The Role of Mortgage Loans in Financing the Housing Needs of University Graduates in the Aspect of Credit Management

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ABSTRACT

This study aimed to analyse the financing of housing needs of university graduates with mortgage loans. An analysis of the role of mortgage loans in financing the purchase of a flat was presented based on statistics concerning borrowers, their age and level of education and in the light of the structure of mortgage loans granted in 2016 and 2017. It was demonstrated that with economic recovery, the purchase of a flat continues to be a luxury for well-educated people aged 25-30 or even 35 years. Furthermore, support from governmental programmes fails to meet the expected outcomes in the case of this group of beneficiaries. Thus in the paper the need of change of managing mortgage credits for young people was emphasized.

Keywords

housing financing, mortgage loan, government housing programmes, managing of mortgage loans

Introduction

The need for having a place to live in is a basic human need. Young university graduates need their own flat if they want to stay in the city of their universities. As they are often at the beginning of their careers they must seek opportunities to finance the purchase of an apartment with a mortgage.

The process of the development of the mortgage loan market in the early years of the transformation in Poland was challenged with many obstacles and occurred very slow. On a larger scale, such loans were offered by banks

already in 1996. Since 2000, the portfolio of housing loans has been dominated by loans for households (already 72% of total housing loans in 2002) (Polish Financial Supervision Authority, pp. 19-20).

A significant acceleration in the development of the residential mortgage loan market was observed directly before Poland's accession to the European Union, whereas in the years 2006-2008, there was an expansion of the mortgage loans in Poland. The main causes of the growth of the mortgage loan market in Poland since the transformation period are presented in Table 1

Table 1. The reasons for the growth of the mortgage loan market in Poland since the systemic transformation period

- 1. Decrease in basic interest rates of the National Bank of Poland.
- 2. Entry of the baby boomers into the labour market since 2001.
- 3. Rapid economic migration and a strong inflow of funds related to this tendency.
- 4. In the period of the largest increase in mortgage loans: the economic recovery, the fall in unemployment and the increase in salaries and wages.

Source: author's own elaboration based on Kata (2015, p. 187)

As can be seen from the information contained in Table 1, the basic factors influencing the growth of demand for the residential real estate in the market include the decrease in the basic interest rates of the National Bank of Poland, the baby boom generation entering the labour market since 2001, the inflow of funds from economic migration, the increase in mortgage loans granted

as a result of the economic recovery, the decrease in unemployment rate, and the increase in salaries.

According to the European Mortgage Federation (EMF 2017, pp. 81-82), approximately 75% of real estate in Poland is purchased using mortgage loans. Mortgage debt accounts for only 18% of the national GDP, compared with a

European average of more than 51%. (Sitek 2014a). The record levels are observed in Denmark and the Netherlands, where the mortgage-to-GDP ratio exceeded 100%. (EMF 2017). In Poland, the objective of the housing policy in the market economy is to enable households to choose a form of satisfying their housing needs appropriate for their preferences and income, opening up new possibilities of financing housing purchases. Due importance of the housing sector for the economy, especially since the 2009 crisis, government programmes of co-financing the state budget aimed to support the country's housing policy and to target first-time buyers have become more important.

Methodology of research

The inspiration for the analysis concerning mortgage lending of residential housing in Poland in the period of 2015-2018 is its general condition. This study aimed to analyse financing of housing needs of university graduates with mortgage loans. The surveys published by GUS, KNF, EMF, reports by ZBP and the empirical research conducted by domestic and foreign research institutions were used to achieve the study aim.

Data analysis allowed for presentation of the economic situation of the banking sector in Poland in 2016-2018 and to assess the opportunities for satisfying the housing needs (with particular focus on university graduates) with mortgage loans.

The housing estate market in Poland in 2016-2018

The history of mortgage loans in Poland is relatively short. On a larger scale, they have been available since 2002, but it was the period of 2006 to 2008 that saw a boom (BIK 2018, pp. 1-2). The last crisis (2008-2009) only slightly slowed down the development of this market. Since then, new legal regulations and recommendations have been introduced to provide security to both the financial sector and consumers. One of the most important changes proposed in 2018 was a change in the Recommendation S that recommended banks to

extend their services with fixed-rate mortgage loans and the so-called "key for debt" option.

The offer of mortgage loans is gradually expanding, but it is still relatively modest compared to the offer in the most developed markets, such as the American and British market (Sitek 2014b).

Mortgage loans are a significant instrument for the development of the real estate market. The fast-growing value of loans granted results from a dynamic growth of both the number of loans granted and the average value of loans granted. This results from a very dynamic until recently increase in housing prices and high demand for flats.

According to the data of Statistics Poland (GUS), there were 366 flats per 1,000 inhabitants in Poland in 2005, while in Western Europe, the figure was around 400 flats². Therefore, the deficiency shown is a measure of the potential demand for housing. Effective demand, viewed as purchasing power of the population and its creditworthiness, which has grown in recent years due to wage increases and wider availability of loans, is obviously greater. The decrease in the shortage is confirmed by the fact that in November 2018, 376 flats per 1,000 inhabitants were recorded in Poland, while for the EU on average, this was 435-440 flats per 1,000 inhabitants (Heritage 2018, pp. 7-14; 15-21).

The mortgage market is, therefore, the main macroeconomic growth driver linking the financial markets and the real economy. This market accounted for nearly 46% of EU GDP in 2017, binding the EU's financial and social system. The mortgage credit market not only plays a fundamental role in ensuring the financing of housing needs, but above all, in facilitating the access to home purchases, and therefore plays an important role in social, political and economic life citizens. In fact, mortgage credits are part of the everyday lives of 70% of Europeans as a key instrument for financing housing needs.

¹ In developed markets, the popular mortgage products, being gradually introduced in Poland, include: reverse mortgages: bullet loan (interest), loans linked to an individual savings account (leverage mechanism), loans enabling the so-called equity release or products combining a loan and insurance instruments (bankassurance)

combining a loan and insurance instruments (bankassurance)

² It should be stressed that according to various analyses, the housing deficit understood as the difference between the number of households and the number of permanently inhabited flats in Poland amounts to approximately 2.5-3 million flats.

Similar to any other segment of the economy or capital market, real estate market, especially the housing market, is a cyclical market. There is a close link between the economic situation and the situation in the real estate market, which depends on a number of factors directly linked to the economy. These include the current economic growth rate, rate, the level of interest rates, or the behaviour of real estate market participants.

In order to characterize the mortgage loan market, a general macroeconomic review of the Polish economy in 2016-2017, the state and forecast of the country's economic situation in 2016-2019 and the profile of borrowers as a synthesis of their preferences in the period under review were presented.

The economic growth observed in 2016-2017 was characterized by a percentage change in GDP, which in the first consecutive quarters of 2016-2019 was +3.1% (compared to Q1 2015), followed by +4.8% compared to Q1 2017) +5.2% and +4.6% compared to 2018 and 2019, with

domestic demand being the main contributor to GDP growth.

Gross value added in the construction sector increased by 11.5% compared to 2017, while in 2016 it decreased by 7.2%.

The annual average unemployment rate in 2017 decreased by 4.9% compared to 6.2% in December 2016.

Inflation rose by 0.2%, from 2.4% to 2.6% in 2017.

The income of the Polish budget amounted to PLN 350.5 billion in 2017 (an increase by 11.4% y/y), while expenditures amounted to PLN 375.8 billion (an increase by 4.1%). Therefore, the deficit in 2017 accounted to 1.7% of GDP (-2.4% in 2016), while public debt was 50.6% of GDP in 2017 and 53.4% in 2016.

The macroeconomic overview of the Polish and EU28 economies in 2016-2017 is presented in Table 2

Table 2. Main macroeconomic indicators describing the state of the Polish and EU economies in 2016-2017

		III 2010-2	UI /			
Macroeconomic indicator	Poland	Poland	EU 28	Poland	EU 28	Poland
	2015	2016	2016	2017	2017	
						2018
Real GDP growth rate (%)	3.8	3.1	1.9	4.8	2.4	4.6
Unemployment rate	7.5	6.2	8.5	6.4	7.6	6.1
annual average (%)						
Inflation (%)	-0.7	-0.2	0.3	1.6	1.7	1.7
Gross housing loans	3.7	-4.7	3.2	13.9	3.5	12.8
annual growth (%)						
Mortgage loan rate	4.4	4.4	2.6	4.4	2.4	14%
						Warsaw
Annual average (%)						
						4% Łódź
Nominal increase in house	1.1	2.5	4.6	4.7	6.0	7.6
prices (%)						

Source: EMF Hypostat (2017, pp. 81-82); EMF Hypostat (2018, pp. 89-90), Eurostat (2019, pp. 1-3)

The analysis of Poland's economic growth in 2016-2017 and the data presented in Table 2 clearly indicate strong macroeconomic foundations of the Polish economy in the analysed period. These strong macroeconomic foundations

support the demand for real estate, especially for housing. The construction market is booming, mortgage loans, under the influence of low interest rates and good condition of the economy, are the main instruments for financing investments in the real estate market. The state and forecasts of the economic situation in

2016-2019 are presented in Table 3.

Table 3. Poland's economic situation and forecasts in the period of 2016 - 2019

Selected macroeconomic	unit	2016	2017	2018	2019*	2020*
indicators						
GDP	% y/y	3.1	4.8	5.2	4.6	3.6
Value added						
- in construction,	% y/y	- 12.3	11.5	17.1	11.1	8.2
- in market services	% y/y	4.0	4.4	4.8	3.9	3.5
Domestic demand	% y/y	3.4	4.7	5.5	4.5	3.8
Gross investment expenditures	% y/y	- 3.5	3.4	8.7	6.6	5.8
Sold production in the construction	% y/y	- 19.2	6.6	16.2	12.1	8.5
sector						
Inflation (CPI; average)	%	- 0.8	2.0	1.6	1.9	2.5
Real gross wages and salaries	% y/y	4.1	3.4	5.3	5.1	4.3
Average employment in the						
national economy (GN)	% y/y	1.9	3.4	2.7	1.9	1.2
Recorded unemployment rate	% y/y	8.3	6.6	5.8	5.7	5.9

^{*} estimates of: Institute for Market Economy Research (IBnGR 2016 only), Institute of Economic Research and Forecast (IPAG),

quoted items issued in the first months of a given year provide data from the previous year.

Source: Author's own elaboration based on the IBnGR (2016, pp. 1-5), IPAG (2017, pp. 1-5; 2018, pp. 1-5; 2019, pp. 1-5)

Analysis of the data presented in Table 3, which enable the assessment of the economic situation in 2016. - Q1 2019 and forecasts for the entire 2019. and 2020 confirms the good economic situation of the country, stable GDP growth rate, the high growth rate in the construction industry, low unemployment, rapid growth of salaries, but also a rapid increase in prices (inflation). In the following years, from 2016 to Q1 2019, the dynamics of the main component of domestic demand, i.e. investment expenditures, was not satisfactory despite a clear increase in 2018, but also a low rate of expenditures. It should be emphasized that the fastest-growing part of the economy is the construction section, where the observed growth dynamics results from a very favourable situation in the housing industry. The growth rate of value added in construction is also very satisfactory.

Mortgage loan as a way of financing the housing needs of university graduates: profile of the average borrower

The presented data concerning the macroeconomic overview of the country's economy (Table 2) and the state and forecasts of the economic situation (Table 3) prove a stable growth rate of economic processes in Poland, a favourable macroeconomic situation and a highly promising macroeconomic situation. Therefore, an attempt was made to create a profile of the Polish borrower, presenting the changes in the profile in 2016, 2017 and 2018. In the design of the profile, the restrictions on the level of education, age and the purpose of the investment financed with mortgage loans were set. The above restrictions were adopted in order to increase the possibility of bringing the borrower's profile closer to university graduates who are potential bank customers, closer to the residential mortgage loan. The general preferences of borrowers that evolved between 2016 and 2018 are presented in Table 4.

Table 4. Borrowers' preferences in relation to a

mortgage loan and its intended use

Loans in total in 2016	4. borrowers prefere	nces in relation	i to a	mortgag	e ioan and its in		
CPLN million				_	Percentage of loans (%)		
December Loans Intotal in 179,949 38,278 200		number of loans		of a loan (PLN		in value	
2016 South South	Loans in total in	179,949	38,278				
Borrower's age: 25.65 9.288 205 25.6 24.3 > 2530 > 30 - 35 years. Level of education of the borrower incomplete high and high education. Marital status of the borrower a single person, married couple.		,	,				
Borrower's age: 22-9 26.4 27.9 22-9 26.4 27.9 22-5 20.5 33.0 35 years. 27.397 29.950 235 72.0 78.2 28.0 28	2010						
Level of education of the borrower incomplete high and high education. Marital status of the borrower incomplete high and high education. Marital status of the borrower a single person, married couple. The primary source of income - employment contract / contract for an indefinite period of time. Average monthly net income on credit request) - 2 - 4	> 25 – 30						
Marital status of the borrower a single person, a sin	Level of education of the	127,397	29,950	235	72.0	78.2	
married couple. The primary source of income	Marital status of the borrower			-			
-employment contract / contract for an indefinite period of time. Average monthly net income (on credit request) > 2 - 4 > PLN 4,000-6000 Purpose of the loan - the purchase of a flat Loans in total in 2017 Borrower's age: > 25 - 30 > 30 - 35 years. Level of education of the borrower a single person, married couple. The primary source of income - employment contract / contract for an indefinite period of time. Average monthly net income (on credit request) > 2 - 4 > PLN 4,000-6000 Purpose of the loan - the purchase of a flat Loans in total in 2018 Borrower's age: - 25 - 30 - 30 - 35 years. Level of education of the borrower incomplete high and high education. Marital status of the borrower a single person, married couple. The primary source of income (on credit request) - 2 - 4 - > PLN 4,000-6000 - Purpose of the loan - the purchase of a flat Loans in total in 2018 Borrower's age: - 25 - 30 - 30 - 35 years. Level of education of the borrower incomplete high and high education. Marital status of the borrower a single person, married couple. The primary source of flat Loans in total in 2018 Borrower's age: - 25 - 30 - 30 - 35 years. Level of education of the borrower a single person, married couple. The primary source of flat Loans in total in 2018 Borrower's age: - 25 - 30 - 30 - 35 years. Level of education of the borrower a single person, married couple. The primary source of flat Loans in total in 2018 Borrower's age: - 25 - 30 - 30 - 35 years. Level of education of the borrower incomplete high and high education. Marital status of the borrower a single person, married couple. The primary source of flat Expendit for the purchase of a flat Loans in total in 2018 Borrower's age: - 25 - 30 - 30 - 35 years. Level of education of the borrower a single person, married couple. The primary source of flat the purchase of a flat the purchase	married couple. The primary source of	116,816	24,566	210	66.0	64.2	
Section Concredit requests Section Sec	 employment contract / contract for an indefinite period of time. 		- ,	-			
Purpose of the loan	(on credit request)	110,040	22,525	205	62.2	58.8	
Dornower's age:	Purpose of the loan						
25 - 30		181,385	42,845	226			
25 - 30							
Solution							
Level of education of the borrower incomplete high and high education. Marital status of the borrower a single person, married couple. The primary source of income - employment contract / contract for an indefinite period of time. Average monthly net income (on credit request)						- '	
borrower incomplete high and high education. Marital status of the borrower 59,099 12,342 209 32.6 28.8 25.7 22.558 25.3 49.2 52.7 28.909 121,589 28,090 231 67.0 65.6 65.6 67.0 65.6 67.0 65.6 67.0 65.6 67.0		50,551	12,483	247	27.9	29.1	
and high education. Marital status of the borrower a single person, married couple. The primary source of income - employment contract / contract for an indefinite period of time. Average monthly net income (on credit request) > 2 - 4		121 622	22 520	255	72.6	70.2	
Marital status of the borrower 59,099 12,342 209 32.6 28.8 a single person, married couple. 89,292 22,558 253 49.2 52.7 The primary source of income - employment contract / contract for an indefinite period of time. 121,589 28,090 231 67.0 65.6 Average monthly net income (on credit request) 50,785 11,140 219 28.0 26.0 > 2 - 4 > PLN 4,000-6000 119,938 25,967 216 66.1 60.6 Purpose of the loan - the purchase of a flat 51,954254 254 254 Borrower's age: > 25 - 30 49,080 11,747 239 24.0 22.6 > 30 - 35 years. 55,473 14,772 266 27.1 28.4 Level of education of the borrower incomplete high and high education. 40,786 272 73.1 78.5 a single person, married couple. 65,947 65,947 14,826 32.2 28.5 The primary source of 100,833 100,833 27,250 49.3 52.		151,032	33,330	255	72.0	78.3	
borrower a single person, married couple. The primary source of income 121,589 28,090 231 67.0 65.6	_						
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married couple. The primary source of income 121,589 28,090 231 67.0 65.6 - employment contract / contract for an indefinite period of time. Average monthly net income (on credit request) 57,510 9,684 168 31.7 22.6 Average monthly net income (on credit request) 50,785 11,140 219 28.0 26.0 ≥ 2 − 4 > PLN 4,000-6000 119,938 25,967 216 66.1 60.6 Purpose of the loan - the purchase of a flat 51 954254 254 254 Borrower's age: > 25 − 30 49,080 11,747 239 24.0 22.6 > 30 − 35 years. 55,473 14,772 266 27.1 28.4 Level of education of the borrower incomplete high and high education. 149,691 40,786 272 73.1 78.5 Marital status of the borrower 65,947 65,947 14,826 32.2 28.5 a single person, married couple. 100,833 100,833 27,250 49.3 52.5 The primary source of 52,94		*					
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(on credit request) 50,785 11,140 219 28.0 26.0 > 2 - 4 > PLN 4,000-6000 119,938 25,967 216 66.1 60.6 Purpose of the loan - the purchase of a flat 204,681 51 954254 254 Borrower's age: > 25 - 30 49,080 11,747 239 24.0 22.6 > 30 - 35 years. 55,473 14,772 266 27.1 28.4 Level of education of the borrower incomplete high and high education. 149,691 40,786 272 73.1 78.5 Marital status of the borrower a single person, married couple. 65,947 65,947 14,826 32.2 28.5 The primary source of 65,947 100,833 27,250 49.3 52.5	contract for an indefinite period of time.						
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Loans in total in 2018 204,681 51 954254 254 Borrower's age: > 25 - 30 49,080 11,747 239 24.0 22.6 > 30 - 35 years. 55,473 14,772 266 27.1 28.4 Level of education of the borrower incomplete high and high education. 149,691 40,786 272 73.1 78.5 and high education. 65,947 65,947 14,826 32.2 28.5 a single person, married couple. 100,833 27,250 49.3 52.5 The primary source of 51 954254 254 239 24.0 22.6 20 27.1 28.4 28.5 27.2 27.1 28.5							
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> 25 - 30 49,080 11,747 239 24.0 22.6 > 30 - 35 years. 55,473 14,772 266 27.1 28.4 Level of education of the borrower incomplete high and high education. 149,691 40,786 272 73.1 78.5 Marital status of the borrower a single person, married couple. 65,947 100,833 100,833 27,250 49.3 52.5 The primary source of 100,833 27,250 49.3 52.5	Borrower's age:						
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borrower incomplete high and high education. Marital status of the borrower a single person, married couple. The primary source of 149,691 40,786 272 73.1 78.5 78.5 78.5 78.5 78.5 78.5 78.5 78.5	> 30 - 35 years.	55,473	14,772	266	27.1	28.4	
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a single person, married couple. The primary source of 100,833 100,833 27,250 49.3 52.5		65 947	65 947	14 826	32.2	28.5	
The primary source of	a single person,		· · · · · · · · · · · · · · · · · · ·				
Income 140,734 34,703 247 06.8 00.9	income	140,754	34,763	247	68.8	66.9	

Source: Author's own elaboration based on the data from KNF (2017, pp. 85-86; 2018, pp. 15-16; 2019, pp. 20=21).

Furthermore, general statistics on mortgage loans, presented in Table 5, were used to reliably describe the profile of the average Polish borrower.

Table 5. Structure of new mortgage loans in 2018

			LOANS			
	Number	Value (mil.PLN)		Number	Value (mil.PLN)	
currency			LTV			
			up to 80%	149 830	37 068	
Total	204 675	51 953	> 80 – 90%	53 388	14 759	
In PLN	201 567	51 123	> 90 – 95%	144	57	
In foreign	3 108	830	> 95 –100%	26	8	
currency			> 100%	69	31	
	financing period credit value					
up to 10 year	ars 16 285	2 304	up to PLN 100,000	19 279	1 399	
> 10 – 20	53 076	14 759	> 100 - 200	66 811	10 196	
> 20 – 25	34 559	9 038	> 200 - 300	60 398	15 031	
> 25 – 30	96 309	27 952	> 300 - 400	32 623	11 276	
> 30 – 35	4 425	1 506	> 400 - 500	14 650	6 567	
> 35 years	21	6	> 400 - 500	10 914	7 483	

Source: author's own elaboration based on KNF (2019, pp. 20-21)

As can be seen from the data presented in Table 5, mortgage loans were taken out in 2018 mainly in the Polish zloty, accounting for 98.5% of all loans granted in that period. The majority of mortgage loans granted were those with own contribution exceeding 20% of the value of the purchased property. The loan granted for the period of 25-30 years (47% of all loans) was very popular. Loans with shorter lending periods were also very popular: 10-20 years (26%), 20-25 years (17%) and up to 10 years (8% of all loans granted in 2018). Analysis of the value of the mortgage loan granted leads to the conclusion that most borrowers did not need more than PLN 200,000, as loans between PLN 100,000 and PLN 200,000 accounted for 33% of all loans granted in 2018. Also popular were loans in the amount of PLN 200,000-300,000 (30%).

With the promising macroeconomic situation and the economic situation in Poland, taking into account all the data concerning the structure of mortgage loans, the structure of borrowers (by age, education, form of employment), the purpose of a loan, the basic source of income and the average monthly net

income, the profile of the average Polish borrower may be presented as:

Married person, aged 35 or under, with the higher level of education, employed under a contract of employment for an indefinite period. Mortgage loan was taken out with a spouse (without financial contribution from the family). average net income isbetween PLN 4,000 and 6,000. The percentage of credit liabilities in the total income is approximately 30-40%. Mortgage loan in PLN was taken out for a period of 25 - 30 years for the purchase of a flat. In 2018, the mortgage loan was taken out in PLN. The likely own contribution was at the level of 20% of the value of the purchased real estate, and the value of the granted loan ranged from PLN 100,000 to 300,000.

Meeting the housing needs, which are one of the fundamental needs of all people, is the first major problem for any new household. These needs can be satisfied by living with parents, buying a flat on the primary or secondary market, renting a flat on the free market or using other legal forms such as social housing, TBS (Social Housing Association) flats. The most advantageous option

may be to take out a mortgage loan and buy a flat. This will allow borrowers to pay off their own loan rather than that taken out by someone else's while fulfilling their dreams about their flat and it can turn out to be a lifelong investment.

A large group of potential borrowers due to housing needs are university graduates. They are young, educated and ambitious, most often without financial resources and, most importantly, without a flat as a universal need, regardless of financial resources. According to the Statistics Poland's (GUS) data (2019, p.3), the number of people who graduated from higher education in Poland in the academic year 2017/2018 (secondcycle studies and MA studies) amounted to 327,714 people. The highest average earnings (gross) within a year from obtaining a diploma can be expected by graduates of technical faculties (PLN 3,537) and science (PLN 3,051). At the other end of the spectrum are graduates of artistic studies, who are the only graduates receiving on average less than 2,000 PLN (Ministry of Science and Higher Education 2017, pp. 1-3). Technical faculties (technology, industry, construction) were graduated from by 64,639 students in 2017/2018, science faculties while (natural sciences. mathematics, statistics and ICT) were graduated from by 26,926 people.

The total number of graduates (91,565) who could start applying for residential mortgage credit in 2019 represents only 28% of all graduates in 2018. Table 4 shows (assuming higher education) that in 2018, for the age range of 25-30 years, the number of mortgage loans granted (49,080) represents 15% of all graduates, while for the age range of 30-35 years, the number of mortgage loans granted represents 17%. From the group of graduates with creditworthiness probably due to income (91,545), 15% and 17% accounted for 13,735 and 15,566 graduates, respectively.

It should be noted that people in the group of people aged 30-35 years group have a fairly stable life situation: a better financial standing, a higher range of salaries, probably the civil status of a married person and therefore greater chances and possibilities of investing in their own flat. Hence the estimation of 17% of graduates from the range of age 30-35 years in 2018. Graduates who apply

for a loan within ca. 1-2 years after graduation (25-30 years) are in a much worse financial situation taking out a loan requires many sacrifices. Consequently, the estimated smaller number of them applies for a mortgage loan (15%).

The above-mentioned numbers of potential borrowers account 7% and 8%, respectively (compared to the number of mortgage loans granted in 2018). According to the analyses of the Polish Bank Association (Związek Banków Polskich, ZBP) (Raport ZBP 2018, pp. 14-18; 21-31), the number of graduates applying for mortgage loans in 2018 decreased to 8%, probably as a result of economic migration. However, as the above estimates show, compared to the ZBP data, mortgage loans for university graduates (for example in 2018) do not satisfy their housing needs.

Since mortgage credit is the most common instrument enabling the purchase of a flat, it should be stated that young, educated people, despite the good economic situation of the country, cannot afford to buy a flat with the help of this instrument (Zadłużenia...2017, pp. 1-2). Young people do not have sufficient creditworthiness and are therefore not eligible for a residential mortgage loan (Kredyt hipoteczny 2019, pp. 1-5). In this situation, the need to support citizens in solving housing problems resulted in the establishment of the National Housing programme by the government.

The following programmes were established: Rodzina na Swoim ("Family on its Own"), "Mieszkanie na Młodych" ("Housing for the Young"), Fundusz Mieszkań na Wynajem Rent Fund"), ("Housing for and recently announced (June 2016), Mieszkanie ("Housing Plus"). It was assumed that in 2018 and 2019, the construction of 100,000 premises would start. The Mieszkanie+ programme is to be based primarily on commercial construction financed by REITs. Housing will be available under commercial tenancy agreements and the lowest income earners will receive special allowances to compensate for the difference between the promised regulated rents and the updated version of the Mieszkanie plus programme. Previous

assumptions government were based on calculations that it is possible to build rental blocks of flats at a price of PLN 2,500-3,000 per 1 square metre. These estimates turned out to be unrealistic. For this reason, the option of building flats based on the social and local government programme was abandoned. These reasons have also led to a shift away from the idea of government regulated rents to prices set by the market. The first works within the Mieszkanie Pus programme started in 2016. In February 2018, the Mateusz Morawiecki's government withdrew from the basic assumptions of the programme, created two years earlier by the government of Beata Szydło: the conditions for the functioning of the programme Mieszkanie Plus were changed. As a further continuation of the programme under the new conditions, the Government plans to build approximately 1 million apartments for rent during the next 10 years of the programme. The main executor of the programme is investments made by the company owned by the State Treasury, Bank Gospodarstwa Krajowego (BGK Nieruchomości), and, at the end of 2018, REITs were to start operating. Furthermore, Individual Housing Accounts have also been set up to replace the programme Housing for the Young, and of course to support the programme Mieszkanie Plus by making it much easier to purchase a flat.

All government programmes have supported especially full families (with children) and guarantee rent subsidies for the poorest. Their main disadvantage is the inadequate adjustment of price limits to the financial conditions of households.

there is a very good economic macroeconomic situation (which describe the condition of the economy), the change in formal requirements for the assessment of creditworthiness will not be an impulse to popularise mortgages, especially generation of young, educated and very ambitious people. With the current restrictions on the new mortgage loans, even the best residential mortgage loan management strategy will not help popularise these loans to meet the housing needs of university graduates (Gorzeń-Mitka et. at. 2017, pp. 110-121). Therefore, the tightening of creditworthiness requirements alone will not favour the popularization and availability of mortgage loans to young people, who are the driving force behind the economic recovery and development of the country's economy.

Quoting Drucker (Drucker 2000, pp. 9-39), to counteract the barriers to satisfying the housing needs of university graduates it is necessary to change the current management paradigms (showing large differences between theory and practice), and developing new fundamental management principles, which will ensure the constructive development of management theory and practice.

Conclusion

The analysis of financing the housing needs of university graduates with mortgage loans carried out in the paper (based on the causes of the growth of the mortgage loan market in Poland since the systemic transformation period, the main macroeconomic indicators and the country's economic situation, changes in borrowers' preferences towards mortgage loans and the analysis of mortgage loan structures in 2018) made it possible to outline the borrower's profile and track its changes in 2016-2018. The paper demonstrated that the current mortgage loan market in Poland has opened up greater opportunities for graduates of well-established financial and economic status (range of age 30-35 years) to invest in housing by minimising the chances for graduates starting their professional and social careers (range of age 25-30 years) to purchase housing.

The reference of the presented borrower profile to the mortgage loan as an instrument for financing the housing needs of university graduates allowed for the determination of the role of the housing mortgage loan in satisfying the housing needs of university graduates. The following conclusions were drawn during the analysis of the market data, indicating:

- an increase in interest in investments in the purchase of flats among university graduates (25-30 years of age),

- considering mortgage credit as the primary source of financing for housing investments,
- the lack of matching price limits in programmes with the financial capacity of graduates,
- potential borrowers often have low levels of own contributions,
- formal requirements of good credit standing and collateral for loans are often impossible to be met by young educated people,
- the lack of government programmes and insufficient support for the housing needs of university graduates,
- government support for people with the lowest education (22%).
- numerous requirements for the use of government programmes to support housing investments significantly reduce the number of potential beneficiaries.

Counteracting barriers to meet the housing needs of university graduates, requires a review and change of the government programs in terms of support and efficient management of housing mortgages for young people. The government programs should be manage in the way that gives the young people real support in the credit process at the very beginning of their adult live not only after getting stable, well paid job. It could be possible by:

- supporting young people not only by subsidising the interest but also own contribution in mortgage loan
- introducing "the credit holiday" especially at the beginning of mortgage loan repayment
- adjust the terms of subsidizing mortgage loan to be attractive not only in the beginning of loan repayment but in the whole period (previous government programs offers subsidizing interest only in the first half of loan repayment and in the second half terms of loan were less attractive than in commercial mortgage loan)

In conclusion, as a result of very strict formal requirements, mortgage loans are not the primary source of financing for real estate investment, especially for young people, despite the significant recovery of the Polish economy.

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