

## **Provisional RPI timeline**

Jill Leyland

*I have been asked to provide a timeline for the Retail Prices Index (RPI) showing the events leading up to the current situation. This is a first - and tentative - attempt; comments and additions are welcome and should be sent to me at [jill.leyland@gmail.com](mailto:jill.leyland@gmail.com)*

*Because the brief was to explain what happened that led to the current situation this timeline is inevitably partial. (A fuller account of how the RPI evolved is given in the following book: "The Retail Prices Index: A Short History" by Jeff Ralph, Robert O'Neill and Paul A. Smith.) A list of sources used is at the end.*

1956. RPI first compiled following the interim RPI which had started in 1947. Advisory Committee recommended it should be based on budgets from "households within income ranges which would include practically all wage earners and most small and medium salary earners" This explains why high income households and pensioners with 75% of their income from the old age pension and other benefits were excluded, exclusions which still exist. Prime use of the index expected to be for wage bargaining. RPI was the responsibility of the Ministry for Labour and National Service (later Department of Employment).

1956 -1994. RPI published monthly. Retail Prices Index Advisory Committee convened periodically, first by Minister of Labour/Employment, latterly by Chancellor of the Exchequer. Last such committee reported in 1994.

1975. RPIAC decides that RPI should measure owner occupied housing by using mortgage interest payments instead of previously used rental equivalence.

1981. Index Linked Gilts first offered for sale linked to RPI. To meet market concerns over whether the government might alter the RPI to the detriment of holders, the prospectuses contain a clause to the effect that any change in coverage or basic calculation that is deemed by the Bank of England to be both fundamental and materially detrimental to the interests of index-linked bond holders enables those holders to demand immediate redemption at uplifted par.

1989(?). Responsibility for RPI passes to the Central Statistical Office (later ONS) and political oversight to Chancellor of the Exchequer.

1992. UK adopts inflation targeting. RPIX (RPI excluding mortgage interest payments) used as target.

1994. Last Retail Prices Advisory Committee. Last item discussed was owner occupied housing costs where the committee decided to include an allowance for depreciation using house prices as the indicator. This was a controversial decision with some members dissenting.

1996. Boskin Commission report on the United States Consumer Prices Index published; it concludes that the US CPI overstates inflation. While this applies to the USA, its conclusions have repercussions in other countries. In particular, the report recommends the use of the geometric mean (Jevons) formula at the first stage of aggregation, partly due to its alleged mirroring of consumer behaviour in response to price changes and partly due to its other statistical properties. This causes a number of countries to consider changing from their use of arithmetic means to Jevons. The RPI retains its use of both the Dutot (ratio of averages) and the Carli (average of relatives) arithmetic means for items at the first stage of aggregation (when weights are not available).

1997. HICPs (EU Harmonised Indices of Consumer Prices) first published. Since their original purpose is to enable inter-country comparison, EU member countries are able to use either the

Dutot or Jevons formulae which tend to give broadly similar results. Carli and other formulae can only be used if it can be demonstrated that they will give broadly similar results.

1997. Bank of England given task of setting interest rates independently to target set by Chancellor of Exchequer. This set at 2.5% (RPIX).

Late 1990s. Persistent one-way difference in inflation levels of UK HICP and RPI noticed.

Established that this was largely due to use of different formulae at elementary aggregate stage which seems to account for 0.5 percentage points on average. Specifically it is the use of the Carli for a number of items in the RPI vs the Jevons which is used almost entirely in the HICP (when weights are not available). No other EU country has a difference that large between their HICP and their national index. A research programme is started and continued, on and off, until around 2005 but decision taken not to change the RPI formulae.

2000. Statistical Framework established with the aim of giving greater independence to official statistics. This introduces the concept of National Statistics which “*will provide an accurate, up-to-date, comprehensive and meaningful description of the UK economy and society*”. They include initially all statistics produced by the ONS, so including the RPI and CPI, as well as key statistics from other departments and devolved administrations. The new post of National Statistician (Head of the Government Statistical Service, Director of the ONS and the government’s chief professional adviser on statistical matters) is created. He/she will have “*responsibility for the professional quality of the outputs comprising National Statistics*”. The Statistics Commission is set up as an independent watchdog.

However, the Framework includes special conditions for the RPI: “*...the National Statistician will take the lead in advising on methodological questions concerning the RPI but the scope and definition of the index will continue to be matters for the Chancellor of the Exchequer.*”

2002. From July, gilts prospectuses cease to have the clause regarding changes to RPI. But those gilts with the clause remain outstanding, the longest-dated maturing in 2030.

2003. UK HICP adopted as Bank’s target and renamed Consumer Price Index. Target set at 2% to allow for the formula effect difference.

2004. Hedonic methods introduced for certain items in the RPI. For various reasons this triggered a report by the Statistics Commission which, among other points, highlights the lack of clarity between “scope and definition” and “methodological changes” in the Framework document. It also points out that the Framework document left the role of the Advisory Committee anomalous. Summoning it was the responsibility of the Chancellor which suggested it could only be convened to discuss matters of “scope and definition”. The change to hedonics was a significant change but a methodological one.

2007. Statistics and Registration Service Act passed making government statistics independent of government and establishing the UK Statistics Authority. It takes effect in April 2008. The Act contains a clause that the UKSA must compile and publish the RPI every month and that “*Before making any change to the coverage or the basic calculation of the retail prices index, the Board must consult the Bank of England as to whether the change constitutes a fundamental change in the index which would be materially detrimental to the interests of the holders of relevant index-linked gilt-edged securities.*”

*If the Bank of England considers that the change constitutes a fundamental change in the index which would be materially detrimental to the interests of the holders of relevant index-linked gilt-edged securities, the Board may not make the change without the consent of the Chancellor of the Exchequer.*” “Relevant” securities are defined as those which have the pre-July 2002 clause in their prospectuses.

The UKSA has to establish a new Code of Practice for official statistics. It also has to assess periodically all statistics which either have national statistics status, or where national statistic status is sought, against the Code. A satisfactory assessment is needed for any statistic to have national statistic status.

2009. New Advisory Committee - Consumer Prices Advisory Committee (CPAC) established. It is chaired by the National Statistician.

2008/2009. Eurostat carries out one of its periodic assessments of the UK's HICP (a.k.a. the CPI). Eurostat queries the index for clothing in the CPI/HICP, which shows negative growth, out of line with other countries.

2009. ONS decided to make some "improvements" to clothing price collection from 2010 to correct for the underestimation of clothing inflation in the CPI. This is considered such a minor change that it is not tested before implementation and it is not reported formally to CPAC. It is not submitted formally to the Bank of England (although it probably would not have needed to be).

2010. The new systems for collecting clothing prices is implemented. The changes, in particular an increase of the proportion of items on sale in the base month of January, have the effect of increasing the variability of the "price relatives" (ratio of current price to base period price for each individual item). Mathematically this was bound to increase the formula effect between Jevons and Carli. Further, since an arithmetic average is sensitive to higher numbers, the RPI clothing figures start to look implausibly high, although the CPI clothing figures now look more reasonable.

2010 June. The incoming coalition government decides to change the uprating of public sector pensions and benefits from RPI to CPI.

2010 August. The Royal Statistical Society, realising that the government decision will turn the "formula effect" from something of primarily academic interest into something of broader concern, writes to the Chair of the UKSA raising certain points.

2010 December. The UKSA publishes its Assessment Reports of RPI and CPI and confirms the National Statistics status of both plus their derivatives.

2011. The increase in the formula effect causes ONS to undertake a programme of investigation into whether changes in the collection/treatment of clothing prices could narrow the formula effect.

2012. RPI CPI User group formed.

2012. A report for the ONS by Erwin Diewert, an acknowledged international expert, recommends that the Carli formula in the RPI is replaced by Jevons. He also recommends that the RPI covers the whole population.

An investigation by the ONS finds that no other comparable country still uses Carli.

In the light of the above the UK Statistics Authority decides to consult on the possibility of partly or completely changing the Carli formula in the RPI, presumably hoping to obtain support for a partial or complete move. There are 406 responses to the consultation (307 from individuals and 99 from organisations). 82% opt for no change with only 5% opting for any change (the remainder not expressing a preference). The importance of continuity is stressed along with the point that should the Bank of England consider that a change was both fundamental and detrimental to the interests of bond holders, this would result in turmoil in the gilts markets and potentially a financing crisis for the Treasury.

2013, January. The UKSA, on the recommendation of the National Statistician, decided:

- i) to keep the formulae in RPI unchanged

ii) to make only “routine” changes to RPI in the future: *‘the basic formulation of the RPI is accepted as currently defined and that any future changes should be limited to issues such as the annual update of the basket and weights, improvements to data validation and quality assurance etc’*.

ii) to introduce a new series – RPIJ – using Jevons in place of Carli

iii) to have the RPI reassessed to see if it still justifies having National Statistics Status  
Prior to the announcement CPAC had met to consider the recommendations. (Although it is not said publicly it is widely known that at least some members, and probably a majority, of CPAC did not agree with the recommendations.)

2013, March. New assessment of RPI published. Removes National Statistics designation due to it being considered inconsistent with the Code of Practice on the grounds that:

(i) ...”*the methods used to produce the RPI are not consistent with internationally recognised best practices*”; and ii) the decision to “*freeze the methods used to produce the RPI, and only to contemplate ‘routine’ changes*” is inconsistent with the principle that any statistical series should be open to continuous improvement.

2013, May. The UKSA announces two reviews. One is a review of governance of consumer price indices in the UK and the second is a review to consider the needs for changes to the range of these statistics produced for the UK to best meet current and future user needs. The latter is to be carried out by Paul Johnson, Director of the Institute for Fiscal Studies.

2013, August. The UKSA publishes its assessment of all consumer price indices except RPI. It includes CPIH and RPIJ, both of which were published for the first time in March 2013. The National Statistics status of CPI and derivatives existing prior to March were confirmed. NS status is granted for CPIH, its derivative CPIHY, and RPIJ subject to certain conditions (mainly concerning communication) including RPIJ methodology not being subject to the RPI “freeze”.

2013 general. At this stage, therefore, the only serious problem officially stated with RPI is its use of Carli and the so-called “freeze” in methodology.

Originally it had been intended to continue the research started in 2011 into the “formula effect” for clothing but in practice this did not happen (in the opinion of the RSS it had started to show useful results but the ONS disagreed).

2014 Review of governance arrangements published proposing two advisory committees: stakeholder and technical. The National Statistician should be advised by the committees but should not chair them. The Stakeholder committee should have an independent chair.

2014 Various debates and papers around the Johnson review.

2015, January. Johnson review published. He recommends that CPIH, after one or two changes, becomes the ONS’s main measure of inflation. In addition to the issue with Carli he also criticises the RPI for: having gross rather than net weights for insurance and second hand cars; its method of dealing with owner occupier costs; and the fact it excludes the top 4% of households by income and pensioners mainly reliant on state benefits. He was not the first person to criticise one or other of these points but the fact that he said all of them in his review gave additional weight to them. (The Royal Statistical Society made a full critique of the Johnson Review which, while supportive of some of the things in his report, criticised most of what he said about the RPI.)

He recommends that RPI use is discouraged and that the National Statistician should consult on discontinuing RPIJ (which he considers of little use), and RPI derivatives such as the Tax and Price index, the Rossi index, and the specialist pensioner indices. In the text he also seems to

suggest that RPI methodology should move towards that of CPIH but it is not one of his formal recommendations.

He also recommends that household indices for different household groups are compiled but only published once a year and alongside income measures.

2015. A consultation is carried out on the Johnson recommendations. 83 organisations or individuals respond. There is a mixture of views but quite a lot of support for CPIH becoming the main index. Also good support for RPI with a strong majority disagreeing with the decision to “freeze” its methodology. Strong support for new Household Index/indices. (John Astin and Jill Leyland’s report proposing a “Household Inflation Index” was published in May.)

2015, November. The new Advisory Panels meet for the first time in a joint meeting. Subsequently they meet separately in January 2016 and provide advice to the National Statistician. It is clear from the advice that the panels are not unanimous with a minority dissenting from some of the recommendations. As regards the RPI, the advice was that it should be subject only to routine updating unless not adopting a change in methodology would adversely affect CPI/CPIH.

2016. The National Statistician set out his proposals for the future of consumer price indices in two letters to the Chair of the Statistics Authority. The latter, in November, gives his final decisions: CPIH will become ONS’s main index; RPIJ will be discontinued from March 2017 (as while it addresses the formula issue it “shares RPI’s other shortcomings”). Household indices will be developed (first published at the end of 2017).

2017, February. In a seminar the National Statistician set out a threefold landscape of consumer prices: Macroeconomic indices (CPI and CPIH); Household indices which are to be developed; RPI as a legacy measure. He said that RPI has several problems: the use of the Carli formula; the way it measured owner occupier costs; the fact it excluded part of the population.

2017 March. RPIJ and a number of RPI derivatives discontinued.

2018, March onwards. ONS publish an article on RPI shortcomings. It is criticised for mixing one or two genuine issues with misleading implications, points that are not inherent to the series and which could be relatively easily changed (for example its use of its bespoke classification system rather than the internationally agreed one) and including some points which simply result from the original purpose of the index. It creates a stir and many objections. Partly as a result the RSS hosts a meeting on the RPI in June. In July the House of Lords (HoL) Economic Committee announced an inquiry into the RPI.

2019, January. HoL Economic Committee Inquiry report published. It is broadly favourable to the RPI which it considers could be salvaged and strongly critical of the UK Statistics Authority. “In publishing an index which it admits is flawed but refuses to fix, the Authority could be accused of failing in its statutory duties.”

2019, February. The Chair of the HoL Economic Affairs Committee and the Chair of the House of Commons Treasury Committee write a joint letter to the National Statistician urging that the problems introduced in 2010 be fixed.

2019, February. In the light of the HoL report the National Statistician writes to the Chair of the UK Statistics Authority. He rejects doing nothing or just tackling clothing on its own. His ideal would be to stop publication of the RPI but he also suggests changing compilation of the RPI to methods used in CPIH (effectively making it CPIH). HCIs would be recommended for those who want a household index.

2019, March. The UKSA writes to the Chancellor with the National Statistician’s proposals.

2019, July. The Public Administration and Constitutional Affairs Committee (PACAC) of the House of Commons publishes its report into the Governance of Official Statistics. It includes a section on the RPI in which it reiterates the HoL criticism that in failing to fix the series the Authority could be accused of failing in its statutory duties. It also mentions concerns over the length of time it has taken for the UKSA to respond to the HoL report and the fact that the delay appears due to the desire to agree matters with the Treasury.

2019, September. Letters from Chancellor and UKSA Chair and their responses to HoL report published proposing the plan to import CPIH methodology into RPI. Chancellor has refused any change prior to February 2025 and will consult on whether the change should be made then or not until 2030 when the Chancellor's power to refuse changes ends. (Last index-linked gilt with pre-2002 clause expires in 2030.) UKSA will consult on method of implementing the changeover. No consultation on the decision itself.

2020. Consultation carried out. Chancellor decides to withhold permission for change prior to 2030. The decision to make the change stands.

### **Sources:**

Reports of the Retail Prices Index Advisory Committee, 1947-1994

Minutes and Papers of the Consumer Prices Advisory Committee, 2009-2013

Minutes and Papers of the Advisory Committee on Consumer Prices – Stakeholder (2015 – date)

*Links to all the above reports can be found at [Advisory Panels for Consumer Price Statistics – UK Statistics Authority](#) (scroll down for the first two)*

UK Consumer Price Statistics: a review (Johnson report)

Governance of Prices Statistics

*Links to these two reviews can be found at [Reviews – UK Statistics Authority](#)*

Statistics and Registration Service Act, 2007

Framework for National Statistics, 2000

Statistics Commission *Changes in the Calculation of the RPI and RPI Governance*, 2004

Derek Bird: *Addressing the formula effect gap between the UK's two primary measures of consumer price inflation* Paper for the Ottawa Group 13<sup>th</sup> Meeting, 2013

Jeff Ralph, Robert O'Neill and Paul A. Smith *The Retail Prices Index: A Short History*, (Palgrave Macmillan, 2020)