

Initial conclusions regarding the impact on prices of the changeover to the euro

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The setting of prices directly in euros started at an early stage, as far back as Q2 2001, in the case of foodstuff ex fresh produce and everyday manufactured goods (personal hygiene products...). Eventhough it coincided with an acceleration in prices, it is difficult to quantify the causal links involved, as other elements were at the same time contributing to an increase in inflation for these products. Now that price returns are available for Q1 2002, it can be seen that the impact on prices of the changeover to the euro from January on was above all a function of the way the switch to new schedules based on «psychological» euro prices took place. It turns out that this impact varied, depending on the products considered. In particular, prices of services were pushed upwards and those of durable goods downwards. In the final analysis, this study based on microeconomic data (roughly 570,000 price returns were processed) confirms the estimates made previously by INSEE, taking a more global approach: the changeover to the euro contributed roughly 0.1 of a point to the increase in inflation in January and the effect was generally neutral in the two following months.

Prices began to be set in euros already in 2001 in the case of foodstuffs and everyday manufactures

The special report contained in the publication in this series dated December 2001⁽¹⁾ had highlighted widely varying sectoral situations immediately prior to the changeover to the euro as sole legal tender. Indirect indicators, calculated on the basis of the recording of price tags carried out month after month for a certain number of everyday products and services (the so-called «sensitive basket»), showed that the changeover to the «predominant euro», in other words to a situation in which prices are set directly in euros, had in reality started well before January 2002 in the case of foodstuffs ex fresh produce and manufactures ex clothing and ex durables⁽²⁾. In these sectors, the percentage of series whose prices were stable to dual conversion⁽³⁾ started to rise significantly as early as Q2 2001. At the same time, the frequency of observation of round prices in francs declined substantially for these products — yet another sign of the gradual abandonment of the franc as reference unit of account.

As it happened, this early changeover to the euro coincided with an acceleration in the prices of the items concerned. For example, in the case of foodstuffs ex fresh produce, the year-on-year price rise, which had been standing at 2.9% in January 2001, reached a peak of 5.4% in September before falling back somewhat to 4.7% in December. Similarly, the year-on-year price rise for manufactures ex clothing and ex durables, having started the year in January at 1.0%, reached 2.4% in December.

However, it is difficult to quantify any additional rise attributable to the changeover to the euro, as other factors were simultaneously tending to force prices upwards.

One example was the fact that the various animal health crises, which began in October 2000 (BSE, followed by foot-and-mouth disease) brought about a sharp acceleration in meat prices until the end of H1 2001 (a rise of 9.7% in June, as against 3.5% in October 2000), helping to push up the index for food prices as a whole. If this phenomenon is eliminated, there was still an acceleration in food prices, but on a smaller scale: the year-on-year rise in food prices ex

(1) See «Price movements and the definitive changeover to the euro», pages 9 to 21 of the English version of «Conjoncture in France», Dec 2001.

(2) «Manufactured goods ex clothing and ex durables» covers personal hygiene products, sporting and leisure goods and stationery.

(3) Stability to dual conversion is always the case for a price that is first set in euros, but a priori it is confirmed in only 15.2% (i.e., the inverse of the official conversion rate) of cases if the price is initially set in francs. Possible distortion occurs at the time of the changeover from francs to euros, since rounding to eurocentimes is less precise than rounding to franc centimes. For example, a price of 100.00 francs is rounded to 15.24 euros, which in turn is equivalent to 99.97 francs and is therefore not stable to dual conversion. On the other hand, a price of 106.00 francs is equivalent to 16.16 euros and 16.16 euros is equivalent to 106.00 francs, meaning that it is a price that is stable to dual conversion.

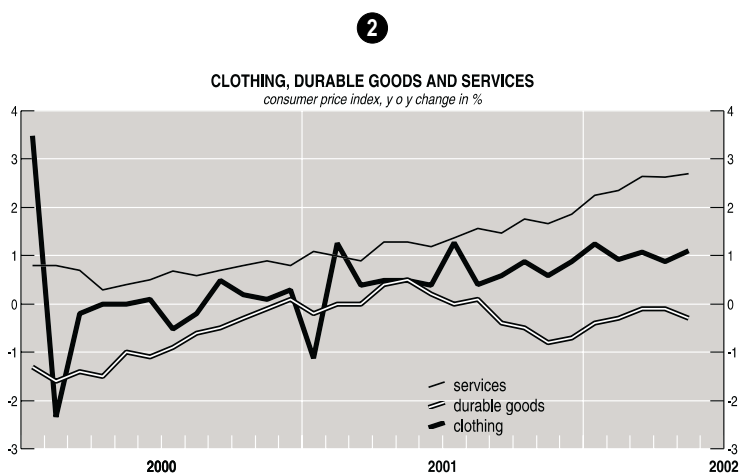
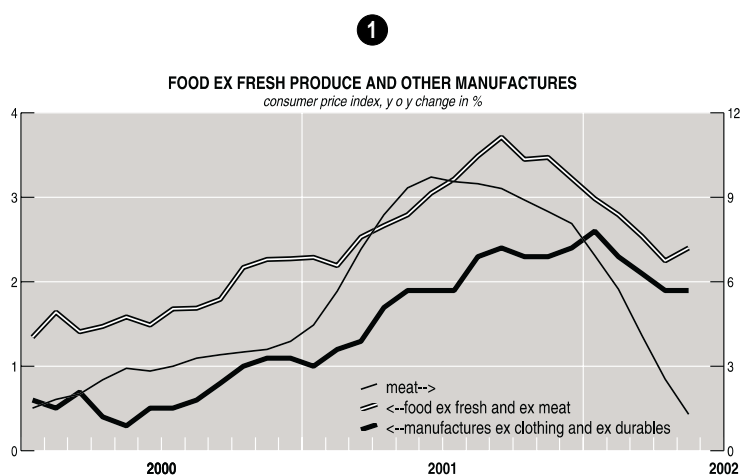
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TABLE 1: STABILITY TO DUAL CONVERSION IN 2001 (%)

	January	February	March	April	May	June	July	August	Sept.	October	Nov.	Dec.
Food	17.3	18.2	20.9	23.7	25.4	27.5	29.4	33.3	38.2	48.5	59.0	65.0
Clothing	15.6	15.5	14.5	15.5	16.3	16.7	16.8	18.3	23.0	25.3	27.7	30.4
Manufactures ex. clothing and durables	13.6	14.8	17.8	20.1	21.5	22.5	24.3	28.3	35.3	44.3	54.6	59.9
Energy	17.0	16.8	17.3	17.1	14.3	14.9	17.9	18.5	19.3	26.1	36.4	45.0
Services	14.7	14.7	14.3	14.4	14.5	14.5	14.5	14.5	15.1	17.4	19.6	21.8
Total	15.9	16.2	17.2	18.4	18.8	19.7	20.8	22.7	25.6	31.7	38.2	42.9

How to read the table :

These figures are calculated on the basis of a «sensitive basket», drawn from the sample usually used in the calculation of the price index. This sensitive basket, bringing together mass consumption products with a high frequency of purchase, was introduced by INSEE in 2001 in order to facilitate the assessment of the conditions of the definitive changeover to the euro. If prices had been randomly fixed in a uniform distribution, the proportion of prices stable to dual conversion would be roughly 15%.



fresh produce and ex meat peaked at 3.7% in September 2001, having been 2.3% in January.

Moreover, the general climate in 2001 was tending to produce additional inflation in France and in the euro zone as a whole. The marked rise in the oil price between mid-1999 and end-2000 and the simultaneous steep depreciation of

the euro had in fact produced so-called «second-round effects», with prices of non-imported products accelerating as the result both of the rise in prices of inputs and the wage increases brought about by the rise in imported inflation. This phenomenon was at work in the case of all products, whether or not there had been an early change-over to the predominant euro.

In fact, in clothing, durables and services, the setting of prices in euros was at a relatively early stage at the end of 2001. Despite certain signs of movement starting in September, the proportion of price series for which prices were not in round francs had increased relatively little in these sectors by December last and stability to dual conversion held good for only a small proportion of prices. And yet acceleration was visible here too, particularly for services and clothing (leaving aside the ups-and-downs recorded as the result of changes in the precise dates of bargain sales from one year to another).

This coincidence of the change-over to the predominant euro with the acceleration in prices in food-stuffs ex fresh produce and manufactures ex clothing and ex durables means that it is not possible to establish a causal link with certitude. In this respect, it is to be noted that prices of food ex fresh produce and ex meat began to slow down last autumn and that the year-on-year price rise in this sector fell back to 2.3% in April, more or less the same level as it had been a year earlier. This suggests that the predominant feature for these products seems to have lain in the fact that price rises that would in any case have taken place (in view of the macroeconomic context described earlier) were simply brought forward by a few months. The application of the agreement for a freeze on prices in industry

and distribution between 1 November 2001 and 31 March 2002 probably also contributed to this behaviour. To judge by the April figure, the price increases recorded at the expiry of this agreement were on the small side. May was a slightly worse month in this respect. It is still too soon to be able to settle the question one way or the other, but if increases in coming months continue to be at a rate close to the long-term average, the «euro effect» will have been seen only fleetingly in the case of food. The same could well be true of manufactures ex clothing and ex durables, where the year-on-year price rise also eased back in the early part of 2002, although to a smaller extent.

The impact on prices of the changeover to the euro is largely determined by the shift to new «psychological» pricing schedules

The special report in the December issue showed that the marked difference in behaviour with regard to the changeover to the predominant euro between individual sectors (food ex fresh produce and manufactured goods for everyday use on the one hand; clothing, durables and services on the other) in fact overlapped with differences with respect to policies towards the setting of «psychological» prices⁽⁴⁾. Sectors that had not tried to anticipate the date of the changeover to the euro as legal tender are those where psychological prices are of predominant importance. As a result, the study carried out last December came to the conclusion that the impact of the changeover to the euro on prices would depend above all on the way in which the shift was made from psychological pricing schedules in francs to new psychological pricing schedules in euros.

TABLE 2: PROPORTION OF ROUND PRICES IN EUROS (%)

	2001				2002	
	January	April	July	October	January	April
Food	31.7	32.1	31.7	33.2	35.8	36.7
Clothing	26.1	27.0	25.6	30.3	40.9	56.7
Manufactures ex. clothing and durables	33.6	33.9	34.4	35.6	37.8	40.7
Energy	32.1	27.0	31.2	33.0	40.7	43.6
Services	26.9	28.5	29.1	33.3	63.7	72.3
Total	29.6	29.7	30.2	33.1	47.0	52.7

How to read the table :

The figures are calculated on the basis of a «sensitive basket» (cf. table 1). By convention, a price is said to be «round in euros» if it ends in 0, 5 or 9 euro centimes. In the case of a random distribution, the probability of a price being round in euros would be 30%.

As there was no means of knowing the nature of the shift at the time the report was written, simulations had been carried out using the following principle.

Future «psychological» pricing schedules in euros had been drawn up, for each intersection of sector and price range, by analogy with what could be observed through the distribution of prices in francs. In addition, it had been assumed that the introduction of the new currency would not in the long run modify the proportion of psychological prices. Three cases had then been envisaged for the shift from a psychological price in francs to a psychological price in euros: a systematic upward adjustment, a systematic downward adjustment and, finally, a systematic adjustment to the nearest psychological price.

The result obtained showed clearly that the impact of the changeover to the euro on overall inflation was potentially substantial, but that its sign was largely undetermined. Depending on the simulations carried out, the impact fell within a range from -1.1% to +1.0%. In the event of a systematic choice of rounding to the nearest psychological price, the impact turned out to be slightly negative, this result being linked to the conversion rate between francs and euros. Psychological prices in francs have in fact a tendency to be slightly higher than psychological prices in euros. For example, the most frequently

recorded price in March 2001, 199 francs, corresponds to 30.34 euros and is therefore slightly above the nearest psychological price, which one might expect to be 29.90 euros.

Evidence regarding new psychological pricing schedules

The availability of price returns for Q1 2002 now enables us to draw preliminary conclusions regarding the impact of the changeover to the euro on French prices, by comparing the hypotheses we had established six months ago with the new reality. One first interesting point to note is the distinct increase in the proportion of round prices in euros (ending in 0, 5 or 9 eurocentimes) from January 2002 on, especially in the service sector. This phenomenon confirms that the first effect of the changeover to the euro as legal tender is indeed the concern to establish new pricing schedules.

In order to take the matter further, a systematic analysis of price frequencies was carried out. The most natural approach consisted initially of comparing the evolution of price frequencies in euros between March 2001 (after application of

(4) It should be remembered that for certain products the setting of prices responds to criteria of a psychological nature. For example, before the changeover to the euro: 199 francs; after the changeover: 29.90 euros.

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the official conversion rule) and March 2002 (the latest set of price returns available for such a study), in order to see whether certain psychological prices in euros had emerged. This initial trial turned out to be largely negative at first sight: in fact, in March 2002, taking only prices with the highest frequencies of appearance, in many cases (with the exception of services) one finds prices that are not psychological in euros but simply correspond to the direct official conversion into euros of psychological prices in francs.

This exercise accordingly does not make it possible to bring out clearly the existence of new psychological pricing schedules in euros. For example, in the case of durable goods, the price most fre-

quently recorded in France in March 2002 was still 608.27 euros, corresponding to a direct conversion of 3990 francs. Even so, whereas this price had been recorded in 4.8% of cases in March 2001, it was found only in 2.5% of cases in March 2002. This last observation is important, since it embodies the real lesson from this first exercise, namely that the abandonment of psychological pricing schedules in francs has indeed been in operation since last January, but that this is a gradual process and is far from being complete in the case of numerous products. The gradual nature of the movement is probably explained by the fact that numerous traders continue to post prices in both currencies, and this makes it possible to maintain certain psychological prices in francs.

Since the price distributions are therefore still «hybrid», a second approach was applied. This consisted of including in the calculations only prices whose frequency of appearance had increased by more than 20% between March 2001 and March 2002⁽⁵⁾. A priori, this method has the advantage of excluding from the analysis most of the prices that were psychological in francs. In fact, it makes it possible to bring out a fine and a broad schedule of psychological prices in euros (*cf. table 4*).

(5) The precise value of the selection criterion adopted (rise in price frequencies of more than 20%) is obviously arbitrary. Other reasonable values (between 10% and 30%) nevertheless lead to the same qualitative results.

TABLE 3: THE MOST FREQUENTLY ENCOUNTERED PRICES IN MARCH 2001 AND IN MARCH 2002

Date	Rank	Food ex. fresh produce			Durable goods			Clothing		
		Value		Frequency (%)	Value		Frequency (%)	Value		Frequency (%)
		Franc	Euro	cumulated	Franc	Euro	cumulated	Franc	Euro	cumulated
March 2001	1	9.95	(1.52)	0.8 (0.8)	3990	(608.27)	4.8 (4.8)	199	(30.34)	3.3 (3.3)
	2	7.95	(1.21)	0.7 (1.5)	1990	(303.37)	3.9 (8.7)	299	(45.58)	3.3 (6.6)
	3	3.95	(0.6)	0.7 (2.2)	2990	(455.82)	3.2 (11.9)	99	(15.09)	2.2 (8.8)
	4	49.90	(7.61)	0.7 (2.8)	2490	(379.6)	3.1 (15)	399	(60.83)	2.1 (11)
	5	4.95	(0.75)	0.6 (3.5)	4990	(760.72)	2.7 (17.7)	149	(22.71)	2.0 (13)
	6	9.90	(1.51)	0.6 (4.1)	3490	(532.05)	2.6 (20.4)	249	(37.96)	1.8 (14.8)
March 2002	1		1.30	0.6 (0.6)		608.27	2.5 (2.5)		45.58	1.8 (1.8)
	2		1.52	0.6 (1.2)		303.37	2.2 (4.7)		30.34	1.8 (3.5)
	3		1.21	0.6 (1.8)		455.82	1.6 (6.3)		60.83	1.3 (4.8)
	4		1.36	0.6 (2.3)		45.58	1.3 (7.6)		37.96	1.2 (6)
	5		0.75	0.5 (2.9)		501.56	1.3 (8.9)		22.71	1.1 (7)
	6		1.14	0.5 (3.4)		227.15	1.2 (10.1)		15.09	1.1 (8.1)

(end)

Date	Rank	Other manufactures			Services			Total		
		Value		Frequency (%)	Value		Frequency (%)	Value		Frequency (%)
		Franc	Euro	cumulated	Franc	Euro	cumulated	Franc	Euro	cumulated
March 2001	1	199	(30.34)	0.6 (0.6)	15	(2.29)	1.4 (1.4)	199	(30.34)	0.9 (0.9)
	2	79	(12.04)	0.5 (1.1)	20	(3.05)	1.2 (2.6)	299	(45.58)	0.9 (1.8)
	3	299	(45.58)	0.5 (1.6)	25	(3.81)	1.2 (3.8)	99	(15.09)	0.6 (2.4)
	4	99	(15.09)	0.5 (2.1)	35	(5.34)	1 (4.8)	399	(60.83)	0.6 (3)
	5	59	(8.99)	0.4 (2.5)	12	(1.83)	0.9 (5.7)	149	(22.71)	0.5 (3.5)
	6	149	(22.71)	0.4 (2.9)	30	(4.57)	0.9 (6.6)	129	(19.67)	0.4 (4)
March 2002	1		0.95	0.5 (0.5)		2	1 (1)		45.58	0.5 (0.5)
	2		30.34	0.5 (1)		4	0.9 (1.9)		30.34	0.5 (1.1)
	3		45.58	0.5 (1.5)		2.3	0.8 (2.7)		60.83	0.4 (1.4)
	4		0.96	0.5 (1.9)		3	0.7 (3.4)		15.09	0.3 (1.8)
	5		15.09	0.4 (2.3)		10	0.7 (4.1)		7.61	0.3 (2.1)
	6		0.97	0.4 (2.7)		15	0.7 (4.8)		1.52	0.3 (2.4)

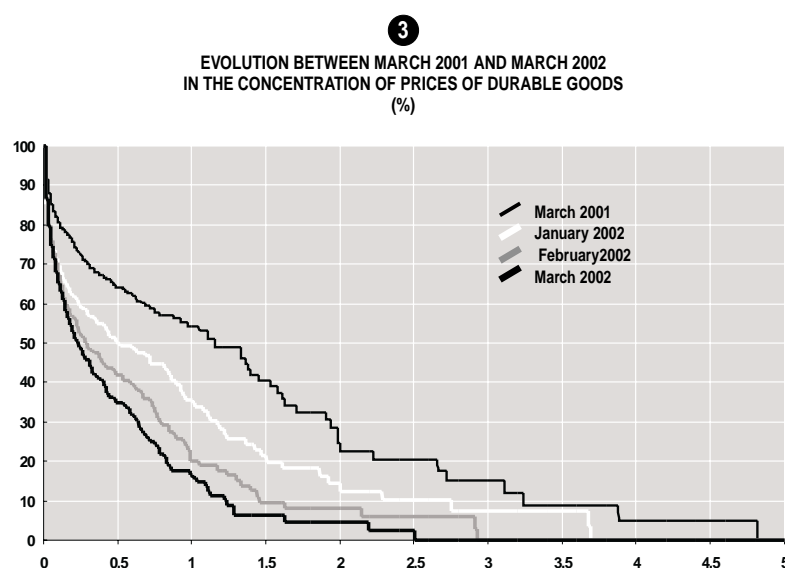
How to read the table:

In March 2001, the third most frequent price encountered for all products was 99 francs, i.e. 15.09 euros after conversion at the official rate. This price then accounted for 0.6% of all returns, with the three most frequent prices (199, 299 and 99 francs) together accounting for 2.4% of returns.

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Despite starting to rise in January 2002, the proportion of psychological prices in euros was in March 2002 well below what it had been in francs a year earlier. Roughly 80% (50% taking the broad schedule) of the prices observed in March 2001 belonged to the old psychological pricing schedules in francs but only 40% (13%) of the prices in euros recorded in March 2002 were in this situation for the new pricing schedules in euros. Adjustment seemed to be taking place particularly slowly in the case of food and «other manufactures», but in any case psychological prices play a much less important role in these sectors. In the case of services, the adjustment was distinctly visible in January, but the rate then slowed down sharply in February and March. It was the arrival of the new collections that encouraged the adjustment in pricing schedules in the case of clothing.

It is also possible that the importance of psychological pricing will turn out in the end to be reduced, now that prices are set in euros. This could be true in particular of low-priced products, because of the rate of exchange between euros and francs. A euro centime has a greater value than 5 franc centimes, with the result that goods carrying low prices that used often to end in 0 or 5 franc centimes (foodstuffs, everyday manufactured goods) may well in future be less systematically rounded to 0, 5 or even 9 eurocentimes).



How to read the graph :

This graph illustrates the manner of the evolution in the concentration of price distribution in the durable goods sector since the changeover to the euro. In March 2001, prices whose frequency of use exceeded 1% (abscissa) accounted on their own for more than half the price returns (ordinate). This proportion fell steeply in January 2002 and continued to do so in the following two months. In March 2002, the figure was barely 20%. The decline in the concentration of prices shows that the changeover from psychological price schedules in francs to psychological price schedules in euros is taking place only gradually. The concentration of prices can be expected to rise in coming months, when psychological prices in euros have become definitely established.

TABLE 4: SCHEDULES USED

Sectors	Price ranges in euros	"Fine" schedule	"Broad" schedule
Food ex. fresh produce	0-1	x.x0 ; x.x5 ; x.x9	
	1-10	x.x0 ; x.x5 ; x.x9	
Clothing	10-100	xx.x0 ; xx.x5	xx.00 ; xx.20 ; xx.50 ; xx.90
	1-10	x.x0 ; x.x5	x.00 ; x.50 ; x.90 ; x.95
Durable goods	10-100	xx.x0 ; xx.95	x0.x0 ; x5.x0 ; x9.x0 ; x0.95 ; x5.95 ; x9.95
	100-1000	xxx.x0	xx0.00 ; xx5.00 ; xx9.00
Other manufactures	10-100	xx.9x ; xx.00	x4.00 ; x9.00 ; x4.9x ; x9.9x
	100-1000	xxx.00 ; xxx.99	xx9.00 ; xx9.99
Services	1000-10000	xxx.00	xx49.00 ; xx99.00
	1-10	x.x0 ; x.x5 ; x.x9	
Services	10-100	xx.x0 ; xx.x5 ; xx.x9	xx.00 ; xx.50 ; xx.80 ; xx.90 ; xx.99
	100-1000	xxx.00	xx0.00 ; xx5.00 ; xx9.00
Services	1-10	x.x0 ; x.x5	x.00 ; x.50
	10-100	xx.x0	xx.00 ; xx.50
Services	100-1000	xxx.x0	xxx.00

How to read the table :

The "broad" schedule is a subset of the "fine" schedule, that includes prices whose frequencies of use are the highest.

TABLE 5: EVOLUTION IN THE PROPORTION OF PSYCHOLOGICAL PRICES IN EUROS

Sectors	in euros					in francs
	March 2001	December 2001	January 2002	February 2002	March 2002	March 2001
Food ex. fresh produce	27.6 (0.8)	31.7 (1.4)	35.8 (2.5)	37.1 (2.9)	38.0 (3.1)	86.2 (47.3)
Durable goods	2.9 (1.1)	6.3 (2.2)	17.2 (6.6)	30.4 (16)	40.8 (22.9)	91.8 (73.8)
Clothing	8.8 (2.3)	14.3 (4.3)	21.0 (7.6)	26.4 (10.8)	38.9 (17.5)	88.0 (58.6)
Manufactures ex. clothing and durables	20.7 (1.3)	24.2 (3.5)	28.4 (6.1)	31.1 (7.4)	33.7 (9.1)	74.6 (51)
Services	10.1 (0.9)	17.9 (6.1)	40.8 (21.1)	44.4 (23.9)	46.7 (25.5)	75.6 (45.1)
Total ex. public-sector and fresh produce	17.6 (1.2)	22.5 (3.5)	31.0 (8.2)	34.5 (10.3)	38.8 (12.7)	81.7 (51.4)

How to read the table :

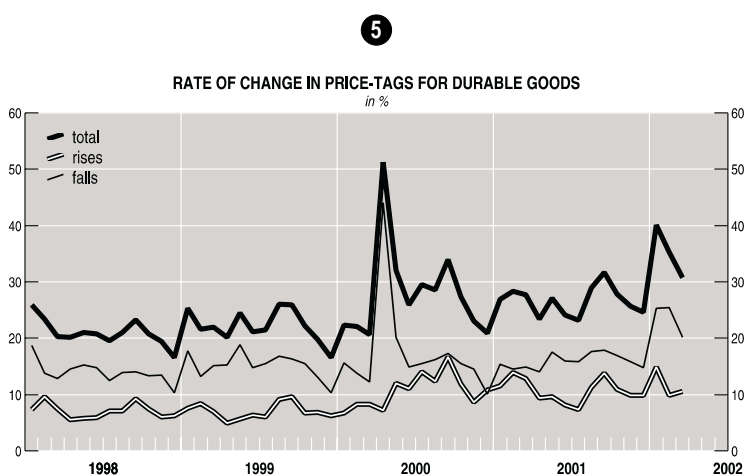
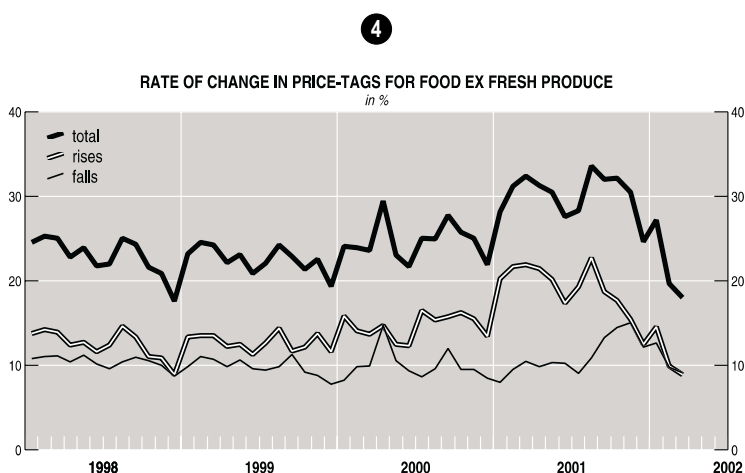
In January 2002, the proportion of psychological prices in euros as defined for the «fine» schedule was 31% (8.2% as defined for the «broad » schedule).

Tentative estimate of the euro effect

The setting of these new psychological pricing schedules in euros makes it possible, in a second stage, to estimate the impact on prices of the changeover to the euro. The exercise presented here was carried out month by month for the first three months of 2002, using price returns for the period December 2001 to March 2002 (roughly 570,000 price returns were used). The method consists of comparing, for a given month, the price indices actually observed by major heading with those that would have been obtained if one had «neutralised» the price changes resulting from series which moved for the first time to a psychological price in euros between December 2001 and March 2002. The term «neutralised» signifies in this case, not an artificial freeze on all price tags having changed to a psychological price, but the fact of being attributed a fictitious price change equal to that recorded, on average and for the month in question, for the prices of comparable products, whether these remained stable or had shifted to prices that are not psychological in euros⁽⁶⁾.

Taking all sectors together, the euro effect seems mainly concentrated on the month of January 2002, being virtually nil in either February or March. For January, the euro effect on inflation is estimated to be +0.1 of a point. This figure, arrived at using a method based directly on price returns, price tag by price tag, turns out in fact to be comparable to those arrived at by the two more general approaches previously presented by INSEE's consumer price division⁽⁷⁾.

However, the effects of the changeover to the euro are highly contrasted between individual sectors, being particularly large in the case of services. This is the sector where the proportion of psychological prices in euros rose most sharply in



How to read graphs 4, 5, 6, 7 and 8:

For a given month, the rate of price tag changes is the proportion of price returns for which a rise or a fall is observed in relation to the previous month. It will be noted, in particular, that the rate had a tendency to rise prior to January 2002 for foods and manufactures ex clothing and ex durables and that, conversely, it was lower than usual in the early part of this year. This constitutes an additional sign that the changeover to the «predominant euro» took place in advance in these sectors. By contrast, the increase in the rate was very marked in services, clothing and durable goods in the first three months of 2002 compared with what was seen at the same period in earlier years.

(6) The result is obviously closely dependent on this assumption: the changes that would have been applied to prices that have become psychological in euros in the absence of the currency changeover are bound to be hypothetical. It is nevertheless reasonable to suppose that some of these prices would have remained stable, given the increase recorded in the rate of price tag renewal that accompanied the build-up of psychological pricing in euros. Another factor of uncertainty is that this method can only be applied to the limited number of price series that showed no break between December 2001 and March 2002. Nevertheless, the frequency of replacement or disappearance of products whose prices are raised month after month does not seem to have increased significantly, except in services, where it showed a sharp rise in January 2002 compared to previous months of January. Series relating to bargain-sales products were not included. In view of the method adopted, the price falls in January for clothing could have been wrongly attributed to the euro effect and this phenomenon would therefore have distorted the estimates.

(7) The first method had consisted of identifying the principal causes of the difference between the monthly change in the overall index in January 2002 and in January 2001, and then imputing the «unexplained» part of the difference to the euro effect. The second consisted of including in the calculation of price variations only those items for which the shift to round prices in euros (round, but not necessarily psychological) turned out to be on a large scale.

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January (to 40.8% from 17.9% in December). This massive adjustment in prices has been accompanied by a high rate of price-tag changes. All in all, the euro effect on prices of services is estimated to have been +0.5% for Q1 2002, out of a total rise of 1.1% (compared with 0.3% during Q1 2001). This means that the acceleration in the prices of services over this period is not uniquely attributable to a euro effect, with other factors coming into play. These included the acceleration in the construction cost index (+4.76% in Q3 2001, as against +0.72% a year earlier) and the ending of the freeze on rents in the assisted housing sector, which influenced the prices of housing services. There were revisions also in the cost of certain healthcare services (during Q1 2002, doctors' fees rose by 3.4% and those of medical auxiliaries by 3.6%). Insurance prices rose much faster than last year because of an increased volume of claims.

In the case of clothing, the changeover to the euro also led to a slight acceleration in prices. The impact was slightly more marked in February than in January, probably because of the ending of the winter sales.

The durable goods sector, where prices traditionally show a tendency to decline, stands out distinctly from the other sectors, in that the impact of the change to the new currency seems in this case to have been generally negative. Moreover, far from fading, this euro effect increased between January and March: -0.15% in January, -0.20% in February, -0.25% in March. Graphs 9 and 10 make it easier to understand the phenomenon at work here, by demonstrating the gradual shift from prices that had been psychological in francs to lower psychological prices in euros. In addition, it is likely that this process is not yet over and that the impact will last during coming months.

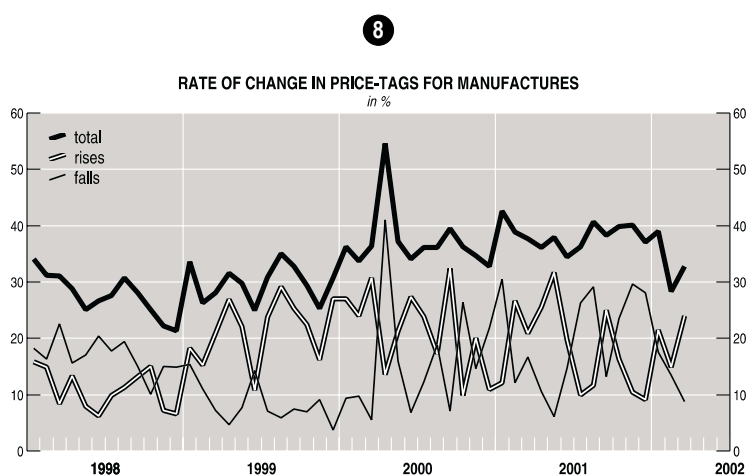
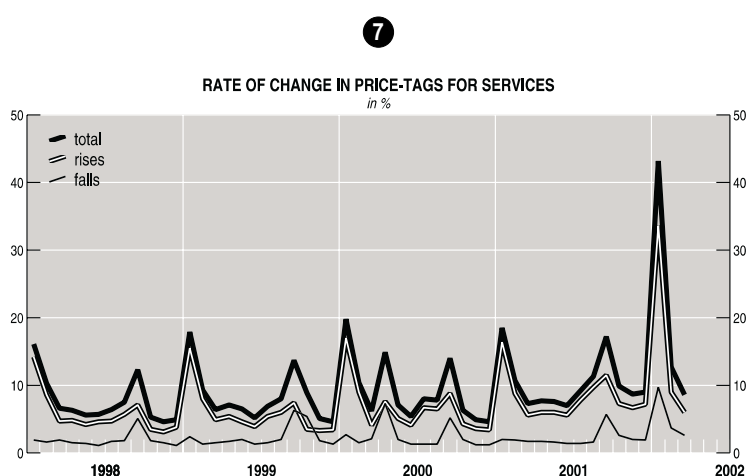
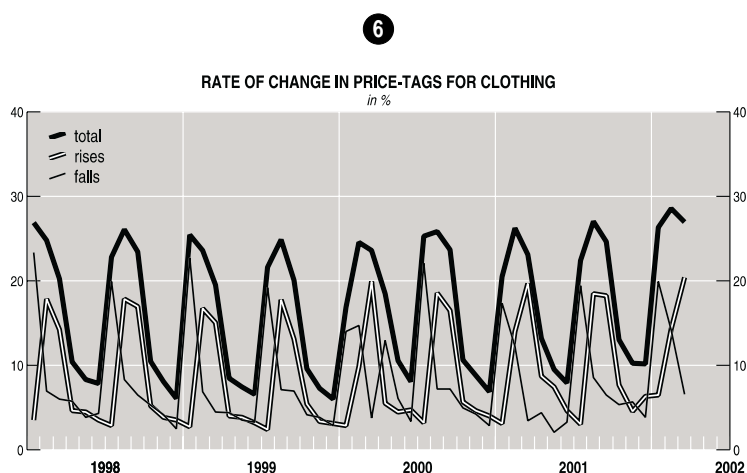


TABLE 6 : EURO EFFECT BY SECTOR

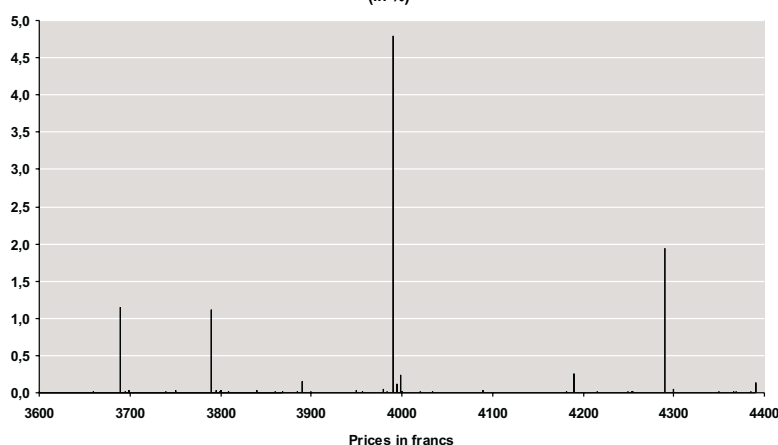
Sectors	January 2002	February 2002	March 2002	Q1 2002
Food	0.07	0.00	-0.01	0.06
Durable goods	-0.15	-0.20	-0.25	-0.60
Clothing	0.05	0.10	0.04	0.19
Other manufactures	0.06	0.00	0.03	0.09
Services	0.42	0.04	0.04	0.50
Total ex. public tariffs and fresh produce	0.17	0.01	0.01	0.19
Total	0.10	0.01	0.00	0.11

Initial conclusions regarding the impact on prices of the changeover to the euro

TABLE 7 : GROUPINGS WHERE THE EURO EFFECT IS MOST MARKED

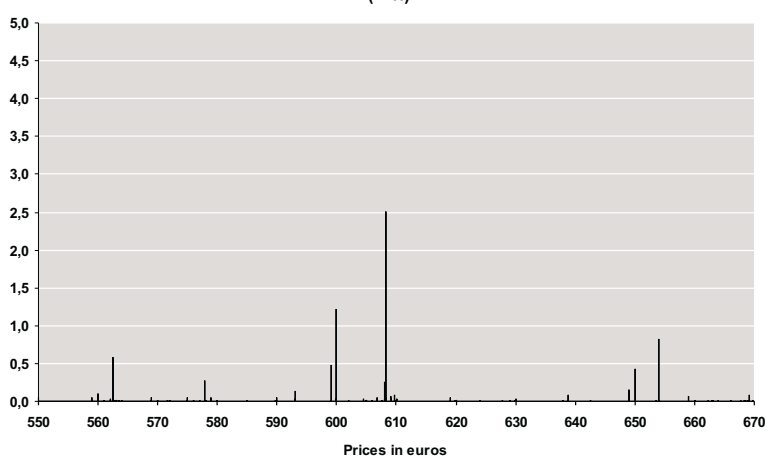
Sectors	Group or grouping	Weighting 2002 (%)	Euro effect				Euro effect on Q1 2002 inflation
			January 2002	February 2002	March 2002	Q1 2002	
Food	Bread	0.6	0.18	0.02	0.07	0.27	0.002
	Pastries	0.6	0.29	0.01	-0.01	0.29	0.002
Durable goods	Audio-visual equipment	0.8	-0.40	-0.24	-0.36	-1.00	-0.008
	Major household goods, electric or not	0.8	-0.24	-0.26	-0.19	-0.69	-0.005
	IT equipment, including PCs	0.3	0.01	-0.27	-1.02	-1.28	-0.003
	Photographic and cinema equipment	0.2	-0.17	-0.59	0.10	-0.66	-0.001
	Telephone and fax equipment	0.1	-1.08	-0.38	-0.27	-1.73	-0.001
Clothing	Footwear	1.1	0.21	0.25	0.03	0.49	0.005
	Men's undergarments	0.5	0.04	0.17	0.02	0.23	0.001
Other manufactures	Jewellery	0.7	0.02	0.15	0.14	0.31	0.002
	Sound and image recording media	0.6	0.03	0.16	0.02	0.21	0.001
	Toys and games	0.5	0.09	-0.40	0.06	-0.25	-0.001
Services	Catering	4.4	0.66	0.06	0.05	0.77	0.034
	Items purchased in cafés	0.9	1.49	0.01	-0.01	1.49	0.013
	Recreational services	1.0	0.66	0.25	0.05	0.96	0.010
	Cultural services	1.0	0.87	-0.09	0.14	0.92	0.009
	Maintenance and repair of private vehicles	2.1	0.20	-0.02	0.17	0.35	0.008

DISTRIBUTION OF PRICES OF DURABLE GOODS IN MARCH 2001
(in %)



9

DISTRIBUTION OF PRICES OF DURABLE GOODS IN MARCH 2002
(in %)



10

How to read graphs 9 and 10:
From one year to another, the distribution of prices of durable goods is shown for the same price range (3600-4400 francs, roughly equivalent to 550-670 euros). In March 2001, the price of 3990 francs stands out quite distinctly, with a frequency of 4.79%. It will be seen that, a year later, the price obtained by a straightforward conversion of this amount into euros (608.27 euros) is still often found (in 2.5% of cases). Even so, its frequency has diminished and at the same time two new prices have come to the fore that are psychological in euros: 599.99 and 599.00. As these prices are below the previous modal values, the impact of the changeover to the euro seems to be beneficial to the consumer in the case of durable goods.

If one makes an examination using a more refined classification than major sectors (*cf. table 7*), it turns out that just a few types of services explain a large part of the euro effect seen for the overall index. These are services linked to catering, leisure and repairs. In particular, in January cafes and restaurants contributed almost half the total euro effect.

Within a given sector, the precise timing of the changeover to psychological prices also seems to have varied from one group or grouping to another. It is in the durable goods sector that timing differences are the most visible. For example, price adjustment in many cases already took place in January for telephone and fax equipment, but it was only in March that they were on any real scale for PCs.

Conclusion

All in all, the availability of price returns for Q1 2002 makes it possible to refine the analysis of the impact on prices of the changeover to the euro as sole legal tender. In this connection, the most important

phenomenon since the start of this year has indeed been the manner of the shift to new psychological pricing schedules in euros. This change was of little importance in the case of foodstuffs *ex* fresh produce and manufactures *ex* clothing and *ex* durables. On other hand, it operated distinctly in January in services and is taking place more gradually in clothing and durable goods.

The changeover to the euro added roughly 0.1 of a point to inflation in January, but was globally neutral in its effect on prices in February and March. However, there are wide differences between sectors, with prices of services being pushed upwards and those of durable goods downwards.

On top of these first-quarter effects, it is also necessary to remember the phenomena seen during last year. The introduction of pricing in euros had in fact begun in Q2 2001 in the case of food and everyday manufactures and had been accompanied by an acceleration in prices. Nevertheless, it remains difficult to establish a causal link with any certainty, let alone quantify it, for two

reasons: first, because other factors were simultaneously pushing prices of these same products up; second, because the marked lull seen between Q4 2001 and the beginning of Q2 2002 in the prices of these same products suggests that part of this phenomenon was in fact transitory, being linked to a simple shift in the timing of price adjustments. No definitive conclusion can therefore be drawn at this stage. As in the case of food and everyday manufactures, it is possible that the additional rises due to the changeover to the euro, especially in services, could therefore in the end be partly compensated by a temporary fall in the rate of price tag changes.

In the final analysis, it seems impossible at this stage to put forward quantified conclusions that are both definitive and precise. Analysis of the period prior to 1 January 2002 remains problematical and the phenomena recorded since January may be partly temporary. Nevertheless, the order of magnitude calculated in this study seems robust, showing that the changeover to the euro has led to only a slight rise in inflation in France. ■