



Disparities in Household Wealth among Slovak Regions

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This article summarises the key findings from the first wave of the Slovak Household Finance and Consumption Survey. The analysis is done at the regional level and presents results on household assets, liabilities, net wealth, income and consumption.

INTRODUCTION

This article describes the financial situation of Slovak households at the regional level by putting together various components of household finance, such as assets, liabilities, net wealth, income and consumption expenditures. We use Slovak data from the first wave of the Eurosystem Household Finance and Consumption Survey (HFCS)¹ that were collected between September and December 2010. The sample consists of 2,057 households, proportionally distributed over all Slovak regions.

Slovakia is divided into the eight following regions: Bratislava (BA), Trnava (TT), Trenčín (TN), Nitra (NR), Žilina (ZA), Banská Bystrica (BB), Prešov (PO) and Košice (KE). Basic characteristics of Slovak regions are described in Table 1. Significant differences between regions originate from topography, geographic dispersion of larger towns and public infrastructure that drive trends in investment and economic development. Over the past years investment has concentrated in western and northern regions, where main industrial hubs emerged, which attracted more services.

This development is reflected by a higher GDP per capita and lower unemployment in these regions compared to the rest of the country.

ASSETS

First we describe the distribution of household assets across Slovak regions, distinguishing real assets (real estate, vehicles, valuables and businesses) and financial assets (deposits in sight/saving accounts, investment in mutual funds, shares or bonds, money owned to households and private pension/life insurance policies). We conclude with the regional distribution of total assets. The reference period for the reported assets is the time of an interview (autumn 2010).

As we can see from Table 2, almost all Slovak households possess some kind of asset and 96% hold real assets. This share does not vary much across the regions and exceeds 93% in all regions. The most common real asset (owned by 90% of households) is the household main residence (HMR) that constitutes the largest part of total real assets. The share of home-owners is high in each Slovak region and by far exceeds the share

¹ More information about the Eurosystem Household Finance and Consumption Survey (HFCS) is available at http://www.ecb.europa.eu/home/html/researcher_hfcs_en.html.

Table 1 General regional data

	Abbreviation	Population total	Area (in km ²)	Population density	GDP per capita (in EUR)	Unemployment rate	Average gross nominal monthly wage (in EUR)	Average age	Average living area (m ²)	Number of dwellings started in 2010
Bratislava	BA	628,686	2,053	306,3	43,100	6.1	990	40.1	73.4	4,700
Trnava	TT	563,081	4,146	135,8	20,100	12.0	710	39.5	67.6	2,593
Trenčín	TN	598,819	4,502	133,0	15,800	10.2	660	40.0	67.3	1,481
Nitra	NR	704,752	6,344	111,1	14,800	15.4	640	40.1	77.9	1,483
Žilina	ZA	698,274	6,809	102,6	15,800	14.5	690	38.0	66.2	2,004
Banská Bystrica	BB	652,218	9,454	69,0	13,200	18.6	640	39.4	71.8	914
Prešov	PO	809,443	8,973	90,2	10,100	18.6	600	36.4	76.4	1,703
Košice	KE	780,000	6,755	115,5	14,100	18.3	720	37.4	72.3	1,343
Slovak Republic	SK	5,435,273	49,036	110,8	17,900	14.4	770	38.7	71.5	16,211

Source: Statistical Office of the Slovak Republic – Regional Statistics Database 2010.
Note: GDP per capita in current prices PPP.



Table 2 Median values (EUR) of and participation rates (%) in various types of assets by region, and regional / real-asset shares of total assets

Region	REAL ASSETS	Household main residence	Other real estate	FINANCIAL ASSETS	Deposits	Private pension/ life insurance	TOTAL ASSETS	Regional share of total assets	Real-asset share of total assets
BA	92,200 95.3	83,900 87.5	28,200 16.6	3,000 94.9	2,400 94.5	5,500 17.4	93,300 99.9	17.9	94.2
TT	72,500 94.4	75,000 83.9	N 1.5	5,400 87.4	4,700 87.0	3,600 11.3	79,200 99.9	9.9	88.7
TN	61,700 95.3	54,700 91.4	12,600 13.5	2,000 92.0	1,500 91.7	1,800 21.6	63,200 99.7	10.4	91.9
NR	47,700 99.2	42,100 13.6	9,200 96.2	1,300 90.6	1,000 89.5	5,400 12.4	51,300 100	10.7	92.7
ZA	76,000 96.1	61,200 91.1	27,100 29.8	2,500 94.3	1,500 94.0	3,900 20.0	77,500 100	14.9	93.4
BB	44,300 93.5	40,000 87.1	15,800 13.2	2,000 89.9	1,800 89.2	3,700 11.6	45,400 98.3	9.3	89.3
PO	54,700 97.4	56,800 86.7	N 11.0	3,400 96.3	2,600 96.2	2,100 20.4	60,800 99.5	11.2	87.4
KE	59,500 96.3	50,100 93.6	15,400 20.8	2,600 88.4	1,800 87.6	4,300 13.6	61,500 99.0	15.6	92.6
SK	61,800 96.0	55,900 89.9	16,400 15.3	2,500 91.7	2,000 91.2	3,200 15.1	64,400 99.5	100	91.7

Source: HFCS Slovakia 2010.

Notes: This table reports shares (in %, italics) and median values (in EUR) of various types of assets owned by households in each region. N stands for "not calculated" because less than 25 observations are available.

2 The share of households owning their main residence in the whole euro area is 60%; see HFCN (2013, Table 2.1).

in other euro-area countries.² The high proportion of Slovak households owning their HMR results from the fact that households living in flats owned by the state or housing co-operatives during communist era could purchase these properties for a symbolic price during the early transition to market economy in 1990s.

Other real estate property is owned by 15% of Slovak households. We observe significant differences across regions. While in the region of Žilina almost 30% of households own additional real estate property, this share is only 1.5% in Trnava region. An additional property is usually a house or a flat (33%), a garage (19%) or a building site (9%). Only few households own a farm or an office. Many households (over 30%) specified "other use", which comprises gardens or recreational residences (e.g. weekend cottages).

Concerning other real assets (not shown in Table 2), vehicles are owned by 61% of Slovak households with the highest share observed in Prešov region (73%) and the lowest in Trenčín region (53%). Around 22% of households declared owning some valuables, particularly in Košice region (39%).

Finally, around 11% of Slovak households have a self-employment business. Self-employed households are mainly concentrated in Banská Bystrica region (17%), however, the median value of business wealth in this region is the lowest

(€ 800) compared to other regions (the nationwide median value is € 4,600). The highest values of business wealth are observed in Bratislava region (median at € 15,100) with relatively low ownership rate (9%). Such a large disparity in business wealth correspond to a search for alternative income to the unemployment-induced lack of regular employment opportunities in rural regions, and relatively well paying employers with higher value added in developed regions.

Households in Bratislava region also have the highest median value of real assets (€ 92,200), which is caused mainly by high market values of real estate in this region (median value of the HMR is 83,900). On the contrary, households in Banská Bystrica region have the lowest median value of real assets (€ 44,300), which is due to low market values of real estate in this region (median value of the HMR is 40,000).

Financial assets consist of deposits in current or saving accounts, financial investment products (mutual funds, shares, bonds etc.), money owed to household, private pensions and life insurances. Nearly all surveyed households (92%) claimed having some financial assets; the national median value is at € 2,500.

The most frequent type of financial assets is a bank deposit. Shares of households with bank deposits are similar across regions (close to 90%) and copy the total distribution of financial-asset hold-



ings across regions (see columns 5 and 6 in Table 2). The second most important part of financial assets is private pensions or life insurances, which are owned by 15% of Slovak households. The median value of these assets (conditional on ownership) exceeds the median value of deposits in almost all regions, and reaches € 3,200 in the whole country.

Around 10% of households claim that someone owes them money, the median value of which is around € 1,000; see Messner and Zavadil (2014, Table 2.3). We observe only very few Slovak households having investments in mutual funds (2.7%), bonds (1.0%) or shares (0.8%). This is probably caused by conservative nature of Slovak households as almost two thirds of them find themselves to be risk-averse and not willing to take any financial risk; see Messner and Zavadil (2014, Table 2.4).

The last three columns of Table 2 summarise the regional breakdown of total assets and their respective median values. Although almost all Slovak households declared to own some type of asset, its median value across regions is quite dispersed. The highest median value of total assets (€ 93,300) is observed in the region of Bratislava and is more than twice higher than the lowest median value observed in Banská Bystrica region (€ 45,400). Furthermore we can see that real assets form the most significant part of total assets (around 90%) in all regions. Hence, combined with the result that almost 90% of Slovak households own their HMR, we can conclude that the HMR is the most important component of total household assets in Slovakia.

LIABILITIES

This section deals with the composition of debt among Slovak households. We distinguish mortgage debt that is collateralised by a property from non-mortgage debt, which includes credit lines, bank overdrafts, debt on credit cards and various types of consumer loans. The reference period for the reported household debt is the time of interview (mostly October 2010).

We start with mortgages that are common debt instruments, used by the buyers of a real estate to raise money to do the purchase or to raise funds for any other purpose. The mortgage loan is collateralized by the borrower's property. Despite the high homeownership rate in Slovakia (90%; see Table 2), only 10% of Slovak households have mortgage debt (see Table 3). Most of these households took out a mortgage to purchase their main residence.

A low number of indebted households does not allow us to make a proper regional breakdown due to insufficient number of observations, mainly in smaller and less developed regions. As expected, the highest share of households with mortgage debt (13%), as well as the highest median value of mortgage debt (€ 30,000), is observed in Bratislava region, where the real estate market is the most liquid in the country.

Non-mortgage debt is uncollateralised and usually involves much lower principals than mortgage debt. It includes credit line / overdraft debt, credit card debt and various types of consumer loans, such as car loans, instalment loans, private loans

Table 3 Median values (EUR) of and participation shares (%) in various debt components by region, and regional/mortgage shares of total debt

Region	MORTGAGE DEBT	Mortgage on main residence	NON-MORTGAGE DEBT	Consumer loans	TOTAL DEBT	Regional share of total debt	Mortgage share of total debt
BA	30,000 <i>13.3</i>	30,000 <i>13,3</i>	1,000 <i>24.2</i>	1,500 <i>12.1</i>	4,100 <i>32.6</i>	21.4	90.4
TT	N <i>6.9</i>	N <i>6.9</i>	N <i>1.6</i>	N <i>1.6</i>	N <i>8.5</i>	9.8	N
TN	N <i>8.6</i>	N <i>8.6</i>	1,000 <i>17.5</i>	1,700 <i>11.4</i>	3,100 <i>24.3</i>	8.3	79.1
NR	25,900 <i>11.5</i>	25,900 <i>0.9</i>	1,200 <i>29.0</i>	2,000 <i>15.3</i>	2,600 <i>36.4</i>	15.6	82.1
ZA	26,200 <i>12.5</i>	26,100 <i>11.9</i>	1,900 <i>32.7</i>	2,500 <i>25.4</i>	4,000 <i>39.2</i>	19.2	70.1
BB	N <i>9.6</i>	N <i>8.5</i>	600 <i>24.5</i>	2,000 <i>15.2</i>	2,100 <i>31.8</i>	10.5	71.8
PO	7,500 <i>6.9</i>	7,500 <i>6.1</i>	900 <i>16.1</i>	2,400 <i>9.5</i>	2,000 <i>22.2</i>	6.8	61.6
KE	15,600 <i>7.5</i>	14,600 <i>6.9</i>	700 <i>11.4</i>	800 <i>9.3</i>	2,500 <i>16.7</i>	8.3	93.1
SK	25,000 <i>9.6</i>	25,000 <i>9.3</i>	1,000 <i>20.0</i>	2,000 <i>12.6</i>	3,200 <i>26.8</i>	100	81.2

Source: HFCS Slovakia 2010.

Notes: This table reports shares of indebted households (in %, italics) and median values (in EUR) of various types of debt among those households being indebted by region. N stands for "not calculated" because less than 25 observations are available.



(e.g. from relatives or friends) and other loans. Here we will focus only on consumer loans that constitute the most important part of household non-mortgage debt in Slovakia. A more detailed breakdown of non-mortgage debt by region is given in Messner and Zavadil (2014, Table 3.1).

Some form of non-mortgage debt has been found among 20% of surveyed households, the median value of which is € 1,000. The highest penetration of non-mortgage debt is observed among households in Žilina region (33%), where the median value of debt is also the highest (€ 1,900). Most of non-mortgage debt is due to consumer loans that are taken by nearly 13% of Slovak households and reach a median value of € 2,000. The highest share of households with consumer loans (25%) as well as the highest median value of outstanding balance (€ 2,500) is observed again in Žilina region.

Overall, just around one quarter of Slovak households is indebted (see column 6 in Table 3). The highest share of indebted households is observed in Žilina region (39.2%) and the lowest in Trnava region (8.5%). In line with expectations, the highest median value of debt (€ 4,100) is observed in the most developed region of Bratislava. Confronting this finding with those of Table 2 we can conclude that although households in Bratislava region own the largest share of assets in Slovakia, these assets are often financed by debt. On the other hand, households in less developed regions have lower median values of total debt and also claim less assets owned (see Tables 2 and 3). Among these, Prešov region has the lowest median value of total debt (€ 2,000) and also takes the lowest regional share (6.8%).

The last column of Table 3 reveals that mortgage debt is the prevailing component of total

debt, mostly due to large volumes it encounters. The nationwide median share of mortgage debt in total household debt is 81%; ranging from 62% in Prešov region to 93% in Košice region.

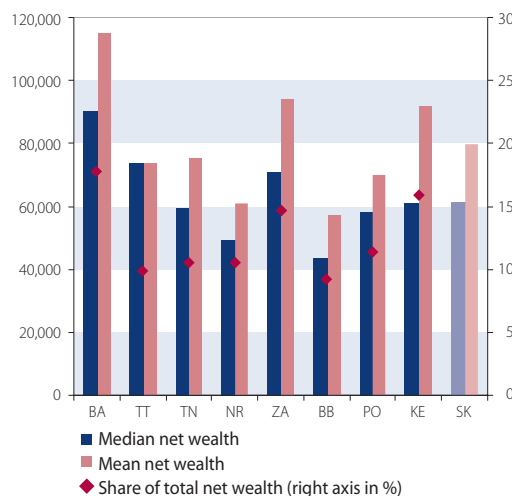
NET WEALTH

Net wealth is defined as the difference between total assets and total liabilities. Its median and mean values for all Slovak regions are plotted in Chart 1. The median value of net wealth (blue bars) of Slovak households is € 61,200, whereas the mean value (pink bars) is around 30% higher (€ 79,700). In general, the larger the difference between median and mean value, the more unequally is wealth distributed. In international terms, net wealth in Slovakia is the most equally distributed among all euro-area countries (see Zavadil, 2013).

The highest median and mean net wealth has been found in Bratislava region (€ 90,100 and € 115,100, respectively), which also has the highest share (red diamonds) of total household net wealth in Slovakia (18%). On the other hand, the lowest values of median and mean net wealth are observed in Banská Bystrica region (€ 43,800 and € 57,100, respectively), which has the lowest share of total household net wealth in Slovakia (9%).

Chart 2 depicts the distribution of net wealth in each Slovak region, suggesting that household net wealth is the most dispersed, and thus the most unequally distributed, in Bratislava region. On the other hand, Nitra region shows the lowest net wealth dispersion. While in Bratislava region more than a half of households live with the net wealth of above € 90,000, more than three quarters of households in Nitra, Banská Bystrica and Prešov regions have net wealth below this level. Moreover, we observe some households with negative net wealth (altogether 1.2%; the largest

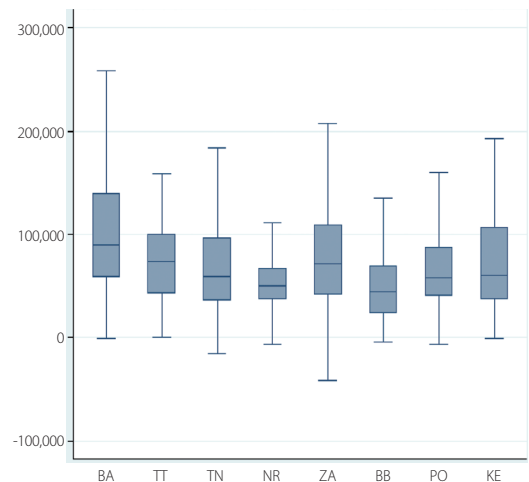
Chart 1 Median and mean net wealth (EUR) and regional shares (%) of total net wealth by region



Source: HFCS Slovakia 2010.

Note: Net wealth is defined as the difference between household total gross assets and total liabilities.

Chart 2 Box plot of household net wealth by region (EUR)



Source: HFCS Slovakia 2010.

Note: Outliers are not displayed in the chart.



share of such households (2.5%) can be found in Žilina region), which is however relatively small (median value at € -1,000 and the average at € -3,500).

INCOME

Household income is a crucial factor for the financial well-being of all household members and strongly influences their investment decisions. This section describes the distribution of household income across Slovak regions. The data report the *household total annual gross income* received within 12 months prior to the time of interview, which is in most cases the period between November 2009 and October 2010.

As we can see from Table 4, household income is relatively equally distributed across Slovak regions. Results, however, convey surprising message that Prešov region has the highest mean household income, while Trnava has the smallest. This is caused by an overrepresentation of small households from Trnava region and large households from Prešov region in our sample; see Messner and Zavadil (2014) for more details.

Once we adjust for the household size by calculating *equivalised household income* (see the note of Table 4 for more details), we observe a clearer picture. Prešov region has now the lowest mean value of the equivalised household gross income (€ 6,000), which seems to fit better with the economic indicators given in Table 1. On the other hand, the highest mean value of the equivalised household gross income is observed in Bratislava region (€ 8,000), which is economically the most developed region in Slovakia (see Table 1). We compare these results with the regional data on the mean equivalised household *disposable* income that are available from the Statistical Office and given in the last column of Table 4. We can see that these values are smaller than the mean values of the

household *gross* income (given in the last but one column) in all regions, except for Bratislava. The difference may be attributed to netting for taxes. This suggests that our results are broadly consistent with the regional data from the Statistical Office.

CONSUMPTION

Consumption completes the picture of the financial situation of households and helps to comprehend the decisions made by households. The HFCS provides information on the household consumption of food at home and outside home (e.g. in cafes or restaurants).

A standard Slovak household spends around € 300 (median) per month on food. The difference between the median value (€ 3,600) and the mean value (€ 3,800) of the annual expenses on food is quite low, suggesting that the food consumption is more equally distributed across households than wealth or income.³

The highest food consumption is observed in Prešov region, where a median (resp. average) household spends around € 4,200 (resp. € 4,600) per year on food. The lowest median and mean amount spend on food is observed in Trnava region (€ 2,100 and € 2,500, respectively). Again, this is the effect of small households in Trnava region and large households in Prešov region (see Table 4). Applying the same procedure as in the previous section, we calculate the equivalised household food consumption and arrive to a dramatically decreased regional dispersion (see column 4 and note in Table 5).

The last column of Table 5 reports the median share of income that is spent on food in each region. This share is the lowest in Trnava region (22%) and the highest in Žilina region (33%). In total, Slovak households spend nearly 30% of their income on food, which is a relatively high share of income compared to other euro area countries.⁴

³ This is also observed in other euro-area countries; see e.g. the Lorenz curve of household net wealth, income and consumption in HFCN (2013, Chart 6.1).

⁴ The median share of income spent on food in the whole euro area is 18.4% and ranges between 12.6% in the Netherlands and 29.8% in Portugal; see HFCN (2013, Table 6.1).

Table 4 Mean household total annual gross income and equivalised household income (EUR) by region

Region	Mean household total annual gross income	Average number of household members	Mean equivalised household gross income	Mean equivalised household disposable income*
BA	13,500	2.5	8,000	8,760
TT	10,700	2.0	7,300	6,960
TN	13,200	2.7	7,200	6,840
NR	13,200	2.7	7,400	6,600
ZA	13,900	3.0	7,500	6,840
BB	13,700	2.6	7,700	6,360
PO	14,800	4.3	6,000	5,880
KE	14,200	2.8	7,500	6,360
SK	13,500	2.8	7,300	6,840

Source: HFCS Slovakia 2010; *Source: Statistical Office of the Slovak Republic.

Note: Equivalised household income equals the total household income divided by the equivalised number of household members, which is calculated in the following way: the reference person of the household is weighted with 1, every additional adult member with 0.5 and each child under the age of 16 with 0.3.



CONCLUSION

This article summarised key disparities in household wealth among Slovak regions, using the Slovak data from the first wave of the Household Finance and Consumption Survey (HFCS). We found that the vast majority of Slovak households (around 90% in all regions) own their main residence that constitutes the most significant part of household wealth. Despite that, only a small share of Slovak households (around 10% in all regions) has mortgage debt. The most valuable assets are held by households from Bratislava region, although these assets are often financed by debt. The least indebted households are observed in Banská Bystrica and Prešov regions,

which also have the lowest level of accumulated assets. Concerning net wealth (i.e. the difference between the household total assets and total liabilities), households are the richest in Bratislava region, where we also find the highest wealth inequality. On the other hand, households are the least wealthy in Nitra and Banská Bystrica regions, where the wealth inequality is the lowest. Mean household income (adjusted for household size) is the highest in Bratislava region and the lowest in Prešov region. Finally, we find that a standard household in Slovakia spends around € 300 each month on food, which constitutes around 30% of its total income; this share does not vary much across regions.

Table 5 Annual expenses (EUR) on food by region

Region	Median	Mean	Median of equivalised food expenses	Median share of income (%)
BA	3,100	3,600	1,900	26.2
TT	2,100	2,500	1,600	22.2
TN	3,600	3,900	2,000	32.1
NR	3,600	3,800	2,000	31.6
ZA	3,900	4,300	2,000	33.3
BB	3,400	3,500	1,800	32.5
PO	4,200	4,600	1,900	27.7
KE	3,700	4,200	2,000	31.4
SK	3,600	3,800	1,900	29.4

Source: HFCS Slovakia 2010.

Note: Equivalised food expenses are calculated as the total household expenses on food over the equivalised number of household members in the following way: the household reference person is weighted with 1, every additional adult member with 0.5 and each child under the age of 16 with 0.3.

References

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2. Messner, T. and Zavadil, T. (2014): *Regional Differences in Household Wealth across Slovakia – Results from the first wave of the Household Finance and Consumption Survey*, NBS Occasional Paper 1/2014.
3. Zavadil, T. (2013): *Majetkové rozdiely sú najmenšie na Slovensku (Wealth differences are the smallest in Slovakia)*, Biatic, No 4/2013.

P A M Ä T N É A Z B E R A T E Ľ S K É M I N C E

Zlatá zberateľská minca Veľkomoravské knieža Rastislav

Národná banka Slovenska vydá 3. novembra 2014 zlatú zberateľskú mincu, ktorá pripomína veľkomoravské knieža Rastislava. Je štvrtou zlatou mincou z tematického okruhu slovanských panovníkov na území Slovenska a nadväzuje na zlaté mince, ktoré boli venované veľkomoravskému panovníkovi Svätoplukovi (1994), veľkomoravskému kniežatu Mojmirovi II. (2006) a nitrianskemu kniežatu Pribinovi (2011).

Rastislav patrí k najvýznamnejším veľkomoravským kniežatám. Za jeho vlády (846 – 870) Veľká Morava prekročila rámec kmeňového kniežatstva, ktoré muselo uznávať závislosť od Franskej a potom Východofranskej ríše. Jeho zásluhou vznikol v strednej Európe nezávislý štát s plnou štátoprávnou legitimitou. Nezávislosť svojej ríše Rastislav dosiahol úspechmi v bojoch s Východofranskou ríšou, spojenectvom s ostatným Slo-

vanmi a diplomaticky najmä spoluprácou s pápežskou kúriou.

K vzniku suverénneho štátu významne prispel príchod misie Konštantína a Metoda na Veľkú Moravu (863), ktorý bol súčasťou Rastislavovho plánu na vytvorenie samostatnej slovanskej cirkevnej provincie. Vďaka jeho podpore mohli obaja bratia rozvinúť mnohostrannú misijnú, vyučovaciu a diplomatickú prácu, ktorá rozhodujúcou mierou