
Status of the Transition to Euro Banknotes and Coins

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INTRODUCTION

The introduction of euro banknotes and coins in the euro area¹ was a huge task that affected the everyday lives of more than 300 million citizens. Billions of euro banknotes and coins were ready to be put into circulation on E-day, 1 January 2002. The size of this operation can be illustrated by a couple of examples: laid out one after the other, the banknotes would reach from the Earth to the moon and back twice, and the total weight of the coins was more than 24 times that of the Eiffel Tower. Within two months, from 1 January to 28 February 2002, all these banknotes and coins replaced the national currencies of the euro area member states as legal tender.² It had thus become possible to use the same banknotes and coins in all euro area member states (irrespective of the different national sides of the euro coins).

In spite of the relatively short dual circulation period, the operation required several years' planning, involving large areas of society. Legislation had to be in place, banknotes and coins manufactured and distributed, information campaigns launched, etc. The key position of the banking system in relation to payment systems naturally meant that the banks were also a key player in connection with the introduction of the euro. Companies had to switch to pricing and submission of accounts in euro. Last, but not least, citizens had to get accustomed to the new banknotes and coins when shopping, comparing prices, etc.

The transition to euro banknotes and coins was a success, particularly in view of the scale of the operation. Only few problems arose, and the changeover was more rapid than expected. After only one week the majority of transactions in the euro area were in euro. The smooth

¹ Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal and Spain.

² For a description of the introduction of euro banknotes and coins in Ireland, see Ulrik Bie, From Irish Pounds to Euro, Danmarks Nationalbank, *Monetary Review*, 2nd Quarter 2002. In addition, the European Commission (Review of the introduction of euro notes and coins, COM(2002) 124 final, March 2002), the Bank of England (Practical issues arising from the euro, May 2002) and the European Central Bank (Evaluation of the cash changeover, April 2002) have all issued reports on the cash changeover.

transition was to a large extent attributable to a carefully planned cash changeover and a positive attitude on the part of the citizens. This article looks into the cash changeover from the planning stage to the actual introduction of euro banknotes and coins, as well as various consequences of the changeover such as possible derived price increases.

PREPARATION OF THE CASH CHANGEOVER

While the overall framework for the introduction of euro was planned at the European level, the actual organisation and implementation took place at the national level. Detailed national changeover plans were prepared in all euro area member states, taking into account the framework set up in e.g. the EU treaty. The basis was the introduction of the euro on 1 January 1999, and that for the first three years the single currency would only exist as account money. Euro banknotes and coins were to be introduced on 1 January 2002, and replace the national banknotes and coins after a maximum of two months. A few countries opted for an even shorter dual currency period (France, Ireland and the Netherlands).

In virtually all euro area member states a committee was set up to handle the overall coordination of the cash changeover. In most cases this committee was headed by a representative of the Ministry of Finance, and the members came from a number of institutions and organisations deemed to be important in the transition phase. A key task for these committees was to ensure that the necessary preparations were made by the responsible players, so that the changeover plan could be duly implemented. The central banks played an important role in these committees, particularly with regard to the preparations in the financial sector and the actual cash changeover.

The decentralised approach to the preparations for the euro changeover made it possible to adapt the process to the traditions of the individual member states. For instance, the degree of coordination varied – in some countries measures tended to be centrally coordinated, while other countries to a larger extent left the initiative to the individual institutions. Parallel with the national information campaigns, the European Central Bank (ECB) and the European Commission conducted cross-border campaigns.

The tasks related to the cash changeover were varied and extensive. Parliaments had to adopt legislation giving all parties involved a firm basis for their further planning. Banknotes and coins had to be manufactured, and large public institutions such as tax authorities needed time to implement projects to make their IT systems euro compatible.

On top of that, this coincided with other large IT projects relating to the millennium rollover. Alongside these concrete tasks was the overall coordinating role of ensuring and promoting timely euro preparations on the part of other players, and spreading awareness of the cash change-over among the general public.

The banks in the euro area were important for the transition to euro. The introduction of the euro on 1 January 1999 had already presented a major challenge to the banks, since the financial markets all at once had to operate in euro instead of the 11 national currencies (Greece did not adopt the euro until 1 January 2001). This transition was seamless. In connection with the cash changeover the primary tasks during the transition period were to convert bank customers' accounts to euro accounts and to start calculating non-cash payments, e.g. cheques, in euro. Towards the end of 2001 the banks also faced a number of logistics tasks relating to putting the euro into circulation at New Year, cf. below.

The scale of the business enterprises' euro preparations varied according to their size. For large, complex organisations, as for the large public bodies, it was important to get the necessary euro projects on track as soon as possible. Tasks included changing accounting practices, redenominating share capital and converting payrolls to euro. For small and medium-sized enterprises the preparations were less extensive, but they, too, had to adapt e.g. accounting practices and payrolls to euro.

Information campaigns informing citizens of the introduction of euro banknotes and coins were a prerequisite to a successful cash changeover. Many resources were used to inform the public of the forthcoming operation. The ECB, the European Commission and national public and private institutions all conducted information campaigns via a wide range of media. For instance, citizens were informed of the transition to euro via brochures distributed to households, advertisements in newspapers and magazines, and TV spots. A special effort was made to reach weak groups, primarily the blind, weak-sighted and hearing impaired, and people with learning disabilities. Meetings were arranged for these groups during 2001, at which they could familiarise themselves with specially manufactured non-negotiable euro banknotes and coins.

Were the euro area member states – with all their diverse and necessary preparations – then ready for the cash changeover on 1 January 2002? In short, yes. Even though many banks and business enterprises adapted their systems to euro at a relatively late stage. In many member states most bank accounts were not converted to euro until late in 2001, and in particular small and medium-sized enterprises' (lack of) preparation gave cause for concern. However, with a large effort towards the end of the year major transition problems were avoided.

The euro-readiness of the general public was monitored regularly via opinion polls. Again, it dawned upon people fairly late what was going to happen at New Year 2001/02. One reason may be that people do not feel any great need to seek information about something which lies relatively far into the future. In addition, the information campaigns were intensified towards the end of 2001. For instance, all euro area member states sold euro coin sets to the public from mid-December, and in many places they were soon sold out. The more widespread use of dual pricing, i.e. pricing in both euro and the national currencies, towards the end of 2001 undoubtedly also helped to raise awareness. At the start of 2002 three quarters of the population in the euro area member states felt well prepared for the forthcoming cash changeover, but a major logistics operation still awaited if it was to be a success.

THE ACTUAL CASH CHANGEOVER

15 billion euro banknotes and 51 billion euro coins had been manufactured and were ready to be put into circulation from 1 January 2002. Parallel with the introduction of euro banknotes and coins, most of the 9 billion national banknotes and 107 billion national coins in circulation were to be withdrawn. With an operation of this scale it was clear that there would be pressure on the channels by which cash is put into or withdrawn from circulation, e.g. cash-in-transit companies, banks and shops. In addition, shops and citizens had to operate with two types of banknotes and coins at the same time, and get used to calculating in a new currency.

To ease the pressure on the cash distribution channels after New Year, central banks and coin producers had already started distributing euro banknotes and coins to banks and other financial institutions as from 1 September 2001. At the turn of the year the banks had received euro banknotes corresponding to 67 per cent of the value of the banknotes in circulation as at 15 January 2002, and euro coins corresponding to 96 per cent of the value of coins in circulation as at 15 January 2002. The banks were to some extent able to redistribute euro banknotes and coins to retailers before New Year, thereby enabling them to give change in euro from day one. This option was only used to a limited extent; around 10 per cent of the value of the stock of euro banknotes and 22 per cent of the value of the stock of euro coins were redistributed.

One reason for the limited redistribution of cash denominated in euro was that the banks' distribution to retailers (as well as the central banks' distribution to the banks) entailed relatively high insurance and storage costs. There were also large fines for circulating cash denominated in

euro to the public before the turn of the year. Undoubtedly, many small retailers found these costs too high, and in any case they would have access to cash denominated in euro at the banks fairly soon after 1 January 2002.

On 1 January the first euro banknotes and coins were put into circulation. This was primarily effected via three channels – cash dispensers, banks and shops – all of which were more or less ready to dispense euro immediately. 80 per cent of cash dispensers dispensed euro on 1 January, and within the next few days the remaining dispensers were converted. In some euro area member states (Germany, Luxembourg and Spain) banks were open on 1 January, and during the next few days many people visited their banks to acquire euro banknotes and coins. Most large shops were able to give change in euro from day one, while smaller shops tended to give change in the currency received during the first few days of January. However, this soon changed as the smaller shops also acquired ample supplies of euro banknotes and coins.

Despite the many preparations beforehand, e.g. frontloading of euro cash and requests to the public to stock as little cash as possible around New Year, it proved to be impossible to completely avoid "bottlenecks" in connection with the cash changeover. In some areas, the banks experienced large queues on the first few days of the year. People were impatient. This was to some extent due to curiosity, but they probably also wanted to avoid having to handle two currencies at the same time. Consequently many chose to exchange all their national banknotes and coins to euro right away. This behaviour took the involved parties somewhat by surprise. Before the turn of the year a slower cash changeover had been predicted, where people would gradually acquire euro banknotes and coins by receiving change in euro when making payments in national banknotes and coins.

One consequence of this eagerness to acquire euro banknotes and coins was a surprisingly rapid cash changeover. Within a few days the national banknotes and coins had been superseded by euro. After just one week 75 per cent of all cash payments were in euro, and after a fortnight this figure had risen to more than 90 per cent. The national banknotes and coins were also withdrawn from circulation at a rapid pace. National banknotes corresponding to one third of the value of the banknotes in circulation at New Year had been returned to the central banks within a fortnight, and by early February national banknotes corresponding to three quarters of the value had been returned. These figures do not even give the full picture of the speed at which the national banknotes were withdrawn, since bottlenecks occurred. This meant that a lot of cash still figured in the statistics for money in

circulation for a while after it had actually been withdrawn from circulation.

So far, the introduction of euro banknotes has reduced the incidence of counterfeiting. The many security elements of the euro banknotes and the relatively late publication of their appearance undoubtedly contributed to this. In the first six months of 2002 almost 22,000 counterfeit euro banknotes were found, while the corresponding number of counterfeit national banknotes in the 12 euro area member states was 14 times higher in the same period of 2001.

The introduction of euro banknotes and coins has not been universally applauded. It is widely believed that many shops in the euro area have seen the cash changeover as an opportunity to raise prices significantly. This has been criticised by consumers. In a number of countries there have been threats of "consumer strikes", and in Germany the euro – nicknamed the "teuro"¹ – was even partly blamed for the economic slowdown.

However, the price statistics do not confirm this. In January 2002 the Harmonised Index of Consumer Prices (HICP) did rise by 0.5 per cent in relation to one month before, but according to the EU's statistical office, Eurostat, this was primarily due to a combination of higher prices for fruit and vegetables because of bad weather, and higher taxes on tobacco. According to Eurostat's estimates, the cash changeover can only account for price rises of maximum 0.2 per cent up to the end of June 2002.

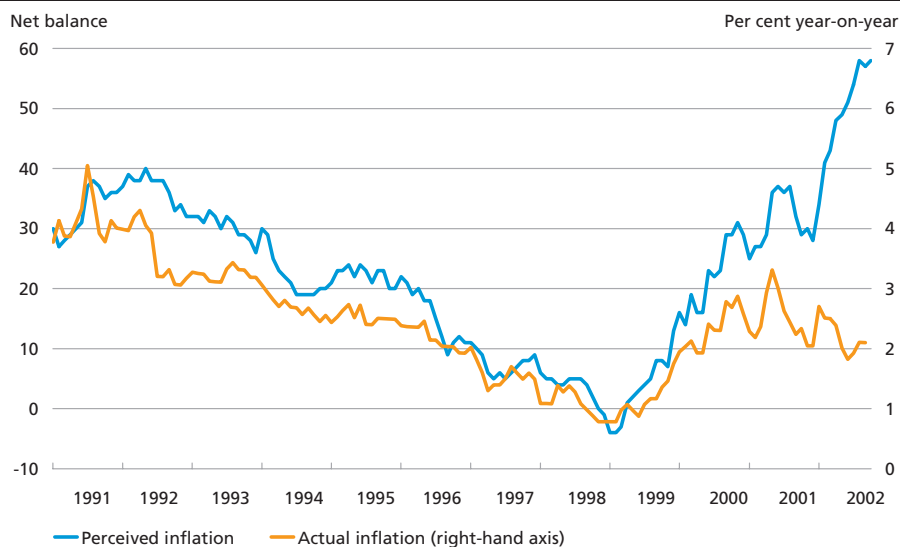
What is the explanation for the discrepancy between the widely perceived significant increase in prices in connection with the cash changeover and the actual statistics which show relatively modest effects on prices? On the one hand people may be exaggerating the price effects of the cash changeover. This hypothesis is supported by the European Commission Consumer Survey, an indicator which is prepared on the basis of monthly consumer interviews and gives information about consumers' opinions of inflation development over the past year.² It should be noted that the indicator gives qualitative (not quantitative) information about the perceived price development. Chart 1 shows that historically the consumer indicator has mirrored the actual price development remarkably well. However, from the year 2000 onwards consumers' perceived inflation has increasingly diverged from the actual inflation. This trend has become ever more pronounced during 2002 since consumers

¹ A pun on the word "teuer", meaning expensive.

² The survey is published in European Economy Supplement B, which is issued by the European Commission on a regular basis.

PERCEIVED AND ACTUAL INFLATION IN THE EURO AREA

Chart 1



Note: Perceived inflation is stated using the European Commission's index. The net balance is the difference in percentage points between the percentage of respondents stating that the cost of living was higher than 12 months earlier and the percentage of respondents stating that the cost of living was lower or the same. Actual inflation is stated using HICP. Monthly observations. The last observation is from September 2002 for actual inflation and from October 2002 for perceived inflation.

Source: EcoWin.

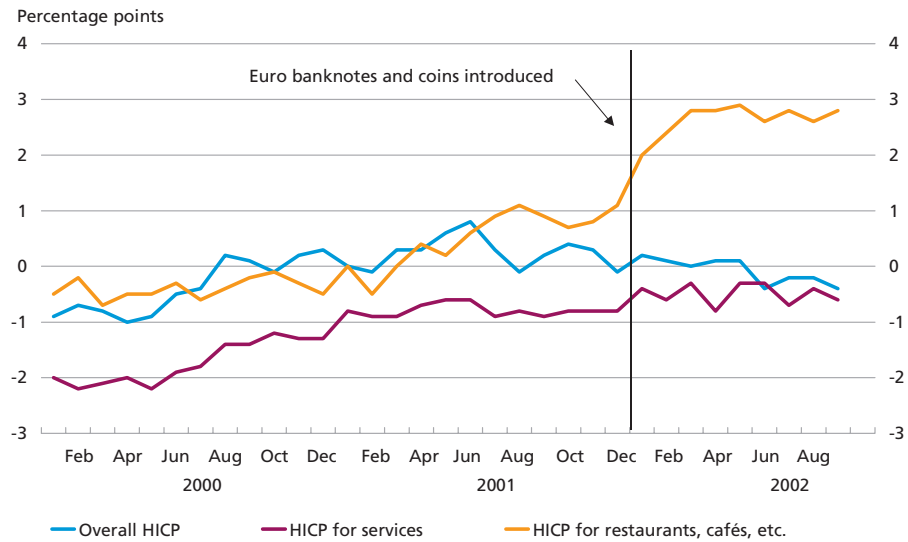
have perceived inflation to be increasing even though actual inflation has gradually declined since January.

One reason for the growing discrepancy between perceived and actual inflation could be that people see large price increases for everyday goods and services as an indication of a significant increase in prices in general. However, this is not necessarily the case. A price index includes a wide range of prices, and lower prices for goods which are not purchased so often could potentially offset increasing prices for other goods, without this being registered by consumers. Indeed this may very well have been the case in the first half of 2002. Price rises were above normal levels for a number of goods and services purchased regularly – e.g. café and restaurant prices – which may, or may not, have been linked with the cash changeover. On the other hand, other prices increased at a slower rate or even fell, so that the overall HICP for the euro area rose significantly less than many people perceived.

The price development in the euro area did not differ markedly from that in Denmark at the time of the cash changeover, except for certain subcomponents, cf. Chart 2. New Year 2001/02 definitely saw an unusually strong price development for restaurants and cafés in the euro area compared to Denmark. However, this area is only included in the total

DIFFERENCE BETWEEN PRICE DEVELOPMENTS IN THE EURO AREA AND DENMARK

Chart 2



Note: Price development (per cent year-on-year) in the euro area less the corresponding price development in Denmark. Monthly observations. The last observation is from September 2002.

Source: Eurostat.

price index and the price index for services at respectively 7 and 17 per cent. For the more aggregate price indices there was no diverging development. In January 2002 Denmark still saw a higher rate of inflation for services, including e.g. restaurants and cafés, and relative to the euro area Danish inflation has actually increased gradually over the past year so that inflation is currently higher in Denmark than in the euro area.

On the other hand, it cannot be excluded that the price statistics understate the price effects of the cash changeover. In reality it is impossible to know what the prices would have been if the cash changeover had not taken place. To look into this issue, the Dutch central bank, De Nederlandsche Bank, has conducted interview surveys among retailers. In a first survey¹, which was conducted in January 2002, it was concluded that the cash changeover had led to an increase in the Dutch price index by 0.2-0.4 per cent. It is assessed that two thirds of this increase relates to rounding to a "psychologically right" price, while one third reflects the higher costs of introducing euro banknotes and coins. In another survey² conducted in June 2002 it is assessed that the cash changeover

¹ C. K. Folkertsma, C. van Renselaar and A. C. J. Stokman, Smooth euro changeover, higher prices? Results of a survey among Dutch retailers, Research Memorandum WO no 682.E, April 2002, De Nederlandsche Bank (accessible from the Dutch central bank's home page, www.dnb.nl).

² Getting used to the euro, Quarterly Bulletin September 2002, De Nederlandsche Bank (accessible from the Dutch central bank's home page, www.dnb.nl).

had led to an increase in the Dutch price index by 0.6 per cent. This figure is not necessarily incompatible with Eurostat's price effect estimate of 0.2 per cent for the euro area, since the Netherlands has seen relatively high inflation for some time. At the end of 2001, inflation in the Netherlands was 5.1 per cent, compared with 2.0 per cent for the euro area overall.

The different estimates for the price effects of the cash changeover thus indicate that the introduction of euro banknotes and coins has had an effect on prices which cannot be deemed to be insignificant, but which is all the same relatively modest in relation to the aggregate consumption pattern. Some of the price increases are attributable to costs incurred by retailers in connection with the cash changeover. In addition, many shops saw 1 January 2002 as a natural date to introduce some of the price adjustments made from time to time. Therefore the cash changeover may merely have led to concentration and earlier introduction of price adjustments which would have taken place anyway. While the cash changeover has been linked with price increases, it is expected that in the longer term the euro will dampen price increases or even lead to lower prices for certain products. This is due to the fact that the single currency makes it easier to compare prices across borders, which is likely to result in enhanced price competition.

The reports of higher prices in the wake of the cash changeover do not significantly distort the picture of a successful introduction of euro banknotes and coins. In general the new banknotes and coins received a warm welcome. In an opinion poll conducted by the European Commission at the end of January 2002, 80 per cent of the respondents stated that the introduction of euro banknotes and coins had taken place in "very good" or "rather good" conditions. In the same survey more than two thirds said that they personally were "quite happy" or "very happy" that the euro was their new currency.