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Macroeconomic factors' influence on mortgage interest rate type demand

This research tests the relationship between mortgage interest rate type choice and macroeconomic factors (income, house prices, inflation) in Lithuanian mortgage market. Significant negative relationship was observed between mortgage short-term interest rate demand and income level.

Keywords: mortgage loans, mortgage interest rate type, mortgage demand, mortgage supply, mortgage markets, macroeconomic factors.

Šiame darbe analizuojamas ryšys tarp paskolų būstui įsigyti palūkanų normų rūšies paklausos ir makroekonominių veiksnių (pajamų, būsto kainų, infliacijos lygio ir pokyčių). Nustatytas stiprus neigiamas ryšys tarp trumpo palūkanų fiksavimo laikotarpio paklausos ir pajamų lygio.

Raktiniai žodžiai: būsto paskolos, paskolos palūkanų normų rūšis, būsto paskolų paklausa, būsto paskolų pasiūla, būsto paskolų rinka, makroekonominiai veiksniai.

JEL Classifications: E43/G21.

Introduction

While taking a mortgage loan, house-holds face many complex problems. J. Y. Campbell (2006, p. 1578) describes what is important to make a good decision, the households "must take into consideration real interest rate risk, inflation risk, borrowing constraints today and the possibility of borrowing constraints in the future, their risk aversion, their probability of moving and their ability to refinance (...) optimally". One of the important decisions they have to take is mortgage interest rate fixation period.

The chosen interest rate type makes

influence on the households' ability to fulfill their financial obligations to the financial institutions and on consumption levels not only in present, but also in the future. Households' choice is also important for mortgage providers who seek not only to increase their loan portfolio, but also to manage the quality of loan portfolio. The supervising agencies are also interested in factors, financial system and the economy. Thus, it is important to understand what the main determinants of mortgage interest rate type choice are.

Mortgage contracts are contracts that

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share various influencing mortgage interest rate type choice. It is important for financial system stability through mortgage providers' loan portfolio quality and for mortgage takers' as financial service consumers' protection and empowerment. 2008 financial crisis has shown how problems in mortgage lending may destabilize types of risk between mortgage lenders and borrowers. Interest rate risk is one of them. A long-term interest rate mortgage contract has a stream of payments which is invariant to changes in the level of real interest rates for the long period of the interest rate fixation. It is usually longer than one year and up to 5, 10, 15 years or for the whole life of a loan. A mortgage with short interest rate fixation requires a borrower to pay a floating nominal interest rate. Payments have a relatively stable real market value (since short-term uncertainty about inflation is small, so most inflation shocks are compensated by variation in the nominal interest rate). The main concern of the long-term borrower is inflation rate over the period of interest rate fixation. Short-term rate borrower who is income constrained faces significant risk, because if real interest rates increase, then required payments also increase while income may remain unchanged. It is also important if the loan is taken in foreign currency and if the interest rate depends on foreign country's economic situation. Because the term structure of interest rates is normally upward sloping, both the initial payments and the expected stream of future payments are normally lower for a short-term interest rate loan than for a long-term interest rate loan. For this reason, income and constraints tend to lead mortgage borrowers to prefer short-term interest rate loan. However, the anticipation of future income constraints makes short-term interest rate

loan risky and may lead borrowers to prefer long-term interest rate loans.

Literature on mortgage interest rate type choice emerged in the 1980s after the introduction of short-term interest rate (or as it is called in American literature – adjustable rate) in the US market. Currently research of mortgage design and choice is more advanced and "integrates insights from across our discipline: not only from fields within finance such as asset pricing, behavioural finance, and financial intermediation, but also from urban economics and macroeconomics" (Campbell, 2012, p. 2).

When relation between macroeconomic factors and mortgage interest rate is discussed, usually it is related with monetary policy perspective. It is analyzed how quick is economy's response to interest rate policy decisions and actions, how it is related with mortgage portfolio structure by mortgage interest rate fixation period (Bernanke, Gertler, 1995; Kashyap, Stein, 2003; Sander, Kleimeier, 2004; Liu et al., 2008; Goukasian, Majnouri, 2010). The dominating mortgage type has the potential to influence macroeconomic outcomes, by altering the transmission mechanism of monetary policy and to determine consumption changes, households' default patterns. In turn, the macroeconomic environment has a powerful influence on country's mortgage market.

Most research of mortgage interest rate type choice is focused on developed countries and mature mortgage markets. Emerging markets are under-researched. Macroeconomic situation in such countries is different from developed countries – economic fluctuations in emerging markets are not only more frequent, but also stronger. Households in these countries are more sensitive to such fluctuations

because of lower savings and limited state social protection abilities. Current environment of rapid economic changes is predetermined by globalization and financial markets integration, non-conventional financial institutions and supervising agencies. At the same time, mortgage markets are still under development. Thus, insights enabling interest rate type choice forecasting and possibility of intervention into the household decision making process by financial institutions should ensure proper financial risk management. This leads to the scientific problem: what is the relationship between macroeconomic factors and households' mortgage interest type choice in a developing market?

The object of the research is the relationship between macroeconomic factors and mortgage interest type choice of households.

The **aim of the article** is to identify the relationship between macroeconomic factors and mortgage interest type choice of households in Lithuanian mortgage market.

To meet the aim of the article following **objectives** become necessary:

- to identify and to discuss what macroeconomic factors and how influence households' mortgage interest rate type choice;
- to suggest the methodology for analysis of relationship between macroeconomic factors and mortgage interest type choice of households;
- to investigate and to characterize the relationship between macroeconomic factors and mortgage interest type choice of households in Lithuanian mortgage market.

The research methods include analysis of theoretical and empirical literature describing the main macroeconomic factors

and their relationship mechanisms with mortgage market, Spearman's correlation analysis, investigating the relationship between macroeconomic factors – real income levels, housing price levels, inflation volatility, and mortgage market characteristics – interest rate levels and expectations, lending volumes and loan portfolio quality – affected by those macroeconomic factors.

Background

Spur of the research on mortgage interest rate type choice dates back to 1980s after market liberalization and introduction of loans with short-term interest rates in the US. Current situation is rather different – it is intended to re-regulate markets, deflationary environment, unconventionally low interest rates encourage revisiting the issue.

One of macroeconomic indicators is real income. Research of income and mortgage choice relationship was mainly based on household-level research and not macro level of aggregate income. The research of the household income related factors started with J. K. Brueckner (1986), J. Alm and J. R. Follain (1987), J. K. Brueckner and J. R. Follain (1988). Since then, several contradictory views dominate in literature: 1) increasing household income lowers probability that household will choose short-term interest rates (Alm and Follain, 1987; Brueckner and Follain, 1988; Posey and Yavas, 2001); 2) low income (relative to their loans) households should prefer a reduced interest rate risk, i.e., along-term fixation (Campbell and Cocco, 2003); 3) income is irrelevant given the prices and terms of the contract (Baesel and Biger, 1980), proved by empirical evidence of U. S. Dhillon et al. (1987), J. Vickery (2007), M. Paiella and A. F. Pozollo (2007).

Mortgage demand related factors are housing prices and mortgage interest rate levels. Demand for short-term interest rate should be greater when there is high positive correlation between the house price and the mortgage interest rate (Alm and Follain, 1987; Brueckner and Follain, 1988) and vice versa. Empirical research also identifies that housing price cycles affect household's decisions (Sa-Aadu and Megbolugbe, 1995) in a different way: it is possible that some households may be forced to either consider buying a house with a lower (and so far affordable) short-term rate or not buying a house during periods where real house prices are increasing. Thus increased shortterm rate demand is motivated primarily by housing affordability concerns.

Interest rate expectations related factors, such as the level of the mortgage interest rate, short-term - long-term differential should also be included as factors influencing mortgage type choice. Level of interest rate can be measured against related benchmarks. J. Y. Campbell and J. F. Cocco (2003) advocate the spread between the yields on a nominal long-term and short-term bond, R. S. Koijen et al. (2009) model shows that household mortgage choice should be linked to the inflation risk premium. High inflation variation encourages short-term interest rate choice as one-side bet against inflation become "extremely expensive" (Campbell, 2012, p. 6). Differential between short-term and long-term interest rate was also analyzed as an indicator (Campbell, 2006; Vickery, 2007). Empirical studies confirm that if the general interest level is relatively high, borrowers also prefer shortterm interest rate due to the mean-reversal expectations. A high spread between the interest rate increases the probability of taking a short-term interest rate. However, it seems that differential between short-term and long-term interest rates or benchmarks should depend upon whether this is a relative cost or a forecast of interest rate changes. If large differential is perceived as a forecast of short-term interest rate increase in the future, demand of long-term interest rates should increase. If, on the other hand, it is perceived as a price for insurance against interest rate increases, large differential means expensive insurance. In this case, demand for short-term interest rates should increase.

Macroeconomic factors also affect mortgage market characteristics, designed by mortgage providers. Thus, mortgage interest rate type choice is also influenced by supply related factors. Mortgage providers via their advice or pricing decisions may influence demand of a certain type interest rate. Interest rate risk interacts with credit risk. Due to a change in short-term interest rates, the probability of failure to repay debts increases. Existing research proposes that short-term rate loans must be considered riskier than long-term rate loan (Posey and Yavas, 2001). Rich empirical research provides approving evidence. P. H. Hendershott and R. van Order (1987), D. F. Cunningham and C. A. Capone (1990), B. W. Ambrose et al. (2005) find relatively high rates of default among short-term rate households.

A factor influencing bank's credit risk aversion is increasing competition. Competition encourages pursuing riskier policies in attempt to maintain profits (Keeley, 1990). Empirical investigations (Demsetz et al., 1996; Hellmann et al., 2000; Salas, Saurina, 2003; Bofondi, Gobbi, 2004) show that measures of bank risk are correlated with market power. Increasing competition should increase share of riskier (i.e., short-term interest rate) loans. Loan portfolio quality worsening has the opposite effect. Loan

portfolio quality worsening is also related with housing price decreases and income decreases. In that case, economic downturn should decrease demand (or supply) of loans with short-term interest rate fixation.

To generalize, previous studies provide an extensive list of macroeconomic factors that may have influence on the mortgage interest rate type demand: household income (contradictory predictions), housing prices (positive), inflation (negative), levels of interest rates (contradictory predictions), competition in the mortgage market (positive) and loan portfolio quality (positive). However, current context - low inflation, low interest rates require revisiting household interest rate choice determinants. Additional evidence would bring some extra points to the empirical debate. Also, the geography of research will be extended to emerging markets, which are still under-researched, mostly due to the

short history. Specific of such markets is higher uncertainty about interest rate variance, more volatile economic situation. To evaluate if mortgage markets develop according to theoretical predictions in emerging countries, research of such countries' mortgage markets is needed.

Sample

In this paper data from Lithuanian mortgage market is analyzed. Lithuanian market could be characterized as an emerging market: it is a relatively young market with relatively short mortgage history and rather simple mortgage products. This type of market is under-researched, as majority of previous research is focused on developed markets.

The research period cover the time range is from October 2004 to February

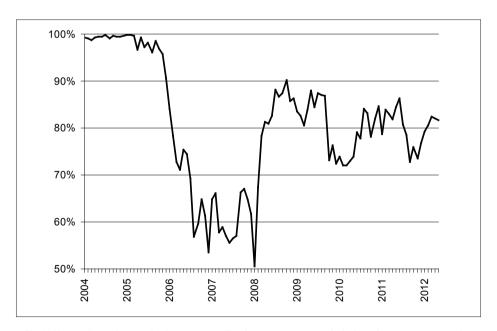


Fig. 1. Share of new loans with interest rate fixation up to one year in Lithuanian mortgage market

Source: Bank of Lithuania.

2013. Such duration is sufficient to evaluate macroeconomic factors impact on mortgage interest rate type choice as 1) it includes full economic cycle (economic boom and bust) in the country, 2) the rapid mortgage market growth in Lithuania started at approximately 2002–2004, 3) before 2004 longer term interest rate fixation option was not widely available to mortgagees offered by mortgage providers, 4) share of new loans with short-term interest rate fixation was fluctuating significantly during that period (see Figure 1).

Since 2004 to 2012 the share of mortgage loans with short-term interest rate fixation fluctuated from the highest 99.9 % in November 2005, to the lowest 50.6 % in October 2008. There is a consecutive decrease in the share of new loans with short-term interest rate for the period of two years (2006–2007). Also there are several periods of consecutive increase of the share of loans with short-term interest rate lasting for 6 months in the end of 2008 – beginning of 2009 and in the beginning of 2011.

To analyze macroeconomic impact on mortgage interest rate type choice, data from the Bank of Lithuania is used. The data includes monthly information of the volumes of new mortgage loans for households by initial rate fixation up to 1 year (short-term interest rate) and more than 1 vear (long-term interest rate). New loans include all financial contracts, terms and conditions that specify for the first time the interest rate of the loans, and all new negotiations on existing loans (including refinancing). Information is separately provided about loans granted in national currency Litas and EMU currency Euro. For this analysis only loans in Euros were considered. Loans in Litas were not included in analysis as it is known that for loans in national currency many mortgager providers do not offer a possibility to fix interest rates for longer than one year.

Data on macroeconomic indicators were taken from various public sources. EURIBOR 6 months and EURIBOR 2 weeks data (monthly average) was taken from "Euribor-EBF". Data required for real income estimation (net salary, CPI index and unemployment) was taken from Lithuanian Department of Statistics.

Methodology

As the goal of the research was to analyze relationship between macroeconomic factors and mortgage interest rate demand, correlation analysis and regression analysis were initially chosen as research methods, based on E. Moench et al (2010), R. S. Koijen et al (2009). However, due to variables' non-normal distribution (all the variables did not pass tests of normality) which could not be improved by any available variable transformations, research methodology was limited by Spearman's correlation analysis. The authors accept that correlation analysis cannot assess the likelihood that the correlation is due to chance rather than underlying economic relationship and cannot capture the joint relationships that may exist between the macroeconomic factors and interest rate type demand. However, this limitation is inevitable for relatively small number of observations, though it is conditioned by the emerging market characteristics.

Analyzed factors were divided into two groups: "pure" macroeconomic factors, such as households' real income, real house prices, inflation volatility, and mortgage market characteristics which are related with mortgage supply side factors – level of mortgage interest rates, volumes of new

mortgage loans, loan portfolio quality. Bivariate correlations between those macroeconomic factors and share of new loans with short-term interest rate were analyzed. Description of the aforementioned factors – variables' indicators is provided in Table 1.

Based on previous research, positive relationship is expected between the share of mortgage loans with short-term interest rate fixation and volumes of new loans, level of the short-term interest rate, inflation variation and real estate prices. Negative relationship is expected with the share

of non-performing loans (inverse indicator of portfolio quality). The predictions of the character of relationship with real house income and market rate differential are ambiguous. Strong relationship will be considered if relationship coefficients will be higher than 0.6. Coefficients lower than 0.3 will be considered as weak.

As the main limitation of the research is the short history of the observation, causing non-normality of variables distribution. It is the main reason why research method had to be limited by correlation

Table 1

Macroeconomic factors, their indicators and expected relationship with short-term interest rate mortgage demand

Group of factors	Factors	Indicator	Assumptions taken into consideration	Expected correlation (positive"+", negative "-")
Macroeconomic factors	House- holds' real income	Net salary index (2004=100) x (1-unemployment) x CPI index change (2004/current)	Unemployment levels and inflation impact are evaluated. There is no data on household disposable income	?
	Real house prices	House price index multi- plied by CPI index change (2004/current)	Inflation impact to house prices is evaluated	+
	Inflation variance	Monthly data on the yearly CPI change variance (mean = 2, as target level of the ECB) with one month lag	To consider the inflation volatility relation with mortgage choice	+
Mortgage market characteristics	Mortgage interest rate gap	Difference between interest rates for newly granted loans with initial interest rate fixation up to one year and more than on year	Percentage point gap is better perceived than percentage change	?
	Level of the short- term interest rate	Difference between EURIBOR 6 months and EURIBOR 2 weeks	EURIBOR rate was chosen as benchmark, as interest rates on loans in foreign currency (euros) have no direct relationship with local bonds or local inflation. Information of EURIBOR rates is easily accessible and available to household's prior decision.	+
	Volumes of new loans	Monthly volumes of newly granted mortgage loans in Euros	Level of mortgage market activity, measure of competition in the market	+
	Portfolio quality	Share of non-performing mortgage loans in total mortgage portfolio	Measure of credit risk. Negative sign is expected because share of non performing loans is inverse to portfolio quality	-

analysis only. Another limitation is that mortgage loans granted in Litas was not included into research. The argument for that option is that most of mortgage providers grant loans in Litas only with shortterm interest rate, so choice is biased due to the supply related factors. The impact of such limitation is mitigated by the fact that on average newly granted loans in Litas make 31 % of the whole volume, the share of loans in Litas in portfolio during the period of observations decreased from 52 % to 23 % (according to the data of the Bank of Lithuania). Based on this limitation the indicator of short-term interest rate level was put into market characteristics instead of macroeconomic factors. Short-term interest rate level was identified comparing euro zone market interest rate levels (EU-RIBOR) and not local market indicators.

Results

Results of correlation analysis are provided in the Tables 2 and 3. Strong negative correlation was identified with real income (-0.762, statistically significant at p<0.001 level). Correlation with pricing variables was statistically not significant. That contradicts the view in the previous researches that income is not significant given the pricing and terms of the loan. Also the signs of correlations with inflation variance, real house prices were identified to be different than compared with the results of previous researches.

An explanation of the positive relationship between the share of short-term interest loans and household income was based on risk aversion of households where lower income was considered as a factor showing household's vulnerability to interest rate shocks (Campbell, Cocco, 2003). This assumption was not validated by the results of the current research. An assumption for negative income impact was that due to low income levels households are income constrained so their choice is restricted to the lower interest rate loan. Those who expect growing income in the future should have chosen less expensive, i.e., short-term interest rate (Brueckner and Follain, 1988). That is reasonable, having in mind low income levels and expected income growth of the emerging country households. However, in previous research income variable was considered mostly on an individual household level and here aggregate level of households' income was tested. That may be consistent with J. Vickery (2007) suggestion that market wide variables are more important than individual.

The next by strength (negative) correlation was detected with inflation variance (-0.489, statistically significant at p<0.001 level). According to the set levels of strength, correlation is not strong. But the contradictory sign deserves a deeper discussion. When inflation was increasing, the share of new loans with short-term interest rate was decreasing. This may be explained by the fact, that borrowers choose foreign currency for their loan. The different inflation

 $Table\ 2$ Correlation between macroeconomic factors and the share of short-term interest rate mortgage loans

	Macroeconomic factors				
	Real income	Inflation variance	Real house prices		
S	762	489	345		
Spearman's correlation estimate	(.000)	(.000)	(.000)		

Table 3
Correlation between the share of short-term interest rate mortgage loans and mortgage market character-
istics

	Mortgage market characteristics				
	Mortgage inte- rest rate gap	Level of short- term interest rate	Volumes of new loans	Share of non-per- forming loans	
Spearman's correlation	.106	.227	113	320	
estimates	(.293)	(.022)	(.263)	(.001)	

"size" led to situation when interest rate on long-term loans in foreign currency was attractive compared to local inflation rates.

Correlation with real house prices was weaker (-0.354, statistically significant at p < 0.001 level). Counter-intuitive sign of house price indicator is also consistent with negative impact of real income. Correlation between real income and real house price is rather high (0.594, at p<0,001). Thus increasing housing demand did not result in the greater share of cheaper mortgage loans (and more volatile interest rate). When demand was growing, the same happened to mortgage market. Thus, increasing housing prices and increasing demand increased competition. But the outcome of the increasing competition and growing mortgage market was not just lower risk aversion, but also larger variety of mortgage products feature of possibility for households to insure against interest rate volatility. Longer term interest rates became more attractive and/or more widely offered.

Results of the correlation with supply side related market characteristics are provided in Table 3. Among the supply related factors only correlation with non-performing loans is statistically significant and has a predicted sign.

Non-significant correlation with pricing factors together with the fact that correlation between market rate differential and short-term interest rate level is not perfect (0.616 at significance level of

p<0.001), prompts that pricing in Lithuanian mortgage market must have been rather stochastic. Level of the short-term interest rate which is identified as exogenous inter-bank market rate shows better statistical significance characteristics. Thus mortgage market interest rate differential is less proper as an expectations' indicator than the level of short-term interest rate.

Conclusions

Previous mortgage interest rate type choice analysis shows that macroeconomic factors may have influence on mortgage interest rate. Among the most important factors household income, housing prices, inflation and interest rates were mentioned. Household income and housing prices are related with housing affordability and housing demand, inflation and interest rates – with expectations about future opportunities or threats.

The spur of previous research was observed in 1980s evoked by changes in the US mortgage market (liberalization and introduction of short-term interest rates) and by inflationary environment. Previous research was mostly focused upon developed countries with mature mortgage markets. But macroeconomic situation and its fluctuation frequency and amplitude in emerging markets is different. Due to lower income, smaller savings and weaker social

policies households in these countries are more sensitive to such fluctuations. At the same time, mortgage markets are still under development. These features imply that macroeconomic factor's impact upon households' mortgage interest rate type choice may be different. Situation in emerging countries mortgage markets is under-researched. Current situation is also different compared to that three decades ago: recent financial crisis brought back the ideas of re-regulation, environment is deflationary, and interest rates are unconventionally low. These motives encourage revisiting the issue of the macroeconomic factors' impact upon mortgage interest rate type choice.

In this research mortgage market of Lithuania and its relationship with macroeconomic indicators was analyzed. Spearman's correlation was used to identify those relationships. Empirical evidence of mortgage interest rate demand relationship with macroeconomic factors in Lithuania for the period 2004–2012 was very often contradictory to previous research in developed markets.

The research results show different relationships compared to previous predictions. The strongest relationship was detected between the share of loans with short-term interest rate fixation and

household income. The strong and negative correlation contradicts the prediction of risk aversion and may be explained via income growth expectations. Housing price growth pattern is related with real income pattern and so house prices have the same negative though weaker correlation. Inflation is negatively related to short-term mortgage interest rate choice. It is an outcome of borrowing in foreign currency when local inflation volatility is higher. Relationship with pricing factors was not significant - the outcome also contradictory to previous research. On the supply side related factors, the relationship between share of non-performing loans and share of loans with short-term interest rate fixation was detected. The relationship, though, rather weak, but is found to be statistically significant.

Though it must be admitted that sample of data for deeper analysis of Lithuanian mortgage market is rather short and thus acts as a limit of the research method choice. However, having in mind the goal of the research to analyze emerging market, it must be assumed that an emerging market in time becomes a developed or mature market and lose its characteristics of emerging market. Thus, the obstacle of short history in such kind of research is hardly avoidable.

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The paper submitted: July 19, 2013 Prepared for publication: September 1, 2013

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MAKROEKONOMINIŲ VEIKSNIŲ ĮTAKA BŪSTO PASKOLŲ PALŪKANŲ NORMŲ RŪŠIES PAKLAUSAI

Santrauka

Prieš pasirašydami būsto paskolos sutartį, namų ūkiai susiduria su gausybe sudėtingų klausimų. Vienas iš svarbiausių – kokį paskolos palūkanų fiksavimo laikotarpį pasirinkti.

Nuo pasirinkto palūkanų fiksavimo laikotarpio didele dalimi priklauso namų ūkių galimybės vykdyti sutartinius įsipareigojimus paskolas išdavusioms kredito institucijoms (laiku mokėti paskolos grąžinimo įmokas ir priskaičiuotas palūkanas), taip pat namų ūkių vartojimo galimybės ir per pirmąjį palūkanų fiksavimo laikotarpį, ir jam pasibaigus, kai paskolų palūkanų normos bus peržiūrėtos. Pasirinkus trumpesnį palūkanų fiksavimo laikotarpį, palūkanos gali keistis dažniau, o tai reiškia didesnį neapibrėžtumą dėl namų ūkių finansinių galimybių. Namų ūkių pasirinkimas svarbus ir paskolas išduodančioms institucijoms, nes jos siekia ne tik didinti savo paskolų portfelius bet ir užtikrinti pageidaujamą paskolų kokybę. Priežiūros institucijoms taip pat svarbu žinoti veiksnius, darančius įtaką namų ūkių paskolų palūkanų fiksavimo laikotarpio pasirinkimui: nuo to priklauso finansų sistemos stabilumas (kredito institucijų turto kokybė), taip pat tai svarbu siekiant užtikrinti tinkamą paskolų gavėjų - finansinių paslaugų vartotojų apsaugą.

Būsto paskolos palūkanų normų fiksavimo laikotarpio pasirinkimo problema darosi ypač aktuali šiandien, kai dėl globalizacijos, finansų rinkų integracijos ekonominėje aplinkoje vyksta dideli ir dažni pokyčiai. Šiuo metu paskolų palūkanų normos yra išskirtinai žemos. Viena vertus, dėl to gerėja skolinimosi galimybės dabar, kita vertus, ateityje, jei padėtis pasikeistų, dėl to gali kilti grėsmių visoms trims suinteresuotų asmenų šalims – paskolas paėmusiems namų ūkiams, paskolas išdavusioms institucijoms ir priežiūros institucijoms. Svarbu išanalizuoti, kokia įvairių veiksnių įtaka svarbi augančios ekonomikos šalių rinkose, kur visi procesai vyksta greičiau,

svyravimai didesni, o namų ūkiai mažiau atsparūs įvairiems finansiniams šokams. Vadinasi, atnaujintos žinios apie ilgalaikių paskolų palūkanų fiksavimo laikotarpio pasirinkimą įtakojančius veiksnius, atsižvelgiant į pasikeitusias ekonomines sąlygas bei augančios ekonomikos šalių specifiką, nepraranda svarbos.

Remdamosi 2004-2013 m. Lietuvos kredito institucijų namų ūkiams suteiktų naujų būsto paskolų ir jų palūkanų normų statistika, straipsnio autorės analizuoja makroekonominių veiksnių, kaip prognozuojančių požymių, ryšį su pasirenkamu būsto paskolų palūkanų normų fiksavimo laikotarpiu. Analizuojamas trumpo (iki vienerių metų) paskolos palūkanų fiksavimo laikotarpio ryšys ir su būsto paskolų paklausa (namų ūkio interesais) siejamais veiksniais skirtumu tarp skirtingo laikotarpio palūkanų normų, ankstesnėmis palūkanų kitimo tendencijomis; ir su būsto paskolų pasiūla (kredito institucijų interesais) susijusiais veiksniais - paskolų portfelio augimu, paskolų portfelio kokybe; ir su abiems pusėms aktualiais makroekonominiais rodikliais - nekilnojamojo turto rinkos, pajamų lygio pokyčiais.

Spirmeno (angl. *Spearman*) koreliacijos analizės metodu nustatytas stiprus neigiamas ryšys tarp namų ūkių realiųjų pajamų ir naujų paskolų, kai pasirenkamas trumpalaikis palūkanų normų fiksavimo laikotarpis, vertės (=.762, n = 101, p<.001). Šie rezultatai prieštarauja ankstesnių tyrimų išvadoms, jog ryšys tarp namų ūkių pajamų ir paskolų, kai pasirenkamas trumpalaikis palūkanų fiksavimo laikotarpis, paklausos yra silpnas ar teigiamas. Analizuojamas laikotarpis yra gana trumpas. Vis dėlto šis ribotumas yra pateisinamas ir neišvengiamas, turint mintyje tyrimo tikslą – išanalizuoti augančios ekonomikos šalies būsto paskolų rinkos dalyvių elgseną. Laikui bėgant, jauna ir auganti rinka praranda būtent šias savo charakteristikas.