Institute and Faculty of Actuaries

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Reform to Retail Prices Index Methodology

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The Institute and Faculty of Actuaries (IFoA) welcomes the opportunity to respond to the Government's consultation. As a royal chartered professional body, the IFoA has a duty to comment on issues in the public interest and we believe that we can provide an objective view on this issue.

Key points

The retail price index (RPI) is widely considered an imperfect measure of general inflation, sometimes overestimating and at other times underestimating changes in prices and how these changes are experienced. RPI can also be more volatile than other inflation measures, and it does not match with those used in other countries, which makes international comparisons difficult. Review and reform of the index is therefore welcome.

Whilst the Consumer Price Index (CPI), and its variant including owner occupiers' housing costs (CPIH) can provide a more realistic reflection of inflation, they also possesses some inherent weaknesses, including the fact that the consumer goods they consider do not provide an index that measures all production or consumption in the economy. Any form of measure is a simply a construct; each will have its own strengths and weaknesses, and will measure what it is designed to measure.

In practical terms, a change to CPIH from RPI would benefit those who make payments based on the value of the CPIH index, assuming CPIH continues to grow more slowly than RPI. By contrast, those who receive income linked to the value of the index will be more likely to receive lower future income. As a result, changes to the measure of inflation used will create winners and losers in all cases, sometimes very unevenly.

A change in the inflation rate has most impact on long-term contracts which contain an explicit linkage to RPI. RPI is widely-used in the indexation of pensions, for example, and many workers have pay deals linked to RPI. The impact of the proposed change on workers and pension scheme members across the economy could be significant. There should therefore be parliamentary or legal scrutiny of any replacement or adjustment for those purposes, which properly weighs up the winners and losers.

We note that the scope of this consultation's questions is very narrow. It also comes at a time of great economic uncertainty. The long-term economic impact of the COVID-19 outbreak is, as yet, unknown. Nonetheless, the genuine impact of these statistical changes should be considered in the context of the range of other financial pressures faced by employers and pension schemes in the medium term, regardless of the date chosen to enact the switch.

Should you wish to discuss any of the points raised please contact Catherine Burtle, Policy Manager (catherine.burtle@actuaries.org.uk / 0207 632 1471) in the first instance.

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1. Do you agree that this proposed approach is statistically rigorous?

1. CPIH is considered to be a rigorous statistic and RPI, in its current form, is not. RPI, for example, in its current form, cannot properly allow for seasonal effects in a reasonable fashion while CPIH can. We agree that unless the current problems with RPI are addressed, it is preferable to use a different measure. Recent index-linked gilt (ILG) prospectuses set out a transparent process to determine a "just and equitable" replacement for RPI in those circumstances[1].

2. The current inconsistent use of RPI, CPI and CPIH is unsatisfactory from a number of viewpoints. Having multiple definitions of inflation leads to confusion, mistakes and a level of public distrust. The proposed approach makes sense from the point of view of ensuring simplification and public confidence.

3. Over the long term, there will also be a benefit in moving RPI to CPIH if it means that in future it will be possible to hedge CPI liabilities properly (although those currently hedging CPI liabilities with RPI assets are set to lose out very badly). At present, this can only be done through approximate hedging strategies based on RPI linked assets. Some CPI linked bonds and swaps are available at present, but the market is very limited. A much deeper market should make it cheaper to hedge CPI liabilities for those that wish to do so (and, for example, reduce buy-out costs).

4. In practical terms, the 2007 Statistics and Registration Service Act requires the production of RPI to continue. So the most appropriate means to establish rigour in UK inflation statistics would be for Parliament to legislate for RPI to cease (i.e. amend the 2007 Act), triggering an appropriate process for establishing RPI's replacement in the various different contexts in which it is used. Duplicating CPIH under the name of RPI bypasses this process and is a less rigorous operational approach, since it involves a large step change in data and methodology and such relabelling is not transparent. This may cause problems in models which rely on long term data being consistent. Making the change more transparent would also do less damage to public trust in inflation measures.

5. On the calculation methodology, whether this be using AM or GM (arithmetic or geometric mean) - many financial and economic indices (house, equity, wage, bond and so on) are compiled on an AM basis. However CPI is calculated on a GM basis, which hinders comparability. Another area warranting further investigation is the difference that AM/GM calculation methodologies make in taking into account the actual level of consumer substitution that takes place in the market place. If consumer substitution behaviour is prevalent and is considered appropriate for inclusion in an index used for compensation purposes, then CPI provides a closer match to the ideal.

6. We also note that RPI and CPI are subject to seasonal factors which mean the exact approach could have a material impact, even if it is spread out over a year. This is true of any changes for example, to the constituents of RPI and/or CPI so this is an issue which is present even without RPI reform.

2. What will be the impact on the interests of holders of 'relevant' index-linked gilts (i.e. 2½% IL 2020, 2½% IL 2024 and 4 1/8% IL 2030) of addressing the shortcomings of the RPI in:

a) 2025
b) 2030 or
c) any year in between?

7. A later implementation date will mean fewer payments are affected by the change. If the change is not implemented until 2025 at the earliest, then gilts maturing in 2020 and 2024 will be unaffected. If it is implemented at any time in the period 2025 to 2030, the value of the 2030 index linked gilt will be affected with the impact being higher the earlier the change is made. Current market analysis suggests this effect is already being priced in to some extent so holders have already experienced at

[1] https://www.dmo.gov.uk/media/15395/prosp200318a.pdf

least part of this loss as an immediate fall in capital value. The eventual impact on holders will depend on the terms of any compensation paid to holders.

8. With all considerations of an implementation date, we consider it as important to agree on a date and stick to it, rather than worry unduly about the “correct” date. This will remove uncertainty, which can be problematic, especially in areas like liability driven investment where decisions need to be made on how to set up matching.

9. The Government should also consider the impact of the *announcement* date, as well as the proposed *implementation* date of any change to inflationary measure. Arguably the announcement date is the more important of the two, as following any formal announcement, markets will quickly move to factor in the confirmed change

3. What will be the impact on the interests of holders of all other index-linked gilts of addressing the shortcomings of the RPI in
a) 2025
b) 2030 or
c) any year in between?

10. As mentioned above, the effective date of any change to RPI will impact different holders differently depending on the date they mature. The broader impacts of the change on holders of ILGs, whenever it is implemented, may be significant losses: Redington have assessed the loss at £80-£100bn with much of this loss having been experienced already.[2]

Investment

11. Many actuaries are involved in areas of work where assets held include index-linked bonds and inflation linked bonds. Any change from RPI to CPI would result in a reduction of income and capital, reducing the value of assets. The reduced payments would benefit the Government and other issuers of index-linked securities.

12. It is difficult to see how ILGs could be switched from RPI to another inflation measure without some kind of adjustment being made to ensure that investors would not lose value. Whilst some investors will currently hold ILGs to source RPI, many others will be holding them as a proxy for other types of inflation. Unless this is dealt with in a satisfactory way, it is unlikely that it would be possible to transition the ILG markets away from RPI for existing issues. While it would be possible to issue CPI-linked gilts in the future without any particular difficulty, it would take many years for the overall market to switch from RPI to CPI. Indeed the longest-dated RPI-linked gilt is the 2068 index-linked gilt, which has another 50 years to go until maturity.

DB Pension scheme members

13. Many employer-sponsored pension schemes provide benefits that increase before and after retirement, with increases linked in some way to RPI. Some pension schemes have their pension increases concretely defined in the scheme rules and are therefore tied to using RPI, rather than a more flexible definition of inflationary increases. Others have wording in their rules that might allow CPI or CPIH to be used if it replaces RPI or becomes a more appropriate index.

14. To put this into context, if a scheme were to replace RPI with CPI, a 65 year old man who had been expecting pension increases in line with RPI, could expect to receive aggregate lifetime pension

[2] https://www.pensionsage.com/pa/Redington-calls-for-latest-possible-RPI-CPIH-Alignment-date.php

payments to be around 10 - 15% lower (using typical assumptions for the expected difference between future RPI and CPI).

15. Many pension scheme liabilities are linked to LPI. LPI caps the inflationary increase in pension payments to a maximum (e.g. 5%) and protects pensioners against decreases in the event of deflation. The economic value of these caps and floors will change on a move to CPIH.

16. Crucially, this is a very complex area of law and if RPI ceases to be measured, whatever the date of implementation, there would be a variety of impacts on schemes and their members, often turning on the precise wording of their own scheme rules. Indeed there are still many ongoing RPI/CPI cases at various stages through the courts at present. Where lower index values are used, members will generally receive lower benefits, whilst schemes may see an improvement in funding levels and a consequent reduction in any contribution requirements from the sponsor, particularly if their RPI risk has not been fully hedged.

17. Thus far, the Government has chosen not to legislate for an overriding trustee power to allow schemes to adopt CPI (or another index) by default. An argument for making this change is therefore that it gives parity to all pension scheme members, rather than the current position where members have RPI or CPI increases based on a rules lottery.

18. Employer-sponsored pension schemes are significant investors in index-linked stocks and holders of RPI linked swaps. These are used to hedge RPI risks, as well as a number of other inflationary risks (LPI-linked liabilities, CPI, L-CPI-linked liabilities), and as a proxy for salary inflation risks. As alluded to above, it is important to note that reductions in investment returns from these swaps will adversely affect the income of a pension scheme. The impact on a scheme's funding position will be affected depending on the corresponding size of any reduction in the payment of pensions. The calculation of any potential impact on scheme funding levels is not a trivial one, and must factor in the relative volatility of RPI and CPI, as this will impact on the value of the floor and cap of LPI increases awarded.

19. An important reason for issuing index-linked gilts (as opposed to nominal) is to provide suitable assets for the UK pensions system. Pension schemes hold ILGs to match liabilities, with UK pension funds owning over 60% of all ILGs outstanding by current market value. This is evidence of a persistent buyer and therefore source of funding to the Government. So it is essential that policy-making considers assets and pensions indexation together.

20. From a funding perspective the impact on individual schemes will differ materially depending on what assets they currently hold and what their rules specify for pension increases. Where pension increases are based on RPI (or LPI) and schemes hold ILGs, then overall both assets and liabilities will reduce, and funding will be broadly unchanged (or even improve, if the scheme is not currently not fully hedged against inflation). However, schemes that hold ILGs to back CPI-linked pension increases could face significant funding strains if holders of ILGs aren't compensated for the changes, since their assets will reduce but their liabilities will remain broadly unchanged.

DC pension investors

21. As asset holders, investors in defined contribution (DC) pensions will be affected at a high level in the same way as other investors by the impact on the value of the asset they hold. A lower future coupon will lead to a lower asset value and, unless compensated in some fashion, the asset holder will lose money.

22. Some (perhaps the majority of) DC investors in index-linked gilts are passively invested. The most common use of ILGs by DC members will be as part of a pre-retirement lifestyle structure, typically from around 5-10 years before retirement. The main rationale for using ILGs is to provide more stable returns than equities as members approach retirement, and to provide a degree of protection against changes in future inflation expectations during the pre-retirement period.

23. Apart from the notable “price hit” from the change from RPI to CPIH, DC investors should therefore be relatively agnostic about whether the ultimate coupons deliver RPI or CPIH. As long as the DC investor is buying (as they lifestyle) a consistent product to what they then sell at retirement, they should still have achieved those twin objectives of lower volatility returns and allowing for changes in the expectations of future inflation during the period.

24. Therefore, for DC investors, 2030 would be a better date to implement the change than 2025, or any date in between. This is because it will affect a smaller proportion of gilts held currently by DC investors, and the impact on their assets is therefore smaller. DC investors lifestyling into ILGs in the future should theoretically be buying gilts which have the RPI/CPIH question already allowed for in the price they pay, so should also be agnostic on the timing of implementation.

4. What will be the impact on the index-linked gilt market or those dependent on it of addressing the shortcomings of the RPI in

a) 2025
b) 2030 or
c) any year in between?

25. A second area where DC pension scheme members will be affected by this change is inflation linked annuities. Many DC scheme members will have purchased index-linked annuities which are linked to RPI, and inflation-linked annuities have been and are still sold linked to RPI, despite it no longer being a national statistic.

26. Changing RPI to mirror CPIH will act to lower future expected inflation-linked increase on these annuities. Consumers will (if the outcome is as expected) lose value on these products compared to what might originally have been expected. Again, a later implementation is therefore the “least worst” for these consumers.

27. We do not think there is likely to be a substantial impact on demand from DB pension funds for ILGs from changes to RPI, whenever it happens. The RPI change may make ILGs a worse match for some schemes' liabilities and a better match for others, but in the absence of better alternatives, schemes are not likely to use them any less.

28. There is however the possibility of an impact from investors who lose faith in the ILG market, resulting in lower demand for ILGs and possibly therefore higher borrowing costs for the UK Government.

5. What other impacts might the proposed changes to address the shortcomings of the RPI have in areas or contracts where the RPI is used?

29. As mentioned above, in practical terms, a change to CPI from RPI would benefit those who make payments based on the value of the index. Those who receive benefits linked to the value of the index will be more likely to receive lower future benefits. As a result, changes to the measure of inflation used will create winners and losers in all cases, sometimes very unevenly. A change in the inflation rate has most impact on long-term contracts that contain an explicit linkage to RPI.

General Insurance

30. Most insurance contracts will not be affected due to the short-term length of the contracts. However, damages claims awarded by courts are frequently linked to RPI and therefore any potential reduction in RPI would reduce the value of these awards.

31. Periodical Payment Orders (PPOs) - a form of compensation award in personal injury claims – were linked to RPI when they were initially issued. However, the courts were persuaded to instead use the Annual Survey of Hours and Earnings (ASHE) and since then all are ASHE-linked, which has driven a significant increase in PPO settlements. Stopping RPI would affect a small number of PPOs in payment, and therefore the impact would be fairly limited. That said, there are still PPOs settling with an RPI element, where the PPO is not wage-related or due to loss of earnings (e.g. prosthetics), or where the wages are linked to RPI, but the care is linked to ASHE.

32. For more information on the impact of changes to inflation with regards to personal injuries, the Committee may wish to consider the independent report produced for the Ministry of Justice on the Discount Rate.

Health Insurance

33. Health insurance payments are generally short term so most claimants would not see a material change in benefit payments. However, a small number of claims (for the long-term disabled) are for longer periods and those claimants would see the largest reduction in future income. Most policyholders would see a small reduction in premiums.

6. Are there any other issues relevant to the proposal the Authority is minded to make of which the Authority or the Chancellor ought to be aware?

34. CPI is arguably a better match for pensioners' own expenses than CPIH, and CPIH better than RPI. If RPI is replaced by another index then it may be appropriate to choose one that matches pensioners' expenses, if this is a dominant use of the index. The dominant index used by pension schemes is CPI (rather than CPIH). It may therefore be beneficial to facilitate a market in CPI-linked products.

35. Many pension schemes and saving institutions hold long term investments in infrastructure projects. In many of these income is subject to regulatory requirements or market practices which link the income to RPI. If a lower level of RPI applies in the future, or if RPI is discontinued in replaced with CPI, the value of these holdings could be affected significantly.

36. A small number of pension savers make fixed monthly contributions which increase each year by RPI. A very large number of pension savers make contributions set at a percentage of their monthly pay. In both cases, the contributions may reduce if RPI is lower, or is replaced by CPI, in the first examples as the annual increase is lower and in the second case if wage increases are generally negotiated in a way which is linked to RPI inflation. This could reduce overall savings levels.

37. Finally this change will also be an issue for those with student loans – those in issue account for around 30% of the size of the ILG market, and are also currently linked to RPI. Potential changes will be of interest to both investors in securitised loan portfolio, but also to current and former students.