

Contemporary Issues in Business, Management and Education 2013

Development and sustainability risks of Lithuanian consumer credit market

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Abstract

In the paper dynamics of consumer credit market development in Lithuania is being analyzed during the period from 2004 to 2012. Growth of market volume has been analyzed in correlation with macroeconomic indexes of the country as well as earnings of households and the regulations set by the state. Special attention was paid to some aspects, which might cause sustainability problems of this market. Based on uniform approach applied the credit portfolio of households in various credit institutions has been analyzed in detail as well as the dynamics of bad loans. Some predictions and warnings related to potential sustainability threats have been formulated.

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Selection and peer-review under responsibility of the Contemporary Issues in Business, Management and Education conference.

Keywords: loans; consumer credits; insolvency; financial literacy; sustainability threats.

1. Introduction

Process analysis and control of consumer credit market has been paid attention by the governments and researchers of many countries. Even though the problems within this market not always cause direct threats to the stability of the whole financial system of the country, its social and political sensitivity is extremely high. Therefore, regulations have always been developed parallel to the development of this market in many countries.

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Regulation and supervision of consumer credit markets. In 1968 the USA has adopted Consumer Credit Protection Act (FDIC, Consumer Financial Protection Bureau, 2010) followed by Fair Credit Reporting Act in 1970 (Federal Trade Commission, 2011) and later by Fair Debt Collection Practices Act adopted in 1977 (Bureau of Consumer Protection Business Center, 2010). Three main US credit reporting companies – Equifax, Experian, and Trans Union Corporation – gather credit-related information on consumers. Each of them maintain own records for each individual throughout the country and based on this estimates his personal credit score, which is available for use by credit companies and the individuals themselves. The US Federal Reserve System also uses information from credit reporting companies for estimation of processes on macroeconomic level, but as stated in (Avery, Calem, Canner & Bostic, 2003), this information is sometimes too detailed and not enough systemized to be handy for market supervision purposes, therefore special studies are being ordered by the US Federal Reserve to additionally analyze and systemize it.

United Kingdom has set own legislation related to consumer loans by adopting „Consumer Credit Act 1974“ (Official Home of UK Legislation, 1974).

The European Union in 2008 has adopted Directive 2008/48/EC (EUR-Lex, 2008) on credit agreements for consumers, repealing the previous Council Directive 87/102/EEC. The Directive was transferred into Lithuanian legislation by adopting in 2010 the LR Consumer credit Law (Parliament of LR, 2010). The State Consumer Rights Protection Service was appointed by the law as a main institution responsible for administration and supervision of consumer credit market in the country. From 2011 part of its duties, mainly related to market supervision have been transferred over to the Bank of Lithuania. The law has legitimized so called data bases for creditworthiness estimation of the recipient of consumer loan, nevertheless no information on credit score of each individual, similar to the US credit reporting companies, is available in Lithuania so far. This, also a limited market coverage by the mentioned databases compromise to a certain extent the efficiency of monitoring of the market by the state. Taking into account the country's limited experience in dealing with consumer credits, a closer look and in-depth analysis would be helpful for better understanding of processes and prevention of potential threats.

Research of consumer credit market related processes. Various consumer credit related aspects have been analyzed by numerous researchers and presented in publications worldwide. J. Logemann (2012) has studied the evolution of consumer credits market on a global scale. J. V. Signoriello (1991) has traced the peculiarities of commercial loans lending process and linked the results to the economic situation in Latin America. S. Finlay (2009) has investigated the Calculation of Interest rate and APR in UK. E. T. Garman, R. E. Fogue (2009) specialize in personal finance and have traced the proportions between income and contributions to pay loans in USA. Vanessa Mak and Jurgen Brasspening (2012) analyze the EU consumer credit market peculiarities from legal regulations point of view. Barbara O'Neill (2010) in her articles discusses the U.S. Credit Card Act of 2009, which outlawed many of the unethical techniques that credit card firms had been using to take money away from their customers. She notes that some companies have not fully complied with the law, and all of them are looking for loopholes in it, so consumers ought to remain wary. Robert B. Avery, Paul S. Calem, Glenn B. Canner (2003) have investigated consumer credit market in USA and made an overview of Consumer Data and Credit Reporting. Lyn C. Thomas (2000) has made a survey of UK consumer credits market and forecasted the financial risks related to lending. David Gal and Blakeley B. McShane (2012) made an investigation about consumer debt management in consumer credit market in the USA. Keith Wilcox, Lauren G. Block and Eric M. Eisenstein (2011) have made a research that examines consumers spending related to credit cards. Liran Einav, Mark Jenkins, Jonathan Levin (2013) have made an investigation about the impact of credit scoring on consumer lending. Stephen E.G. Lea, Paul Webley, Catherine M. Walker (1995) investigated psychological factors in consumer debt in UK. The investigation was related to households money management skills and aspects of their consuming behavior. Teresa A. Sullivan, Elizabeth Warren, Jay Lawrence Westbrook (1989) have investigated relations between bankruptcy and consumer credits in USA. Michael McBride (2001) has made an investigation about income effect on human well-being and stressed the willingness to live above real possibilities, which force borrowing. Phylis M. Mansfield, Mary Beth Pinto, Cliff A. Robb (2013) have made a review of the empirical literature of relations between consuming issues and credit cards. D. J. Hand, W. E. Henley (1997) have made an investigation about statistical classification methods in consumer credit scoring. Nasir Uddin (2013) has made a study that estimates a two-group discriminant function to determine the expected financial health of the consumer credit customers' of a bank of Bangladesh by using thirteen demographic, socio-economic, and loan characteristics of the sample borrowers.

Bank of America (2012) investigates consumer credit market in USA and gives suggestions how to avoid bad loans for households. EUROFINAS (2013) organization has made investigations about interest rate and APR calculations, also about bad loan variation in member states. Bank of Lithuania (2011, 2012) from 2011 investigates the dynamics of Lithuania's consumer credit market. Lithuania's Small Consumer Credit Association (2013) and Lithuanian Consumer Leasing and Credit Association (2013) investigate information about their members financial information.

Publications show that majority of processes in the consumer credit market are common in all the countries. It is also obvious that this market is very complex and many factors affect its condition, including local and the country-specific. There are indications that despite existing regulation, supervision and monitoring some processes in Lithuanian consumer credit market might not develop in a secure way. The Bank of Lithuania and other institutions collect information within the sector, mainly based on statistical data and analyze it, but the analysis of the processes not always is adequate without deeper investigation.

The aim of this paper is to analyze processes related to the development of Lithuanian consumer credit market, first of all within small and short term loans segment and the investigation of reasons and tendencies, which might cause the potential sustainability threats.

2. Macroeconomic Environment

It is supposed that consumption is directly related to financial situation of households, first of all earnings, which in its turn depends on general economic situation of the country. To verify this, some country's macroeconomic indexes and consumption indicators of household have been analyzed in order to find correlation between them. Analysis was made for the period of 2004–2012, which covers all phases of the economic cycle- growth, peak, decline and the recovery (Fig. 1).

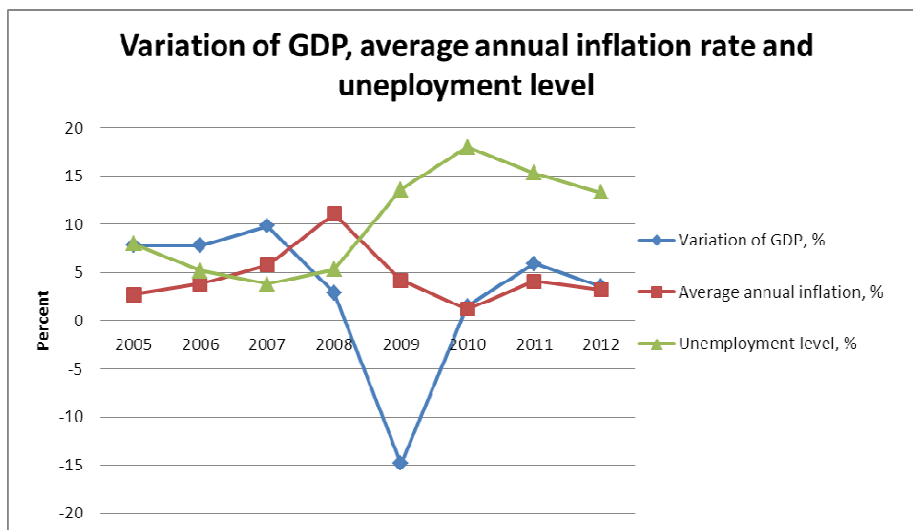


Fig. 1. Dynamics of Lithuania's GDP, inflation rate and unemployment level in 2005–2012
(Source: according to Statistics Department and LR Ministry of Finance done by authors)

Until 2007, when economy was growing, both GDP and inflation have grown too. The growth rate of GDP was permanently increasing and has reached almost 10% in 2007. Several factors have stimulated this, among them increased internal consumption, foreign investment, reduced unemployment and very high inflation rate. The crisis has reached its peak in Lithuania in 2008–2009 and was marked with very sharp drop of GDP by approximately 15% in 2009. Furthermore, inflation, which was permanently growing during the previous years has also reached its peak of 11.1% in 2008, compared to 5.8% in 2007. Unemployment rate in 2009 has increased 2.5 times compared to

2008. Further growth of unemployment by 30% was registered also in 2010, while total unemployment level made 18%. Some economy recovery signs were observed in 2010, but finally they became obvious in 2011 and were followed by reduced unemployment, inflation and the growth of GDP.

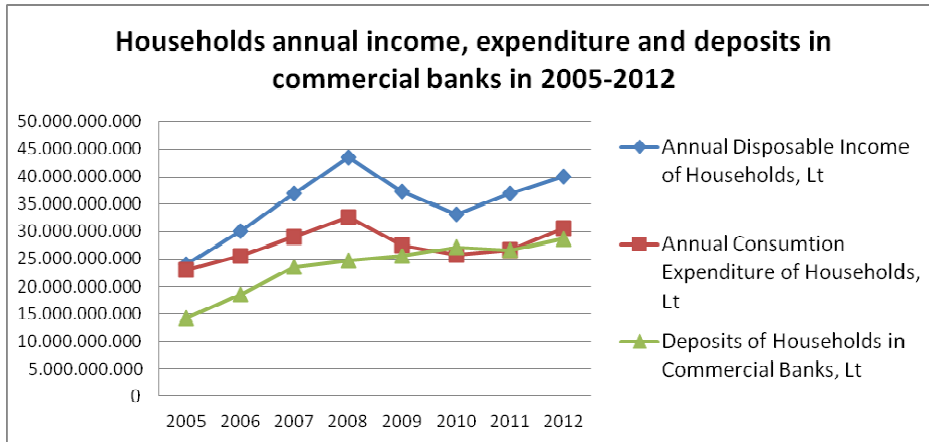


Fig. 2. Dynamics of Lithuania's Households annual income, expenditure and deposits in 2005–2012
(Source: according Statistics Department, LR Ministry of Finance and Central Bank of Lithuania done by authors)

Graphs in Fig. 2 illustrate dynamics of annual income, expenditure and monetary savings/deposits of Lithuanian households during the period being analyzed. During the pre-crisis period all the above indicators have been permanently growing. Actually they have in a certain way copied the country's macroeconomic indexes. Situation has significantly changed during the recession of 2008–2009. Average households' income has declined by approx. 14% in 2009, while drop in consumption was even higher and has reached 15.6%. Surprisingly, this has produced an unexpected and quite significant monetary savings and increase in bank deposits belonging to households by more than 3%. Similar situation was observed in 2010, when income of households has declined by another 11%. Increase of bank deposits made 6.5%. This result was somehow unexpected and indicates that correlation between country's macroeconomic and households' economic situation is quite complex. It appears that emotional environment is a very strong factor, which affects financial behavior of households – during the period of uncertainty the consumption is being limited very strictly and financial reserves accumulated to form a safety buffer. This situation has changed significantly starting from 2011 in relation to improving economy and especially in relation to overall psychological environment. Income of households' didn't reach the pre-crisis level yet, but was growing sharply, reaching the level of 11%. Consumption growth of households by approx. 3% was followed by 1.73% decline of households' bank deposits. Optimism induced by economic recovery has affected financial behavior and motivated increase of consumption, while compromising saving to a certain extent at the same time. The same tendencies are characteristic for the year 2012 as well, although some difference is present here. Approx. 8.5% growth of income was followed by increase of consumption by 15%, which has finally reached the same level as during the peak before crisis and contrary to previous year the increase of bank deposits by 7.8%.

Analysis has shown that contrary to the 2008–2009 financial crisis period, which was marked with reduced households' income and consumption and, surprisingly, the simultaneously increased savings in banks, the period starting from 2010 had indicated increase of consumption and increased spending of earlier accumulated savings. This demonstrates that financial behavior of households is linked not only with pure financial indicators, but very much depends on psychological factors and prevailing emotional condition of the society.

3. Dynamics of Consumer Credit Market

Households can borrow from various financial institutions, like local commercial banks, branches of foreign banks operating in the country, credit unions and other financial institutions. All of them are considered by the Bank

of Lithuania (LB) as being Monetary Financial Institutions (MFI). LB provides general statistical information about them, analyses and makes it public regularly. In the paper information presented by LB and other sources was analyzed in order to find out if there are differences in various segments of consumer credit market, or they became rather stagnant with little dynamism as it might appear from generalized figures illustrating tendencies in 2009–2012, see Fig. 3.

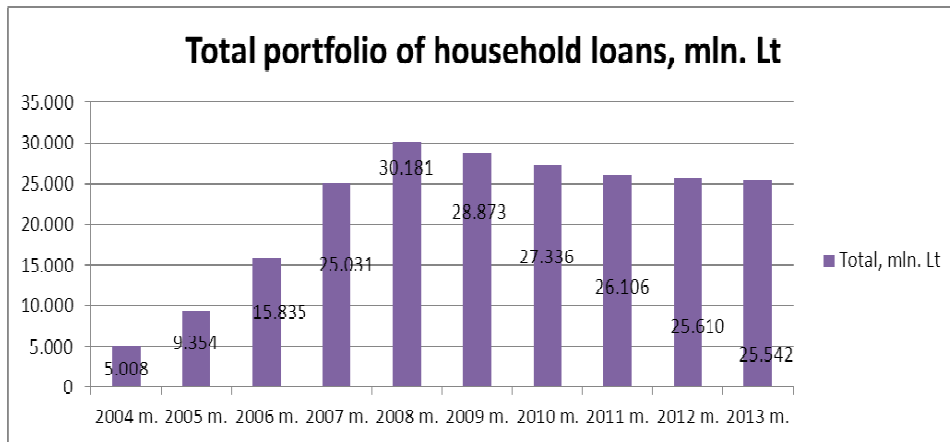


Fig. 3. Dynamics of Lithuania's Households loan portfolio in 2004 – 2013 (Source: according to LB data, done by authors)

Fig. 3 reflects dynamics of the household loans portfolio in the MFI for the period of 2004–2012. Note: The result of year 2013 is an estimation made by LB. The character of changes copies very closely dynamics of macroeconomic indexes of the country for the same period. Years 2004–2008 were favourable for the growth of portfolio for many reasons. Economy was booming, income of households raising, Lithuania had just joined the EU, the society was relaxed, full of optimism and accepted this situation as quite natural. Combined with the liberalism of banks and willingness to give loans despite of potential risks, all this has created an ideal base for phenomenon called “economic bubble“. Loans were given if income was higher than the borrowers' monthly payment with little attention paid to his liability level.

Volume of portfolio has been increasing extremely fast. During the year 2004 it has doubled (Fig. 4). An absolute growth was even higher in 2005, but max acceleration was reached in 2007. In 2008 the total volume has increased by 6 times compared to 2004 and made 30 billion Lt. It was the biggest ever portfolio of household credits in Lithuania. Since 2008 the volume was permanently shrinking. In 2009 the decline was 4.3%, in 2010 – 5.3, in 2011 – 4.5% and in 2012 – 1.9%. LB estimates that year 2012 shall be the last one in a row of 4 years with negative result and 2013 will hopefully bring some growth. The decline of household loans portfolio was first of all caused by shrinking economy and lack of public optimism, but the influence of changed attitude of banks has played and still plays its role as well. Based on experience gained during the crisis the banks became more conservative and even demonstrate certain reluctance while lending. The state on its behalf also made regulations more strict. As a result a max amount of the loan available for the borrower has been limited by linking it with his liabilities. The loans monthly cost currently can not be higher than 40% of the total income of borrower.

Sharp growth until 2008 was changed by 3 years decline at almost the same rate as the previous growth. The decline has lasted until 2011 and has stopped since than resulting in more or less stable volume of loans from 2011.

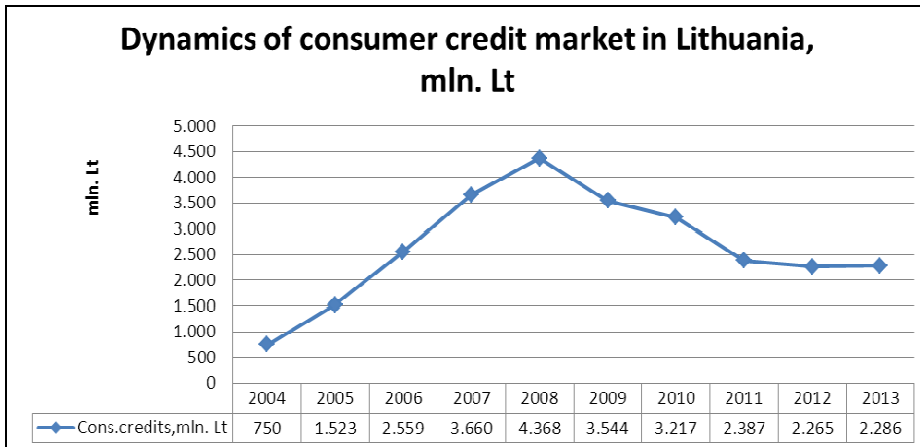


Fig. 4. The Changes in Consumer credits portfolio in 2004–2013 (Source: according to LB data, done by authors)

Fig. 5 displays the correlation of both the total value of household loans and consumer credits with the GDP as a main macroeconomic indicator of the country. Both total volume of household loans and consumer credits presented in relative figures reach their maximum in the same year 2008 as the GDP does, and decline together with GDP after the crisis. The only difference in the pattern of graphs is that they do not follow immediately the new growth of GDP, which started again in 2010, but still tends to decline until approximately 2012. This difference can be explained by an emotional condition of the society, which during 2010 and 2011 was still under impression of crisis.

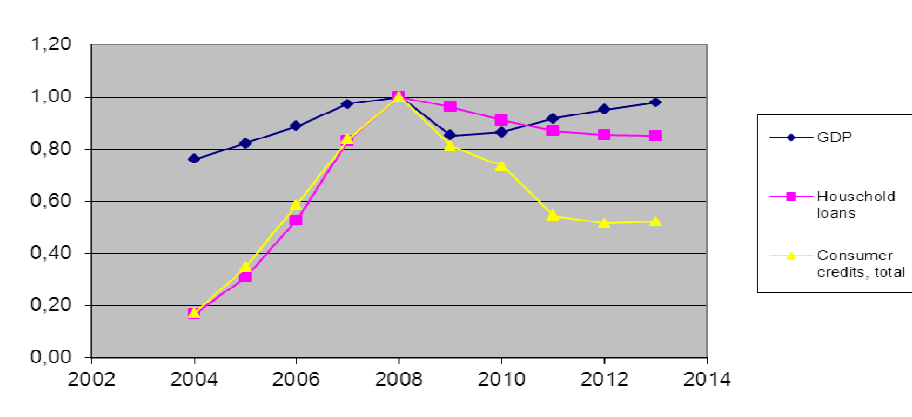


Fig. 5. Correlation of households loans and consumer credits with GDP (Source: according to data from Ministry of Finance and LB, modified by authors)

The Bank of Lithuania provides information on consumer loans split by duration: short term (below 1 year), mid term (from 1 to 5 years) and long term (longer than 5 years). Fig. 6 displays dynamics of loans by year in each category.

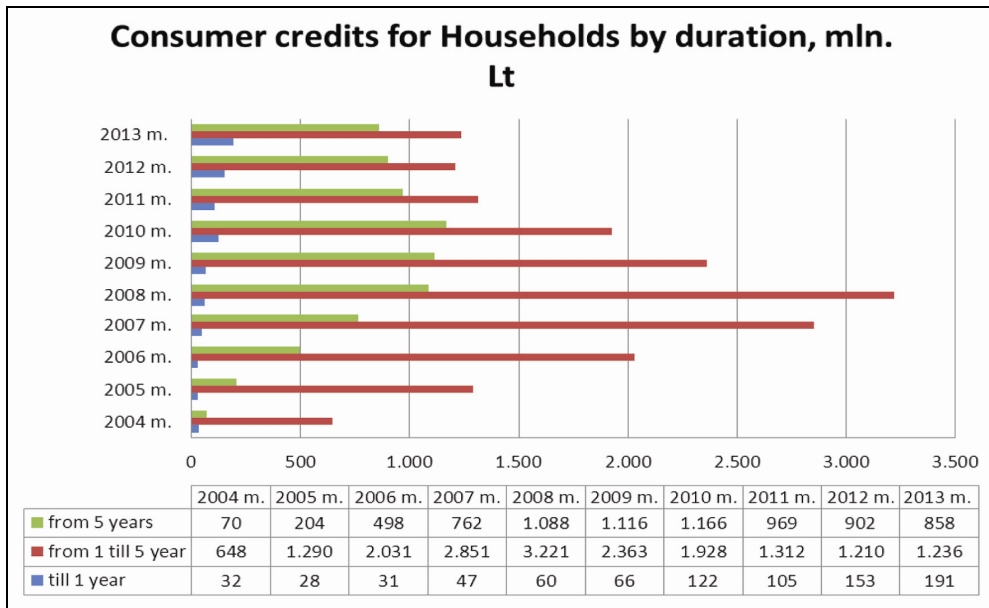


Fig. 6. Consumer credits by duration in 2004–2013
(Source: according to LB data, done by authors)

The Table 1 shows distribution of loans by duration and their share in 2005, 2008 and 2012. Years reflect situation before crisis, during the economic peak and the recovery period after the crisis. During this period the biggest relative growth was within short term loans with 3.65 times increase of share. This specific growth has significantly damped a total consumer loans portfolio decline. Growth rate of short term loans is increasing permanently, which is seen from data below.

Table 1. Distribution of loans by duration and the growth rate (Source: according to LB data, done by authors)

	2005	2008	2012
Till 1 year	1.85 %	1.36 %	6.75 %
From 1 till 5 years	84.73 %	73.73 %	53.42 %
From 5 years	13.42 %	24.90 %	39.83 %

Fig. 7 displays the correlation of consumer credits volume with GDP in the segments split by duration. Mid term loans demonstrate high correlation, while long term loans perform in a similar way, but with approximately 2 years delay. This difference between the performance of mid and long term loans is understandable as active long-term agreements could not be changed immediately and time was needed for the effect to take place. Contrary to those, the dynamics of short term loans is completely different. Its' volume has been increasing non-stop since year 2004. At the beginning (in 2004) its share as it follows from Fig. 6 was negligible compared with the total volume, but later due to permanent relative growth it became comparable with the mid and long term loans.

The Bank of Lithuania in 2011 took over from Consumer Rights Protection Service the supervision of consumer credit market, which made the comparison of current and earlier information somehow complicated. Nevertheless, the latest data confirm that a number of new loans is increasing sharply, although the total volume as stated earlier remains almost unchanged for several years. This is because in the new loans portfolio small and very small loans make an absolute majority. For example, in the second quarter of 2013 loans below 1000 Lt have made 37%, while loans over 1000 Lt – 26.4% and their numbers grew accordingly by 29% and 15% during one single quarter of the year 2013.

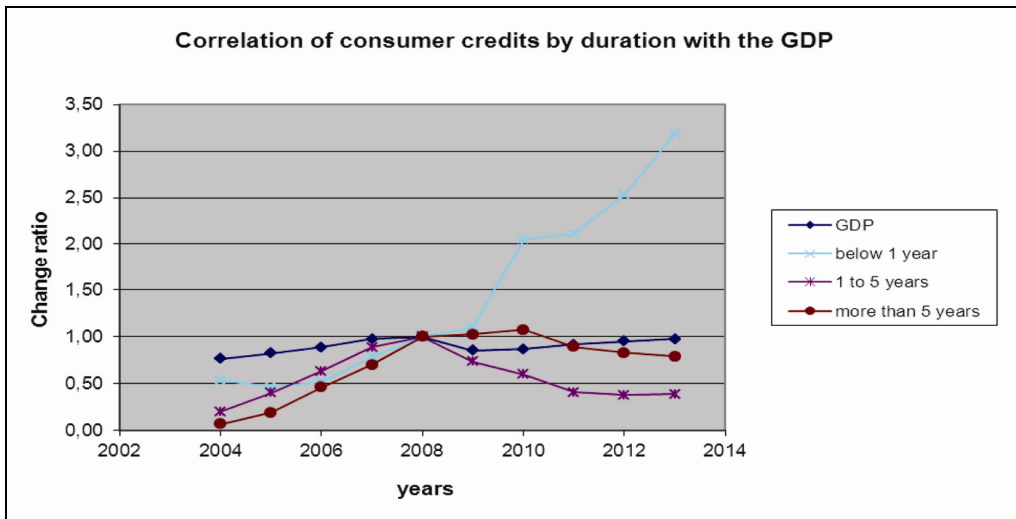


Fig. 7. Correlation of consumer credits by duration with GDP (Source: according to Ministry of Finance and LB data, done by authors)

LB report (2012) tells that a number of financial institutions, which specialize in the segment of consumer credits has been growing very fast during the last years reaching a total number of 56 of which 33 are specialized in loans below 1000 Lt only. The latter loans fall out of the LB Loan risk database used by the credit companies for the assessment of clients, which also implies the increased risk in the segment. As the dynamics of these figures as well as a sharp growth in number of credits resemble the pre-bubble situation of 2008, it suggests that a closer look at the processes within various segments of consumer credit market, including the detailed analysis of the characteristic of both lenders and borrowers is necessary in order to foresee and prevent any potential sustainability problems.

The following can summarize analysis of latest developments within consumer credit market: a) Improving macroeconomic environment and the changed attitude of main commercial banks (more conservative lending to households) during and after the financial crisis have created favorable conditions for growth of demand especially for small consumer credits and has triggered emergence of big number of comparatively small credit companies, first of all dealing within the very small loans segment. b) Taking into account that Loans Risk Database run by the Bank of Lithuania does not cover the segment of loans below 1000 Lt, also that a big part of them is not secured at all and their number grows very fast, the need for them to be supervised as carefully as all the rest of the loans is obvious. c) The volume of secured loans has been permanently shrinking since 2008, but the decline of total portfolio was not significant due to damping effect by increasing share of fast growing number of small loans.

4. The risk of bad loans and sustainability threats

In the paper the share of loans with repayment overdue is used as an indicator showing whether or not the processes inside the consumer loans market are stable and the market itself is secure and sustainable. High and fast growing share rate shall be considered as obvious threat and vice-versa.

The Bank of Lithuania (LB) splits the loans in 3 categories by overdue time:

- consumer credits when payment was overdue for more than 30 , but less than 60 consecutive days;
- consumer credits when payment was overdue for more than 60 , but less than 90 consecutive days;
- consumer credits when payment was overdue for more than 90 consecutive days.

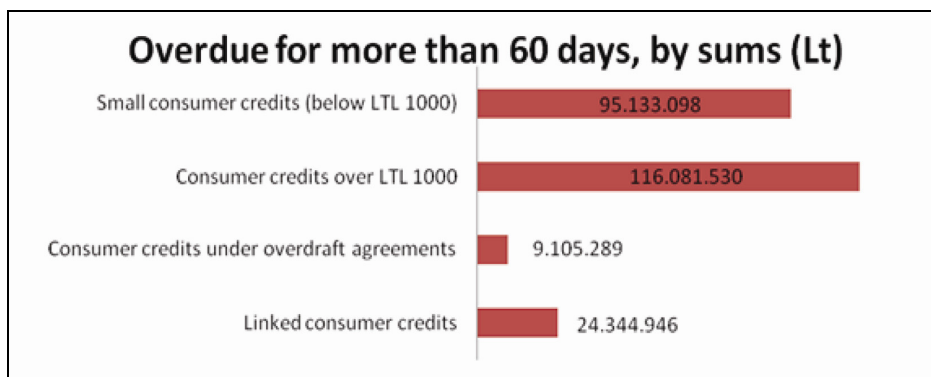


Fig. 8. Dynamics of problematic loans by sums in 2012 (Source: according to LB data, done by authors)

At the end of year 2012 the share of such loans made 10.8% of the total portfolio and was mainly formed by loans over and below 1000 Lt (Fig. 8). If the share of problematic loans is expressed not in currency as in Fig. 8, but in the number of loans, it gives different result. In this case the share value exceeds 20% (see Table 2).

Table 2. The share of problematic loans by overdue time (by numbers of loans)
(Source: according to LB data, done by authors)

	2012-12-31	2013-03-31	2013-06-30
Overdue for more than 90 days	18.44 %	19.37 %	20.22 %
Overdue for more than 60 days	19.88 %	21.02 %	21.96 %
Overdue for more than 30 days	22.90 %	24.79 %	25.48 %

LB considers the loan problematic if overdue time is more than 60 days. Of course, this threshold is conditional. Even a 30 days overdue indicates clearly enough about difficulties in fulfilling obligations by the borrower. The number of loans with 30, 60 and 90 days overdue differs by only 3–4%, which shows that borrowers with 30 days overdue have limited possibilities to settle their outstanding debt within coming 60 days. As a result a number of loans with more than 90 days overdue is increasing only at slightly lower rate than loans with 30 days overdue.

According to LB the biggest share of problematic loans is registered in the small consumer credits segment below 1000 Lt. The share of loans with more than 90 overdue days in this segment has reached 27% and is further increasing. This is really threatening because the growth of the number of loans in this segment is the highest. Even if this would not cause major financial problems (share of the segment in the total volume of consumer credit market is still insignificant), but social and political consequences would be very sensitive. Obviously, adequate measures should be taken, e.g. better regulation of the segment, more accurate supervision and monitoring, including obligatory full coverage by, e.g. Loans Risk Database of LB or other database, but it is also very important to understand the processes better in the segment and why this situation is so different compared to the rest of consumer loans. So far no detailed research was carried out in this regard and lack of relevant publications is obvious. LB and other institutions involved in supervision activities follow processes mainly by collecting and publishing various data, but not always have the possibility to deeply analyze every process and reasons causing the potential threats.

One of the reasons raising the number of problematic loans is high and relatively little regulated interest rate. According to LB in 2009 an average annual interest rate value for consumer credits amounted approximately 17%, while in 2012 it has decreased to 12%. At the same time its value in the small loans (below 1000 Lt.) segment was 8,7 times higher and made 105%. Annual payment rate (APR), which indicates the true cost of borrowing is even higher and in 2013 makes 172%, but is still lower than the statutory rate of 200% (The Central Bank of the Republic of Lithuania, 2013). According to latest information the Bank of Lithuania, based on practices of other countries, initiated Consumer Credit Act supplementing project, and proposed to reduce the current APR from 200% to 50%

Other reasons to cause high rate of problematic loans, besides those already mentioned, are irresponsible behavior of borrowers and the attitude of credit companies active in this segment.

Table 3. Number of clients aged below 25 in small consumer credits segment
(Source: according to LB data, done by authors)

Small consumer credits (below LTL 1000)	2012-12-31	2013-03-31	2013-06-30
Number of clients	185.166	201.546	213.035
Number of clients aged below 25	65.495	71.836	80.685

Statistics show that about 35% of clients in the segment are individuals younger than 25 years and this share is increasing (Table 3). This is really worrying because the combination of lack of life experience and poor financial literacy makes them borrow irresponsibly. The lack of knowledge within personal finance management was pointed in special analysis (Taujanskaitė & Milčius, 2012). The survey has lasted for 2 years and had indicated some improvement of skills, nevertheless the general level still remained critically low. Special LB research (Central Bank of Lithuania, 2013) came to similar conclusions. Yet another survey (My money, 2010) carried out by consumer credit company “General Financing” confirmed that even 88 % of the population is not able to describe the difference between an annual interest and the credit repayment rates.

Obviously, individuals who experience lack of knowledge are not able to make the right decisions related to borrowing therefore all measures setting the principles of responsible borrowing would be important and helpful.

Credit companies are using various techniques, which help them to minimize losses related to bad loans. For example, instead of registering a bad loan they offer extension option if client accepts to pay an extension fee. Thus a real statistics of loans quality is being modified and a part of agreements disappear from the problematic agreements list. Table 4 indicates how much the borrowers have paid in extension fee in 2012 and in the beginning of 2013.

Table 4. Outstanding amount of consumer credits when the credit repayment period was extended after the borrower paid an extension fee, LTL
(Source: according to LB data, done by authors)

	2012-12-31	2013-03-31	2013-06-30
Linked consumer credits,	8.420.623	8.044.031	7.661.180
Consumer credits under overdraft agreements,	0	0	0
Consumer credits over LTL 1000,	46.571.348	56.971.456	66.599.103
Small consumer credits (below LTL 1000)	39.980.673	42.006.686	43.532.147

Again, the biggest amounts of extension fee were paid in the segment of loans with amount over 1000 Lt, were 43% increase was registered within only half a year. Therefore, a real amount of bad loans must be higher than the presented in official statistics.

Only than if the credit company and the client have not reached an agreement, information about the case reaches the databases. There are several databases, e.g the Loan risk database run by the Bank of Lithuania, which collects information from banks and Credit Unions and accumulates data on all loans as well as all the clients' liabilities, including debts, but except of loans below 1000 Lt. Creditinfo database registers the total paid and unpaid loans, but doesn't show the real number of liabilities an individual has. In this case, an individual, who's overdue is longer than 60 days, but has reached an agreement on extension, can borrow from another company with no problem as his record list in the database is „clean“.

Another database called Credit bureau links nearly all the credit institutions and reflects all information about liabilities and client's payment behaviour, but this is a commercial institution, its information is not free of charge, therefore not all credit institutions use its services.

Currently, the usual practice is that each credit company considers which database it will use for assessment of clients' credibility as no compulsory rules exist. As it follows from analysis, a number of reliability gaps do exist in the current system and better regulation would be definitely helpful.

5. Conclusions

Overall view on consumer credit market of Lithuania based on generalized statistical data makes impression of processes being relatively slow and stable, causing no threats. Deeper analysis discovers several contradicting and quite dynamic processes in its segments, which produce overall impression of stability just because they compensate each other.

Fast consumer credits segment is distinguished by the highest dynamism, which has resulted in 3 times increase of its volume since 2009 contrary to still shrinking segments with the duration of loans longer than 1 year. The following important factors have stimulated this: favourable macroeconomic situation, liberal and not free from reliability gaps state monitoring and regulation systems, radically changed attitude of the banks which became more conservative after the crisis and, finally, the relaxed and irresponsible behaviour of borrowers whose financial literacy is poor and who are easy to manipulate.

Current tendencies in fast consumer credits segment in some ways resemble the pre-crisis processes seen on macroeconomic level in 2007–2008. Due to still limited market share this would unlikely cause any major financial troubles or stability threats in the near future, but it might have very sensitive social and political consequences as a number of people involved and possibly suffering from this could be significant.

To avoid potential threats the precautions should be taken, such as revision of the state regulation and monitoring system and especially the education on all possible levels to withstand massive and very aggressive advertisement of such risky products as fast loans, etc.

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