

ADVISORY PANEL ON CONSUMER PRICES – TECHNICAL

Including the cost of finance in CPIH and HCIs**Purpose**

1. This paper considers the conceptual appropriateness of including aspects of the cost of credit in the CPIH and the feasibility of including interest payments in the CPIH and in the HCIs.

Actions

2. Members of the Panel are invited to:
 - a) discuss whether ONS should initiate further work to include Financial Intermediation Services Indirectly Measured (FISIM) into CPIH
 - b) comment on ONS' proposal to use the simple revaluation approach to measure gross interest costs in the HCIs
 - c) comment on ONS' proposal to use the CPIH to update the stock of debt each month in the HCIs

Inclusion of FISIM in CPIH

3. The [Consumer price index manual: Theory and practice](#) (ILO, 2004) breaks nominal interest into 4 conceptually different components: a pure interest payment; a risk premium that depends on the creditworthiness of the borrower; a service charge payable to the bank, moneylender or other financial institution engaged in the business of making loans; and a payment to compensate the creditor for the real holding loss incurred on the principal of the loan during inflation.
4. The manual suggests that the fourth component is clearly outside of scope of a consumer price index as it is a capital flow. Conversely, the service charge should clearly be included. The treatment of the first two components is more controversial, and it may not be possible to decompose the various elements of nominal interest in practice.
5. Financial Intermediation Services Indirectly Measured (FISIM) comprises those parts of financial services where the implicit charge involved is the net interest earned by financial institutions. This may proxy the service charge that households pay to finance their consumption goods and services.
6. FISIM are included in the System of National Accounts (SNA) measure of household final consumption expenditure (HHFCE). However, European legislation excludes FISIM from the Harmonised Index of Consumer Prices (HICP) as the scope of HICP is restricted to monetary transactions by Regulation No 1687/98.
7. Few other countries include FISIM or other interest costs in their national CPI. European countries that do include a measure of interest costs are Finland, Lithuania, Norway and Poland.
8. Due to the formulation of SNA measurement, it is possible to find an implied price deflator for household expenditure on FISIM, so calculating a price index for FISIM is certainly possible. The index could be calculated by applying monthly interest rate data to the stock of

debt in each period. This stock of debt would be from the base period, but this would need to be updated monthly to account for the change in the purchasing power of money over time (inflation).

9. This estimate would be timely and coherent with SNA methodology. However, as the measurement of the price index for FISIM would include an estimate for the changing value of money in each month, probably proxied by the CPIH itself, this could lead to circularity issues. This would be especially apparent if the interest rate remains relatively stable over time.
10. There are other financial services in scope of HICP that are calculated as a proportion to their transaction value. The unit transaction value for these services is also updated monthly to account for the general level of inflation each month. These services include payment services, money transfers, foreign currency exchange and stock brokerage.
11. If FISIM were to be included in CPIH it is estimated that it would currently have a weight of approximately 20 parts per thousand (2% of CPIH).

Inclusion of gross interest costs in HCIs

12. The Household Costs Indices (HCIs) are currently in development. A recent paper by ONS (in draft) considers how an index including the gross cost of interest is appropriate when it is compared with a measure of income that includes gross interest received. Therefore, it is proposed that the HCIs will include a measure of the gross cost of interest, and will be matched with an income measure inclusive of interest received.
13. As mortgage interest payments are already calculated for use in the Retail Prices Index (RPI), practically it makes sense to use the same method for mortgage interest payments in the HCIs. This section therefore considers the calculation of interest costs for other types of debt (for example, loan and credit card debt).
14. There are different methods that can be used to measure the change in interest costs. International practice is to fix the underlying quantity of debt by multiplying changes in interest rates by a suitable debt (price) index. This can be either a simple revaluation, or the debt-profile approach – a more sophisticated method that also accounts for the age of the debt (as used for mortgage interest payments in the RPI).
15. The debt-profiling method could be implemented by dividing debtors into debt-age cohorts and applying separate indices to each one. However these extra refinements may incur additional costs. For example, Woodhouse (1997) notes the debt-profile model used in the UK is so complex it's questionable whether the approach is cost-effective. Furthermore, it would be very complex to tailor the debt-profile approach to each household group, if it were thought there were sufficient differences in the debt profile for each of the household groups considered.
16. The simple revaluation approach involves indexing the underlying stock of debt to maintain a fixed basket of debt, then applying the average effective interest to this amount. This approach is recommended as it is in line with international best practice.

17. Furthermore, as it is the most comprehensive measure of consumer price inflation, ONS believe the CPIH would be the appropriate price index to account for changes in the purchasing power, or value, of money over time.
18. In summary, ONS propose to use the simple revaluation approach to calculate the cost of interest on non-mortgage loans for the HCIs, using the CPIH to update the stock of debt each month to account for the change in the purchasing power of money.

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