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THE IMPACT OF THE CRISIS ON FOREIGN CURRENCY BORROWING OF HOUSEHOLDS IN CESEE-IMPLICATIONS FOR ECONOMIC POLICY[1]

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ABSTRACT: The crisis highlighted the risks associated with foreign currency lending to households. Based on previous research and micro evidence from the Euro Survey of the Austrian Central Bank, this note shows that households in CESEE perceive foreign currency loans as riskier, but demand for these loans is remarkably stable. We argue that economic policy needs to distinguish between supply and demand driven foreign currency lending. If it is driven by demand factors, restrictive regulation might not be the remedy.

KEYWORDS: foreign currency loans, behavior of households, regulation, CEEC.

JEL Classification: D14, G21, G28

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Introduction

The credit boom in Central Eastern and Southeastern Europe (CESEE) prior to the global financial crisis on the one hand supported growth in the region. On the other hand, the share of foreign currency loans in total loans also increased, in particular to unhedged borrowers.

The experience of sharp depreciations of several currencies in CESEE during the crisis and a deterioration of the financial situation of households raised concerns that foreign currency lending would endanger countries' macroeconomic and financial stability. This put the topic towards the top of the economic policy agenda. Should policy react and how should it react? Answers to these questions crucially depend on knowledge about the driving factors of foreign currency lending and about the impact of the crisis on the demand for foreign currency loans. In this context our note presents microeconomic evidence which helps to shed light on these questions. In our view such microeconomic evidence is essential and better suited than aggregate data for developing a more thorough understanding of the causes and consequences of foreign currency borrowing and for developing adequate policy responses.

The Impact of the Crisis - Evidence from the OeNB Euro Survey

To develop our argument we employ data from the Euro Survey of the Austrian Central Bank. This representative household survey has been conducted semi-annually since fall 2007 in four EU member states (Hungary, Poland, Bulgaria, and Romania) and five candidate and potential candidate countries (Croatia, Albania, Bosnia and Herzegovina, the FYR Macedonia, and Serbia). The data thus permits cross country comparisons. It complements aggregate statistics in several dimensions providing evidence obtained in face-to-face interviews on the dissemination of foreign currency loans among households, on plans of households to take out a foreign currency loan, and subjective assessments such as the risk associated with foreign currency loans. Importantly, the time span covered by the survey allows analyses on the effect of the crisis[2].

In the survey, the highest share of foreign currency in total loans to households is found in Croatia and Serbia at over 70%, followed by Hungary at close to 60%. The currency board countries, Bulgaria and Bosnia and Herzegovina have the

[2]Overall, the OeNB Euro Survey gathers information on the use of the euro among households with regard to cash holdings, savings, and loans and provides a picture of how households evaluate the current and future economic situation of their country as well as of the household itself. For more information on the OeNB Euro Survey, see www.ceec.oenb.at

lowest share of foreign currency in total loans at around 30%. This picture, regarding the distribution of foreign currency loans in the CESEE region, is similar to that which is well-known from aggregate statistics. However, the distribution of loans is likely to be affected by both supply and demand factors and with aggregate statistics it is difficult to separate these effects. By contrast, the survey includes a question about respondents' plans to take out a loan. This can be interpreted as a more direct indicator of demand and also of possible future developments in foreign currency borrowing.

In all countries the number of respondents planning to take out a loan - expectedly - declined during the crisis. More importantly, among those planning a loan the number of respondents who plan to take out a loan in foreign currency also declined (Chart 1).

The crisis thus clearly had an impact on the demand for loans in foreign currency; however, Chart 1 also shows that the impact was limited and demand has not disappeared. Instead, in three countries (Albania, Croatia and the FYR Macedonia), the share of planned foreign currency loans roughly persists at the same level as before the crisis. In the remaining six countries it has dropped and remains at a lower level. In Hungary results likely reflect respondents' awareness of government measures throughout 2010 to curb foreign currency lending. In Poland demand dropped sharply with the substantial depreciation of the złoty in the first half of 2009 but seems to slightly recover.

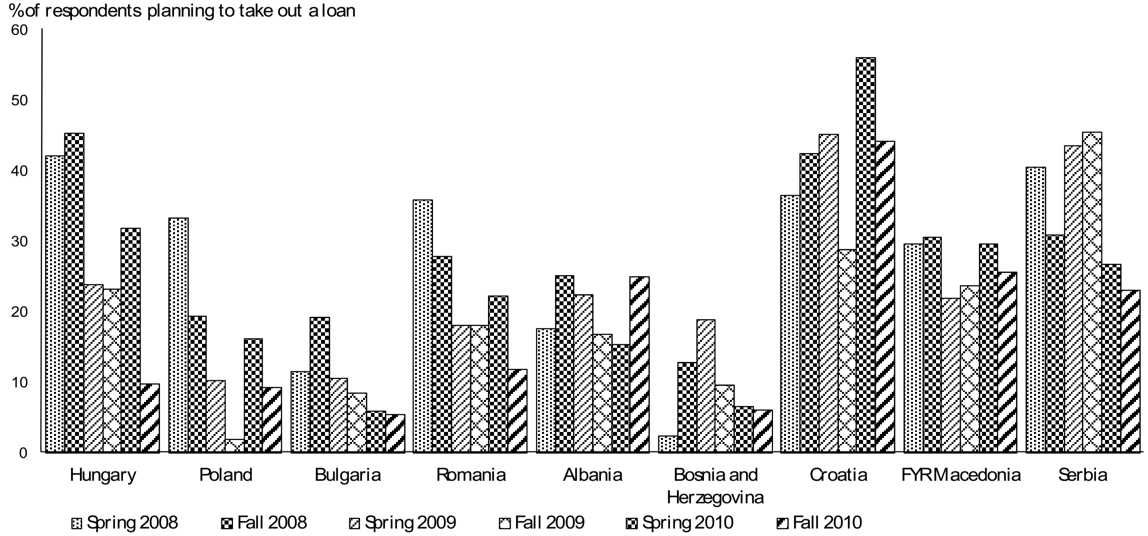
The rather moderate decrease in demand in some countries raises the question whether respondents are not aware of or unresponsive to the risk of exchange rate depreciations associated with foreign currency loans, which became apparent during the financial crisis.

In two surveys after the crisis all respondents were asked whether euro loans had become riskier because of possible exchange rate depreciations. Between 67% (Bulgaria) and 90% (Hungary) of respondents answered in the affirmative (Chart 2, y-axis). This result reflects a subjective assessment of a 'risk increase', which to some extent is difficult to pinpoint as to its exact meaning. What influences risk perception, especially of respondents who do not hold a loan at present? One contributory component seems to be whether respondents know somebody who fell into financial difficulties with a foreign currency loan[3]. At the country level,

[3]Respondents were asked in spring and fall 2010 whether they agree or disagree on a scale from 1 to 6 to the following statements (1) "Over the last two years, taking out a loan in euro has become riskier because of possible exchange rate depreciations." (2) "I know somebody who has gotten burnt on a foreign currency loan because repayments became much higher than expected."

`Chart 1

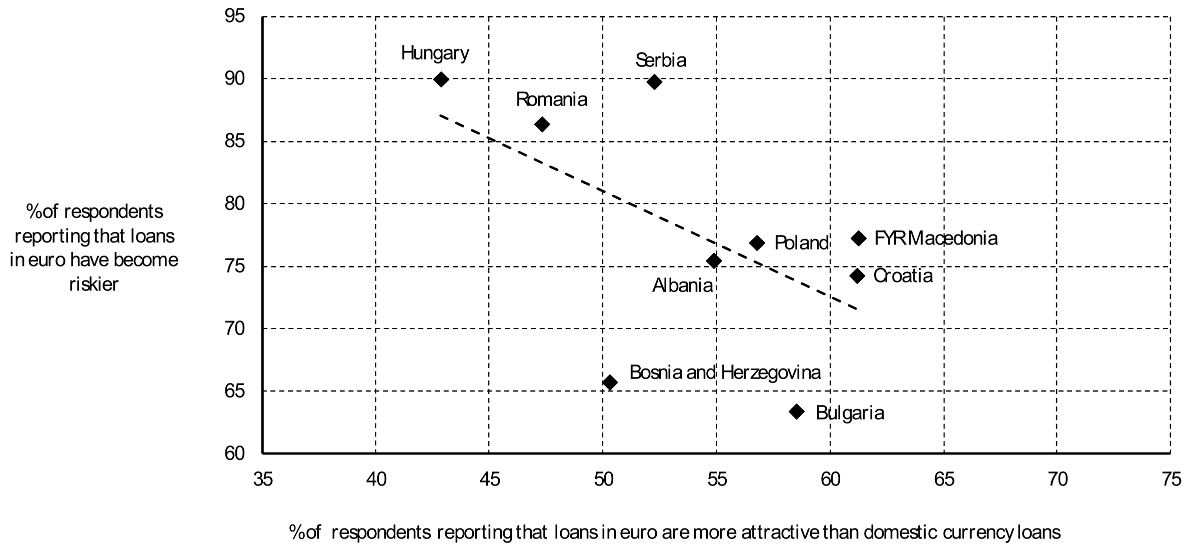
Do You Plan to Take Out a Foreign Currency Loan Within the Next Year?



Source: OeNB Euro Survey.
Note: Excluding respondents answering "Don't know / no answer."

Chart 2

Increase in Perceived Risk versus Relative Attractiveness of Euro Loans



Source: OeNB Euro Survey, spring and fall 2010.

Note: Excluding respondents answering "Don't know / No answer".

agreement to the two questions is highly correlated. In all countries, with the exception of Bosnia and Herzegovina, the majority of respondents know somebody who fell into financial difficulties with a foreign currency loan and in all countries over 60% of respondents agree that foreign currency loans have become riskier. The crisis, thus, had a clear impact on respondents' risk perception, but what does this signify for demand?

Is demand for foreign currency loans going to decrease or even vanish? Chart 2 suggests this is not likely. Although risk perception is negatively correlated with perceived attractiveness of foreign currency loans, the majority of respondents in seven out of nine countries state that, taking everything into account, euro loans are more attractive than foreign currency loans (Chart 2, x-axis). Even in Hungary, where 90% of respondents regard foreign currency loans as having become riskier, 43% of respondents still assess them as overall more attractive than loans in forint.

These survey findings suggest that the crisis increased the risk perception but not to such an extent that this would offset the perceived advantages of foreign currency loans. It shows that demand for foreign currency loans is remarkably stable and driven by factors which, in the respondents' perception at least, were not changed dramatically by the crisis. What are these factors and what does it imply for policy makers?

Implications for Economic Policy

From the perspective of economic policy, foreign currency lending can compromise financial stability and increase the risk of systemic crises. On the one hand it exposes unhedged borrowers to exchange rate risk. On the other hand it exposes banks to concentration risk as otherwise heterogeneous borrowers will be subject to the same risk factor: exchange rate depreciation. Foreign currency lending may further force monetary policy to concentrate on stabilizing the exchange rate and thus limit its effectiveness.

We will argue that the determinants of foreign currency loans differ across the CESEE region and hence economic policy design needs to differentiate between countries. To support our main argument, we first present a brief summary of the literature's main results.

On the one hand, the economic literature explains foreign currency lending by demand factors. In the required brevity, we clearly cannot do justice to all the important contributions from the literature but just note that several papers stress the role of interest rates differentials (illustrated in chart 3) and of households' inadequate assessment of involved exchange rate risks.

An important alternative view stresses that it might be the optimal response for households to borrow in foreign currency. Both the models of Ize and Levy Yeyati (2003) and of Jeanne (2005) predict that if domestic monetary policy credibility is weak, i.e. if inflation is very volatile (relative to the volatility of the real exchange rate), households will borrow in foreign currency. Moreover, by the same line of reasoning, a lack of monetary policy credibility also induces households to save in foreign currencies.

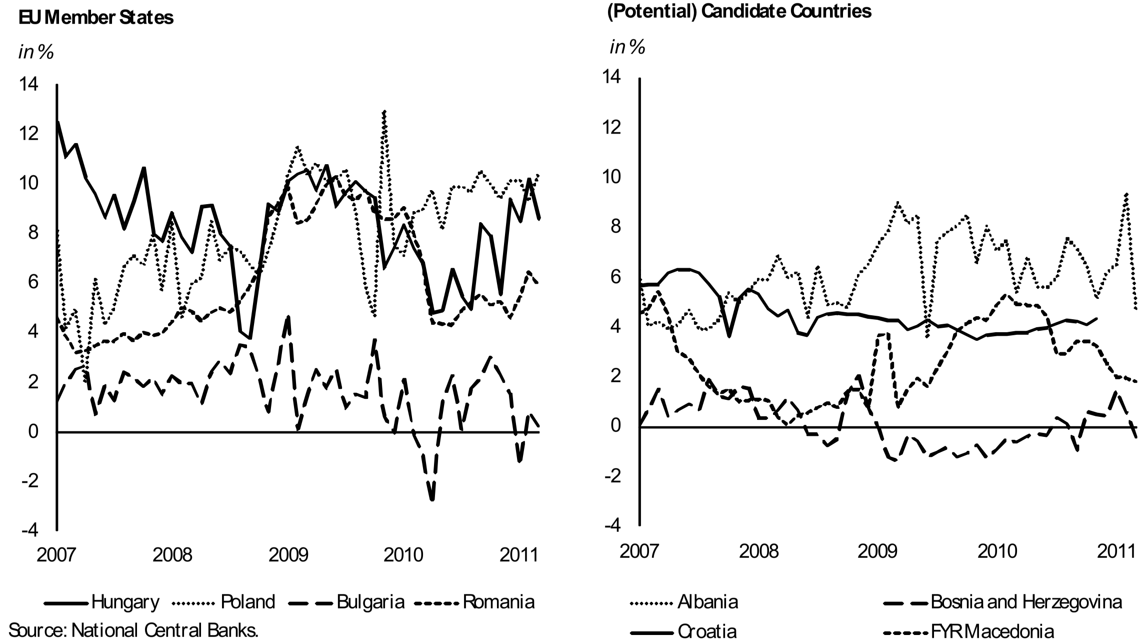
On the other hand, different strands of the literature have pointed to the importance of supply side effects. In the presence of a substantial share of foreign currency savings banks face exchange rate risks on their balance sheets. In response, banks foster foreign currency lending to match the currency structure of their assets (see Basso, Calvo-Gonzalez and Jurgilas (2007), Luca and Petrova (2008)).

For regulation and policy purposes, it is essential to know whether supply or demand drives foreign currency lending. If supply factors are important, regulation which targets banks would be appropriate. If demand factors are important, policy needs to further distinguish whether households are mainly driven by interest rate differentials or by a neglect of the exchange rate risk or whether households are aware of the risk but other factors cause their decision to borrow in foreign currency.

To shed light on these issues Fidrmuc, Hake and Stix (2011) conduct a micro study of households' foreign currency borrowing in CESEE based on the Euro Survey data and estimate the determinants of households' foreign currency demand controlling for income, remittances, expectations regarding the economic situation and socio-demographic characteristics. Their results lend support to the significance of monetary policy credibility. Moreover, they provide supportive evidence to the view that households' incentive to save in foreign currency is intimately related to their decision to borrow in foreign currency. In particular, this applies to SEE, where it is well known that foreign currency deposits account for a large share of total savings. In CEE, this channel is less strong and demand for foreign currency loans might be more related to the interest rate differential and expectations regarding euro introduction.

Chart 3

Interest Rate Differential Short Term Loans



Source: National Central Banks.

Note: The interest rate differential is calculated as the difference between interest rates on short term loans in the local currency and short term loans in euro for each country. Data for Serbia for short term loans in euro are not available.

The role of foreign currency savings in SEE as presented by Fidrmuc, Hake and Stix (2011) calls for a remark: The presence of foreign currency savings has typically been interpreted as indicative of a supply effect. However, this is not necessarily the case. If one believes in the theories which explain foreign currency borrowing by a lack of domestic monetary policy credibility, then the causality does not run from the presence of foreign currency savings to foreign currency loans. Rather both savings and loan decisions are driven by an independent factor – namely households' lack of trust in the stability of the domestic currency [4].

This argument is corroborated by additional evidence from the Euro Survey. Respondents were asked why they denominated their loan in foreign currency. These motives can broadly be divided into supply and demand factors (Beckmann, Scheiber and Stix (2011)). Two important results emerge: First, although supply motives are important, demand factors play a role. Second, in SEE the stability of interest rates (an indicator of monetary credibility) tends to be a more important element in the decision for a foreign currency loan than the mere cost advantage which is more important in CEE. This piece of evidence also suggests that households in SEE lack trust in the domestic currency in terms of monetary stability.

The result that foreign currency savings and loans are intimately linked in SEE is also consistent with evidence presented by Brown and De Haas' (2011) on the lending behavior of banks in CESEE. They find that the macroeconomic environment determines foreign currency lending. In particular, they do not find evidence that foreign banks push foreign currency loans indiscriminately.

Economic policy therefore needs to distinguish between supply and demand driven foreign currency lending. Foreign currency saving and foreign currency lending are intimately linked in SEE. If foreign currency lending should be curbed, then one must focus on those factors which drive foreign currency saving. However, both saving and borrowing in foreign currency is driven by factors which are not easily amenable to regulation. Instead, the decision to save or borrow in foreign currency depends chiefly on the macroeconomic environment and trust in monetary stability. Regulation strongly restricting access to foreign currency loans or

[4] A different question is where the lack of domestic monetary policy credibility originates, in particular as some countries have pursued a successful stabilization policy over the past years but still face high savings in foreign currency. Chart 4 (Annex) compares inflation volatility in CESEE countries from 2000 to 2011 and helps to illustrate that differences in (past) inflation volatility are sizeable with the highest values found in Serbia. However, from this picture a close relationship between inflation volatility over the past 10 years and foreign currency borrowing is not easily discernible. This suggests that a lack of monetary credibility could be related to past periods of economic turbulence.

measures which make foreign currency loans more expensive (e.g. taxes) could in this case even be counterproductive, as Zettelmayer et al. (2010) and Jeanne (2005) argued. In CEE, however, different factors drive foreign currency loans. Here, regulation which targets banks and customers could be and in part has already proved to be successful.

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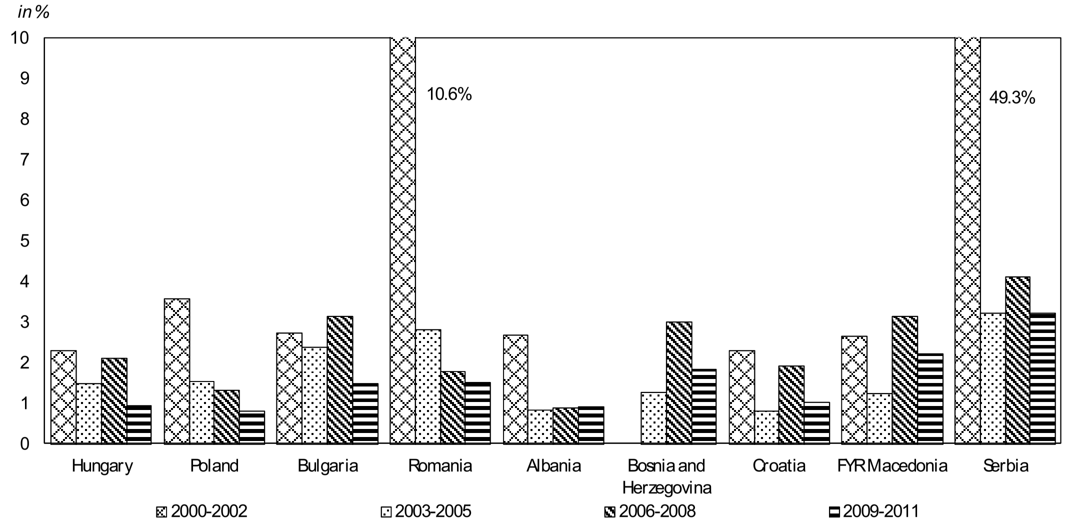
Annex:

Chart 4

Inflation Volatility



Source: authors' calculation based on data from wiiw and Eurostat.

Note: Figures are the standard deviation of inflation computed over 3 year periods based on monthly year-on-year inflation. Data are from Eurostat for EU member states and from wiiw non-EU member states.