caps apply differently to indexation and revaluation

Long term

Applying analogous reasoning to the long term section on the Revaluation Order there is no additional long term impact of this policy beyond the immediate and short term impacts already discussed.

Administrative burden and policy savings calculations

Under current arrangements schemes have issued communications to members based on RPI linked revaluation and indexation, have calculated cash equivalent transfer values, commutation factors etc. on the basis of RPI linked liabilities. As a result of the changes discussed here companies may need to recalculate some or all of these based on CPI linked indexation and revaluation. There may be an administrative cost, which DWP does not have the data to quantify, to re-doing these calculations. There is also likely to be a one off cost, which DWP does not have data to quantify, of seeking advice from scheme advisors (e.g. lawyers and actuaries) about the impact of the change. If schemes choose to change their scheme rules in response to this change they will also face additional administrative costs.

The Government is currently consulting on including any change to the rate of indexation used by schemes to the 'listed changes' under Regulation 8 of the Occupational and Personal Pension Schemes (Consultation by Employers and Miscellaneous Amendment) Regulations 2006 (SI 2006/349). This requires scheme sponsors to consult with active members of their schemes before making such a change. In the short term it is likely that a relatively high proportion of schemes would wish to make such a change and so the aggregate cost for the first three years is estimated at £400,000 – based on the assumption that 25% of schemes consult on such a change each year at a cost of consulting of £0.68 per communication per member and 2.4m active members . Over time changes of this sort will be no more frequent than any other changes and so the ongoing cost of this listing is estimated at £80,000 with only 5% of schemes considering such a change in a given year.

Wider impacts

By reducing the expected value of existing pension liabilities it is possible that some schemes currently deemed to be unviable by their sponsors will be considered to be viable again and so retained open. To the extent that providing remuneration through a pension is a preferred by employers and employees this could be beneficial.

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 DB liabilities (for example improved credit ratings and ability to pay dividends.

The Pension Protection Fund (PPF) is a statutory scheme administered by the Board of the Pension Protection Fund which pays compensation when defined benefit and hybrid pension schemes are underfunded at the point their sponsoring employer experiences a qualifying insolvency event. For consistency with the changes described in this Impact Assessment, the Government is amending the legislation governing the PPF so that PPF compensation will in future be revalued and indexed in relation to CPI rather than RPI.

This decision has two particular financial impacts on the PPF:

- It reduces the value of the liabilities held by the PPF. The Annual Report and Accounts of the PPF published in October 2010 estimates this effect to be in the region of £500m, on the basis of a 0.5% difference in the RPI and CPI.
- It reduces the likely burden on the PPF from schemes transferring to PPF in future. Schemes only transfer to PPF if they are unable to buy benefits at at least PPF compensation levels from an insurer. If PPF compensation is lower in value, more schemes will be funded sufficiently to provided benefits at that level. In the light of this, and bearing in mind all the other factors which affect the risk faced by the PPF, the Board of the PPF is proposing to reduce the quantum it seeks to raise from the PPF levy from £720m in 2010/11 to £600m in 2011/12. The Board continues to keep the rate of the levy under review, and must determine the quantum each year, so future developments may prompt the Board to raise or reduce the quantum in future years.

Preferred option with description of implementation plan

The Government is therefore adopting CPI as the measure of inflation for the reference period 1 October 2009 to 30 September 2010, with the intention of continuing to use CPI to measure inflation in future years. The current order, the Occupational Pension Schemes (Revaluation) Order 2010 is based on the published CPI inflation figure for the year to 30 September 2010 of 3.1% and will affect the calculation of revaluation additions and indexation increase due to be paid in calendar year 2011. Defined benefit occupational pension schemes will already have procedures in place to implement the relevant uprating increases as they refer to the annual Revaluation Order each year in making the necessary calculations.

IMPACT TESTS

Statutory equality duties

Equality: Differential gender impact as a result of different life expectancies of men and women.

Economic Impacts

Competition: No impact on competition.

Small firms: No specific impact on small firms. Although DB schemes are more common in large companies they are also provided by number of small companies

Environmental impacts

Greenhouse gas assessment: No impact on greenhouse gasses.

Wider environmental issues: No wider environmental issues

Social Impacts

Health and wellbeing: No direct impact on health or wellbeing.

Human rights: No impact on human rights

Justice system: No impact on the justice system

Rural proofing: No impact on rural proofing.

Sustainable development

No impact on sustainable development.

Annexes

Annex 1: Post Implementation Review (PIR) Plan

Reasons for not planning a PIR: 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 30th September. This is a regular annual activity and there is no scope for changing the process.