UDC 339.97

# CHANCES OF RECOVERY FOR THE WEALTH OF HOUSEHOLDS AFTER THE FINANCIAL CRISIS IN THE VISEGRAD COUNTRIES

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**Purpose.** Examining the events of the long 20<sup>th</sup> century's financial crises the economic policy raises attention on the one hand on the permanent character of crises and on the other hand on their significant macroeconomic consequences. The statistics contain the number of bank and company debts, the decrease of macroeconomic output (GDP), the decline of employment, and also the increase of inflation and governmental debt. But they only contain partial information about the households' wealth loss. We have drawn up generally three questions, which should be answered in this research: what kind of effects had the financial crisis of 2007 on the households' wealth in the V4 countries; which factors have made an influence on the wealth situation in the region between 2007–2015; what chances has the recovery of the wealth situation.

**Methodology**. In order to achieve the objectives of the study, we used a statistical analysis method, namely the analysis of dynamics of indicators, identification of the change trends and their comparison.

**Originality.** In our research we have analysed on the one hand the causes and consequences of wealth loss, and on the other hand the chances of state engagement in the recovery process in the case of the Visegrad countries.

**Practical value**. The authors analyse in their research on the one hand the effects of the financial crisis of 2008 on the wealth of households, and on the other hand they examine the chances of recovery to contribute to the creation of prudential behaviour both in the case of stakeholders and in the case of decision makers. References 14, tables 2, figures 7

Key words: financial crisis, households wealth, wealth loss.

# МОЖЛИВОСТІ ВІДНОВЛЕННЯ ДОБРОБУТУ ДОМОГОСПОДАРСТВ ПІСЛЯ ФІНАНСОВОЇ КРИЗИ В КРАЇНАХ ВИШЕГРАДСЬКОЇ ЧЕТВІРКИ

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Розглядаючи події тривалої фінансової кризи XX століття, економічна політика привертає увагу, з одного боку, до постійного характеру криз і, з іншого боку, до їх значних макроекономічних наслідків. Статистичні дані містять кількість банківських та корпоративних боргів, зменшення макроекономічного виробництва (ВВП), зниження зайнятості, а також збільшення інфляції та державного боргу. Але вони лише містять часткову інформацію про втрати добробуту домогосподарств.

Основні питання дослідження: які наслідки призвели до фінансової кризи 2007 року та втрати добробуту домашніх господарств у країнах Вишеградської четвірки; які чинники вплинули на стан добробуту в регіоні протягом 2007–2015 років; які шанси відновити ситуацію.

Для досягнення цілей дослідження використано статистичний метод аналізу, а саме аналіз динаміки показників, виявлення тенденцій зміни, їх порівняння. Автори аналізують в своїх дослідженнях, з одного боку, наслідки фінансової кризи 2008 року щодо доходів домогосподарств, а з іншого — вивчають можливості відновлення для сприяння створенню пруденційної поведінки як у випадку зацікавлених сторін, так і у випадку осіб, які приймають рішення.

Ключові слова: фінансова криза, добробут домогосподарств, втрата добробуту.

PROBLEM STATEMENT. The 20th century was the century of great financial turbulences and crises. Without limitation, it is important to mention that the process has begun with the bank crisis of New York in 1907 (when the stock market index was decreased by almost fifty percent compared to the previous year), then it has continued with the world economic crisis of 1929-33. Great turbulences were created also after the contract termination of Bretton-Woods (for example in Latin-America in the 1970s and 1980 s, in Japan in the 1990s, and in Russia in 1998–1999). Some researchers have compared the global and regional effects of the 2008 financial crisis to the effects of the world economic crisis of 1929-33 (Eichengreen, 2015). Presumably the history of financial crises did not closed yet; several risks can make surprise also in the future.

The economists analyse the causes of crises and

within this of the financial crises since more than thousand years. As a result of this there was created an agreement in the case of causes, according this the following factors can have a significant influence on the creation of crises (Allen/Gale, 2007; Bauer, 2008):

- rapid and unfounded (without real economic background) credit expansion,
- irresponsible speculation of banks and investors (e.g.: overestimation of shares and mortgage covers, etc.),
- hope in easy and rapid gain by the investors, shortcomings in their values and ethics, and
  - the loose regulation of financial markets.

As an effect of the financial crises:

- there is a decrease in the real economic output,
- the inflation is increasing, the purchasing power of money is decreasing,
  - the solvent demand is decreasing,

- the wealth of population is decreasing, their income situation is worsening, etc.

In our research we analyse on the one hand the causes and consequences of wealth loss, and on the other hand the chances of state engagement in the recovery process in the case of the Visegrad countries.

EXPERIMENTAL PART AND RESULTS OBTAINED. 1. DETERMINING FACTORS OF THE INCOME SITUATION OF HOUSEHOLDS:

1.1. Theoretical background of the research

The actors of social science pay from the 1970s raising attention on the analysis of the income and wealth situation of households. This has got basically two main causes:

- first after the oil crisis of 1968 there was a break in the increase of the incomes in the developed countries, and there were increasing wealth differences (e.g.: Frick/Grabka, 2009; Merill Lynch, 2008; UN Statistics, 2016),
- second the income differences are generating increasing social tension (Piketty, 2014).

Based on these the literature raises generally three questions:

- a) Which factors have a significant influence on the wealth and income situation of households, and which factors can be the causes of it?
- b) What kind of social and political effects can have the wealth and income differences?
- c) Which fiscal and monetary policy instruments can be used to reduce wealth differences?

As an effect of the neoliberal economic policy change of the 1970s the income and wealth inequalities were increasing worldwide. It is not possible to stop it without an economic policy change.

It is well-known, that the administration managed by F.D. Roosevelt has made several governmental actions after the world economic crisis of 1929/33, which has formed the institutional system (e.g.: Agricultural Adjustment Act, National Industrial Recovery Act, Security and Exchange Commission, Glass-Steagall Act, Margin Requirements of Fed, Federal Deposit Insurance Corporation, Social Security Act) to eliminate the consequences of the financial crisis.

1.2. Notion of household wealth and its components

The household's wealth can be computed in a given time period as a sum of financial assets, financial savings and investments, the real estate wealth and other wealth elements.

The wealth can have own and foreign sources. To the own, personal sources belongs the net income (base rate, bonus and other financial allowance), the social income (pension, unemployment allowance, child care allowance or other social incomes), and also the income deriving from ownership or properties (like interest, dividend, rent, etc.).

1.3. Causes of the creation of wealth inequalities and its social components

The situation of assets and sources is defined by family/household dependent factors (like size of the family, age structure of family members, educational attainment, employment, risk taking capability, etc.),

by the fiscal and monetary policy and also by the territorial/local capabilities (Figure 1).

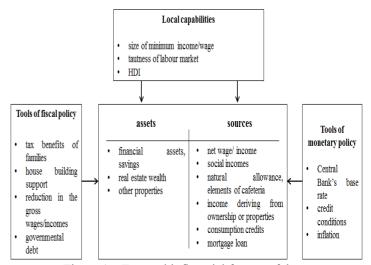


Figure 1 – External influential factors of the households' wealth (*Source: own compilation*)

## 1.4. Basic questions of the research

We have drawn up generally three questions, which should be answered in this research:

- a) What kind of effects had the financial crisis of 2007 on the households' wealth in the V4 countries?
- b) Which factors have made an influence on the wealth situation in the region between 2007-2015?
- c) What chances has the recovery of the wealth situation?
- 2. WEALTH SITUATION OF HOUSEHOLDS AS AN EFFECT OF THE 2008TH FINANCIAL CRISIS IN THE V4 COUNTRIES

From the beginning of 2000s in the Visegrad countries there was an increasing need for consumer durables and new houses, what the population wanted the cover mainly from long-term loans (Fig. 2).

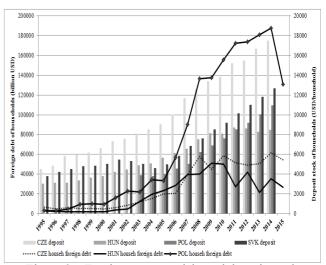


Figure 2 – Foreign currency debt and deposit stock of households in the V4 countries (1995–2015) Source: compiled by the authors based on OECD data (Note: foreign currency debt of households (billion USD) – left axis; deposit stock of households (USD/household) – right axis)

Compared to the practice of previous decades there was a new element in the increase of credit stock (mainly in Hungary and Poland), namely there was a debt also in the foreign currency credits.

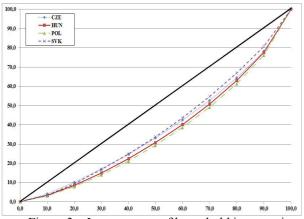


Figure 3 – Lorenz curve of household incomes in the Visegrad countries (2015) (*Source: own compilation*)

The exchange rate turbulences of the 2008<sup>th</sup> financial crisis have made a very negative effect on the affected households. The credit banks have transferred the weakening of national currencies.

So the households with mortgage loan were trapped: most of them could not repay the increasing monthly instalments, and the increased debt stock. As a result of this the banks begun to prove their rights based on the mortgage credit contracts.

This had a very negative effect mainly on the young families with low income. At the same time as an effect of the crisis the unemployment rate was increasing in the region's countries, and territories, which had an effect also on the income inequalities (Fig. 3).

The lack of significant improvement in the households' income situation (Table 1) and the wealth loss of households were extremely difficult in the case of Hungarian population, which has caused that the households became more prudent.

Table 1 – GINI coefficient of household incomes

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
CZE	26.0	25.3	25.3	24.7	25.1	24.9	25.2	24.9	24.6	25.1	25.0
HUN	27.6	33.3	25.6	25.2	24.7	24.1	26.9	27.2	28.3	28.6	28.2
POL	35.6	33.3	32.2	32.0	31.4	31.1	31.1	30.9	30.7	30.8	30.6
SVK	26.2	28.1	24.5	23.7	24.8	25.9	25.7	25.3	24.2	26.1	23.7

Source: compiled by the authors based on Eurostat data

#### 3. INFLUENTIAL FACTORS OF HOUSEHOLDS' WEALTH

In the region, and in their NUTS2 territories the households' wealth shows significant correlation with the human development index (as a complex indicator, Fig. 4), and with the tautness of labour market (Fig. 5).

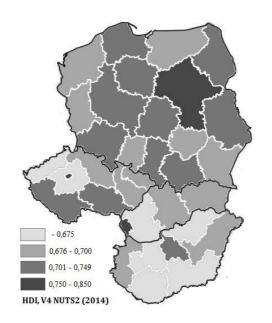


Figure 4 – Territorial inequalities of the HDI in V4 countries NUTS-2 regions (Source: compiled by the authors based on Eurostat data) (Note: correlation of territorial HDI and income: 0,549\*\*)

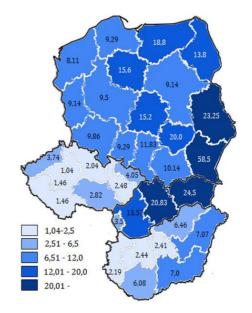


Figure 5 – Tautness of labour market in the V4 countries (2015) (Source: compiled by the authors based on Eurostat data) (Note: correlation of labour market tautness and territorial income: -0,331\*)

Table 2 – Relation between the regions' development and the median of property income (*Source: compiled by the authors based on Eurostat data.*)

	GDP/ca pita (Euro)	Median of property income/ household (Euro)	No.		GDP/ca pita (Euro)	Median of property income/ household (Euro)	No.
Észak-Magyarország/ Northern	10 500	146.82	1	Strední Morava/ Central Moravia	17 700	525.98	19
Hungary	10 300	140.62	1	Moravskoslezsko/ Moravian-	17 700	323.96	19
Dél-Dunántúl/ Southern Transdanubia	11 900	212.58	2	Silesian Region	18 400	535.03	20
				ZápadnéSlovensko/ Western			
Észak-Alföld/ Northern Great Plain	11 300	284.93	3	Slovakia	18 800	601.41	21
				Jihozápad/ Southwest, Czech			
Dél-Alföld/ Southern Great Plain	11 900	402.56	4	Republic	19 400	654.58	22
				Severovýchod/ Northeast, Czech			
Swietokrzyskie/ Holy Cross Province	13 100	393.09	5	Republic	18 000	793.65	23
Podlaskie/ Podlaskie Province	13 000	383.80	6	Lódzkie/ Lodz Province	16 700	1 021.56	24
Warminsko-Mazurskie/ Warmia-							
Masuria Province	12 900	455.27	7	Pomorskie/ Pomerania Province	17 300	1 028.71	25
				Malopolskie/ Lesser Poland			
Podkarpackie/ Subcarpathia Province	12 700	638.24	8	Voivodeship Province	15 800	1 299.82	26
				Jihovýchod/ Southeast, Czech			
Lubelskie/ Lublin Province	12 600	722.33	9	Republic	20 600	888.30	27
VýchodnéSlovensko/ Eastern Slovakia	13 800	444.93	10	Strední Cechy/ Central Bohemia	19 500	1 059.08	28
				Dolnoslaskie/ Lower Silesia			
Opolskie/ Opole Province	14 500	349.02	11	Province	20 100	1 413.22	29
				Wielkopolskie/ Greater Poland			
Lubuskie/ Lubusz Province	15 000	371.41	12	Voivodeship Province	19 300	1 546.40	30
Közép-Dunántúl/ Central							
Transdanubia	15 600	309.67	13	Slaskie/ Silesia Province	18 600	2 059.56	31
				Közép-Magyarország/ Central			
StrednéSlovensko/ Central Slovakia	15 900	433.80	14	Hungary	28 700	2 807.74	32
Severozápad/ Northwest, Czech		10.1.5					
Republic	16 500	494.23	15	Mazowieckie/ Mazovia Province	28 500	3 826.56	33
Nyugat-Dunántúl/ Western						1	
Transdanubia	17 900	287.68	16	Praha/ Prague	46 000	1 030.14	34
Zachodniopomorskie/ West Pomerania							
Province	15 100	711.14	17	Bratislavskýkraj/ Bratislava Region	49 000	325.29	35
Kujawsko-Pomorskie/ Kujawy-							
Pomerania Province	14 800	768.31	18				

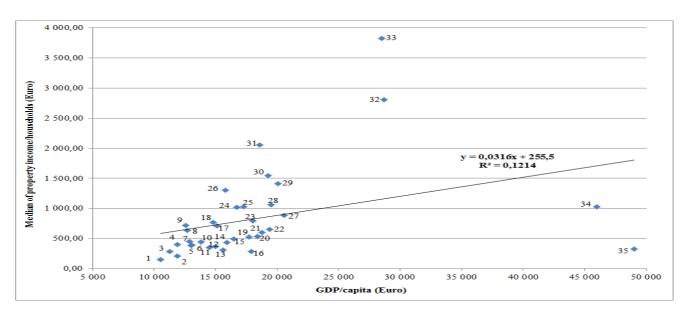


Figure 6 – Relation between the regions' development and the median of property income (2013) (Source: compiled by the authors based on Eurostat data)

# 4. CHANCES FOR WEALTH RECOVERY (Fig. 7).

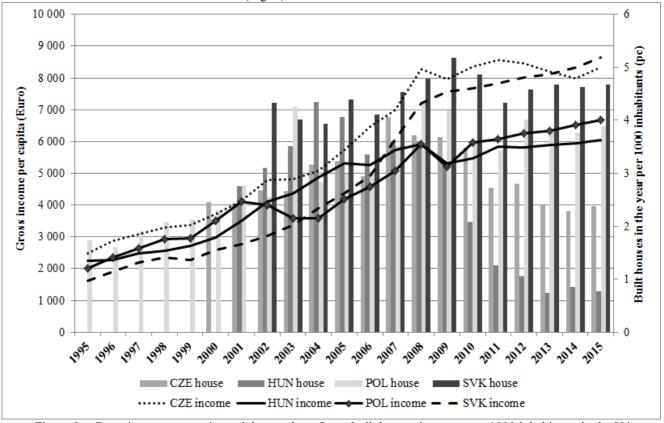


Figure 8 – Gross income per capita and the number of new built houses in a year per 1000 inhabitants in the V4 countries (1995-2015) (Source: compiled by the authors based on Eurostat data and on the database of the countries' statistical offices) (Note: gross income per capita (Euro) – left axis; number of new built houses in a year per 1000 inhabitants (pc) – right axis

CONCLUSIONS. Based on the dates until now the growth rate of net export was restored relatively rapidly in the V4 countries after the financial crisis of 2007; while the growth rate of the population's consumption and the investments is much lower.

Presumably the process of recovery can be drawn out, and its growth rate will not reach for some years the before the crisis typical growth levels, which was caused mainly by the overheated lending

# ВОЗМОЖНОСТИ ВОССТАНОВЛЕНИЯ БЛАГОСОСТОЯНИЯ ДОМОХОЗЯЙСТВ ПОСЛЕ ФИНАНСОВОГО КРИЗИСА В СТРАНАХ ВЫШЕГРАДСКОЙ ЧЕТВЕРКИ

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Рассматривая события продолжающегося финансового кризиса XX века, экономическая политика привлекает внимание, с одной стороны, к постоянному характеру кризисов и, с другой стороны, к их значительным макроэкономическим последствиям. Статистические данные содержат информацию о динамике банковских и корпоративных долгов, сокращению макроэкономического производства (ВВП), снижению занятости, а также увеличению инфляции и государственного долга. Но они содержат лишь частичную информацию о потерях благосостояния домохозяйств.

Основные вопросы исследования: какие последствия привели к финансовому кризису 2007 года и потере благосостояния домашних хозяйств в странах Вышеградской четверки; какие факторы повлияли на состояние благосостояния в регионе в течение 2007–2015 годов; существуют ли шансы восстановить ситуацию.

Для достижения целей исследования использованы: статистический метод анализа, а именно анализ динамики показателей, выявление тенденций изменения, их сравнение. Авторы анализируют в своих исследованиях, с одной стороны, последствия финансового кризиса 2008 года по доходам домохозяйств, а с другой — изучают возможности восстановления для содействия созданию пруденциального поведения, как в случае заинтересованных сторон, так и в отношении лиц, принимающих решения.

Ключевые слова: финансовый кризис, благосостояние домохозяйств, потеря благосостояния.

#### REFERENCES

- 1. Allen, F. Gale D. *Understanding financial crisis*. Oxford University Press, Oxford/New York. 2007. 303. p.
- 2. Anderson, B. L. Butkiewicz, J. L. Money, Spending and the Great Depression. *Southern Economic Journal* 1980, vol. 47, no. 2, p. 388–403.
- 3. Bauer M. Krisenbewältigung in der Finanzwirtschaft. Paralellen und Unterschiede der Bankkrisen in Japan (1990-2006) und den USA (1980-1998) (=Japan Analysen Prognosen, Nr. 200). Düsseldorf/München. 2008.
- 4. Available at: www.djw.de/uploads/media/JAP\_200\_Banken\_v1.pdf (accessed: January 15<sup>th</sup> 2017.)
- 5. Bernanke, B. James, H. *The Gold Standard, Deflation, and Financial Crisis in the Great Depression. An International Comparison.* In: Hubbard, R. Glenn (ed.): Financial Markets and Financial Crises. A National Bureau of Economic Research Project Report. Chicago-London, 1991. p. 33–68. Available at: http://papers.nber.org/books/glen91-1 (accessed: September 5th 2016.)
- 6. Eichengreen, B. *Die großen Crashs 1929 und 2008. Warum sich Geschichte wiederholt.* Finanzbuch Verlag, München. 2015. 608. p.
- 7. Frick, J. R. Grabka, M. M. Gestiegene Vermögensungleichheit in Deutschland. Wochenbericht des DIW Berlin. 2009. no. 4, p. 54–67.

- 8. Galbraith, J. K. *A pénzügyi spekulációk rövid története. Eufória és csalódás*. Adu Print, Budapest, 1995. 94. p.
- 9. Merill Lynch. *World Wealth Statistic Report*. 2008. 40. p.
- 10. Piketty, Th. *Capital in the Twenty First Century*. The Belknap Press, Harvard University. 2014. 704. p.
- 11. Pogány, Á. A nagy válság nagy magyarázatai. Az 1930-as évek gazdasági válság az újabb szakirodalom tükrében. *Korall*, 2013. no. 54, p. 153–173
- 12. Reinhart, C. M. Rogoff, K. S. *This Time is different*. Princeton UP. 2009. 512. p.
- 13. Simai, M. A jelenlegi világválság háttere, jellemzői és következményei, valamint a válság utáni időszakba való átmenet. *South-East Europe International Relations Quartely*, 2010. vol.1. no.3, 10. p.
- 14. UN Statistic. *Distribution of Income and Consumption; wealth and poverty.* 2016. (Available at: unstats.un.org/unsd/demographic/sconcers/income/defa ult.htm, accessed: December 10<sup>th</sup> 2016.)

Стаття надійшла 10.05.2017