

# **THE EURO AND CUSTOMERS' PRICE PERCEPTIONS: EXPLORING GERMAN CONSUMER BEHAVIOUR AFTER THE INTRODUCTION OF THE EURO**

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## **ABSTRACT**

The introduction of the Euro meant an important change and one might suppose the new currency having some impact on consumer behaviour in general and on consumer price perceptions in particular. Understanding this might be crucial - especially for retailers and their future success. Therefore, it is rather astonishing that we find little (scientific) research on this topic. This paper presents first evidence on consumer price perceptions after the introduction of the Euro, that could be of high interest for retailers attempting to adjust their pricing strategies.

In the empirical analysis, we show the results of two surveys conducted in Germany in March and in June 2002 in order to track changes in consumer price perceptions due to the introduction of the Euro. In the interviews, we collected data from subjects regarding the underlying theories of consumer price perception as well as general consuming attitudes and attitudes towards pricing. The analysis focuses mainly on the identification of different groups of consumers. In both samples two groups differ significantly. First, there are the so called „Euro-sceptics“ – having a more doubtful attitude towards the Euro. Second, there is the class of the „Euro-phorics“, who have a positive general attitude towards the new currency and therefore a more positive perception of the new retail prices. Both types can be distinguished concerning their perceived importance of prices for buying decisions. They also differ in their manner of price perception and judgement.

## **INTRODUCTION**

Beginning with January 2002 the Euro replaced (at one go) national European currencies. In Germany consumers now have to pay with Euro instead of Deutschmark notes and coins. There are at least two good reasons for taking a closer look on consumer behaviour after the

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introduction of the Euro. On the one hand - from the scientific point of view – following prior studies concerning the importance of reference prices, price stimuli or even the general importance of prices for buying decisions, one should suppose the introduction of the Euro might have some impact on consumer behaviour in general and on consumers' price perceptions in particular. Above all, because research evidence indicates that the role of price is more complex than that of a simple indicator of purchase cost to buyers (Monroe 1990). On the other hand - from the practical point of view - understanding consumer behaviour (Kotler 1996, Sheth, Mittal and Newman (1999)) and more precisely consumers' price perception (Monroe 1990) are supposed to be crucial for retailers for choosing the right (successful) pricing strategy. In fact, many people thought the introduction of the Euro would be a good opportunity for retail companies to leverage pricing policies to secure their long-term future. Adopting the right strategy on the Euro would enable them to steal a march on their competitors by attracting new and re-convincing (old) regular customers. However, until now few evidence of research in this particular field has been published. As a result, no one has been able to identify the specific price perceptions consumers adopted after the introduction of the Euro. It is precisely this question that we turn to now, using an exploratory study of consumers in Germany

The paper is organised as follows. First, some theoretical underpinnings concerning consumers' price perception are proposed. Then survey design and results are presented. The paper concludes on some implications for retail pricing strategies and directions for future research.

## **CONCEPTUAL BACKGROUND**

One issue relative to the analysing of how consumer behaviour faced with such a fundamental challenge - as the introduction of the Euro - in their buying situation is to understand how people form price perceptions and what kind of price knowledge and price intentions they might have in consequence. Following, some ideas on how consumers could probably cope with this particular circumstances will be presented.

### **Consumers' perceptions of prices and price knowledge**

Psychological theories of consumer information processing propose that price information at the point of purchase will be encoded, evaluated, and integrated into (long term) memory (Monroe (1973), Dickson and Sawyer (1990), Monroe (1990)). The way in which information

is stored in memory depends on many factors. Determinants of price encoding could be the importance of price, the price ending, the familiarity with a brand, but also the consistency between observed and expected price, or even consumers' processing goals and consumer characteristics (Helgeson and Beatty (1987), Zeithaml (1988) Mazumdar and Monroe (1990), Sheth, Mittal and Newman (1999)). While results from studies concerning the price recall accuracy vary from study to study, it is clear that consumers – if they do not always memorise specific prices as such – at least store price information in form of information chunks that are less complex (Monroe (1973), Mazumdar and Monroe (1990) and (1992)). Thus, consumers might perhaps not be able to remember explicitly the prices they paid last, but they might be capable of judging new prices for products in the product's categories as for example “too expensive” or “too high” (Monroe (1973), Monroe and Lee (1999)).

Additionally, a number of researchers in consumer price perception showed that buyers create – in order to reduce complexity – an individual system of internal price references (Briesch et al. (1997), Bell and Bucklin (1999), Mazumdar and Monroe (1990)) that might even correspond to price thresholds (Monroe (1973) and (1990)). Monroe and Petroschius (1981) argue that the consumer's range of acceptance provides together with the so called adaptation level the “anchoring” stimuli for buyers' judgement of a new price. Consequently, the retail price and the consumer's reference price are judged against one another when both are present. For doing so, one should suppose consumers having a precise knowledge of the prices of each product they are buying. Yet, empirical research has revealed repeatedly during the past decades that most of the consumers do not precisely know or remember product prices of articles they had recently bought (Dickson and Sawyer (1986) and (1990)). One possible explanation for the low price knowledge is that consumers might note prices at the point of purchase but do not try to remember them for any length of time. Dickson and Sawyer (1990) show that consumers' price knowledge at the moment of choice might be high, but it drops quickly as the buyer progresses to considering the next product to buy. Anyway, Monroe and Lee (1999) give evidence that even price information not consciously remembered might influence consumers' internal reference prices and, thus, price evaluations.

### **Consumers' price perceptions in a situation of complete lack of usual price references**

With regard to price evaluations, the uniqueness of the switch from different national currencies to one European currency at one go creates a completely new and exceptional situation. Consumers had – from one day to another – to deal with completely new prices without much

possibility to escape. With the new currency they would virtually lose their internal price references. Consequently, their only possibility would be to refer to external references as the new Euro prices and in most of the cases the double labelled prices (in Deutschmark and Euro) on the shelves. Without this help a comparison with the familiar prices (and old references) would only be possible by (re)calculating back to the past currency prices.

Acting as Homo Economicus consumers might show – in this particular situation - stronger interest in searching for appropriate price information. Consumers could, thus, possibly aim to replace their old price knowledge by new prices in Euro and consequently replace their familiar price references by memorising new Euro price signals. This learning process might take some time, because price information is stored – explicitly or implicitly - in long-term memory (Monroe and Lee (1999)). Concerning different product categories (and their general price level), one should not forget that even if consumers tend to learn new prices and memorise new reference they will focus these efforts on products with generally higher price levels, such as clothes or durable goods (e.g. washing machine), more than for so called fast moving consumer goods (e.g. milk or coffee). Grewal and Marmorstein (1994) show that customer's interest to spend time comparing prices depend on the savings they expect relative to the price of the purchased product.

All in all, it seems obvious that consumers are unlikely to have a Euro price knowledge right after the introduction of the Euro, that they would tend to search for relevant information more intensely and that they would judge price changes differently depending on their general attitude towards the Euro and the relative importance they give to prices for their buying decision. So, the question arises as if to how customers perceive their own behaviour in this particular situation, i.e. when price knowledge is absent.

## **METHOD**

In respect of understanding consumer behaviour in this particular situation, we collected information on the underlying theories of consumer price perception as well as general consuming attitudes and attitudes towards pricing. The major question of this investigation was the following: would consumers change their price perception and behaviour because of the introduction of the Euro?

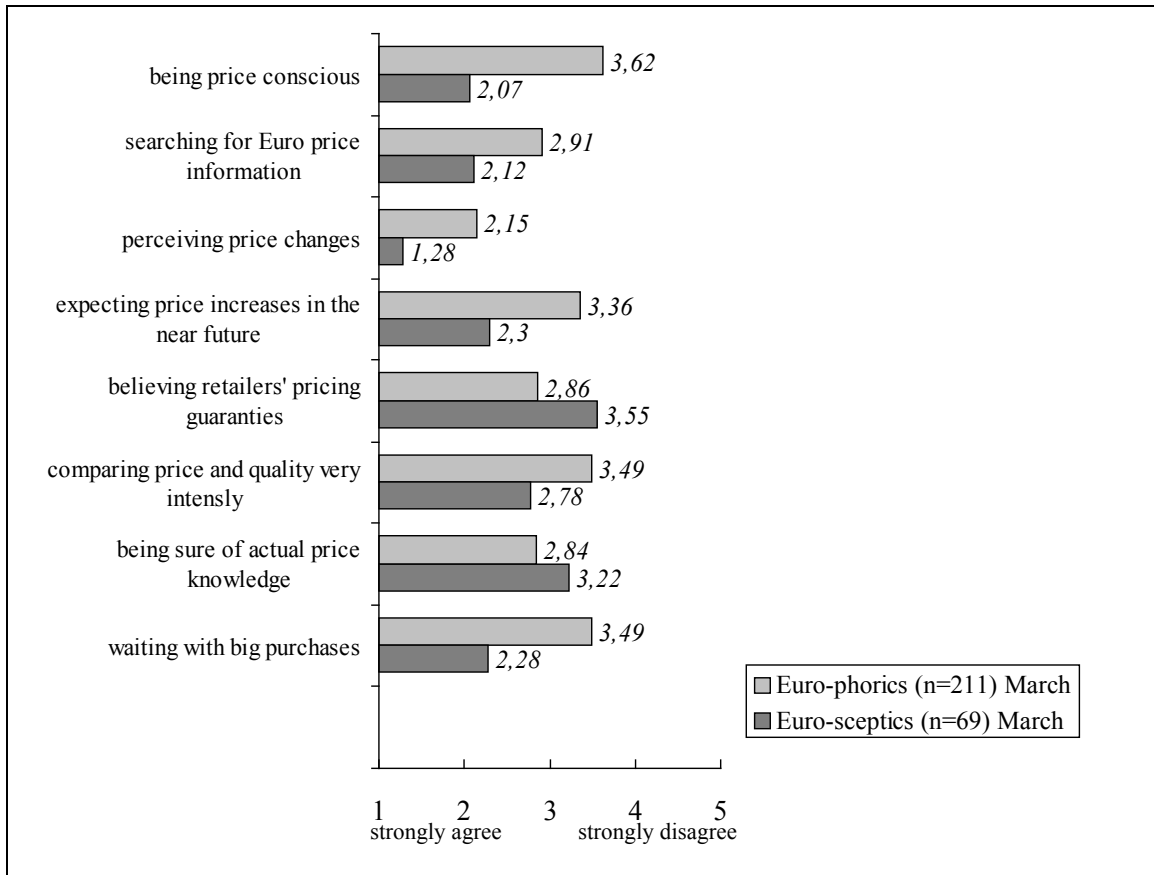
As this main topic seems too general and too broad to be answered at once, we had to develop on the basis of existing research evidence (Monroe (1990), Diller (1998) and (2000)) and several pre-tests a catalogue of detailed price-related questions with relevance for the particular situation of the introduction of the Euro, as for example the following ones. Are consumers more price conscious? Do they look for more or even other price information? Do they change the relative role of prices for their buying decision? Do they change their regular basket of goods because of the Euro prices? And how do they judge prices at all? What reference prices for particular goods (such as coffee, milk, a pair of jeans or a TV-set) do they state? In which currency do they state these price thresholds - (still) in DM or (yet) in Euro? Do they have new ones? Are these thresholds (in amount) comparable to the old ones? Do they calculate from DM to Euro? What is their opinion about the new currency? On the basis of this catalogue we developed or borrowed in original or modified form from previous research scales for each of the underlying price-related constructs (Diller (1998) and (2000)). Using in most of the cases the 5-point Likert-method of summated ratings. Pre-tests were carried out in summer 2001 and in the beginning of 2002 in order to see how suitable the conceptualisation would be for the survey. Trained interviewers, using the final script, conducted standardised telephone interviews: 280 in March and 305 in June 2002. The samples were randomly drawn from the current German telephone directory.

The empirical analysis presented in this paper concentrates mainly on the identification of different groups of consumers in both samples - using factor and cluster analysis - and the description of their differences in pricing behaviour as well as changes, becoming obvious between March and June 2002. We do so, as cluster analysis is widely accepted as being very useful for classifying objects into homogeneous groups involving many different variables (Churchill and Iacobucci (2002)). The two cluster solutions presented in the following are based on the same price-related variables in order to make a comparison possible, describing only results that distinguish both samples and clusters significantly.

Despite careful methodology, this study cannot be considered statistically representative. Yet, it does provide a broad range of data on a number of questions (some of them stated above) to gain a systematic and thorough insight into changes of consumer price perceptions after the switch to the Euro.

## RESULTS

The results of our data show that there are clear differences between the March and the June sample concerning price awareness and consciousness, price perception and judgement as well as price knowledge. In both samples, we found two main types: the “Euro-sceptics” and “Euro-phorics”. In order to address our actual research objective of understanding how price behaviour of consumers - being confronted the Euro - changed (between March and June), we concentrate on the description of the two clusters using the price-related variables distinguishing the two groups best and significantly (canonical values: 0.739 and 0.75 of the corresponding discriminant functions; Wilks’ Lambdas 0.454 and 0.438).



*Figure 1: Significant differences between cluster 1 and cluster 2 concerning relevant price-related variables in March 2002 (means, statements on a Likert scale)*

First, there are the so called „Euro-sceptics“ (cluster 2) having a more doubtful attitude towards the Euro in general and towards German retailers’ honesty and fairness in pricing in particular. Second, there is the class of „Euro-phorics“ (cluster 1), who has a positive attitude

towards the European Union and the Euro in general and a more positive perception of the new retail prices. Both groups can be distinguished concerning their perceived importance of prices for buying decisions. They also differ in their kind of price perception and judgement (see figure 1 for the results in March 2002).

The group of Euro-phorics (cluster 1) seems to speak – as the cluster label already suggests – more in favour of the Euro as one single currency for members of the European Union than the second cluster of the Euro-sceptics. In March 2002, this class allies 211 of the 280 interviewed consumers. They are relatively price unconscious and they do less price search than their counterparts in cluster 2. This second group of more sceptic consumers also does not seem to give much trust in the retailers' price guaranties. Therefore, they have a more intense price judgement process comparing price and quality parameters to a larger extent than the Euro-phorics are doing. Although their intense price search and judgement, the sceptics express a lower self confidence concerning their actual price knowledge. As they have much stronger sense of past price changes, and in March still expect further price increases by retailers using the special situation, they seem to be more aware of the lack of their old price references and the necessity of learning new prices and price signals. Corresponding, they tend to wait with big purchases, whereas the Euro-phorics do rather disagree with this idea in March 2002. This confirms the idea of the Euro-phorics being the group of consumers that does not always have the first look at prices but consider other product characteristics as more important for a purchase.

Comparing the results from the March and the June samples, it is remarkable, that the class of the Euro-phorics becomes smaller during these three months. In the first sample 24.6 per cent of German consumers interviewed in March expressed a more sceptic attitude towards the Euro; 75.4 were Euro-phorics. Whereas in June 39.7 percent of the interviewed consumer stayed optimistic, 60.3 per-cent showed the characteristics of the Euro-sceptics.

Although official statistics (destatis (2002)) in Germany pretended the inflation rate after the introduction of the Euro being rather moderate (and lower than the average of the past years), press coverage (mainly during the second quarter of 2002) stated a lot of negative examples of unjustified price increases. This apparently re-inforced the consumers' sense of price increases. From the scientific (pricing research) point of view, the expressions of negative

experiences during both interview samples, approve previous research results showing price perceptions as fairly subjective and individual processes.

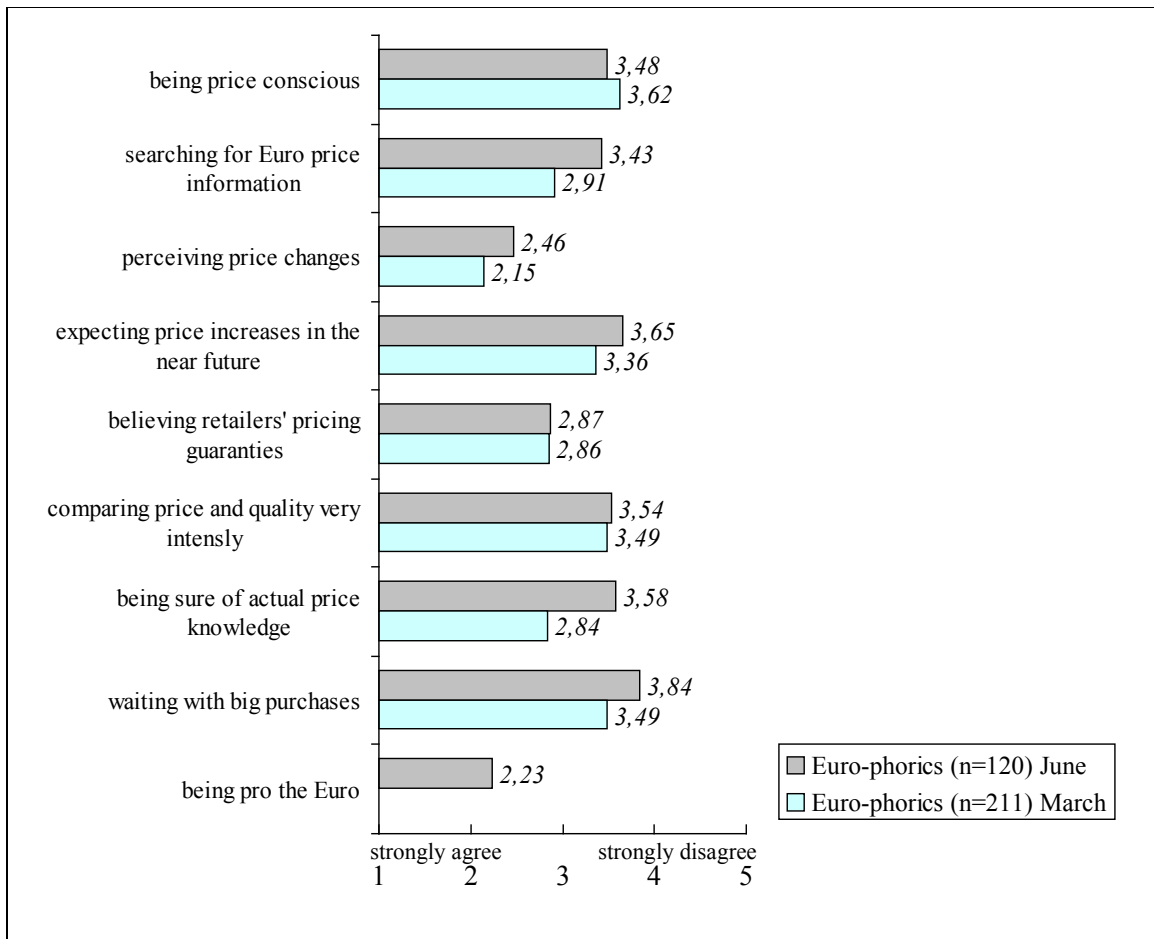


Figure 2: Comparison Euro-phorics in March and June 2002 (means, statements on a Likert scale)

As can be seen in figure 2 the consumer type of the Euro-phorics underwent some relatively extreme changes concerning price perception between March and June 2002. They became slightly more price conscious, yet price does still not play the decisive role in their buying decision. They do not change their general price judging behaviour, still being relatively “lazy” comparing price and quality features of a possible buy. And they do not change their belief in retailers’ price guaranties. Consequently, they express in June a lower sense for past – apparently observed – price increases due to the introduction of the Euro than they did in the March interviews. As well, they expect rather fewer (future) price increases than they did in March. Therefore, in June they tend to search for even less price related information and could rather not agree on delaying big purchases due to the Euro. But, compared to the above results, they are rather losing self confidence concerning their knowledge of actual prices in

June. An explanation might be the mentioned attention media in Germany paid to the Euro-topic during the second quarter of 2002. Euro-phorics might, in consequence, be more aware of their lack of price knowledge and experience. But perhaps they do simply not want to know prices. A fact that might be explained by their absence of interest in price information search and a lack of general scepticism, which is – to the contrary - the distinctive characteristic of the second cluster: the Euro-sceptics. As there are less optimistic consumers in June, the class of the sceptics increases its number of “members” from 69 consumers in the March to 182 in the June sample.

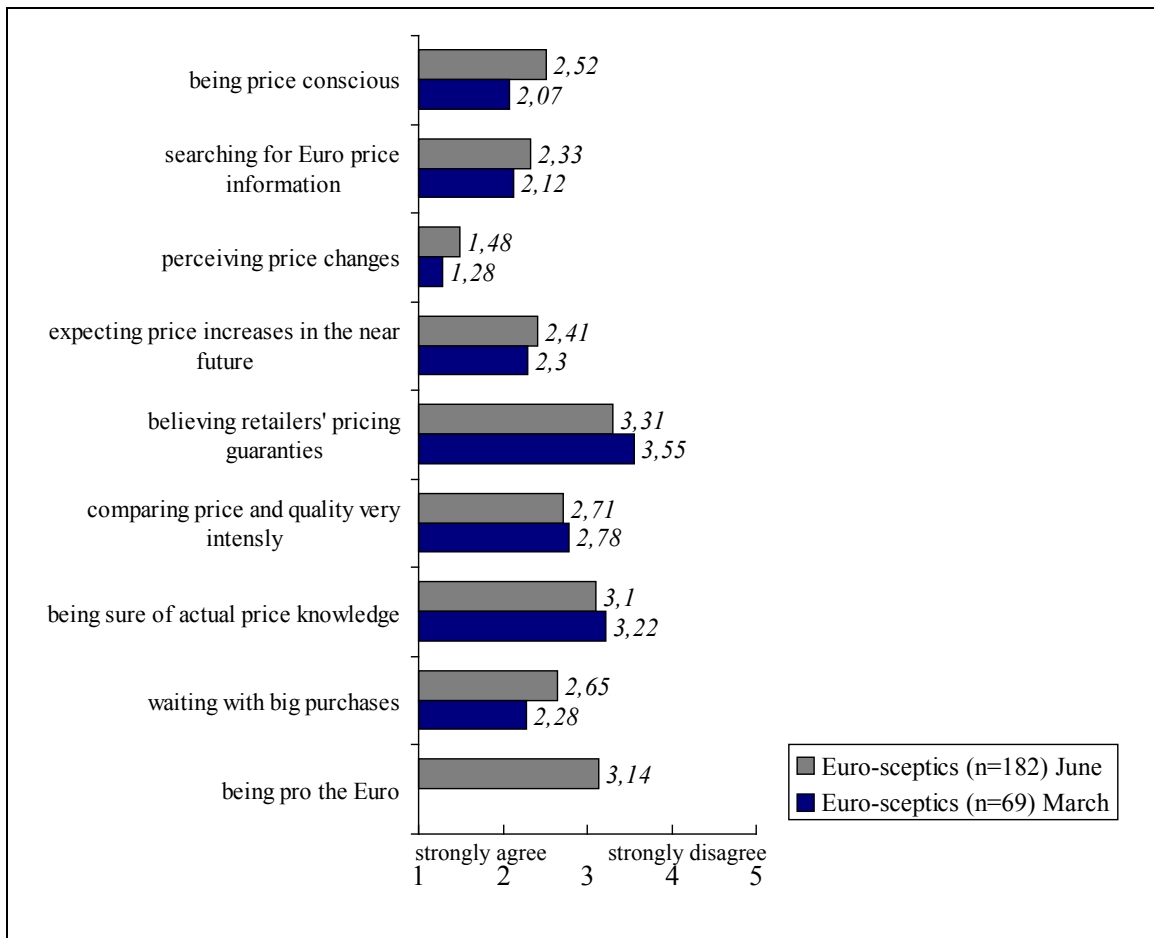


Figure 3: Comparison Euro-sceptics in March and June 2002 (means, statements on a Likert scale)

This class of consumers tends to be more contra the Euro than the optimists. However, in June they become relatively less price conscious and relatively less intensely searching for price information. They do not change their price judgement behaviour, but still comparing product characteristics and price signals of an offer more intensely than the Euro-phorics pretend to do. The fact that both clusters did not change their way of judging prices confirms the general

belief in pricing research of price judgement being a more stable kind of attitude (Monroe 1990, Diller (1998)), whereas other price-related constructs are more susceptible for changes.

Euro-sceptics are slightly more self confident of their actual price knowledge than in March. They weaken their belief in retailers' opportunistic price changes for the past and future, still being much more distrustful than cluster 1. Additionally, cluster 2 does in June trust more in so called price guaranties retailers use to re-assure customers of their price fairness (renunciation of opportunistic behaviour) than they did in March. Consequently, they tend to be less cautious in less delaying big purchases (due to the Euro) than in March. In comparison, they are much more cautious than the Euro-phorics. They seem to wait until they are more accustomed to the new currency and apparently until they feel more comfortable with their own price knowledge and therefore more self confident with their own (new) internal reference system.

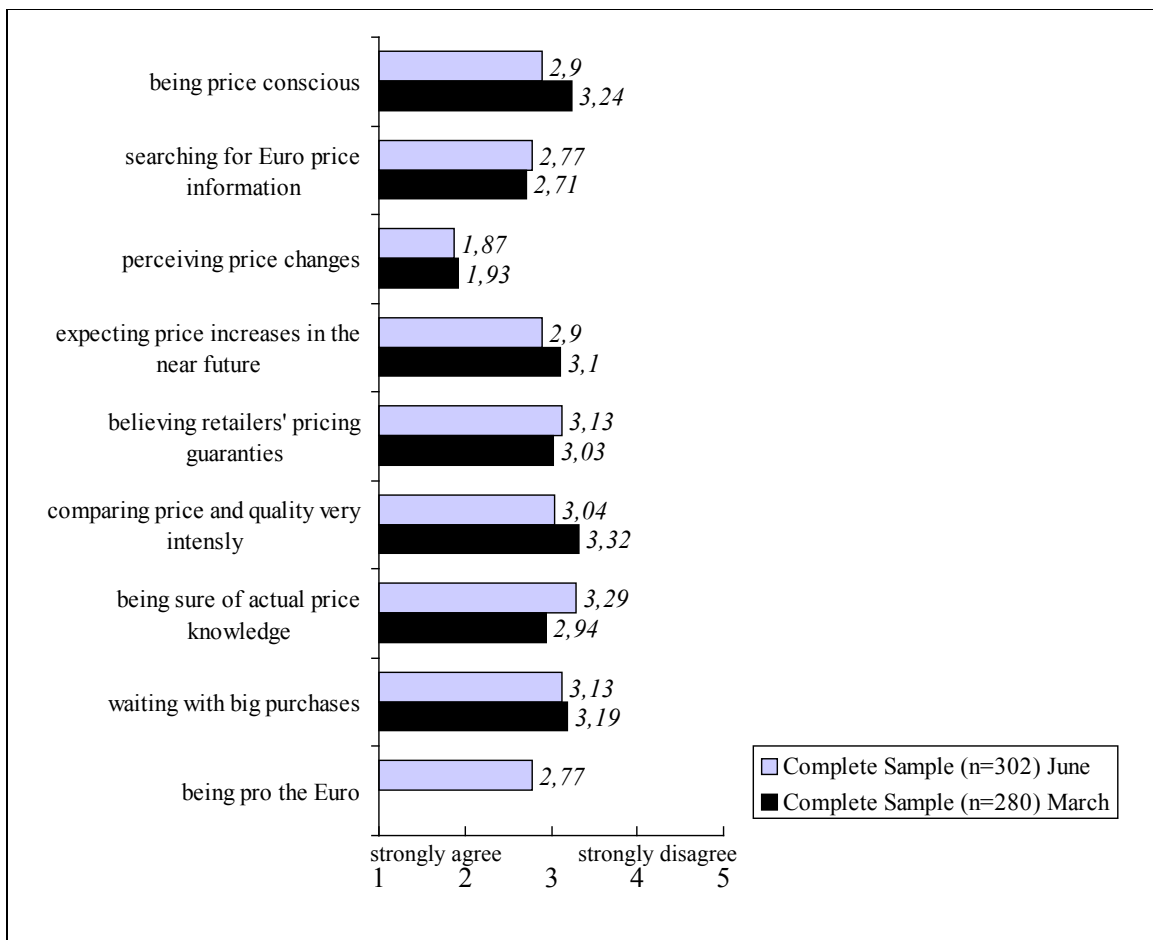


Figure 4: Comparison of the complete samples in March and June 2002 (means, statements on a Likert scale)

Summing up the major changes observed in consumers' pricing behaviour in Germany between March and June 2002, figure 4 reveals, that despite quite remarkable changes in the occupation of the clusters and in the analysed statistical values (means) in the two classes of consumers, values for the complete sample stay fairly constant. Two relatively big changes occur concerning price consciousness and price knowledge. The first being more important, the latter being less sure in the second sample of consumers in June 2002.

## **IMPLICATIONS**

To conclude on the use of these empirical results, we want to shortly mention some ideas concerning retail strategies. Crossing the two main objectives of retail companies (margin and image) and (the retailers' assumptions concerning) consumers' price perception and knowledge, four different retail pricing strategies might be possible: (1) margin orientation on the assumption that consumers either do not have price knowledge or (2) that consumers know prices and (3) image orientation on the assumption that consumers either are price knowledgeable or (4) that consumers are price ignorant. But, only two strategies seem to be effective: "opportunistic pricing" (1) and "price repositioning strategy" (3). The former because customers do not notice and, thus, do not "punish" price increases; the latter because it attracts consumers and enhances the store price image. However, as consumers' Euro price knowledge is relatively low in both groups (and even lower in June than in March) retailers are supposed to adopt "opportunistic pricing" rather than focusing on price image actions, that – taking our results into consideration - would have to be very expensive to have a significant effect.

## **LIMITATIONS AND FUTURE RESEARCH**

The current study has shed some light on consumers' price perception in a situation of lack of (usual) price information and loss of the (usual) reference price system. Even though the methodology used was acceptable for the purposes of the present study, it has some limitations. First of all, it has a quite small sample. Future research with a larger (probability) sample would be necessary and possible, because apparently the consumers' adjustment processes are not yet finished. It will be interesting to see which way these adjustment processes will take within the next time.

It also should be noted that the focus on subjective data (customers' perceptions) neglected retailers' intentions and objective data on price development in the period (e.g. prices of special shopping baskets). Thus, another future research issue involves retailers' knowledge - or at least their perceptions - of customers' price knowledge.

Beside important implications for practice of these results - especially for German retailers, which faced massive reproaches of exploiting customers lack of price knowledge and are fighting actually for their image as price honest shops - this study also has a theoretical contribution to pricing research (conceptualisation of price-related constructs). It confirms previous research on consumer price perception and judgement and indicates a relevant framework for retailers price segmentation as well as appropriate actions.

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