

## The Reverse Mortgage as a Financial Tool for Increasing the Living Standard of Seniors in the Slovak Republic<sup>1</sup>

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### Abstract

*The aim of the paper is to define the main features of the reverse mortgage, to present the socio-economic situation of seniors in the Slovak Republic, to present the results of a survey aimed at the interest of seniors in using a reverse mortgage and formulating recommendations for application practice. The questionnaire survey was realised nationwide in all regions on a sample of 925 respondents. Of the total number of respondents, only 16% of property owners showed interest in a reverse mortgage. The answers of the respondents showed that the main reason for the lack of interest in the reverse mortgage is the unwillingness to break the intergenerational property transfer, which confirms the traditionally strong family relations and family solidarity in the Slovak Republic.*

**Keywords:** *Slovak seniors, reverse mortgage, living standards, aging of the population, housing*

**JEL Classification:** G18, G21, J11, K20

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### Introduction

In connection with population aging, the overall change in the lifestyle of families and the need to ensure a comfortable life for seniors in the changing social environment, the Ministry of Finance of the SR analysed the legislative environment regulating the functioning of reverse mortgages abroad. The analysis was elaborated in the context of the National Program for Active Aging for the years 2014 – 2020 within the meaning of Government Resolution No. 688/2013.

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In this document, the Government of the Slovak Republic has set “to consider the preparation of a new legislative norm enabling and regulating the transformation of citizens’ long-term assets into long-term regular income in old age”. This is an intention of raising the living standards of citizens in the context of the limits of pension systems.

The reverse mortgage represents a newly-developed tool that would be available to address specific situations that occur in the individual lives of seniors. On the one hand, the aging of the population changes the meaning and the proportion of different needs that seniors may have and at the same time increases the demands on pension systems that have their financial limits. For these reasons, national governments are creating legislative support which is to serve as a special instrument for ensuring income for current and future retirees.

Everywhere in the world there is a sizable group of seniors who have one common problem – a lack of financial resources: either because of insufficient income or insufficient savings (or no savings at all). With age, health care expenditures are rising and, in view of potential inflation, the cost of living is rising as well. Until now, the only option to acquire a greater amount of financial resources for seniors in the Slovak Republic (hereinafter SR) was the sale of real estate, which is often a painful decision for property owners.

A promising solution for such a situation can be the introduction of a reverse mortgage in our country in a similar way as it has been introduced in some EU countries (Great Britain, Holland, Sweden, Hungary...) or in the world (USA, Canada, Australia...). Property wealth generates a substantial part of the wealth of European households (Doling and Elsinga, 2013; Skudelný, 2009).

It would be a new financial and economic tool that would be available to address specific situations that occur in the individual lives of seniors. The introduction of the reverse mortgage raises a number of questions with a primary focus on issues related to the reaction of potential users to the offer of reverse mortgage in circumstances specific for the SR.

Until now, there has not yet been any research carried out in this area. This motivated us to examine this subject and, in particular, the interest of potential users in this financial instrument. A reverse mortgage as a form of financial security in old age can be tempting for seniors, as it offers a guarantee of living on their own property as well as the possibility of obtaining supplementary income, but at the same time creates an environment that creates significant risks in case of a bad legislative setting.

The goal of this study is to define the main features of the reverse mortgage, to present the results of the analysis of the socio-economic situation of seniors in the SR based on selected indicators connected with the reverse mortgage and

present the results of the survey focused on detecting the interest of seniors in using the reverse mortgage as well as subsequently create recommendations for applying these results in practice. We focus our attention on the benefits and potential risks of introducing a legislative norm that will govern this new financial instrument which could become a real instrument of financial assistance and support for senior citizens.

## 1. Theoretical Approaches to the Reverse Mortgage

Schemes for the transformation of long-term assets, so-called equity release schemes (ERS), were introduced in the 1980s in the US in the form of reverse mortgages. There are approximately 44 products derived from ERS models in the EU member States. For this reason, we will describe the common features of these products as the scheme has developed into two models, which are (MF SR and NBS, 2015):

a) *the mortgage model* – this model allows the lender to provide a loan covered by a mortgage on a part of a senior's real estate, the loan amount is usually up to 50% of the property value;

b) *the sales model* – the return of costs invested in the property (Home reversion). This model is similar to the mortgage model in its basic principles, with the fundamental difference being its relation to the real estate. It is a real estate sale in the form of an ERS model, with a change in property ownership taking place at the beginning of the contractual relationship. However, the senior can continue to live on the real estate until the end of his/her life. The provider of this ERS, who is the owner of the property from the beginning of the contractual relationship, covers the risks and costs associated with this product by its value. Property management and maintenance is the responsibility of the provider (the new owner). The senior receives a lump sum paid at one time or a regular income, typically up to 50% of the market value of the property.

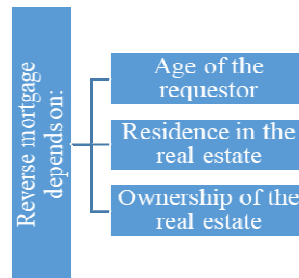
In regard to the consideration of the SR government to introduce the reverse mortgage, we will focus mainly on this form of ERS in the following part of the article. A reverse mortgage is a form of financial agreement between a reverse mortgage lender and a borrower that allows older people to convert the real value of their property into a loan in the form of cash advances that do not require any future repayments. The conditions for providing a reverse mortgage are illustrated in Scheme 1. Simultaneously, the debtor can remain in the property until he or she dies, sells the property or permanently moves.

Prior to the signing of the contract, the licensed person assesses the property value to ensure that the property meets the minimum standards set for that type

of real estate. If repairs are needed, they can be funded directly from the reverse mortgage. Seniors (borrowers) retain the title to the personal property and are responsible for paying real estate tax and insurance as well as for property maintenance. Unlike in other financial products, the borrower's income as well as his/her creditworthiness are not decisive as payments are made by the lender to the debtor. Lenders are interested in offering this financial product because it has considerable potential due to the large number of older property owners and the relatively low risk of generating a financial loss.

#### Scheme 1

##### Conditions for Providing a Reverse Mortgage



Source: The author's own creation.

Experts in the field of economics, sociology, as well as in the multidisciplinary field of housing research, emphasize the importance of real estate value in relation to old age and retirement (Chiuri and Jappelli, 2010; Costa-Font, Gil and Mascarilla, 2010; Doling and Horsewood, 2003, Elsinga et al., 2007; Malpass, 2008; Ronald, 2008; Rouwendal, 2009; van Gent, 2010; Venti and Wise, 2000).

Literature distinguishes predominantly two motives for real estate owners to apply for a reverse mortgage. The first is that a reverse mortgage reduces housing costs (Doling and Horsewood, 2003; Kemeny, 2005; Yates and Bradbury, 2010). E.g. Doling and Horsewood (2003) report that a reverse mortgage can facilitate retirement because people are no longer dependent on income from a job. The second potential motive can be the use of real estate value in relation to the life cycle of savings and consumption: mortgage funds could be consumed at an older age (Bonvalet and Ogg, 2008; Chiuri and Jappelli, 2010; Costa-Font, Gil and Mascarilla, 2010; Rouwendal, 2009).

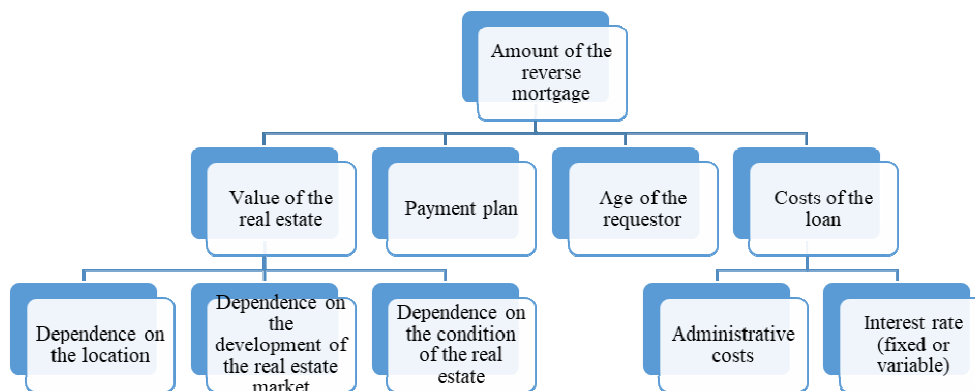
The reverse mortgage is, therefore, designed especially for seniors who own real estate and their income is low. A reverse mortgage will allow seniors to earn a one time or lifetime income while they can live the rest of their lives on the mortgaged property. As far as the applicant's age limit is concerned, this is not uniform in the countries in which it is used (e.g. USA – 62 years, Great Britain –

55 years ...). Applicants should generally be older than 60 years, while lenders set this minimum age depending on the social system, retirement age and other welfare categories of a specific state. For the purposes of our study, we take the age limit of 65+ because it is the lower border of the post-productive age used in international statistics.

The maximum amount of the loan depends on the property value, the age of the applicant (borrower), the cost of the loan and the payment plan chosen by the borrower (Scheme 2). Loan costs, in addition to the interest rate, normally include a loan origination fee, an expert appraisal fee, mortgage insurance and other contractual fees. Typically, these fees are funded by the reverse mortgage.

#### Scheme 2

##### Factors Affecting the Amount of a Reverse Mortgage



Source: Author's own creation.

According to Davidoff and Welke, the nature of a reverse mortgage is in itself linked to two aspects of moral hazard. The first is that the debtor does not have an internal incentive to maintain the value of the property and does not pay real estate insurance or real estate tax. The second aspect is that providing seniors with financial means makes their lives more attractive, which can lead to exceeding the optimal length of stay on the real estate (Davidoff and Welke, 2004, p. 2).

After the amount of the loan is determined, cash will be paid after all general conditions are fulfilled, depending on the payment plan chosen. In the payment plan, the reverse mortgage user chooses how to draw funds. The senior can receive funds through:

- a) a cash payment,
- b) a lifetime pension paid in regular installments,
- c) an interest-bearing bank account from which he may draw.

While the senior (debtor) lives on his/her real estate, the loan is not repayable. The entire loan becomes payable when the borrower sells the property, permanently moves away or dies. In the event of the debtor's death, the heirs to the property can repay the unpaid portion of the loan and take possession of the property, or the lender sells the property and repays the loan. Borrowers as well as lenders have the benefits and disadvantages of this financial product shown in Table 1.

Table 1

**Benefits and Disadvantages of a Reverse Mortgage for the Parties to a Contract**

<b>Parties to a contract</b>	<b>Benefits</b>	<b>Disadvantages</b>
<b><i>Borrowers</i></b>	<ul style="list-style-type: none"> <li>- Do not have to meet requirements for income, employment or other requirements to receive a loan.</li> <li>- Repayment of the loan is not required while the borrower resides on the property.</li> <li>- The amount of the loan due on the due date cannot be higher than the current value of the property.</li> <li>- The cash can be used for any purpose.</li> <li>- No property other than real estate can be used to repay the loan.</li> </ul>	<ul style="list-style-type: none"> <li>- Over time, the borrower's real estate assets begin to decline because interest is growing on the principal of a reverse mortgage.</li> <li>- Reverse mortgages may be more expensive than other types of mortgages.</li> <li>- Reverse mortgages can reduce the inheritance of the borrower's heirs as the value of the property decreases.</li> <li>- In the event of the non-fulfilment of the contractual terms, there is a risk that the lender will require an early repayment of the reverse mortgage.</li> </ul>
<b><i>Lenders</i></b>	<ul style="list-style-type: none"> <li>- Substantial financial rewards.</li> </ul>	<ul style="list-style-type: none"> <li>- On the loan due date, the value of the property may be lower than the amount of the loan.</li> <li>- The life of the borrower is significantly longer than the life expectancy at the time of signing the contract.</li> <li>- Unfair and deceptive business practices of debtors.</li> </ul>

Source: Authors own creation to Kaplan and Neill (2007), pp. 2 – 3.

There are some guarantees connected to this product, such as a guarantee of rent in the form of a monthly loan payment during the occupation of the property, also a guarantee of rent, as the owner of the property remains in it for as long as he wishes. Other guarantees include the repayment of the loan only when the owner of the property does not live in it anymore and the guarantee of no recourse, as the creditors have no access to any other assets of the debtor, except the property secured by the loan.

## **2. The Starting Point for Consideration of Using a Reverse Mortgage in Specific Conditions of the SR**

In relation to a reverse mortgage, in the following sections of this study we will focus on the aging of the population (proportion in the population, life expectancy) and the resulting demands on long-term care, as well as on the

socio-economic situation of pensioners created by their monetary income and expenditure, and on the key element of the reverse mortgage – real estate ownership and real estate value.

### **2.1. Demographic Aging of the Slovak Population in Relation to the Needs of Social Care**

One of the major manifestations of demographic changes in Slovak society is the aging of its population. The aging of the population can be defined more simply as an increase in the median age of the residents of a specific area or country. While at present the median age of a Slovak Republic resident is 39 years, according to the EUROPOP2013 forecast, it will be 52.5 years in the year 2060. Although the median age in the SR is currently below the EU27 average, by 2040 it will be higher than the EU average. Despite the fact that the manifestations of this phenomenon are not yet as obvious, the Eurostat prognosis of demographic development by the year 2060 points out the accelerating of aging in the Slovak population. According to this forecast, the age structure of the Slovak population will change fundamentally in 2060. While in 2015, 14% of the population was older than 65 years in Slovakia, it will grow by about 250% in 2060 and will account for 35% of the total population. The share of population older than 80 years will also increase significantly. Other age groups (0 – 14, 15 – 64) will encounter a population decline during the years 2015 – 2060, especially in the productive population (–18 percentage points).

Another demographic indicator that suggests the acceleration of the aging process is the increase in the average life expectancy. In 2060, the average life expectancy for males will reach 82.3 years (+9.2 years over 2015), and 87.4 years for females (+7.2 years over 2015). The average life expectancy at the age of 65 will change in a similar way. For both sexes, the increase in the number of years of survival extends the period during which old people are exposed to various serious illnesses and become dependent on help from another person with limited financial resources.

With regard to the prolonged age of survival, attention should be drawn to the average life expectancy without disability (healthy life years). On average, the population of the SR lives around 55 years of healthy life, and differences in this indicator between men and women are disappearing over time. While the population at the age of 50 had about 11.6 years of healthy living left in 2014, the population at the age of 65 had less than 4 years left (Table 2).

With older age, the number of years of healthy life decreases, and up to 78 – 80% of the population has long-term limitations in daily activities in the oldest age group. Consequently, living expenses for health and social care are being added to normal living expenses.

Table 2

**Healthy Life Years in the SR**

Healthy life years	2005		2007		2009		2011		2014	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
<i>At birth</i>	55.2	56.6	55.6	56.1	52.4	52.6	52.1	52.3	55.5	54.6
<i>At the age of 50</i>	12.4	13.2	11.9	12.1	10.2	9.7	10.2	10.0	11.7	11.5
<i>At the age of 65</i>	4.8	5.4	4.1	4.2	3.5	2.9	3.5	2.9	4.3	3.6

Source: Eurostat database: Healthy Life Years [hlth\_hlye], cit. 22. 1. 2017.

The importance of a reverse mortgage for seniors can therefore also be assessed in relation to satisfying social welfare needs. A certain portion of the group of seniors dependent on long-term care services may, given the financial demands of social services, become potential candidates for obtaining a reverse mortgage.

Based on the above-mentioned results of the forecasts, the age structure of the Slovak population will change in the following years in favour of the older age group. As the number of seniors increases and the age of survival grows, the growing number of seniors dependent on help from other people should be taken into account. Based on the results of the empirical research (e.g. European Commission, 2014), the age around 75 years old indicates the beginning of changes in an individual's perception of health, personal strength and living conditions as well as changes in personal needs along with other circumstances of individual life. According to Eurostat data, up to 90% of the Slovak population is limited in daily activities.

Changes in health and mental status affect the degree of self-sufficiency for people of this age. One-time assistance is no longer sufficient and there is a need to provide long-term care services as seniors become dependent on the help of other people in everyday activities such as help with personal care, caring for a home, and helping with social activities. Emphasizing the importance of the family and a strong expectation that family members will provide full and long-term care for dependent seniors may not be fulfilled.

In such cases, the senior becomes dependent on the use of some of the available social services, while the goal is to keep seniors in their natural environment as long as possible, which is in line with the European trend of social service orientation towards domestic care services.

Although legislation allows seniors to benefit from a wide range of social services, in connection with a reverse mortgage, home care services and outpatient social services are more important, since one of the basic conditions for



a reverse mortgage applicant is his/her residence in their own property. In case of his/her placement in a residence facility, the senior citizen loses the right to return and the property goes into the ownership of the reverse mortgage provider.

Necessary assistance in the natural environment is currently provided to a large extent by family members as informal care or by home care service that is within the competence of municipalities and cities and which is provided by professional nurses for reimbursement.

In this consideration, it is important to emphasize the long-term lack of coverage in home care services by municipalities and cities. Municipalities justify low coverage, in some cases, absolutely no coverage of domestic care services by a lack of funding. For a senior reliant on this kind of social service there is an option of using another provider's offer but the remittance for alternative service providers is far costlier for the senior, and it is realistic to assume that the price that the user will pay for the home care service in the future will increase. In the context of these needs, the savings and wealth of the senior are seen as possible sources of funding.

## 2.2. The Socio-economic Situation of Seniors in the SR

One of the main reasons for introducing a reverse mortgage is to ensure complementary long-term income in the old age, which will positively affect the socio-economic situation of seniors. The current development of the Slovak economy is influenced by imbalances at the level of the national economy and is inevitably showing in the living standard of seniors. The socio-economic situation of retirees in the SR is dependent on their income. In retirement age, the most frequent source of this income is a retirement pension. The development of the average amount of pension benefits in the period 2005 to 2016, which is shown in Table 3, records an increasing trend.

Table 3

### The Average Amount of Retirement Benefit in the SR (EUR)

Retirement benefit	2005	2009	2013	2016
<i>Retirement pension</i>	256.02	339.73	390.51	417.46
<i>Early retirement pension</i>	282.15	350.61	384.70	388.80
<i>Disability pension</i>	192.66	249.43	268.49	263.27
<i>Widow's pension</i>	163.91	209.75	237.32	245.31
<i>Widower's pension</i>	106.42	157.86	183.19	190.15

Source: <slovstat.sk>.

The growth of pension benefits is driven by the nominal wage growth in the national economy, as one of the factors determining the retirement benefit and

the valorisation mechanism. The valorisation mechanism is to a large extent dependent on political decision-making, which creates uncertainty about increasing retirement benefits and creates space for finding other sources of income in old age, which may be a reverse mortgage.

The income breakdown of pensioners at the end of 2016, shown in Table 4, shows that more than 60% of pensioners have a social income of less than 425 EUR. Precisely this group of people can be a potential claimant for a reverse mortgage due to insufficient resources in the event of a worsening of health and dependence on others, unexpected spending connected with the use of one's own dwelling or other unpredictable life events.

Table 4

**Breakdown of Pension Beneficiaries by Pension Amount** (until December 31, 2016)

Amount of pension (EUR)	Number of pension beneficiaries				
	Old-age solo + old-age overlapping with widow's or widower's	Early old-age solo + early old-age overlapping with widow's or widower's	Disability solo + disability overlapping with widow's or widower's	Total	
				No.	%
<b>up to 130</b>	8 848	28	19 993	28 869	2.19
<b>130.1 – 200</b>	16 077	58	66 689	82 824	6.28
<b>200.1 – 265</b>	21 612	2 242	41 102	64 956	4.93
<b>265.1 – 325</b>	141 238	5 054	54 236	200 528	15.22
<b>325.1 – 425</b>	381 312	6 426	45 022	432 760	32.85
<b>425.1 – 530</b>	306 106	3 529	14 000	323 635	24.57
<b>530.1 – 665</b>	119 126	2 071	5 136	126 333	9.61
<b>over 665.1</b>	54 524	824	1 982	57 330	4.35
<b>Total</b>	1 048 843	20 232	248 160	1 317 235	100.00

Source: Author's own creation and calculations based on data <www.socpoist.sk> and MPSVaR SR (2017), p. 184.

The actual amount of the pension benefit may not determine when a person decides to draw a reverse mortgage, because other preferences of the potential applicant can play a role in decision-making (e.g. leisure activities, services, etc.).

In older age, there is an increase in the number of lonely people who are reliant on the help of their family or the help of other people for providing basic human needs due to worsening health. According to the average period of receiving retirement benefits (Table 5), we can state that women can be expected to receive pensions nearly 6 years longer than men. Moreover, according to the Aging report 2015, the retirement age for both sexes will be prolonged, with a higher increase for men by the year 2060. This increase in the length of the retirement period will also be negatively taken into account in the amount of the reverse mortgage.

Table 5

**The Average Length of the Retirement Period**

	2014		2020		2040		2060	
	Males	Females	Males	Females	Males	Females	Males	Females
<b>EU-28</b>	18.1	22.6	18.1	22.3	19.9	23.7	21.7	25.3
<b>SR</b>	16.8	22.7	17.7	21.9	19.1	23.6	20.0	23.3

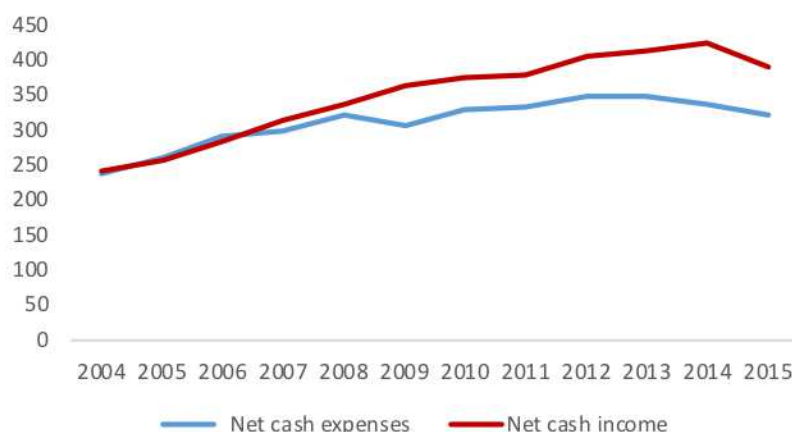
*Note.* The retirement period is considered to be the average life expectancy after reaching the retirement age from cross-sectional mortality tables. With a continuing decrease in mortality, the actual length of the retirement period will become somewhat longer.

*Source:* European Commission (2015), p. 67.

The household income of retirees determines their behaviour as consumers. The largest expenditure items for pensioners in 2015 were expenses for housing, water, electricity, gas and fuels (25.8%), closely followed by expenses for food and non-alcoholic beverages (25.4%). Following these were other net expenses and then transportation costs. Expenses for health, recreation and culture, postal services and telecommunication accounted for around 5% of total expenses. From 2004 to 2015, growth in retirees' expenses was recorded mainly in the area of services, which can be attributed to changes in the preferences of pensioners as well as to a slight increase in the standard of their living.

Over time, the gap between net income and net expenditure of retirement households grows (Graph 1). Selected groups of pensioners are, therefore, able to create a financial reserve in order to raise their living standards or to put money aside in case of unexpected expenses.

Graph 1

**The Comparison of Net Cash Income and Expenditures of Households of Slovak Retirees for the Period 2004 – 2015**

*Source:* Author's own creation according to the <www.statistics.sk>.

A household's long-term budget is the greatest burden on housing expenditure, but the households of retirees are to a certain extent protected by living on their own property, as lower costs are connected with that than if they lived in rentals. According to other census results from 2011, 87.5% of the occupied houses were owned by natural persons. The high percentage of housing ownership is perceived as a high social status in the perception of Slovak citizens and creates a background and certainty. Personal ownership of real estate is also the main condition for claiming a reverse mortgage.

The value of real estate, which is influenced by a number of other factors of mutual interactions, is considered a key factor affecting the amount of the reverse mortgage. Low-quality buildings and neglected maintenance also affect the price of real estate in the correlation of reverse mortgages, because someone will have to pay the necessary reconstruction, or the value of the property will be lower, which will be reflected in the amount of the reverse mortgage.

The real estate price is derived not only from the physical and technical condition of the property itself, but also from the regional location and overall situation on the real estate market.

Over the last few years, with the exception of the year 2015, the SR experienced a year-on-year decline in average real estate prices (Table 6).

Table 6

**Average Real Estate Price (EUR/m<sup>2</sup>)**

Year	SR Total	Year 2002 = 100	Year-on-year change	Flats	Houses	Average real month wage (growth)	Average nominal wage*
2016	1 279	216.0	4.2	1 472	1 089	3.8	912.00
2015	1 227	207.3	0.9	1 355	1 081	3.2	883.00
2014	1 216	205.4	-0.8	1 293	1 096	4.2	858.00
2013	1 226	207.1	-0.9	1 288	1 115	1.0	824.00
2012	1 237	209.0	-1.1	1 297	1 118	-1.2	805.00
2011	1 251	211.3	-3.1	1 315	1 109	-1.6	786.00
2010	1 291	218.1	-3.9	1 333	1 156	2.2	769.00
2009	1 344	227.0	-11.1	1 375	1 206	1.4	744.50
2008	1 511	255.2	22.1	1 574	1 270	3.3	723.03
2007	1 238	209.1	23.8	1 276	1 130	4.3	668.72
2006	1 000	168.9	16.8	998	1 004	3.3	622.75
2005	856	144.6	-10.3	841	915	6.3	573.39
2004	954	161.1	15.4	932	977	2.5	525.29
2003	827	139.7	39.7	815	839	-2.0	476.83
2002	592	100.0	-	602	582	5.8	448.48

Note: \* The data from 2002 until 2008 are converted using the conversion rate.

Source: Author's own creation and calculations based on data <www.statistics.sk> and <www.nbs.sk>.

This slight drop in prices coupled with the stable income situation in Slovak households caused our country to belong to the group of countries where ordinary incomes are sufficient for providing housing at prices that were established

in the housing market over a longer period of time. In mid-2014, the price/income ratio in Slovakia was almost 14% lower than its long-term average (Car, 2015, p. 12). The turnover came in 2015, when, compared to 2014, the average real estate price slightly grew due to a relatively dynamic increase in the average price of flats and a decrease in the average of price houses. This trend continued intensively in 2016.

Several years of labour market instability, the economic potential of the region of the real estate location and the uncertain situation on the markets will have an impact on property valuation, which we see as a significant risk in relation to reverse mortgage applicants.

### **3. Subjective Perception of the Reverse Mortgage Introduction by the Target Group (questionnaire survey)**

Before collecting the data, we asked ourselves these research questions:

1. Would Slovak households of seniors use a reverse mortgage if it existed on the financial market?
2. Would a reverse mortgage help to raise the standard of living for seniors?
3. Would seniors be interested in the introduction of the reverse mortgage in SR conditions?

The questionnaire survey was aimed at gaining the views of seniors on the reverse mortgage as a new financial product, and then in a specific form in order to identify the interest in the product, taking into account the different living conditions for seniors (income, health, age, sex, location of residence, type of real estate).

The survey was conducted in November – December of 2016 by personal contact with the respondents. Each of the respondents was informed about the nature of the reverse mortgage before questions were asked. The data collection was carried out by voluntary surveyors and was centrally organized by the research team of the VEGA research project, resulting in the writing of this paper. A relatively homogeneous target group was chosen due to the limited scope of the survey (with regard to time and financial resources). The target group was residents of the SR aged 65+ who were randomly selected taking into account the fact that respondents who would meet the age condition when applying for a reverse mortgage were selected. In our research, we examine the intensity of the impact of the most commonly used variables: gender, income, residence and age for interest in using a reverse mortgage. The following types of questions were used in the questionnaire: open, closed and semi-closed. A respondent answered the questions by making a choice between predetermined answers,

while the answers were written by the respondents themselves for two questions. There were 19 questions targeted on three areas. The first group of questions focused on the basic characteristics of the surveyed respondents, the second group of questions aimed at finding the socio-economic situation of the respondents' households and the last set of questions was directly linked to the reverse mortgage. After field data collection, basic logic reviews were performed and the data was then processed and evaluated in the IBM SPSS Statistical Program for Quantitative Data Analysis, using descriptive statistics for the analysis.

This questionnaire survey was carried out nationwide, with all regions of the SR being represented. The total number of respondents was 925, of which 61.3% were women and 38.7% were men. In terms of age structure, respondents in the age groups of 65 – 70 and 71 – 75 predominated, accounting for 74.5% of the total number of respondents. The rest were clients over 76 years of age.

In regard to the respondent's place of residence (rural areas versus towns), the survey was able to achieve almost the same proportion of seniors from rural areas and from towns with a slight prevalence of rural respondents (53%). As for the type of property being inhabited by respondents, 61.6% lived in a family home, 38.3% in a flat.

The ownership of real estate was declared by 86.5% of the respondents, which corresponds to the number of 800 respondents with whom, (in view of the need to fulfil this basic condition for offering a reverse mortgage) we continued the questionnaire survey. The health status of respondents stated as bad or rather bad constituted 23%, while only 15% of the 800 surveyed respondents were dependent on the help of another person at the time of the survey. The low number of dependents is related to the age structure, as three quarters of those surveyed were seniors under the age of 75 and the need for long-term care increases significantly in the 75+ age category.

When examining the economic situation of the households measured by monthly income, two income groups were selected, the first being in the range of 0 – 450 EUR per month (56% of respondents' households) and the other with income in the range of 451+ EUR per month which accounted for 44% of households.

When asked whether the respondent's household was able to pay for normal expenses, 45.1% of the respondents answered positively, 54.9% answered negatively, while on the response scale the stratification of questions was as follows:

In regard to the question of whether the household is able to generate savings, 54% responded positively, which suggests that even the group of respondents who said that they have difficulty paying for their usual expenses, can save a certain amount of money.

Table 7

**Are You Able to Pay for Your Normal Expenses?**

Are you able to pay for your normal expenses?					
	Number of respondents	%		Number of respondents	%
Very easily	21	2.6	With difficulty	103	12.9
Easily	63	7.9	With significant difficulty	319	39.9
Relatively easily	277	34.6	With big difficulty	17	2.1

Source: Author's own creation.

In regard to the question of whether respondents were interested in a reverse mortgage, 125 seniors from 798 respondents (two did not respond) showed interest. This represents only 16% of property owners, while 673 respondents who gave a negative answer, represent up to 84% of seniors. The survey results demonstrate very little interest in this product, while in the group that showed some interest, seniors of a younger age were the majority. Of those 125 respondents who answered positively, up to 67% of them reported problems with paying for normal expenses.

Another question was aimed at finding out if and to what extent interest in a reverse mortgage for flat owners and homeowners differs. Of the total number of 282 respondents holding flats, 23% showed an interest in the use of a reverse mortgage, while respondents owning a house were only 12%. We are aware that identifying interest in the use of a reverse mortgage in the families of seniors in households with children and homeless families would represent a clear enrichment of the research. While this has not been the subject of investigation, the respondents' replies to the reasons for not resorting to the reverse mortgage have shown that 75% of them intend to leave their property to their children, pointing to persistent, traditionally strong family relations and family solidarity.

Interest in the reverse mortgage was also investigated from the point of view of the location of the residence of the respondents (town, village). In both groups, there was a low rate of interest, wherein 20% of seniors living in a town were interested in a reverse mortgage and 12% of the population living in a village.

The respondents who expressed interest in the reverse mortgage were asked about the purpose of using the funds. Most respondents would use reverse mortgage funds to increase their living standards (recreation, travel, better quality food, culture ...), followed by paying for health care costs and for the reconstruction of their real estate. Part of the respondents would support their loved ones from these funds.

To the question about the form of payment that the respondents would prefer (annuity, one-time lump sum payment or a combination of both forms), 49% said they would like to receive payment in the form of a regular monthly annuity. This

clearly indicates that seniors approach the reverse mortgage in a responsible way and the purpose of use is linked to the guarantee of regular monthly income.

For the choice of a reverse mortgage provider, 43.50% of respondents think that the appropriate provider would be a state institution which means that for such a risky financial product as a reverse mortgage, respondents prefer the state guarantees and the high credibility of these institutions compared to private sector institutions. The least confidence was given to private companies (only 2.12%), this is due to the high risk of bankruptcy for these companies.

Table 8

**The Opinion of Respondents on a Reverse Mortgage Provider**

<b>In your opinion, the reverse mortgage can be provided by?</b>		
	Number of respondents	%
<i>State institutions</i>	348	43.50
<i>Banks</i>	274	34.25
<i>Insurance companies</i>	63	7.88
<i>Other private companies</i>	17	2.12
<i>Did not answer</i>	98	12.25
<b>Total</b>	<b>800</b>	<b>100.00</b>

Source: Author's own creation.

Respondents who were not interested in a reverse mortgage were asked to identify reasons for their negative attitude to this financial product. 75% of the respondents stated that they intend to leave the property to their children, which means that there are significant emotional and hereditary ties in Slovakia, 8% would prefer to sell their own property through the real estate market, and 17% of the respondents were discouraged by the fact that in case of the serious deterioration of their health that would require them to stay at a social service facility, they would lose their right to receive payments from a reverse mortgage.

It is important to point out that although 8% of respondents prefer to sell their real estate through the real estate market, they may not be able to meet this target, as on average only one of every fifteen houses on the market was sold in the second half of 2015. Therefore, we can say that not every single-family house is sellable and this fact will also contribute to the situation where interest in a reverse mortgage may appear.

Respondents may also reevaluate their lack of interest in a reverse mortgage in the event of a financial emergency, respectively the deterioration of their health that may make them dependent on another person's help while staying at their home. The ability to respond to a rise in the standard of living was negligible.

A question that concluded the questionnaire survey and which the authors of the study addressed to all respondents, regardless of whether they own or do not own a real estate, was as follows: "From a senior perspective, do you consider



the introduction of a reverse mortgage in the Slovak Republic as a useful solution for improving the quality of life in old age?" Out of all 925 respondents, 21% did not answer the question, 34% answered positively, 45% had a negative opinion, which again shows that Slovak seniors do not prefer raising the standard of their living at the expense of giving up personal property ownership.

## Conclusions

Although the reverse mortgage is used in many countries of Europe and the world, our survey revealed the low potential of this financial product among the seniors that we addressed. If determined to use this product, seniors would use the funds for raising the standard of their living. As the results of the survey suggest, the main reason for not responding to this product is the decision to leave the property to their children. Using a reverse mortgage would break the intergenerational property transfer, which is currently used in the SR.

One of the barriers for wider use of a reverse mortgage is the fact that, with increasing age and worsening health, a senior would have to leave his/her property and resolve this situation by staying in a social services facility. According to the respondents, in this case they would prefer selling their real estate on the real estate market. Our selected research sample has taken a predominantly negative view on the introduction of this financial product.

Despite the stated low interest of respondents, we consider the reverse mortgage to be a product suitable for a particular segment of the senior generation, especially for those who find themselves in borderline emergency situations when they own real estate but lack sufficient income for ordinary life, or are threatened with execution proceedings with a definitive loss of property. This form of mortgage can also be an acceptable solution for lonely seniors without strong family relationships and with a strong desire to remain for the rest of their lives in their home environment. Through a reverse mortgage, they will acquire the ability to pay for a wider range of domestic nursing services, respectively other home care social services. In the event of an increased need for financial resources in old age, seniors may prefer selling real estate at the real estate market, because a reverse mortgage is associated with some specific costs. However, it should be taken into consideration that the real estate market does not always immediately provide for the sale of real estate, so the seniors do not get the necessary financial resources in a short period of time. Thus, under certain circumstances, the reverse mortgage is the only source of a secure income in old age. However, it should be noted that even with a reverse mortgage there are some costs (insurance, maintenance) that would otherwise not have arisen.

Due to the rising financial costs of social care and health care and increasing life expectancy, we recommend that in practice, consideration should be given to connecting funds raised through a reverse mortgage, exclusively to the purpose of providing long-term health and social care. A similar principle is applied, for example, in Austria, which ensures a purposeful use of reverse mortgage funds. In the context of this purpose of use, we recommend that law makers determine the minimum amount of a reverse mortgage from the value of the property, as it will be used mainly by clients with poor health, which will be in correlation with their life expectancy.

In order to ensure high protection for seniors, we propose publishing each reverse mortgage offer in a central register managed by the National Bank of Slovakia, thereby providing a high degree of transparency. At the same time, we propose that before signing the reverse mortgage, a minimum period of time for publication in the central registry should be determined, this will provide enough time for the client or other family members to become more aware of his/her commitment and consider all other options.

In the future, in the case of the introduction of a reverse mortgage in the conditions of the SR, a problem related to real estate ownership may arise, which is the basic principle of the use of a reverse mortgage. While today, most seniors are owners of real estate, this situation may change over time in terms of the income distribution of Slovak society. On the one hand, the number of senior citizens living in rented apartments, leased real estate or real estate with a mortgage may increase.

On the other hand, there will be a group of seniors with ownership rights to several properties for whom the purpose of a reverse mortgage loses its meaning. The target group of this financial product will change over time and through this, the cost of this product will change as well. At the same time, the multiplicity of the population will change, which may result in surplus real estate, which will lead to a decrease in its price. However, it is important to understand that generations change. The outlook of senior citizens on using a reverse mortgage will also change in coming years.

While today's seniors are conservative in terms of lifestyle ("we live in a way we can afford") in relation to the use of reverse mortgages, the next generation, already influenced by the consumer-style life and the use of multiple financial products (mortgage loans, credit cards, consumer loans, authorized account overdrafts), may be more willing to use this financial product.

The introduction of a reverse mortgage in the specific conditions of the SR would create new research opportunities for economic science and would enable exploring the deeper implications of the application of this instrument in the SR.

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