

Mortgage Loans as a Way of Financing Business Activities

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Abstract: There are many ways to finance business starting from classical loans to non-purpose mortgage loans, leasing, overdraft, credit cards, equity financing up to other investment funds. Owing to the economic crisis, the availability of some types of banking loans was decreased. Individual banks increased their requirements in terms of loan security to reduce potential risk. Though better for small or mid-size companies, mortgage loan is a way of financing business. The amount of loans has been increasing during the reflation. Nevertheless, the mortgage market has become saturated and it leads to decrease in newly signed contracts in contrast to other loans. However, the interest rates are more and more dropping and they reached historic minimum under the rate of 2%. The goal of the study is to analyse the present situation of mortgage loans in the Czech Republic. Including prediction, the analysis for businesses will be conducted for the period of the years 2002-2016. Confirmation of the scientific question is one of the contribution of the study. The number of contracts and the amount of the mortgage related to the current macroeconomic situation.

Key words: Mortgage loans, company, business, interest rate, development, value

INTRODUCTION

Bank reliance on short-term funding has increased over time. While an effective source of financing in good times, the 2007 financial crisis has exposed the vulnerability of banks and ultimately firms to such a liability structure (Allen and Paligorova, 2015).

At the present time there is stiff competition amongst banks on the financial market based on marketing and information basis. The goal is not only to get new clients but especially to retain the current ones. Traditional banks should beware of new “low-cost” banks on the Czech market and should maintain their sizeable amount of clients. Indebtedness is globally enlarging every year and households and companies take full advantage of loans. Mortgages and loans from building societies are considered to be the most frequent products. Mortgages mature between 5-40 years. Most of the consumers conclude a contract for 20-30 years. The loans from building societies usually last up to 10 years.

Bhutta (2015) analysis helps support the notion that the differential decline by credit score reflects markedly tightened credit supply.

Recourse mortgages increase the cost of default but also lower equity and increase payments. The effect on default is nonmonotonic. Loan-To-Value (LTV) limits increase equity and lower the default rate with negligible effects on housing demand. Combining recourse

mortgages and LTV limits reduces the default rate while boosting housing demand. Together they also prevent spikes in default after large declines in aggregate house prices. Hatchondo *et al.* (2015), Dia and Menna (2016) find that resource costs explain a large share of bank interest margins which generates a floor for the interest rate on loans. Kim (2015) analyzes how mortgage loan modification policies, after a sudden drop in house prices, affect household choices in the mortgage and unsecured loan markets.

At the present time of extremely low interest rates and slow economic growth, the government and central bank of each country strive to boost their economies. In March 2016, The European Central Bank (ECB), also, decided to boost the economy and increase a low rate of inflation by an unexpectedly strong mixture of policies. The ECB decreased all of its interest rates, intensified the purchase of bonds and it offered a new cycle of low cost loans to banks. The basic rate was unexpectedly decreased from historical minimum of 0.05-0% but according to analyst it is basically insignificant. Monthly bond purchases are increased by 20-80 milliard (2.2 billion Czech Crowns). Along with the purchase of state bonds, the ECB is going to purchase bonds with a high rating issued by non-bank financial institutions. Banks in the Eurozone will be allowed to opt for a new 4 years programme.

A bank that is very active in granting loans to the real economy can borrow more than a bank that concentrates

on other activities, “ECB President Mario Draghi said. As supposed, the deposit rate was decreased to -0.40% from current 0.30%. At the time of negative rates, banks are obliged to pay for deposits parked in the ECB which should make them lend a higher amount of money. The ECB also decreased the rate on the marginal lending facility which equals 0.25% and offers overnight credit to banks by ECB (Czech National Bank, 2016).

Whether the real interest rates respond in a different manner to macro-economic news at the Zero Lower Bound (ZLB) as compared to the case away from the ZLB is essential for assessing the effectiveness of government policies and the validity of the policy implications of new Keynesian Models at the ZLB. By using an identification strategy based on heterogeneity, Zhang (2016) finds that at the ZLB, monetary policy news is less effective in affecting short-and medium-term real rates and its effect dies off faster (Hedvicakova and Svobodova, 2015).

METHODOLOGY AND DATA

According to the Act No. 190/2004 Coll., as subsequently amended (including the Act No. 137/2014 Coll.) and Article 28, “a mortgage loan is a loan whose redemption, including appurtenances is secured by a right of pledge over real estate where the claim arising from the loan does not exceed twice the amount of the mortgage value of the mortgaged real estate. A loan is considered to be a mortgage loan from the day when the right of pledge takes legal effect. For the purposes of coverage of mortgage bonds, the receivable arising from a mortgage loan or a part thereof may be first used on the day when the issuer of mortgage bonds learns about the legal effect of the establishment of the right of pledge over the real estate”.

This study is based on the analysis of the literature and study on housing. Important information is available on the official websites of each bank institution, the Czech National Bank, the Czech Statistical Office as well as of some financially oriented portals like Hypoindex, Golem Finance, etc.

Mortgage loans are a widely studied subject and there is an extensive literature dealing with mortgages on the Czech market which enables us to gain insight into the selected areas of mortgages from multiple sources which deepen or complement the issue.

The goal of the study is to analyse the situation on the Czech mortgage market with an emphasis on the development of mortgage loans from 2002 to the first quarter of 2016. The analysis will focus on businesses that use mortgages as one of the financing option for business entities.

The scientific question will be solved in the study, economic growth after 2011 led to a growth in the volume of lent money.

The short overview of the history and use of mortgages in the world is presented together with the operation of national and commercial banks. An integral part of study is also, the macroeconomic analysis.

The mortgage market in the Czech Republic will be analyzed in the study. Therefore, the used currency is CZK. The current exchange rate in June 2016 is 27 CZK equal 1 Euro or 24 CZK equal 1\$.

DEVELOPMENT OF INTEREST RATES AND LOANS IN 2004-2016

Within interest rates on new loans to households, overdrafts recorded the biggest change in April. Interest rates on loans to non-financial corporations saw the largest change for loans of up to CZK 7.5 million. The overall interest rate on consumer credit, loans for house purchase and other loans rose to 4.44%. The interest rate on consumer credit decreased to an all-time low of 10.91% and the interest rate on loans for house purchase rose to 2.40%. Other loans were remunerated at a higher rate than in March (3.36%). The rate on mortgage loans reached its second lowest level, since the start of the measurement (2.15%) (Fig. 1).

Interest rates on new loans to non-financial corporations (excluding overdrafts, revolving loans and credit cards) increased to 2.09%. The rate on new loans of up to CZK 7.5 million dropped to 3.31%, the rate on loans of over CZK 7.5 million and up to CZK 30 million fell to 2.06% and the rate on loans of over CZK 30 million increased by 0.02% point to 1.96% (Czech National Bank, 2016).

Total loans means without overdraft, revolving loans and credit cards. From the data is evident that the highest interest rate was in 2008. From this time is interest rate moderately fluctuated. The trend is also in the connection of volume of loan and interest rate. Generally is true that the more businesses borrow they are getting a lower interest rate. In this year is the interest rate on the existing minimum.

Figure 2 contains the volume of the provided loans. In 2007 was reached the peak of all loans in volume. Almost, the same value was gained at the end in 2014. The highest volumes are dedicated to loans over CZK 30 million. The smallest amounts are dedicated to smaller loans, up to CZK 7.5 and 7.5 million up to CZK 30 million. The trend is in all loans similar. Data for loans up to 7.5 million and over 7.5 million up to CZK 30 million are available from 1st of January 2010.

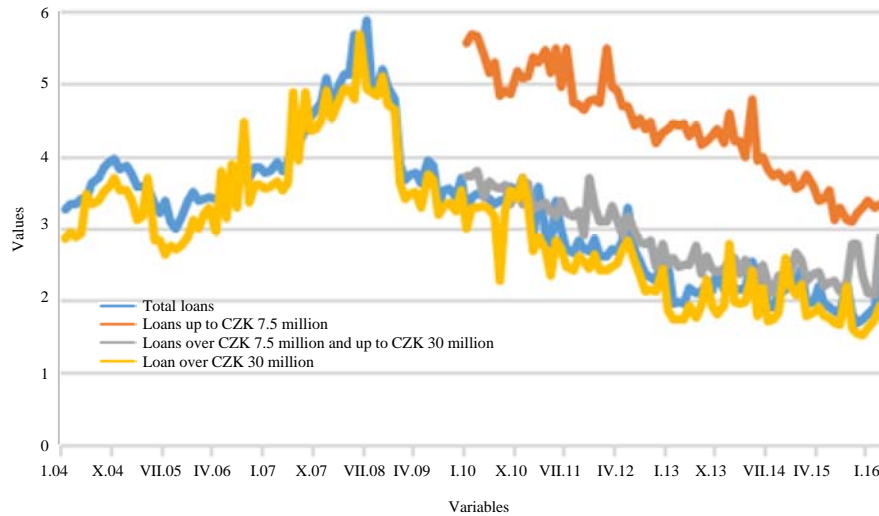


Fig. 1: Development of the interest rate of loans for non-financial corporations (%) own processing based on CNB., 2016a

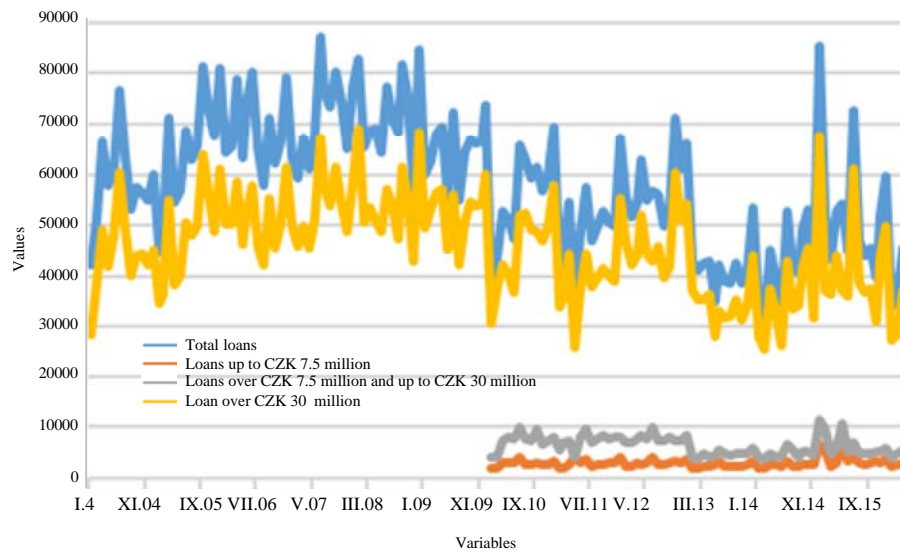


Fig. 2: Development of the loans-volume for non-financial corporations (million CZK) own processing based on CNB., 2016b

DEVELOPMENT OF MORTGAGES FOR BUSINESS ENTITIES 2002 2016

In the years 2002-2007 based on Fig. 3, it is apparent that at the time of growing the economy the demand for money formed by companies grew as well. Until the year 2005, companies used mortgages for purchasing current housing more than for constructing property in contrast to the year 2006 when constructing new property was more frequent. During the economic crisis which began in 2008, the issue of investing by companies fell into the background and the priority was maintaining the

business. However, the economic downturn also had one of its advantage and it was a reduction of the interest rates to a minimum in order to promote economic growth which was reflected in the interest rates of mortgage loans enabling the finance issues to be more accessible for many companies.

That is why the demand for mortgage loans has increased, since, 2010. The number of signed mortgage contracts were rising in the years 2010-2015 except for the year 2012. In the year 2015, 47% of the total mortgage loans were used for purchasing properties, almost 45% for construction and the rest 20% for other purposes. In 2010,

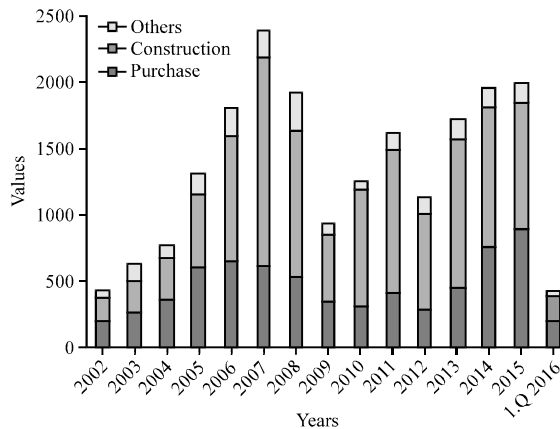


Fig. 3: Development of number of mortgage loans depending on the purpose of use in the period of 2002 to the first quarter of 2016 own processing based on Ministry of Finance (2016)

69.4% of mortgage loans were on construction purposes. The highest share of purchases (46%) was reached in 2004. From 2007 until 2013 (except for 2009) the share of purchases of properties was from 25-27% of total mortgage loans. The share of current properties has been increasing, since, 2013. Mortgages for other purposes represent the least part of signed mortgages, reaching up to 15% in 2008 and the least 5% in 2010 which can reflect the crisis.

The number of signed mortgage contracts also relates to development in terms of financed money. Since, the year 2010 there were totally 70621 thousand CZK intended for other purposes (non-purpose mortgages). About 58312 thousand CZK was intended for construction and the least part 49559 thousand CZK for purchasing properties. The results are significantly influenced by the change of trend in 2013 when the part of non-purpose mortgages started being bigger than the remaining ones. In 2014, more than 50% was lent for other purposes. Comparing the year 2010 and 2015, the total amount of borrowed money increased by 457%. However, the total amount of mortgage loans in 2015 did not exceed the amount of 64222 thousand CZK in the year 2008. In 2009, the amount of new mortgage loans dropped to 15341 thousand CZK which is only 24% of the previous year. In 2010, the amount of new mortgage loans dropped to 10926 thousand CZK. It was doubled in the following year, 22006 thousand CZK. The highest increase of 71% is reported in 2014 compared to the previous year, it changed from 26591-45325 thousand CZK (Fig. 4).

In the period of 2002 and the first quarter of 2016, there was relatively significant fluctuating progress in number of signed contracts and provided funds for

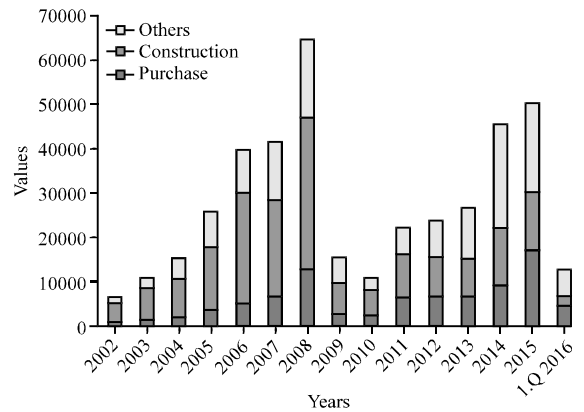


Fig. 4: Development of mortgages according to the purpose of use in the period of 2002 and the first quarter of 2016 (million CZK) own processing based on Ministry of Finance (2016)



Fig. 5: Development of the value of mortgage per 1 contract in the period of 2002 and the first quarter of 2016 (thousands) own processing based on Ministry of Finance (2016)

mortgages for businesses. There was dramatic fluctuation in terms of the value of mortgages per one contract. In the first 3 years indicated in Fig. 4, mortgage loans were not highly represented on the market. The values are therefore, compared from the year 2005. The value of property purchase was tripled, increase of 2.5 times in non-purpose mortgage and half the value for construction. According to other analyses, values for purchase, construction and others were calculated for 1 contract.

Significant difference in borrowed value per 1 contract for purchase was recorded in the year 2008. It climbed from 10985294 CZK to 24642586 CZK (Fig. 5). There were also considerable differences in the year

2011 and 2012. The values for current properties decreased again in the year 2013 and 2014. The values increased again in 2015. There is an apparent decrease in lent money for construction. The highest value of 30429343 CZK per 1 contract was recorded in 2008 (Fig. 5). In the year 2015, the value was 2.2 times lower than in 2008.

Non-purpose loans represent interesting progress. The highest value per 1 contract reached 156250 thousand CZK in 2014. It was doubled in contrast to the previous year. The value increased by 2.5 times between the year 2003 and 2004 (Fig. 5).

CONCLUSION

The Czech mortgage market has experienced many records in the year of 2015. According to the Ministry of Regional Development, the amount of signed mortgage loans exceeded 184 milliard Czech Crowns, almost 41 milliard more compared to last year. The average value of mortgage reached 1.87 million which is about 9.3% more compared to the year 2014. One of the reasons could be an increase in prices of properties. HB index has been monitoring progress of prices of flats, houses and land, since, 2010 and has reported annual increase of 6.2% points (pp) in flats, 2.4 pp in houses, 5.3 pp in land.

The current mortgage interest rates are still under 2% and they even dropped to 1.94% in April, Hypoindex (2016). According to prognosis, the interest rates are going to keep low in 2016. However, other decrease is more likely. Reasons for low interest rates in 2017 are the Czech National Bank (CNB) has confirmed the persistence of intervention in currency probably until the end of the year 2016 and kept the interest rates without any change. It has not set negative interest rates unlike The European Central Bank.

Regarding the number of contracts concluded by business entities to the beginning of the economic crisis there was an increase in the number of contracts. Between 2008 and 2009 there is a sharp decline. There was the growth in the number of contracts, since, 2010 beyond 2012. Since, 2013 there has been a recovery of the Czech economy which was reflected also in mortgage loans. Again began increase of the contracts numbers. Although, there is still a decline in the interest rates, the mortgage market is starting to be saturated and the number of contracts has stagnated.

Just as there is an increase in the number of signed contracts, there is also the growth of the borrowed amount (Cernohorska and Honza, 2014).

The results show that while in the first 2 years were the largest amount per contract used for reconstruction, in 2004, it was otherwise. The non-purpose loans began to rise up and from this year it always has been the highest loan amount per contract for non-purpose loans. Regarding the purchase of new properties and renovations in the period were turbulent changes. After the end of the economic crisis, i.e., since, 2010 there is an increase of mortgages on one contract for both, the purchase of a new property and the reconstruction. The amounts in purchase are higher. Despite low interest rates the values in the years 2009-2015 did not exceed the maximum value from 2008. In contrast, the non-purpose loans led to an enormous increase in 2013 and subsequently in 2014.

Number of contracts reflects the impact of the financial and economic crisis and the stagnation in 2013 in the Czech Republic. The situation on the mortgage market correlates with the economic cycle in the Czech Republic. It is possible to confirm the scientific question stated in the second chapter of the study. Economic growth after 2011 led to a growth in the volume of lent money.

The eventful topic number 1 on the mortgage market is a new regulation coming from the EU. It was accepted by the Ministry of Finance (DKNY Fashion Company, 2016) as customer credit act. The new act thoroughly includes all types of loans for customers such as classic cash loans, credit cards, shopping on credit and even mortgages and other loans that have not been regulated (they are loans on houses and so called microloans). Focusing on mortgage loans, e.g., the current conditions for premature repayment are going to be changed, paying off will be easier.

The raised questions are following. Is it a reason for banks to make mortgages more expensive for an early payoff and how much they react to it? What will have bigger influence on the potential price increases? Regulations and the possibility of early payoff or monetary policy of the CNB and its impact on money? It is also in question if the regulations for loans from the EU and state are right.

Czech National Bank published the Financial Stability Report 2015-2016. "In the third and fourth quarters of 2015 the collateral value of the loans grew slower but faster than prices of property. In the categories LTV of 80-90 and 90-100% for which there is an incentive to influence the mortgage value, the value of average mortgage value was about 10% and the average loan amount is then increased by 13%". Important topic for discussion can be also financial literacy (Soukal and Draessler, 2015).

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REFERENCES

- Allen, J. and T. Paligorova, 2015. Bank loans for private and public firms in a liquidity crunch. *J. Financial Stab.*, 18: 106-116.
- Bhutta, N., 2015. The ins and outs of mortgage debt during the housing boom and bust. *J. Monetary Econ.*, 76: 284-298.
- CNB., 2016a. ARAD data series system. Czech National Bank, Prague, Czech Republic. http://www.cnb.cz/cnb/STAT.ARADY_PKG.VYSTUP?p_sestuid=19522&p_uka=6,7&p_strid=AAD&p_sort=2&p_od=200401&p_do=201604&p_period=1&p_des=50&p_format=4&p_decsep=.&p_lang=EN.
- CNB., 2016b. Financial stability report 2015/2016. Czech National Bank, Prague, Czech Republic. https://www.cnb.cz/en/financial_stability/fs_reports/fsr_2015-2016/index.html.
- Cernohorska, L. and F. Honza, 2014. Comparison of banking systems in the countries of former Yugoslavia and the Czech Republic. *Sci. Pap. Univ. Pardubice*, 21: 17-28.
- Czech National Bank, 2016. Commentary on MFI interest rates. Czech National Bank, Prague, Czech Republic. https://www.cnb.cz/en/statistics/money_and_banking_stat/harm_stat_data/mfi_komentar.html.
- DKNY Fashion Company, 2016. Surprise for the Markets: The ECB will support the European economy unexpectedly assertive steps. DKNY Fashion Company, New York, USA., <http://zpravy.aktualne.cz/ekonomika/prekvapeni-pro-evropske-trhy-ecb-srazi-la-hlavni-urokovou-saz/r~20a5d590e6c411e59c4a002590604f2e/>.
- Dia, E. and L. Menna, 2016. Productivity shocks, capital intensities and bank interest rates. *J. Macroeconomics*, 48: 155-171.
- Hatchondo, J.C., L. Martinez and J.M. Sanchez, 2015. Mortgage defaults. *J. Monetary Econ.*, 76: 173-190.
- Hedvicakova, M. and L. Svobodova, 2015. Analysis of banking fees and clients' needs. *Eur. Financial Syst. Masarykova Univ.*, 2015: 181-188.
- Hypindex, 2016. Hypindex development. Hypindex.cz, Czech Republic. <http://www.hypindex.cz/hypindex-vyvoj/>.
- Kim, J., 2015. Household's optimal mortgage and unsecured loan default decision. *J. Macroeconomics*, 45: 222-244.
- Ministry of Finance, 2016. Macroeconomic forecast April 2016. Ministry of Finance, New Delhi. <http://www.mfcr.cz/en/statistics/macroeconomic-forecast/2016/macroeconomic-forecast-april-2016-24521>.
- Soukal, I. and J. Draessler, 2015. Could financial literacy overcome price information asymmetry: Empirical study. *Eur. Financial Syst.*, 2015: 528-535.
- Zhang, J., 2016. Macroeconomic news and the real interest rates at the zero lower bound. *J. Macroeconomics*, 48: 172-185.