

Drivers of household credit demand before and during the crisis

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On June 9, 2016, the OeNB played host to a presentation of topical research results based on data from the OeNB's Euro Survey by Ádám Banai, head of the Applied Research and Stress Testing Department at Magyar Nemzeti Bank (MNB), and Nikolett Vágó, researcher at the same department, at an event chaired by Peter Backé (OeNB).

In their paper, Banai and Vágó identified the drivers of household credit demand in Hungary and Poland. The authors emphasized that due to a lack of data, it was always challenging to examine household credit demand. The OeNB's Euro Survey is the only database that contains relevant information on Hungarian households' financial behavior whose structure does not change over a long horizon. For this reason, getting access to Euro Survey data was extremely useful for the MNB. The Euro Survey has provided the basis for several earlier studies that deal with the motivation behind households' financial decisions, e.g. Stix (2013) or Beckmann et al. (2011). Relying in particular on Fidrmuc et al. (2013), Banai and Vágó examined the demand-side reasons of foreign currency lending to households using Euro Survey data for the period from H2 2007 to H2 2011. They ran several logit estimations where the dependent variable was provided by the response to the question "Do you plan to take out a loan within the next year?"

Methodology

In terms of methodology, the key challenge was that a considerable number of observations were missing from the database; this could have affected the reliability of the empirical results if the problem had not been handled properly. Therefore, the authors used multiple imputations, an advanced method that is more reliable and efficient than less sophisticated conventional methods. Their results confirmed that the outcome differed depending on the method used, i.e. the proper treatment of missing variables was indeed important. This was one key finding from a methodological point of view. Moreover, Banai and Vágó showed that the proper methodology to manage the problem of missingness got more important as the level of missingness increased. In the case of missingness as high as 50%, estimation results can differ even if two different multiple imputation techniques are compared. At a moderate level of missingness (15% to 25%), different multiple imputation methods yielded practically the same results.

Main results

The results showed that in both Hungary and Poland, borrowing decisions were determined primarily by three factors: existing banking relations, which may be closely connected with financial awareness and financial literacy; macroeconomic expectations, which also have a connection with households' personal financial situation; and trust in the institutional system. As regards the latter, trust in the EU – in addition to trust in domestic institutions – was particularly important in Poland: credit demand from households who trust the EU was stronger. In Hungary, trust in foreign banks was significant so that higher trust went hand in hand with higher credit demand. Also in Hungary, the labor market influenced credit demand in all periods. Unemployed people's intention to borrow was

stronger than employed people's right after the onset of the crisis, which may have been attributable to strong liquidity constraints.

As the two countries were examined separately, the role of regions (agglomerations) could also be taken into consideration. In Hungary, the effect of the place of residence appeared to be very strong. It suggests that in the pre-crisis period, the credit market was indeed flooded by borrowers with deteriorating creditworthiness. However, from 2009 onward, credit demand was highest in Central Hungary, the country's most developed region. In Poland, a similar phenomenon before the crisis appeared only with respect to the role of education, as this factor had a negative effect.

The largest difference between the Polish and Hungarian results appeared in the later phase of the crisis (between H2 2010 and H2 2011). In the case of Hungary, there were two factors that proved to be significant, which did not appear in the estimate performed on the Polish data. First, the negative experience with foreign currency loans reduced credit demand. This may be attributable to the fact that in Hungary the problems related to foreign currency loans were well known already in 2010. Second, the results confirm that in Hungary self-selection may also play a strong role in household lending. Those households that regarded banks' credit conditions as strict were less inclined to apply for a loan in the first place.

Discussion

In the lively discussion that followed the presentation, several questions and suggestions were raised. For example, it was suggested running the estimations on data excluding those who already had a loan when the survey was conducted. Having a loan contract may also be a reason for the low willingness to borrow. It should be a good robustness check. According to the survey, it seems that one of the main motives for borrowing in foreign currency was the advice of banks. Some suggested, however, that in many cases respondents just like to blame others (i.e. debtors may blame banks for the choice of the loan currency). Since this phenomenon could be observed even before the crisis, bank advice was an important factor in any case, the authors pointed out in response. Finally, it was suggested to redo the estimations based on a joint Hungarian-Polish sample to additionally check for robustness. This may give rise to some new insights, the authors acknowledged, but at the same time they pointed out that due to significantly different missingness structures, any empirical results derived from a combined two-country sample should be interpreted with utmost caution.