SUMMARY

The present document describes the problems when new firms enter into a so far monopoly like market situation. Beside this, the differences between in principle new products and new varieties of an already existing product are worked out. The planned procedure is outlined, which is consistent with previous traditions and concepts and corresponds to the expectations of the users. The analogies and differences are pointed out on the basis of a simpler example. The problems mainly concern the question of the transition procedure when new suppliers (having new products and/or varieties) enter into the market.

If new suppliers win market shares, special attention has to be paid to the comparison of the quality. In the case of comparable quality, the transition should be reflected by a price change in the index. This procedure can in principle be used with all homogeneous goods and services.

Preface

The key word market liberalisation summarises a number of transitions when a monopoly- or oligopoly offer market is opened for new suppliers. These new suppliers do not have to be actually new globally seen, but are however new for the local market.

In the past several such transitions have occurred in Austria. For example up to the 1970s and 1980s the prices for milk and bread were fixed by the government (this made the price survey very easy). In the more recent past a protected marked for dairy products existed until shortly before the Austrian accession to the EU in 1995. The transition at that time shall serve as a simplified example for today’s problems, and also the differences will be noticed.

The two problems of the CPI/HICP

To be very brief, the calculation of a consumer price index relates to the two components of the (correct) selection of the products and varieties and the comparable survey of their prices through time.

In practice one has to aim to keep the selection constantly as representative as possible. The actual transition procedure between old and new varieties depends on the quality criteria of predecessors and successors.
New products and new varieties

When any innovations appear on the market basically two cases can be distinguished. Innovations can
  • either be a basically new product
  • or a new variety of a well known existing product,
whereby the borderline can never be drawn exactly by definition. Hereafter however an
operational assistance is to be offered for the distinction of the two cases.

A basically new product in the CPI/HICP is characterised by the fact, that a predecessor, which
is directly replaced by this product is not evident and the market share stems from several
different areas. So for example microwave ovens can be regarded as a new product because the
related purchases have no direct predecessor. They can result from reductions in the purchase of
  e.g. kitchen furniture, vacation or clothing. The situation presents itself thus:

before
  old product with several varieties

afterwards
  old product with several varieties    NEW

A new variety of an existing product (for instance a new brand of yoghurt) is characterised by
a clearly evident predecessor product and that the market share of this new variety (mainly)
results from a loss of the market share of the other varieties of that product.

before
  old product with several varieties

afterwards
  old product with several varieties    NEW

When new varieties enter into the market it is necessary to include these in the price survey with
respect to their market importance and to judge correctly the quality difference between
predecessors and successors.
Market liberalisation in the Austrian CPI – the example of dairy products

In the years 1993-1997 a strong and radical change took place in many varieties of the Austrian market for dairy products which shall serve as an example hereafter. Basically new (dairy product) varieties can appear on the market in two kinds:

- As a new variety in an existing outlet
- Or as a new outlet which offers mainly the new varieties

In the case of dairy products naturally the first of the two situations was dominant, after only a year almost all shops offered a larger number of varieties. These were then either successful or not. New outlets have not been registered (with the transition between two outlets the equivalence has to be judged, for instance by the criteria availability, offer variety, advice/support, service activities etc.).

In the CPI price survey the situation occurred, that the original varieties were partially replaced by new varieties. If they were equivalent by quality, an eventual price difference in the transition was fully reflected as a change in the CPI. If the quality on the other hand was considerably different the transition did not change the CPI level.

In the total CPI result this competition manifested itself in falling prices: On the one hand the new varieties were often equivalent but cheaper than the old ones and on the other hand also the prices of the old varieties decreased.

This relatively simple and homogeneous product group could serve as an example, now the same principles shall be used for electricity prices and gas prices and even telecom prices.

Market liberalisation in the cases of electricity, gas and telecom

With electricity and gas an essential similar situation is to be expected, but for the moment the liberalisation has not shown any consequences for the consumers. The transition period can also be expected to be considerably longer than on the dairy market.

The only difference to the example above is, that the liberalisation is not to be expected in the existing businesses but rather by occurrence of new businesses (new for the local market). These will sell the same product (electricity or gas) and not even a new variety, or in any case a variety of equivalent quality. The market will so perhaps turn out to be more homogeneous than the dairy market.

However, a variety of different quality would occur in the invented case, if electricity were only available in the afternoon and evening or if the transition required high additional investment costs.

For telecommunication services the situation turns out to be quite similar provided that the quality of the suppliers remains comparable. This may not be the case when a supplier is very new to the market and/or very small. In such cases it may be justified (and is presently done in Austria) that the new supplier is not taken into account in the first moment. At a later point of time, when the suppliers turn out to be comparable and the market shares are known the procedure described below can be applied.
The application for new suppliers – calculation procedure

At the beginning, new suppliers will have a very small market share. An extension in the selection will therefore not be sufficient to ensure representativity. The actual price effect results from the occurrence of the suppliers as such and of the different price level for the (small) fraction of those who change their suppliers. The transition procedure is therefore crucial.

For this reason in the CPI/HICP the **weighted average price** shall be calculated several months after the entering of the new suppliers. The prices will relate to the available set within the region.

The **detailed weights** for the average price will be derived from the shares of the suppliers in the latest market figures. This will only be possible for annual or semi-annual intervals. For Austria such a calculation has to be done for every region.

It is important to realise, that this procedure has nothing to do with reweighting. It should rather be considered as a procedure for partial replacement of the old varieties by the new varieties. It is **only a replacement procedure** for some of the prices faced by households. The global weights for electricity/flat rate, or electricity (during the day) or electricity (night) remain unchanged. The global weights reflect the consumption pattern of the households in the base period (Laspeyres concept).

The price survey will take place monthly, so a recent reporting can be achieved. The extension of the survey to more than one supplier can also be limited, for instance extension only if the local market share exceeds 5%.

The procedure can only be applied if the varieties – in our case the suppliers – offer varieties of equivalent quality. This can be expected in the case of electricity and gas.

The consequences of the above procedure

The procedure described above leads to representativity and that the traditional concepts of the CPI/HICP remain unchanged. For the users it is guaranteed that the current market situation, the price to be paid on average and the related index figure are shown correctly. As the global weights for electricity items remain unchanged this method is compliant with the HICP standards and the Laspeyres concept.

In the first example: In the 1990s the share of foreign varieties in the dairy market has reached some 15% in Austria. The transitions were reflected as price changes in the CPI if the quality was equivalent.

The procedure described above leads to the same results as the transition on the dairy product market. The change in the composition of the suppliers for electricity relates to a sum of individual changes of consumers between equivalent varieties with a different price. After some years a market equilibrium can be expected. The average price in the region reflects in each stage the current market situation.

It has also to be mentioned that this procedure has a resource implication. However, it serves the purpose of a currently increasing quality of the harmonised consumer price statistics.
Extensions and future options

The procedure described above can be applied under two premises

- The related goods and services have to be homogeneous, all varieties and all suppliers concerned have to be of essentially equivalent quality
- The market shares have to be known within recent time

These two premises hold only for a small fraction of the CPI/HICP coverage and can therefore not be applied globally. Mostly the market shares are not known or distributed among very many suppliers and only traditional selection procedures can be used. For the CPI/HICP this often means purposive selection by experts, probability sampling is not so frequently used.

The procedure described in this paper is very close to an exhaustive survey of the market. In addition to the fields of electricity and gas it can be applied for some parts of telecommunication services. Besides to the availability of market data it depends particularly on the control of quality criteria and equivalence in this respect.

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