

THE EURO IN CENTRAL AND EASTERN EUROPE

– SURVEY EVIDENCE FROM FIVE COUNTRIES

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Introduction

Last year, there was a lively debate about whether the euro will be able to take over the role of the Deutsche mark in Central and Eastern Europe. This debate was mainly driven by indications of a decreasing foreign demand for Deutsche marks which was attributed to uncertainties in relation to the changeover and fears of owners of black market money to disclose the origin of their holdings. (Sinn and Westermann, 2001a and b). Now, in light of this debate and a few months after the cash changeover, this article presents new survey results that allow an assessment of the role of the euro in Central and Eastern Europe. In particular, the survey shows the actual exchange behaviour of residents of Central and Eastern European countries and whether any major shifts in the composition of foreign cash have occurred. Furthermore, the results shed light on the motives behind the decision to hold euros, people's opinions about the euro or what people in Central and Eastern European countries think about the stability of the euro.

The representative survey was commissioned by the Oesterreichische Nationalbank and conducted by Gallup in Croatia, Hungary, the Republic of Slovenia, the Czech Republic and the Slovak Republic in April/May 2002. It is in line with previous surveys that have been conducted since 1997 on a biannual basis each April/May and October/November (Stix, 2001). For each survey and in each country about 1,000 persons over the age of 14 are interviewed.¹ The fact that the surveys have

been repeated allows to analyse changes in the behaviour of Central and Eastern Europeans over time.

For which currencies were Deutsche marks exchanged?

All respondents who held Deutsche marks around 1 January 2002 were asked about their exchange behaviour. The answers, expressed in percent of respondents, are summarised in the table below. In sum, 69 percent exchanged their Deutsche marks for euros, 5 percent for US dollars, 1 percent for Swiss francs and 23 percent for local currencies. As the figures for the individual countries show, the vast majority of Croatians and Slovenians exchanged their foreign currency holdings for euros. In the other countries, a large share of respondents opted for local currencies and in the Czech Republic and in Slovakia to a sizeable extent for US dollars.² By and large, similar results were obtained for the Austrian schilling (not shown).

The spread of foreign currency holdings

The focus of the previous question on currency holdings around 1 January 2002 might bias the results in favour of the euro, which had not been available before 1 January 2002. For example, this could be the case if Deutsche mark holdings, and here supposedly illegal holdings, had already been exchanged for US dollars during the year 2001.³ At

² As the number of respondents is quite low for Hungary, these numbers should be treated with some caution.

³ Probably because of fears of declaring black market Deutsche mark holdings.

For which currencies were Deutsche marks exchanged?

	Euro	U.S. dollar	Swiss franc	Local currency	Others
Total	69	5	1	23	2
Croatia	82	2	1	15	0
Czech Rep.	46	11	1	40	3
Hungary*	43	3	3	52	0
Slovakia	50	14	1	31	4
Slovenia	77	2	0	17	4

Note: Numbers in percent of respondents who held Deutsche marks in the months around January 1, 2002.

* Low number of observations (40) for Hungary.

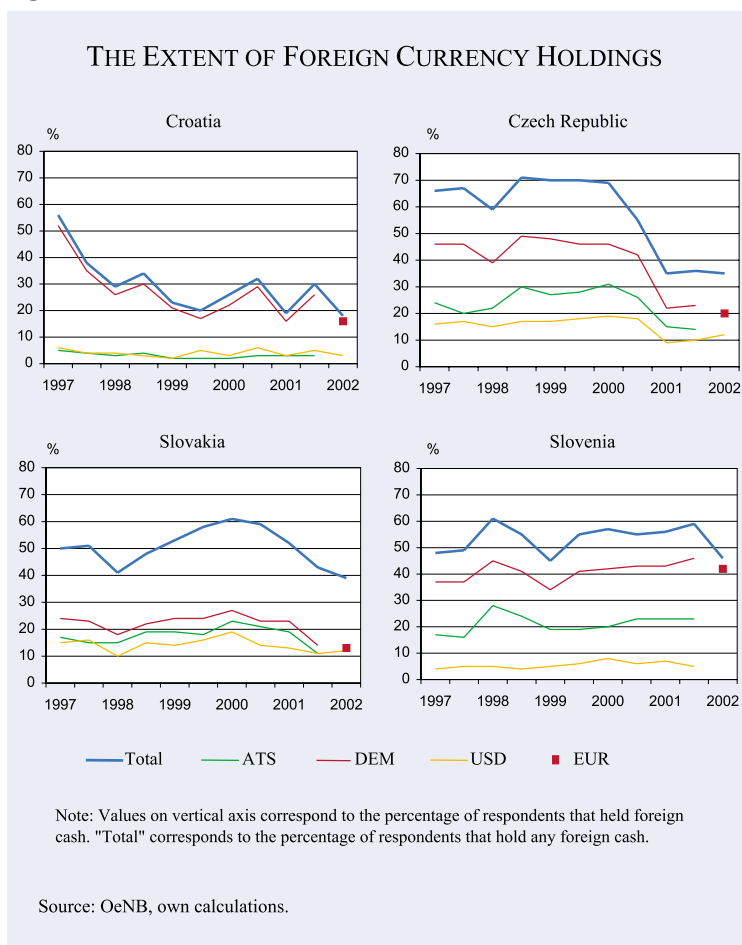
Source: OeNB, own calculations.

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The views expressed in this paper are those of the author and do not necessarily reflect the views of the Oesterreichische Nationalbank.

¹ The main focus of the surveys was to estimate foreign currency cash holdings of euros (EUR), US dollars (USD) and Swiss francs (CHF). For further details about the surveys, the reader is referred to Stix (2001).

Figure 1



any rate, the result that a relatively high share of respondents exchanged Deutsche marks for local currencies is in line with the findings from previous surveys which indicated a decline in the diffusion of foreign currency holdings in all countries except Slovenia. Figure 1 shows the evolution of both the percentage of private persons holding some kind of foreign cash (blue line) and a breakdown by currency (DEM, ATS, USD and EUR) from May 1997 to May 2002. The new survey results show clearly that this decline continued to be strongest in Croatia and the Czech Republic and to be a little weaker in Slovakia.⁴ In May 2002, euros were held by 42 percent of Slovenians, 20 percent of Czechs, 16 percent of Croatians, 13 percent of Slovaks and 11 percent of Hungarians over the age of 14.

To compare these euro shares with previous values, we need data on the percentage of persons who held either schillings or Deutsche marks prior to 2002 (thus preventing double counting by eliminating all

respondents that held both currencies). However, these data are not available. Therefore, we compare the share of holders of euros, including the share of those that still held Deutsche marks in 2002, with the shares of Deutsche mark holders found in earlier surveys. This exercise shows that in all countries the euro share in 2002 is lower than the Deutsche mark share in November 2001. It should be noted that the euro share is even lower than the Deutsche mark share alone (i.e. not counting any previous schilling shares). This suggests that a "correct" comparison, that is a comparison that also includes the share of respondents who held schillings, would show an even sharper drop.

Interestingly, in all countries alike, the US dollar share was highest around the year 2000 and declined slightly thereafter. During the last few surveys it remained roughly constant. Although both the share of US dollar and Deutsche mark holdings declined in a longer-term perspective, the percentage decline from the peak in 2000 to November 2001 is stronger for the Deutsche mark than for the US dollar (except in Slovenia).

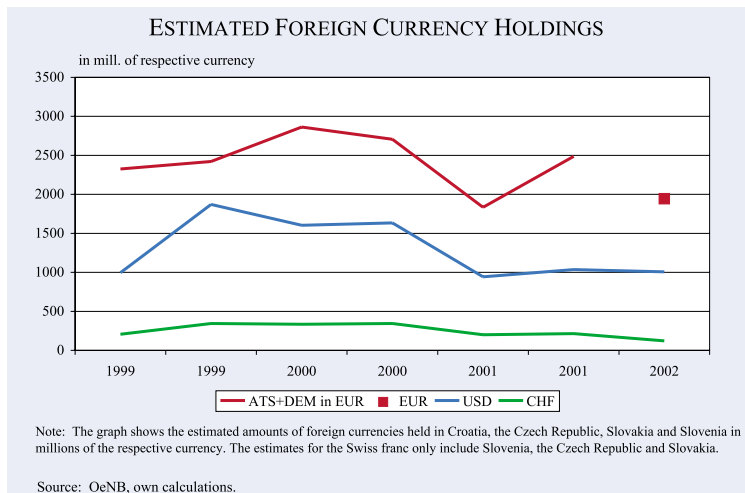
Foreign currency amounts

The table and Figure 1 contain information about the behaviour of respondents but are otherwise uninformative about the size of foreign cash balances. As the respondents are also asked about their individual foreign cash holdings, it is possible to derive an estimate of the actual amounts that were circulating. In particular, this figure is calculated by weighting the class means of the categorised amounts with the percentage share of respondents who answered that the amount of their foreign currency holdings lies in the respective range.⁵ Then, by multiplying the resulting per

⁴ Again, the graph for Hungary is not shown due to the low number of respondents.

⁵ The survey does not ask about the precise amount but rather about categorized amounts (< 100, < 500, etc.).

Figure 2



capita average holdings by total population (older than 14 years), we obtain an estimate of the amount of foreign currency held in the respective country. It should be emphasised that the resulting numbers represent just crude estimates which incorporate neither illegal nor other undisclosed cash holdings (Stix, 2001). Therefore, these estimates are likely to understate the true amount by a sizeable factor. However, even in spite of these limitations, we still consider these estimates to be useful, as changes over time might be indicative of changes in the overall demand for foreign cash.

The results are summarised in Figure 2, which shows the euro amount of May 2002 and, for ease of comparison, the aggregated schilling and Deutsche mark amounts expressed in millions of euros from May 1999 to November 2001. Also the estimated US dollar and Swiss franc amounts are depicted.⁶

As presented in Figure 2, the estimated nominal amount of euros that circulated in the analysed countries clearly declined from May 2000 to May 2002.⁷ However, due to some short-run fluctuations, the size of the percentage change depends heavily on the choice of the base year, ranging from – 32 (May 2000 to May 2002) to – 16 percent (May 1999 to May 2002). Since we do not rely too much on such indi-

⁶ If the number of respondents is very small, the estimated amounts show sizeable variations. Therefore, we do not put too much faith in analyses based on single observations. Because the number of respondents is small in Hungary, the euro and US dollar estimates are based on the remaining four countries only. In the case of the franc, which in general is only held by a low percentage of respondents, Croatia was also excluded.

⁷ In comparison to the survey in May 2001, the euro amounts did not decline. However, as mentioned above (compare with footnote 4), we do not rely on one individual observation.

vidual observations, we think that a more robust measure of the percentage decline in the demand for euros might be obtained by calculating the mean holdings in 1999 and 2000 and by comparing this figure with the euro amount of May 2002. This exercise shows that, relative to the average holdings in 1999 and 2000, the amount of euro holdings declined by about 25 percent. The surveys also allow to get (albeit quite imprecise) estimates of the size of Deutsche mark and schilling stocks that had not been exchanged yet. If

we assume that these stocks are exchanged for euros, then the average decline would be somewhat lower (– 18 percent), but still substantial.

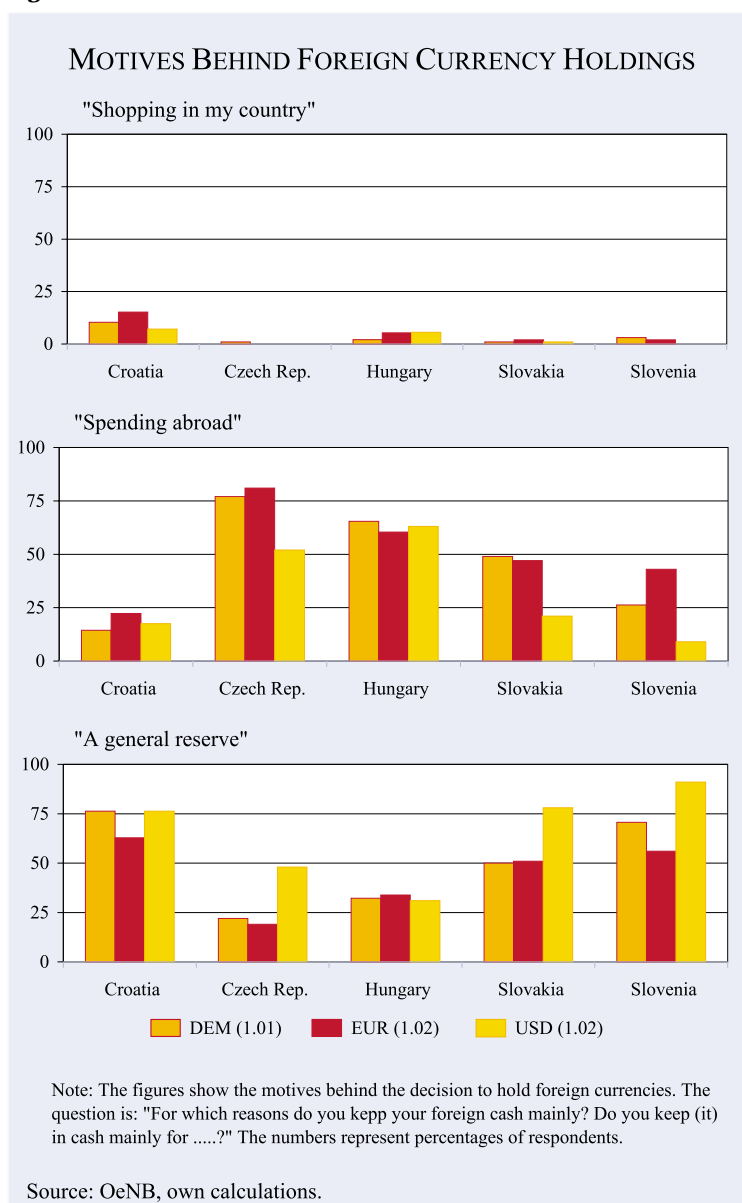
Concerning the US dollar, the surveys show that the amount of US dollars has remained roughly constant over the last three surveys. If seen in a longer-term perspective, however, there is also a decline in US dollars. A longer-term reduction is also found for the Swiss franc.

What are the motives behind euro and US dollar holdings?

Prior to the introduction of euro cash, there were arguments that the euro would not be able to attain as high a reputation as the Deutsche mark had enjoyed in Central and Eastern Europe. An analysis of the reasons behind the decision to hold foreign currencies may shed some light on this issue. Therefore, the respondents were asked about their motives. The corresponding results for the euro and the US dollar, expressed in percentage of respondents, are depicted in Figure 3. To compare the role of the euro with the role of the Deutsche mark, the corresponding values for the latter from the survey in May 2001 are also given.⁸ The results show that currency holdings are hardly motivated by domestic transactions except in one case: in Croatia 15 percent (euro) and 7 percent (dollar) of all respondents answered that this is their main motive for holding euros or US dollars. Euro hold-

⁸ Due to the possible presence of seasonality effects, the May 2002 values are compared with the May 2001 and not with the November 2001 values.

Figure 3



ings are predominantly used for transaction purposes (e.g. shopping or holidays in Austria or in Germany) by Czechs and Hungarians. This was also found to be a major motive in Slovakia. By contrast, euro holdings are predominantly considered to be a general reserve by Croatians and Slovenians and, to a high degree, by Slovaks. In these three countries, US dollars are also held primarily because of their store of value function. In the Czech Republic and in Hungary, US dollars are mainly used for expenditures abroad.

A comparison of the motives for holding Deutsche marks and euros shows sizeable changes only for Croatia and Slovenia, where the "spending abroad" motive gained in importance. Most likely,

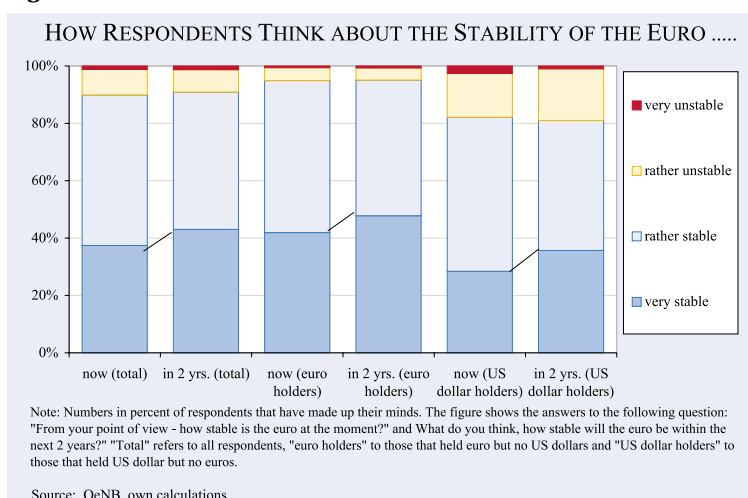
this can be explained by the fact that a high share of former schilling amounts in both countries was held for shopping purposes. These schilling holdings were partly transformed into euro holdings, implying that a larger share of euro holdings – in comparison to Deutsche mark holdings – in these two countries can now be linked to shopping purposes. However, apart from these two cases, the motives for holding euros are remarkably similar to those for holding Deutsche marks.

What do respondents think about the stability of the euro?

One aspect of the most recent survey was to get an indication of the overall standing of the euro in the countries under consideration. To this end, the respondents were asked whether their attitude towards the euro had turned more or less favourable compared to their previous opinion. The answers show that in May 2002, 51 percent of respondents had a more favourable opinion of the euro. Only 13 percent answered that their opinion had turned less

favourable. Among those who held euros, 70 percent had a better opinion and 10 percent a worse opinion than before. The respondents were also asked for their opinion of the US dollar: Here, the share of people with a more positive opinion about the dollar is smaller (42 percent) and the share of those with a more negative opinion larger (16 percent). Among those who actually held US dollars, 64 percent had a better and 12 percent a worse opinion (compared to their previous opinion).

Further, the respondents were asked for their assessment of the current and future stability of the euro and the US dollar. In particular, respondents were asked how stable or unstable they con-

Figure 4

sider both currencies at the moment and over the next two years.⁹ The results for the euro are summarised in Figure 4, which shows the percentage of respondents that answered either "very stable," "rather stable," "rather unstable," and "very unstable." Figure 4 also shows a pairwise comparison of the answers concerning the current and the future situation for all respondents ("total"), then for those respondents who held euros but no US dollars (labelled "euro holders" in Figure 4) and finally for all respondents that held US dollars but no euro ("US dollar holders"). Four months after the introduction of euro cash, about 90 percent of the total population considers the euro to be rather stable or very stable. Among euro holders, this value is 95 percent. Among US dollar holders, expectedly, this value is lower, or, put differently, the percentage of those who consider the euro rather or very unstable is quite high (18 percent). Two things are remarkable about the respondents' assessment of the future stability of the euro: First, the percentage of those with a skeptical view about the future stability of the euro is low and about the same as the percentage of those with a skeptical view about the current stability of the euro. Second, the percentage share of those who answered that the euro would be very stable over the next two years is considerably higher than the share of those who answered that the euro is currently very stable. Surprisingly, this is even the case for those who held US dollars only.¹⁰

⁹ Notice that "stability" in this sense is used as a metaphor, a very general notion that can refer to the exchange rate or the inflation rate. We do not ask for the respondents' view about the stability of the exchange rate or of the inflation rate separately because the number of those without an opinion would be very high.

Finally, all respondents who held euros (or US dollars) were asked whether they planned to exchange these holdings for US dollars (or euros). Overall, 7 percent of all respondents answered that they think about exchanging their holdings (or plan to do so) and 88 percent answered that they do not.¹¹ In Croatia and Slovakia, where the percentage of those who exchanged Deutsche marks for US dollars was highest (see Table), 14 and 10 percent, respectively, answered "yes, sure" or "yes, maybe". As to the

planned exchange of existing US dollar holdings for euro holdings, three percent answered "yes, sure" or "yes, maybe" and 88 percent "probably not" or "no." Therefore, there seems to be a slight indication that more respondents plan to replace their dollar holdings by euro holdings than the other way around. However, due to the predominance of those who do not plan to switch currencies, the results provide more support to the view that sizeable portfolio shifts between euro and US dollar cash balances will not take place in the near future.

Expectations about the introduction of the euro

In light of the debates about European Union enlargement and, later, the introduction of the euro in some or all of the prospective EU member countries, the respondents were also asked whether they believed that their country would introduce the euro within the foreseeable future.¹² The answers of those who actually expressed an opinion can be summarised as follows: Only in Slovakia do the sceptics hold a majority: a total of 63 percent answered that they were "very or rather unsure." In all other countries, the clear majority was either "very sure" or "rather sure" that their

¹⁰ Similar to the euro, the results for the US dollar reveal a high degree of confidence in the current and future stability of the US dollar (90 percent and 92 percent, respectively). Among euro holders, the respective values are ("very stable" plus "rather stable"): 89.2 percent (now) and 90 percent (within the next two years). US dollar holders: 94.3 percent now and 95 percent within the next two years.

¹¹ The remaining share of respondents answered "do not know".

¹² The question was: "Do you believe that your country will introduce the euro within the foreseeable future - that is will it join the euro area?"

country would join the euro area; the largest majority was found in Slovenia, where 67 percent answered that they were “very sure” and 19 percent that they were “sure.”

Summary and implications

A recent representative survey commissioned by the Oesterreichische Nationalbank and conducted in May 2002 allows an assessment of the extent of foreign currency holdings in euros and US dollars among adult citizens in Croatia, the Czech Republic, Hungary, Slovakia and Slovenia. The main results and implications can be summarised as follows:

First, people who held Deutsche marks around 1 January 2002 were asked about their exchange behaviour. The results show that the majority exchanged their Deutsche marks for euros. Furthermore, a substantial share of respondents opted for local currencies, while the share of those who exchanged their holdings for US dollars is sizeable only in Croatia and Slovakia.

Second, the share of respondents who held euros in May 2002 is significantly lower than the share who held either schillings or Deutsche marks in November 2001 while the US dollar share remained roughly constant. In general, the proportion of inhabitants that held any foreign currency declined not only in a short-term perspective from autumn 2001 to spring 2002, but also in a longer-term perspective from 1997 to 2002 (in the long run except Slovenia).

Third, the estimated nominal amounts of euros held in Croatia, the Czech Republic, Slovakia and Slovenia declined substantially from 1999/2000 to May 2002. A decline relative to 1999/2000 can also be found for the US dollar and the Swiss franc while in the last three surveys from May 2001 to May 2002, the nominal amount of US dollars remained roughly constant.

Taken together, the results about the exchange behaviour (Table) and about the extent of foreign currency holdings (Figure 1) as well as the results from the analysis of the estimated amounts (Figure 2) do not point to a substantial substitution of Deutsche mark or Austrian schilling holdings for legal US dollar holdings. The surveys show that

people exchanged Deutsche marks mainly for euros or, to a lesser extent, for local currencies. The long-run reduction in the extent of foreign currency holdings as well as the fact that the euro amounts declined without an associated increase in either US dollar or Swiss franc amounts might reflect, as conjectured in Stix (2001), an increased confidence of Central and Eastern Europeans in either their local currencies (if foreign currencies were exchanged for domestic cash) or into their banking systems (if foreign currencies were exchanged for bank deposits). Of course, these results must be qualified to the extent that the survey cannot measure unreported illegal holdings.

Fourth, the results as to the perceived stability and the opinion of the euro show that only a few months after its introduction, the euro already has excellent “approval ratings” in Central and Eastern Europe. About 90 percent of all respondents think that the euro is currently rather or very stable and will remain stable or rather stable over the next two years. Among the group of individuals that actually held euros in May 2002, these numbers are even higher (about 95 percent). Furthermore, the motives behind the decision to hold euros are quite similar to the motives behind the decision to hold Deutsche marks.

Finally, a majority in Croatia, the Czech Republic, Hungary and Slovenia believes that the euro will be introduced in their country within the foreseeable future. Only in Slovakia, the majority doubts that the euro will be introduced.

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