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15. How the Finnish Consumer Price Index Survived the Euro change-over

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[1] The views expressed in this paper are those of the author, not necessarily those of Statistics Finland

1. Introduction

The Consumer Price Indices (CPI) are used predominantly for two purposes: For the first, it is one of the key-macro-economic indicators. In this capacity, it is used not only in economic analysis but also in important economic policy settings like formulating and assessing fiscal, monetary, trade and exchange rate policies. For the second, CPI's are used to adjust wages as well as social security and other benefits to compensate, partly or completely, for changes in the cost of living or in consumer prices. (ILO 2003).

CPI's key role in compensation mechanisms also brings about the vigorous public interest in the CPI. The media, various beneficiaries' interest groups and the general public keep an eye on CPI. Major changes in the contents and methodology of the CPI is typically commented not only in professional media but also in the media directed to the general public. Also, any doubts or perceived discrepancies concerning price developments are often articulated in public as potential CPI faults.

Having this in mind, it is no wonder that in all euro-area countries a lively public discussion arose when national currencies were changed over to euro in 2002. The public opinion and the press have repeatedly questioned the quality of official inflation statistics, typically claiming that the CPI understates 'true' inflation that has come along with the introduction of the new currency euro.

In Finland the general opinion, when measured directly in surveys, does show to a large extent, similar pattern (Sofres 2004). However, in the media the reaction has been quite moderate. Instead of questioning the quality of the CPI, the journalists' discussion in the press and other media has formulated the question in another way: What makes people think that the euro-changeover has caused general price increase despite the fact that CPI does not indicate any significant increase that might be attributed to the euro.

From the Central Statistical Office's point of view the situation is quite favourable. Although there still is some scepticism among the population in general, the media seems to take the CPI as a fact.

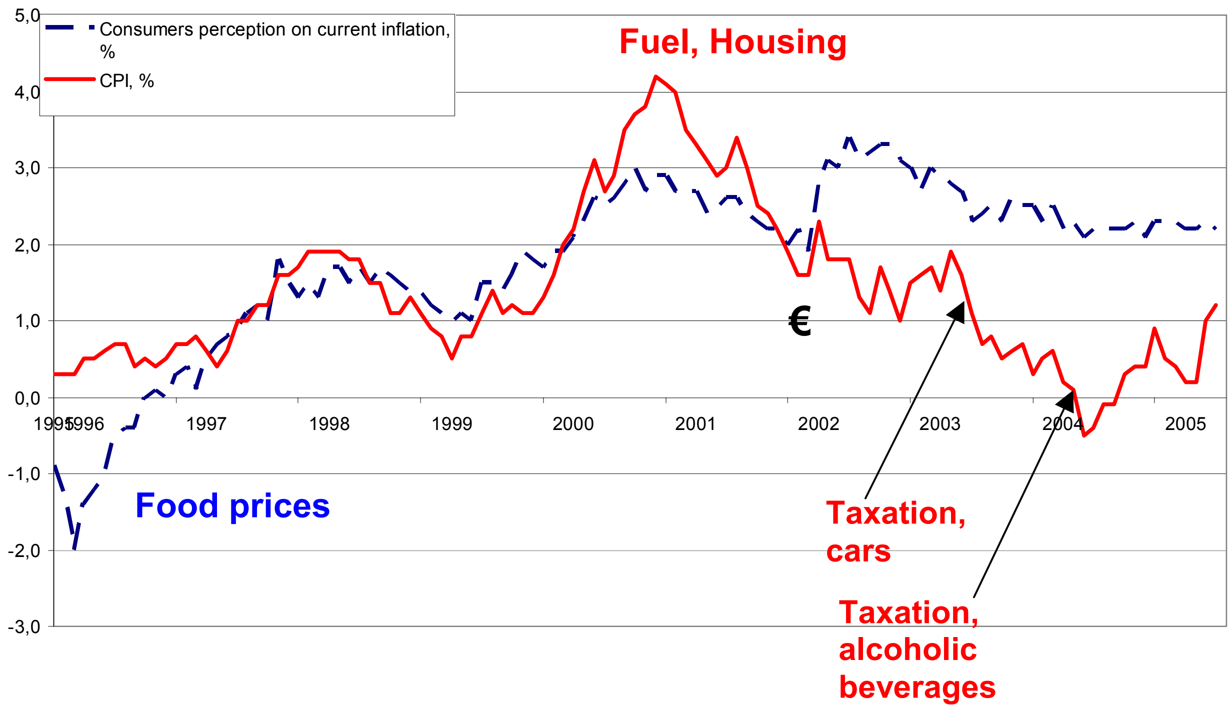
In the following we will first present the outcome of the euro-changeover process from the consumers' point of view. The second part presents briefly how the change-over to euro was communicated to users and how the change-over was referred to in the press. The final chapter concludes.

2. Inflation expectations and actual inflation

Statistics Finland has monitored the public perception of inflation since late 1980's in a regular survey "Consumer barometer survey". Since October 1995 the data have been collected monthly in accordance with the harmonised EU approach[2]. The results from the monthly survey, in combination with the headline CPI, are presented in figure 1 below:

[2] See Kangassalo and Takala 2004 for the description of methodology.

Figure 1: Perceived and actual inflation in Finland and some inflation determining factors



The first observation is that the perceived and the actual inflation seem to be broadly in the same scale: The consumers and official statistics do agree on the magnitude. At a closer look, however there are some interesting discrepancies. For the first, the perception gap has on some points in time been rather large, but the direction of the gap has been different. In 1995 – 1996 consumers perceived the inflation to be significantly lower than the actual inflation as measured by the CPI. The same happened again in 2000 – 2001, but not to the same extent. The last period of perception gap started from the introduction of the euro and seems to continue. It is in the same magnitude as the gap in mid 1990's but of different direction.

In general, it is possible to figure out tentative explanations to perception gaps. The first gap in 1995 – 1996 relates probably to food prices. As Finland joined the European Union in 1995, food prices dropped significantly. By the end of 1996 the decrease was over 10,5 per cent as compared to food prices in year 1994 (Lehtinen 2005). The consumers' seem to have noted this and the perceived inflation plummeted to – 2 percent whereas the headline CPI stayed at about 0,5 per cent above zero.

By and large, the mid 1990's Finnish inflation perception gives some support to the hypothesis that consumers' judgements on inflation are to some extent determined by the frequency of the purchases. Goods and services purchased more frequently - like food - contribute to the perceived inflation more than they do to the actual one (ECB 2002, Kangassalo and Takala 2004).

The second gap – again, consumers perceive inflation as being lower than it actually was – is more difficult to explain. The CPI rocketed to about 4 per cent year-on-year but consumers perceived it as being below three per cent. The reasons for the rapid rise of headline CPI were fuel prices and increases in rents, house prices and interest rates. It seems to be that these factors were not fully perceived as part of inflation by consumers.

There is no evident explanation to the euro-changeover gap that emerged in 2002. The most plausible explanation so far relies on psychological cognitive dissonance –argument. According to this idea, people tend to avoid and disregard information which goes contrary to their a priori expectations. Table 1 below highlights the hypothesis in Finland: Already two months prior to the introduction of the euro, 76 per cent of the population thought that the introduction will raise the overall price level. After the introduction, people did indeed stick to their already adopted views (Aalto-Setälä et. al. 2003). Same kind of argument has also been put forward by Traut-Mattauch et.al (2004, referenced in ECB 2005, 31).

Table 1: Expectations and perceptions of the euro-changeover in Finland

Do you believe the euro will raise the overall price level?		**How, in your opinion, has the euro affected the average price level?**		
	October 2001		March 2002	January 2003
Yes	76 %	Raised a lot	7 %	10 %
No	20 %	Raised somewhat	67 %	68 %
Can't say	4 %	No effect	23 %	20 %
		Lowered somewhat	1 %	0 %
		Lowered a lot	0 %	0 %
		Can't say	2 %	2 %

Source: Aalto-Setälä et.al. 2003

By mid 2003, the perceived inflation had dropped down to slightly over 2 per cent[3]. The inflation gap has, however, not diminished. The reason is that the headline CPI has been unexpectedly low. To a large extent, the low headline CPI can be attributed to two specific factors: The decline in 2003 was due to changes in taxation of cars. The decline in 2004 – which even lead to year-on-year price decrease for a couple of months – was due to cut in the taxation of alcoholic beverages. Again, it seems that these specific factors have not been perceived by consumers as part of general price level.

3. Communicating the euro-changeover to general public

The price follow-up of the euro-changeover and changeover related research in Finland was carried out mainly by three institutions:

- National Consumer Research Centre
- Statistics Finland
- The Finnish Consumers' Association

The National Consumer Research Centre (NCRC) is a non-profit, state-financed expert institute of applied consumer research. One of its key fields of research is market functionality and price

[3] It seems to be as if Finnish consumers had adopted the ECB inflation target as their benchmark of perceiving inflation; if this is the case, one reason to this might be that the ECB inflation target may be the most frequently cited single inflation-related figure in the media. Contrary to the national CPI actual figures, the ECB target seldom changes.

structures. (For the detailed description of NCRC activities connected to euro-changeover see Aalto-Setälä et. all 2003 and other publications of the NCRC euro-project).

The Finnish Consumers' Association (CA) is an independent association with the aim to promote the interests and rights of consumers by doing the following: to encourage consumers to work actively for their interests and to promote this kind of co-operation; to promote and advance consumer interests in society and on the market by means of informal action; to further the principles of fairness and sustainable consumption; to promote consumer awareness; to work for environmental protection

Consumers’ Association is by nature a confederation, the most important members of the CA are the local consumer associations. In addition to local consumer associations, the CA also has some trade unions and other non-profit organisations as its member.

The division of labour between the institutions was based on the respective institutions’ official mandates. Hence, Statistics Finland was responsible of the CPI-based information, NCRC carried out parallel, more in-depth data collection and conducted additional studies. The CA organised its own price follow-up which was carried out by its active local members and coordinated and instructed by the central organisation.

There was no formal co-operation between the three actors. However, informally, SF, NCRC and CA were well aware of each other’s activities and to large extent networked at the level of individual experts, to discuss the issues that arose during the course of the projects carried on in organisations.

Hence, in the course of the euro-changeover, empirical price information was available from three different sources: The monthly CPI, three NCRC studies carried out before and after the introduction of the euro and local price follow-ups organised by the CA.

All three sources gave to a large extent uniform picture of the price developments indicating that there is not any evident, observable euro-effect as regards the general price-level. All three sources also pointed out to some unexpected price rises in restaurant services and also other services. The CPI, in addition, pointed out to rapid price increases of some public sector fees in recreational services and health services. Despite these price increases, the general impact of the changeover was by Statistics Finland deemed to be negligible (Statistics Finland 2002, Koskimäki 2003).

After the introduction of the euro, it took about four months before any additional information to the CPI was available. Unfortunately, the first CPI releases after the introduction of the euro, did show rapid and huge price increases of seasonal fruits and vegetables. Although the reason for high prices of vegetables was known to relate to weather conditions and not to the euro, it was rather difficult to convey this message to the general public. One of the first “credibility polls”, immediately after the first CPI results were released, indicated that only some 6 per cent of the respondents agreed to SF views that euro had not caused any significant increase in the general price level.

Despite the results of the first credibility poll, the media was fairly responsive to SF message. SF monitors routinely press publicity of the statistical news releases. Tables 2 and 3 below give an overview of the results. The measurement covers about 20 most sold (most subscribed) daily newspapers. However, prior to May 2004 only the press cuttings that contained more text than the press-release itself have been included in the follow-up. The most severe shortcoming of the system is that it only covers the printed media. TV- and radio-publicity that are fairly common in the context of the CPI are excluded.

The internal process of the press-release follow-up is as follows: The system is maintained by a private company. The company screens the cuttings and delivers them to SF. The cuttings containing criticism to SF are flagged by the company. In SF the information services department makes the first evaluation whether it is necessary to respond to the criticism. The clippings containing criticism are also routinely passed to unit in charge (i.e. the CPI) and to the director of the division. If any of the parties concerned considers the public response necessary, a response is prepared by the CPI unit.

In table 2, the total number of press hits for the Prices and wages division of Statistics Finland is presented. Unfortunately, it was not possible to distinquish the cuttings relating only to the CPI. In the begining of the year 2002, when the euro was introduced, there is a clear peak on the number of press cuttings. The total number of press cuttings for 2002 is clearly higher than in normal years. Also the whole year exceeds the average number of clippings. The coverage of the follow-up system was increased in May 2004, hence the information after that is not comparable with the preceding years.

Table 2: Number of press cuttings, Prices and Wages division
(including the CPI and other statistics released by the division)

year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2000	34	42	27	20	44	31	46	27	46	82	53	34	**486**
2001	27	33	48	35	34	29	59	37	36	57	43	49	**487**
2002	50	63	27	40	45	46	46	41	32	69	48	23	**530**
2003	32	18	29	33	24	31	43	35	29	42	35	29	**380**
2004	56	38	36	55	89	97	72	64	48	67	73	47	**742**
2005	77	92	145	61									**375**

As can be seen on table 3, the press fairly seldom presents criticism on the CPI. The response-mechanism to negative publicity sketched above is thus in use rather seldom for the CPI. Presumably, in some other countries the public discussion around the CPI is much more tense.

Table 3: Number of press cuttings interpreted as containing criticism on CPI

year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2000	0	0	1	0	0	0	0	0	0	2	0	0	**3**
2001	0	0	1	0	0	0	0	0	0	0	0	0	**1**
2002	0	0	2	0	0	0	0	0	0	0	0	0	**2**
2003	0	0	0	0	0	0	2	1	0	0	0	1	**4**
2004	1	0	0	0	0	0	1	0	0	0	0	0	**2**
2005	0	1	0	0									**1**

4. Conclusions

Concerning the gap between perceived and actual inflation the conclusion remains somewhat open. It is possible to trace some ad-hoc explanations to the perception gaps, but the interpretation of the euro-changeover gap seems still quite challenging. It may well be that the answer is more easily found in general consumer psychology than in any real price-related empirical findings.

One explanation to the fuzziness of inflation perception, in addition to a priori expectations, is provided in a recent study of Aalto-Setälä and Nikkilä (2005). They examined the changes in consumer price knowledge caused by the transition to the euro. The study was fairly practical, a sample of consumers were asked to provide prices for some frequently purchased items. The estimates by consumers were then compared to actual prices. Earlier studies have shown that consumers' knowledge of prices weakened as a result of the currency changeover.

The follow-up study was carried out in early 2005, three years after the introduction of the euro. The surprising result of the study was, that the price knowledge of consumers has hardly improved at all since its decline due to the currency change. In other words, price knowledge still remains clearly below its former level in the national currency era.

The practical significance of the inflation gap also calls for further consideration. The ECB, in the early months after the introduction of the euro, sketches a scenario where the general public, when mislead by erroneous perception of inflation, underestimate the development of their real wages and thereby also their purchasing power. This, in turn, might lead to misguided wage demands and sub-optimal consumption decisions (ECB 2002, 18). To come true, the scenario would require a significant loss of credibility of the CPI also among its institutional users. The probability of this kind of development within e.g. the European statistical system, is of course an open question.

The example of the exceptionally mild CPI publicity experienced in the Finnish case also calls for explanations. One reason for the conformity of the press may be, that Statistics Finland experts are frequently used, by journalists, as a first source of information in case there are some evident problems or discrepancies concerning statistical data. The explanations given by SF experts are fairly often accepted and cited. In this kind of setting the criticism may die out already in the first release.

Statistics Finland press service policy and institutional arrangements to some extent support the experts and senior officials to take this kind of role towards the media. For example, the institution publishes two periodicals (In Finnish "Tietoaika" and "Hyvinvointikatsaus") that contain easy-to-read analyses of various statistical issues as well as topical statistical reviews. One of the main user groups of those periodicals are journalists. Journalists also receive rather good level of service[4] as they contact Statistics Finland.

One additional factor that may explain the mildness of criticism, is the fact that an important part of statistical disputes are institutionalised. The ILO convention on labour statistics (ILO 1985) – which also covers the CPI – stipulates, that Statistical institutions responsible for the compilation of labour market statistics should consult the main users, most notably the labour market parties, before making changes to statistics. The collaboration between the state, employers' and employees' organisations is rather frequent and statistical issues have their own forum in that co-operation. Hence, disputes on statistics between these key users seldom cause a public debate

In the euro-changeover situation the key to rather favourable outcome was the fact that there were multiple sources of mutually independent data that gave approximately the same result. However, these same results did not only emerge by chance. One factor behind them was the network of experts exchanging information on best practices on price statistics. These best practices were then followed not only by SF but also by other actors involved in the euro-changeover follow-up.

[4] This information is based on judgement by the author

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