CESEE Households amid the Financial Crisis: Euro Survey Shows Darkened Economic Sentiment and Changes in Savings Behavior

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This paper utilizes information from the OeNB Euro Survey, which was launched in 2007 and is conducted twice a year in ten CESEE countries. The most recent survey wave of May to June 2009 focused on the impact of the financial crisis on CESEE households. Results show, first, that the financial crisis is in fact severely felt throughout the region: Respondents' assessment of the current economic situation has deteriorated, trust in the future stability of local currencies has diminished, and trust in banks has declined in almost all countries surveyed. Second, the analysis of aggregate monetary statistics reveals that households reacted by adjusting their portfolios immediately, but developments differ substantially across countries. Third, in countries with more persistent withdrawals, euro cash in circulation, surprisingly, has declined because households resorted to dissaving to compensate for decreasing income. The authors conclude that although a massive shock has hit the region, no dramatic changes in the overall degree of euroization have occurred. This subdued impact is likely to signal that past stabilization efforts have paid off and that the economic and monetary policy measures taken in the course of the crisis were successful.

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1 Introduction

The global financial crisis has represented a massive shock to Central, Eastern and Southeastern European (CESEE) countries. The impact of the crisis on the macroeconomic development and on financial markets is well documented. Much less evidence, at least in a comparative perspective, has been available so far on how the crisis has affected households and how households assess current and expected economic developments. Similarly, relatively little is known about how households have adapted their economic decision making, if at all. In particular, adjustments of savings and portfolio decisions are issues of high policy relevance in the presence of considerable levels of de facto euroization in some countries.

Against this background, the goal of this paper is twofold. First, we provide evidence on how household sentiment has evolved in the course of the crisis. Regarding the portfolio choice of households, two factors can be deemed central to the choice of the currency denomination of asset holdings and the choice of cash versus deposits: confidence in the local currency, and trust in banks. Second, we study whether savings behavior has actually changed, and we present evidence on how foreign currency cash balances have evolved.

We utilize information from the OeNB Euro Survey. Since its launch in 2007, this survey has been conducted every half year in ten CESEE countries (spring wave and fall wave, respectively). The survey provides information on people's economic sentiments and on foreign currency cash holdings. Importantly, as the same wording for the sentiment questions is used in each country, we obtain infor-

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mation that is comparable across countries and over time. Moreover, the recent survey wave, which was conducted from May to June 2009, contained a set of additional questions aimed at shedding some light on the impact of the financial crisis on households.

The paper is structured as follows. Section 2 presents survey results on economic sentiment in the months following the arrival of the financial crisis in the region. Section 3 discusses portfolio shifts in household savings deposits and cash holdings and offers some possible explanations. Section 4 summarizes and concludes.

2 Spring Wave 2009: Worsened Economic Sentiment Reflects Arrival of Financial Crisis

As expected, the significant darkening of growth prospects for the CESEE region has left clear marks in people's perceptions and expectations. However, although all countries have been subject to the same shock, the implications and consequences for the various countries differ substantially, as do the survey results on economic sentiment.

Before discussing specific results in more detail, it is noteworthy that survey responses, measured as the share of respondents answering "don't know," increased for most sentiment indicators as compared to previous waves. This development was particularly pronounced for forward-looking variables, such as exchange rate expectations or expected currency stability. In our view, this reflects respondents' degree of uncertainty about the impact of the crisis and the future economic development.

2.1 Financial Situation of Households Severely Affected – Is There Some Light at the End of the Tunnel?

During the spring wave 2009, interviewees were asked whether the global financial crisis posed a threat to them personally with regard to the financial situation of their household. Chart 1 shows that the percentage share of respondents who answered "yes" to this question was above 50% in all countries surveyed except Poland; in some countries, the percentage in fact rose to more than 70%.

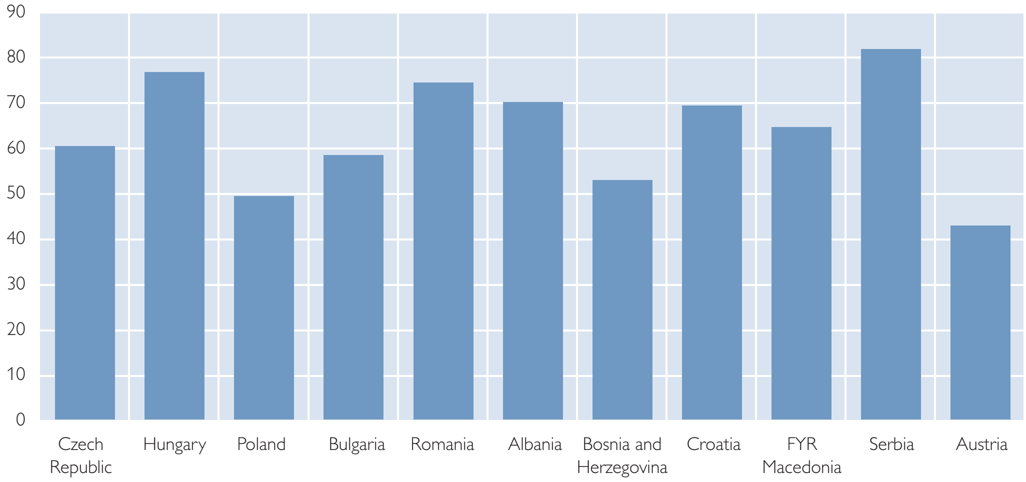
As the survey answers reflect cultural differences, sentiment questions are always problematic to compare unless reference points are provided. These can be either different observations over time or evidence from different countries. As one possible reference point, we can provide evidence from a survey in Austria showing that about 43% of Austrians also see the financial crisis as posing a threat to them personally. Although some caution is necessary, as the questions in the Austrian survey and in the OeNB Euro Survey are not fully comparable, this result suggests that the crisis has left considerably deeper trails in agents' sentiment in CESEE countries than in Austria – clearly reflecting the sharper contraction of economic activity in the former group of countries.

Notwithstanding the difficult economic environment and worsened economic sentiments, the survey results from the spring wave 2009 seem to report some first positive signs at the micro-level: In six of the ten countries, respondents assess the financial situation of their household less negatively than six months earlier. This development may be seen as a reaction to the numerous support packages adopted since fall 2008 at the national as well as at the international level. In particular, significant movement toward a positive response was found for

Chart 1

Response to "Does the Global Financial Crisis Pose a Threat to You Personally with Regard to the Financial Situation of Your Household?"

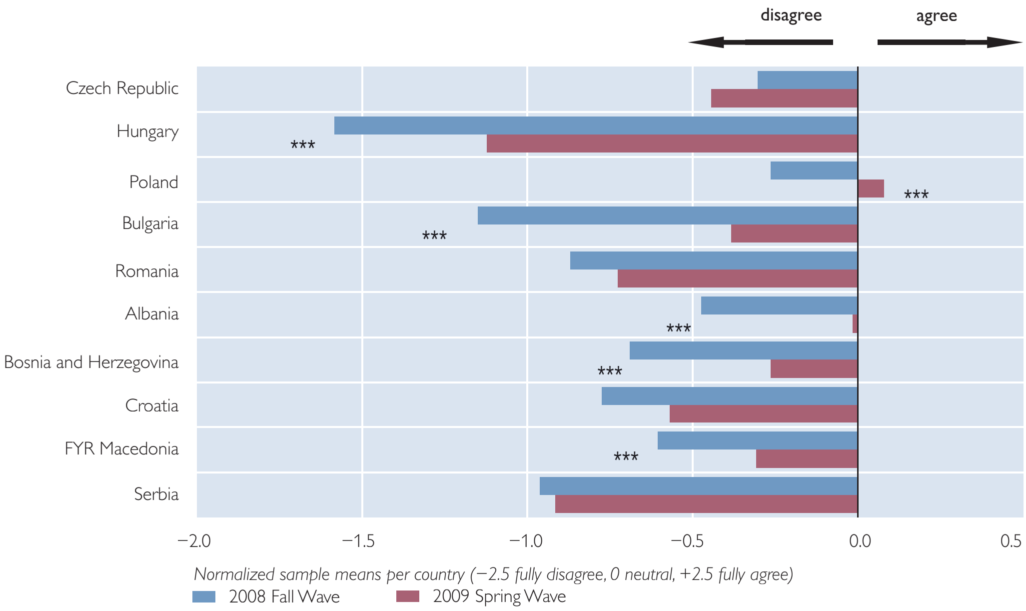
Percentage share of respondents answering yes (adjusted for "don't know" and "no answer")



Source: OeNB Euro Survey 2009 Spring Wave, OeNB.
Note: Values for Austria refer to a question of whether the crisis poses a personal threat, without any specific reference to the financial situation (survey response from May/June 2009). Hence, values are of limited comparability.

Chart 2

Consent to the Statement "Currently, the Financial Situation of My Household is Good"

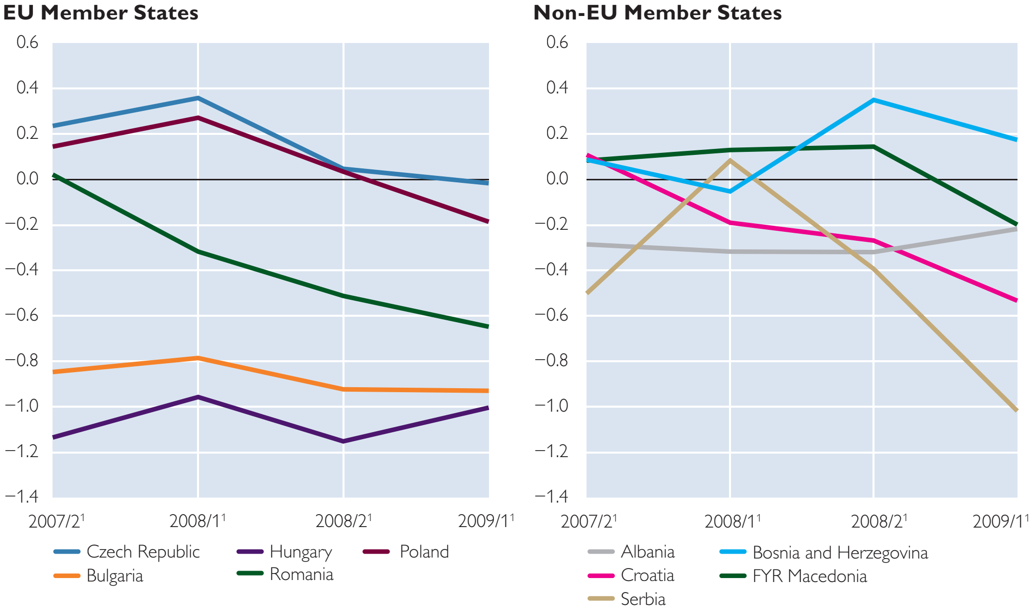


Source: OeNB Euro Survey.
*Note: Respondents were asked whether they agreed or disagreed on a scale from 1 (fully agree) to 6 (fully disagree) to the statements above. *** indicates a significant change in normalized sample means (1% level).*

Chart 3

Response to "Over the Next Five Years, the Local Currency Will Be Very Stable and Trustworthy"

Normalized sample means per country (–2.5 fully disagree, 0 neutral, +2.5 fully agree)



Source: OeNB Euro Survey.

Note: Respondents were asked whether they agreed or disagreed on a scale from 1 (fully agree) to 6 (fully disagree) to the statement above.
[1] 2007/2 refers to the 2007 Fall Wave, 2008/1 to the 2008 Spring Wave, etc.

Hungary, Poland, Bulgaria, Albania, Bosnia and Herzegovina, and FYR Macedonia[2]. Interviewees in the Czech Republic, Romania, Croatia and Serbia remained more skeptical, however (see chart 2).

2.2 Distrust in the Future Stability of Local Currencies Grows

In all countries surveyed except for Bosnia and Herzegovina, a majority of respondents disagreed with the statement that the local currency was very stable and trustworthy, both now and in the next five years. This widespread loss of trust in local currencies may be related to the economic downturn in the region and the repercussions of the global financial crisis (i.e. depreciation of the exchange rate or some countries' need for balance of payments assistance). Within the last 12 months, the assessment turned from positive into negative territory for the Czech Republic, Poland, FYR Macedonia, and most markedly in Serbia (see chart 3).

This loss of trust, however, was not confined to the local currencies: Since the outbreak of the financial crisis, trust in the euro has also eroded significantly, albeit remaining in positive territory in all countries surveyed. This decline both for local currencies and for the euro might be interpreted as a reflection of a more general loss of confidence in the financial system.

[2] *"FYR Macedonia" refers to the former Yugoslav Republic of Macedonia.*

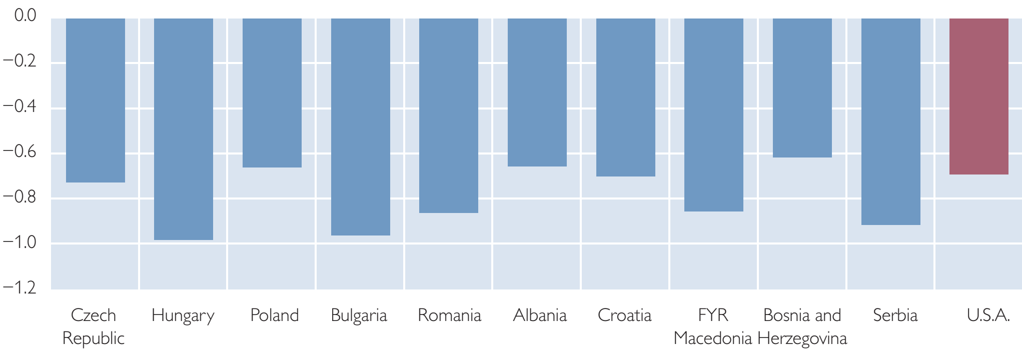
2.3 Trust in Banks Deteriorates, Perceived Safety of Deposits Gains Some Ground

For the first time, the spring wave of the OeNB Euro Survey also contained a question on trust in banks. A considerable literature has shown that trust in banks is very important for financial intermediation. Therefore, the question whether the crisis has lowered trust in banks and whether the loss is permanent has gained considerable attention, in particular in the U.S.A. (e.g. Sapienza and Zingales, 2009). For some of the countries under analysis in this paper, this question is of even greater relevance, as past banking crises and actual losses of deposited money are still vivid in people's memories.

Chart 4

Change in Trust in Banks over the Past Six Months

Normalized sample means per country (–2.5 fully disagree, 0 neutral, +2.5 fully agree)



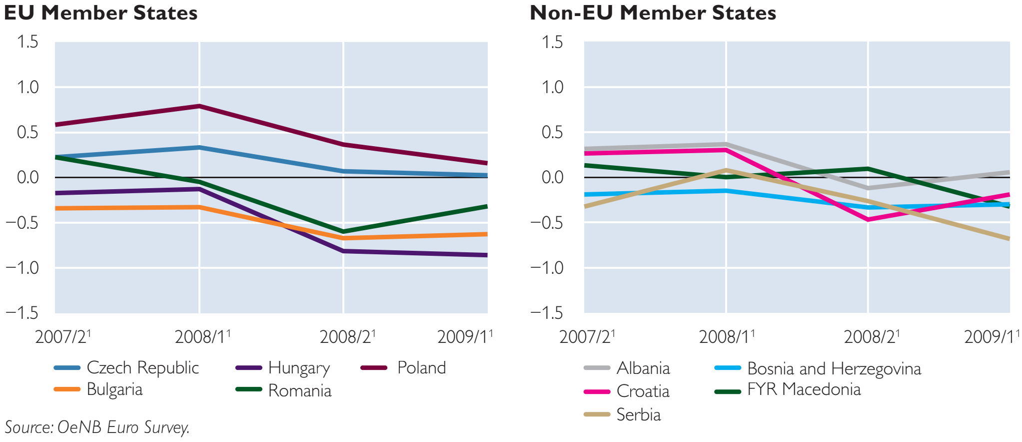
Source: OeNB Euro Survey 2009 Spring Wave, Financial Trust Index (www.financialtrustindex.com).

Note: "How has your trust in banks changed in the last six months?" Values for CESEE are based on changes considering both domestically owned and foreign owned banks. Values for the U.S.A. refer to changes in the last three months as from December 2008.

Chart 5

Response to "Currently, Depositing Money at Banks is Very Safe"

Normalized sample means per country (–2.5 fully disagree, 0 neutral, +2.5 fully agree)



Source: OeNB Euro Survey.

Note: Respondents were asked whether they agreed or disagreed on a scale from 1 (fully agree) to 6 (fully disagree) to the statement above.

[1] 2007/2 refers to the 2007 Fall Wave, 2008/1 to the 2008 Spring Wave, etc.

Indeed, chart 4 reveals that trust in banks diminished in all CESEE countries. In particular, Hungary, Bulgaria, Romania, Serbia and FYR Macedonia faced a noticeable drop. However, at the same time, the comparison with values for the U.S.A. reveals, rather surprisingly, that the loss in banking trust in five CESEE countries is of about the same magnitude as in the U.S.A. – and even in the countries with a stronger decrease, the difference is far from dramatic.

Additional evidence can be derived from survey responses about the perceived safety of savings deposits, which is obviously related to trust in banks. However, deposit insurance schemes might weaken this interdependency. Chart 5 shows the development of the perceived safety of savings deposits over time. This indicator recorded a decline at the time of the fall wave 2008 as compared to the preceding survey wave for almost all countries (with the exception of FYR Macedonia). The cross-country comparison of this variable for the 2008 fall wave is, however, somehow constrained by the fact that the field work periods differ across countries.[3] The May to June 2009 results of the OeNB Euro Survey suggest a slight recovery or at least a stabilization in most countries.[4] In this context, the extensions of deposit insurance schemes may have played a stabilizing and trust-building role. Supportive evidence for this hypothesis is provided in Prean and Stix (2009), who present evidence for Croatia that the extension of deposit insurance coverage had an immediate, positive and substantial impact on how Croatians assess the safety of savings deposits.

3 Changes in Households' Portfolios

The arrival of the financial crisis represented a massive shock for the region, which manifested itself, inter alia, in a deterioration of trust in the local currencies (see section 2.2) and in a loss of confidence in banks (see section 2.3). Research on dollarization/euroization (e.g. De Nicolo, Honohan and Ize, 2005; Scheiber and Stix, 2008) suggests that because of experience with past banking crises and depreciation, households are likely to react rather sensitively to expected depreciation and to the perceived safety of deposits. In particular, this affects two aspects of portfolio choice: (1) savings (deposits and cash holdings) in local currency versus foreign currency, and (2) deposit holdings versus cash. In this section, we analyze how deposits at banks have evolved, what can be inferred from the survey about foreign currency cash balances, and how the overall share of cash and deposits denominated in foreign currency has changed.

3.1 Impact of the Crisis on Households' Savings Behavior: A Differentiated Picture across Countries

An analysis of monetary statistics on household savings deposits indeed confirms the conjecture that households in CESEE countries have reacted, on average, more sensitively to the financial crisis than have more advanced economies. In eight of

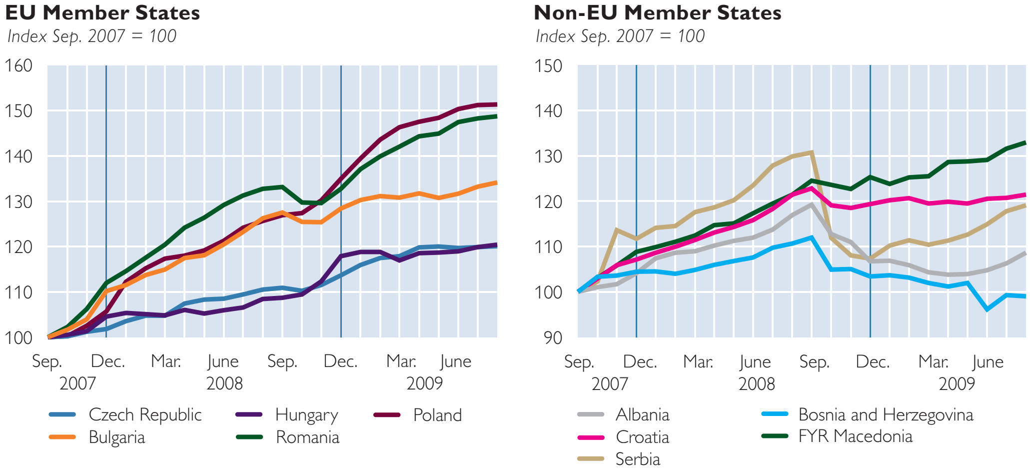
[3] *In the fall wave 2008, the earliest field work started in the first week of October while the last country was surveyed in the second week of November. Hence, in some countries, respondents were asked before the (announced) extension of deposit insurance schemes, in other countries the survey took place afterwards.*

[4] *Compared with the 2008 fall wave, the perceived safety of deposits increased significantly in Albania, Croatia and Romania in May to June 2009. In the Czech Republic, Hungary, Bulgaria, and Bosnia and Herzegovina, no significant change could be found. The only three countries where a significant decline of perceived deposit safety was recorded in the spring wave 2009 were FYR Macedonia, Poland and Serbia.*

the ten analyzed CESEE countries, outflows of household savings deposits occurred in October 2008. Although the extent of withdrawals varied substantially across countries, this situation differed markedly from that in western countries, e.g. Austria, for which no comparable withdrawals were observed. However, for most EU Member States of the sample, the reaction was considerably weaker and of only short duration compared with non-EU Member States.

Chart 6

Total Savings Deposits (Exchange Rate Adjusted) of Households at Banks in CESEE



Source: National central banks.

Note: The constructed index keeps the exchange rate fixed at the end-September 2007 level and therefore depicts the actual change of total savings deposits through net flows.

Table 1

Change in Per Capita Cash Holdings

	Albania	Serbia	Bosnia and Herzegovina	Croatia
	Change in per capita deposits of households, Aug. 2008 to May 2009 (exchange rate adjusted)[1]			
1 Expressed in euro[2]	−167	−97	−131	−81
Percentage change	*−11%*	*−13%*	*−8%*	*−2%*
2 Change in euro cash holdings (survey)[3]	−94	−110	−29	−78
3 "Missing" cash per capita measure 1 – (sum of (1) and (2))	−261	−207	−160	−158
Expressed in percent of monthly gross wage income[4]	*127%*	*37%*	*29%*	*15%*
	Change in per capita local currency in circulation, Aug. 2008 to May 2009			
4 Expressed in euro[2]	135	21	−20	−31
5 "Missing" cash per capita measure 2 – (sum of (3) and (4))	−126	−186		
Expressed in percent of monthly gross wage income[4]	*61%*	*33%*		

Source: wiiw.

Note: The table shows some back-of-the envelope calculations based on a series of strong assumptions. Additionally, the results are influenced by applying a market exchange rate. Overall, caution is necessary when interpreting the findings.

[1] The change in deposits is hypothetical, assuming a fixed exchange rate from September 2007. Per capita refers to the population older than 14 years.

[2] All conversions into euro use the market exchange rate of May 2009.

[3] Change in projected cash holdings from average of waves 2008/1, 2008/2 and 2009/1.

[4] Monthly gross wage in 2008 in euro (market rate).

Chart 6 shows the development of total savings deposits of households since September 2007, both for the EU Member States and non-EU Member States. When analyzing the development over the months following October 2008, we see that the changes in savings deposits are blurred by exchange rate movements. As a sizeable share of deposits is denominated in foreign currency, the depreciation vis-à-vis the euro (observed in some countries) inflates the value of foreign currency deposits when expressed in local currency. Therefore, chart 6 presents the development of household savings deposits adjusted for exchange rate movements.[5]

While in October 2008, deposit withdrawals were recorded in all but two of the CESEE countries analyzed, developments in the EU Member States and non-EU Member States differed sharply in the following months. In the EU Member States, the great majority of households save in local currency. Because uncertainty was greater, the growth rate of savings deposits accelerated from precrisis levels. This may partly reflect a portfolio shift from riskier assets to savings deposits as well as an increase in buffer stock savings or precautionary savings, much like in Austria.[6] In the non-EU Member States, the initial drop in total savings coincided with the outbreak of the financial crisis. With trust in banks unsettled following the collapse of Lehman Brothers, households quickly effected (partly substantial) withdrawals of savings deposits. The developments in the following months, however, took a highly heterogeneous path across the non-EU Member States. A gradual normalization took hold in Romania, Bulgaria and FYR Macedonia – i.e. the withdrawals turned out to be temporary. Furthermore, in these countries private savings started to rise again, but compared to precrisis levels, the speed of capital accumulation has slowed. The decreased rate of accumulation of private savings is a consequence of the ongoing economic crisis, influenced mainly by higher unemployment, lower growth rates of disposable income, and decreased remittances.

In other countries, particularly in Albania, Serbia, Bosnia and Herzegovina and Croatia, we observe that the return of withdrawn money to the banking system was not complete and that the value of savings at banks seemed to have declined more persistently. In other words, people withdrew money and the question is where this money went.

The extent of withdrawals in these four countries is summarized in table 1 above. This table shows the change in per capita deposits of households (exchange rate adjusted) for the period from August 2008 to May 2009. Expressed in euro, withdrawals were in a range from EUR 81 in Croatia to EUR 167 in Albania. In percentage terms, withdrawals were sizeable in Serbia (–13%), Albania (–11%) and Bosnia and Herzegovina (–8%). In Croatia, the decline was only modest (–2%).

3.2 Level of Cash Holdings Decreases in Many Countries Surveyed

The development of savings deposits in these four countries and the fact that foreign currency cash is used in some countries as a store of value (for a detailed

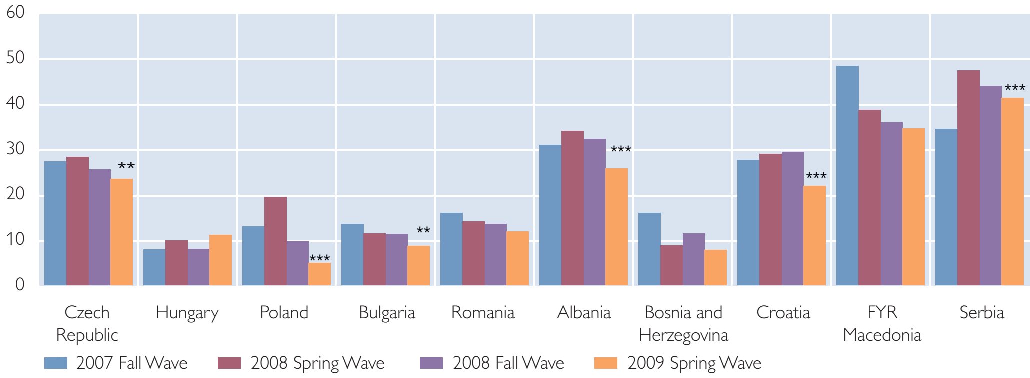
[5] *The constructed index keeps the exchange rate fixed at the end-September 2007 level. It should be noted that the time when the exchange rate is held fixed is of importance for some country results. Despite this qualification, the results allow for a comparative assessment of the development.*

[6] *In May 2009, the annualized growth rate of local currency deposits amounted to 11% in the Czech Republic, 15% in Hungary, and 28% in Poland (by comparison, the annualized growth rate of Austrian households' euro deposits declined from 8.6% in the second quarter of 2008 to 4.7% in the second quarter of 2009).*

Chart 7

Euro Cash Holdings as in Spring 2009

% of respondents (adjusted for "don't know" and "no answer")



Source: OeNB Euro Survey.

*Note: Null hypothesis: The percentage share of spring 2008 equals the percentage share of spring 2009. ** indicates a statistically significant change at the 5% level, and *** at the 1% level, respectively.*

discussion of motives for cash holdings, see Dvorsky, Scheiber and Stix, 2008) give rise to the question of what happened to euro cash holdings after the arrival of the crisis. Inter alia, one could have expected an increase in euro cash holdings.

Results from the 2009 spring wave of the OeNB Euro Survey indicate that the contrary is true (see chart 7). Compared to the results of the 2008 spring wave, the share of respondents holding euro cash declined significantly in the Czech Republic, Poland, Bulgaria, as well as in Albania, Croatia, and Serbia.

Moreover, we observe a decline of per capita euro cash holdings in all CESEE countries except for Hungary. Since these results are based on projections[7] derived from survey answers, it is evident that considerable fluctuations can occur. Additionally, respondents are inclined to understate the true amount or refuse to answer. Even when we take the possibility of such random fluctuations or systematic biases into account, it is surprising that a decline is found in almost all countries, in particular in those countries which experienced prolonged deposit withdrawals.

3.3 Deposits Withdrawn, but Lower Cash Holdings: Where Did the Money Go?

In particular for Albania, Bosnia and Herzegovina, Croatia and Serbia, the findings of the 2009 spring wave of the OeNB Euro Survey are, in a certain sense, surprising – not only did deposits decline in these four countries, but so did euro cash holdings. This raises the question of the whereabouts of the withdrawn money.

Row 3 in table 1 summarizes the extent of the "missing" money question for these four countries by adding the change in the euro cash holdings to the aforementioned decline in deposits. The resulting per capita euro amount ranges between EUR 158 in Croatia and EUR 261 in Albania.

The first presumption about where the withdrawn money went is that people now hold higher amounts of local currency in circulation (CiC). Indeed, Albania

[7] *These projections are based on answers on euro cash holdings. For details, see Scheiber and Stix (2008).*

and Serbia saw a sizeable increase in local CiC. By contrast, local CiC decreased in per capita terms in Bosnia and Herzegovina and in Croatia, so that the above explanation does not apply in these countries (see table 1, row 4). Given the development in Albania and in Serbia, one could pose, under stringent assumptions, the hypothetical question of how much of the decline in deposits might eventually be explained by an increase in local CiC.[8] The results in row 5 of table 1 suggest that the increase in local CiC could potentially explain 50% of the missing cash in Albania, but only 10% in Serbia.

As this explanation cannot solve the puzzle in full, we consider at least three other explanations very plausible.

– First, the survey results might not reflect the true development. Although this can never be excluded, in particular in surveys about financial issues, closer scrutiny uncovers at least three aspects. First, answers on cash amounts fluctuate from wave to wave; hence, statistical confidence intervals might be sizeable. However, what is surprising is that a decline in projected cash holdings is found for all countries. This fact raises our confidence in the survey results. Second, the low dissemination of savings deposits poses a problem.[9] Third, and this is somewhat related to the second issue, the wealth distribution might be very unequal in some of the countries concerned. Therefore, one might not find any changes in a survey because of the well-known problems of underrepresentation of wealthier households in surveys.
– A second possible explanation is that the withdrawn deposits and the cash reserves in euro might have been used to replace lost or decreased income. Table 1 expresses the amount of "missing" cash in percent of the average monthly gross salary. The resulting values range from 15% in Croatia to 61% in Albania (including the contribution from CiC for Albania and Serbia). Considering that we focus on the change over a nine-month period, these values are rather modest, all the more so as the crisis has led to lower growth rates in disposable income and to higher unemployment. In particular, remittances are considered to have declined substantially.
– Finally, the withdrawn amounts and the cash reserves in euro might have been invested in alternative assets or abroad. While the survey does not provide evidence on this issue, we consider this rather unlikely, at least for typical savers.

Overall, all of the stated explanations are plausible. Very wealthy individuals will most likely not reveal the truth in the survey and may also have funneled money into alternative investments or abroad. For average respondents, we do consider the "replacement-of-lost-income" hypothesis rather likely.

As a final point, we highlight that even though the survey responses do not cover the behavior of wealthy households, the OeNB Euro Survey provides very useful evidence about the portfolio behavior of the general public during the crisis.

[8] *Some of the changes in CiC are due to inflation, which we did not account for. Also, such a simplified comparison relies on strong assumptions. Nevertheless, the results allow for a rough comparison.*

[9] *For example, in Bosnia and Herzegovina only 7% of respondents had a savings deposit. The observed decline in the value of deposited money by 8% would imply that about 1 in 13 savers with a saving deposit drew down the entire deposit. If this is true, then 1 in 182 respondents (0.5%) withdrew all of his or her deposits, which implies that on average, only 5 persons in a sample of 1,000 interviewees withdrew all of their savings deposits. While this example is certainly exaggerated, it exemplifies the problem of detecting such outflows when only a relatively small sample is drawn from the population.*

3.4 Virtually Unchanged Degree of Euroization despite Portfolio Shifts

The global financial crisis led to a significant depreciation of floating exchange rates in some CESEE countries (and put some stress on fixed peg regime countries) and to changes of inflation as well as of interest rates. Furthermore, we observe growing concerns about the stability of local currencies in the future and still high shares of respondents expecting local currencies to depreciate further against the euro. All these factors drive households' decisions with respect to the currency composition of their portfolio.

In order to draw a compound picture of the extent of euroization, we calculate an overall euroization index (see Scheiber and Stix, 2008). The euroization index expresses foreign currency assets (i.e. cash and savings deposits) in percent of total assets.[10]

Chart 8 shows that the overall degree of euroization remained surprisingly stable over time in the countries surveyed. A moderate increase of the euroization index can be found for Croatia (+3 percentage points) and FYR Macedonia (+7 percentage points), whereas the euroization index for Albania declined by 4 percentage points.

It is clear that a multitude of factors affects households' portfolio decisions and hence the degree of euroization. Although a full analysis of the impact of these

Chart 8

Euroization Index

Source: OeNB Euro Survey.

Note: Euroization index = (euro cash + euro deposits) / (total cash + total deposits).

[10] *The euroization index (EI) is calculated as the sum of foreign currency cash (FCC) and foreign currency deposits (FCD) over the sum of total (foreign currency and local) cash and total (foreign currency and local) deposits. EI = (FCC+FCD) / (FCC+LCC+FCD+LCD).*

factors is clearly beyond the scope of this paper, a first glance at the available evidence suggests that these factors can in fact contribute to explaining country-specific differences (e.g. higher interest rate differentials have contributed to a higher share of local currency-denominated savings deposits in Romania).

Despite these partial effects, we consider one result astonishing from a more general perspective: Although a massive shock has hit the region, no dramatic or substantial changes have occurred with respect to overall euroization. This might be seen as a payoff of past stabilization efforts and of successful economic and monetary policy measures in the course of the crisis.

4 Summary and Conclusions

Results from the spring wave 2009 of the OeNB's Euro Survey clearly show that the darkening of growth prospects for the CESEE region has left deep marks in people's perceptions and expectations. The financial crisis is severely felt throughout the region: the assessment of the current economic situation has worsened, trust in the future stability of local currencies has deteriorated, and trust in banks has declined in almost all countries surveyed. Notwithstanding this very difficult economic environment, the survey results seem to report some first positive signs at the micro-level: In six of the ten countries surveyed, respondents assessed the financial situation of their household less negatively than six months ago.

The analysis of aggregate monetary statistics reveals that people's portfolio decisions in reaction to the crisis did not follow a clear pattern and that developments differ substantially across countries: After deposit withdrawals in October 2008 in all but two countries analyzed, the situation quickly normalized in the EU Member States surveyed – in some countries growth rates of deposits even accelerated. In the non-EU Member States, however, the development was more heterogeneous, with a more pronounced decline in Serbia, Albania, and Bosnia and Herzegovina. In Serbia and Albania, deposits have rebounded during recent months.

Furthermore, we find that euro cash in circulation has declined in countries in which deposit withdrawals were more persistent. In our view, the most plausible explanation for this somewhat surprising finding is that households have used the money to replace lost or decreased income.

Finally, although a massive shock has hit the region, we find that no dramatic changes in the overall degree of euroization have occurred. This subdued impact is likely to signal that past stabilization efforts have paid off and that the economic and monetary policy measures taken in the course of the crisis were successful.

References

De Nicolo, G., P. Honohan and A. Ize. 2005. Dollarization of Bank Deposits: Causes and Consequences. In: Journal of Banking and Finance. Vol. 7/29. 1967–1727. July.

Dvorsky, S., T. Scheiber and H. Stix. 2008. Euroization in Central, Eastern and Southeastern Europe – First Results from the New OeNB Euro Survey. In: Focus on European Economic Integration 1/08. OeNB. 48–60.

Dvorsky, S., T. Scheiber and H. Stix. 2009. The 2008 Fall Wave of the OeNB Euro Survey – A First Glimpse of Households' Reactions to the Global Financial Crisis. In: Focus on European Economic Integration 2/09. OeNB. 67–77.

ECB. 2009. The International Role of the Euro. Frankfurt am Main. July.
Retrieved from http://www.financialtrustindex.com on October 5, 2009.

Prean, N. and H. Stix. 2009. The Effect of Raising Deposit Insurance Coverage in Times of Financial Crisis – Evidence from Croatian Microdata. Mimeo.

Sapienza, P. and L. Zingales. 2009. A Trust Crisis. Retrieved from www.financialtrustindex.com. on October 2, 2009.

Scheiber, T. and H. Stix. 2008. Euroization in Central, Eastern and Southeastern Europe – New Evidence on Its Extent and Some Evidence on Its Causes. OeNB Working Paper. Forthcoming.