

## ECONOMIC CIRCUMSTANCES AND PERSONAL FINANCE MANAGEMENT

Branko Matić, Ph.D. <sup>1</sup>, Hrvoje Serdarušić, Ph.D. <sup>2</sup>, Maja Vretenar Cobović, Ph.D. <sup>3</sup>

<sup>1</sup>Faculty of Economics in Osijek, Republic of Croatia, matic@efos.hr

<sup>2</sup>Faculty of Economics in Osijek, Republic of Croatia, hserdar@efos.hr

<sup>3</sup>Polytechnic of Slavonski Brod, Republic of Croatia, mvretenar@vusb.hr

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### Abstract

The authors examine the impact of changed economic circumstances to manage personal finances. Analyze financial involvement, level of education and the management of personal finances population in Croatia. The paper used the method of analysis, synthesis, induction, deduction, and a survey poll.

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**Keywords:** financial education, personal finance, financial management

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### 1. Introduction

Prerequisite basic financial involvement of each individual owns a bank account. Bank account is a contractual relationship between credit institutions and their customers through which credit institutions allows a person receiving payments and making payments within the limits of its financial resources and / or the approved loan. (Law of Obligations, the official gazette No. 35/2005, 41/2008, 125/2011, article 1009).

Current and bank account are the main types of bank accounts. The giro account is defined by statutory regulations of the Republic of Croatia as the account to which you receive your self-employment income either in the form of cash or as remittance from natural or legal persons (<http://www.splitskabanka.hr/retail-clients/accounts-and-payments/accounts/giro-account>)

A current account can be with regular or without regular monthly income, and it is an obligatory for all employees. On and through current account workers

receive their regular income – salary. It is not taxable like giro account and owner can **dispose of the funds (up to the available account credit or authorised overdraft)**.

As such it is closely related to and influence the development of personal financial skills and knowledge of the individual which is particularly evident and reflected in terms of disturbed economic circumstances when it is necessary to rationally and responsibly manage personal finances.

## 2. The impact of financial education programs on managing personal finances - survey results

The relationship of the individual to personal finances in substantially reflects its level of financial education. The authors present results of the three surveys conducted on the relationship between the population of Eastern Croatia toward personal finances. Surveys have been conducted on this topic in order to collect relevant information about the financial inclusion to personal finances.

The first survey was conducted in December 2011 on a representative sample of 1199 respondents, while the second survey conducted in November 2013 on a sample of 1444 respondents. Third survey was conducted in March 2014 on a sample of 1395 respondents.

Table 1 shows the general economic indicators in Croatia.

**Table 1.** General economic indicators in Croatia

	2009	2010	2011	2012	2013
Real GDP growth rate	-6.9	-2.3	-0.2	-1.9	-1.0
GDP per capita in PPS (EU-28 = 100)	62	59	61	62	62
Government deficit/surplus	-5.3	-6.4	-7.8	-5.0	-4.9
Private debt in % of GDP	117.3	128.0	137.0	134.2	132.1

Source: Eurostat

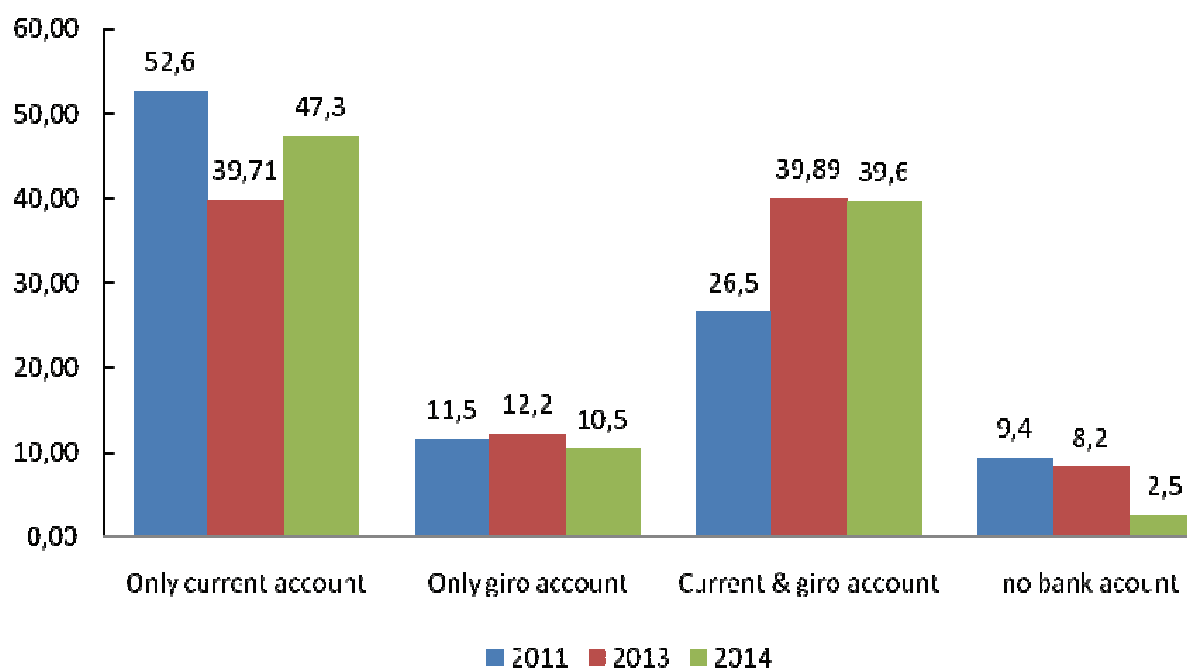
According to the data in Table 1 it is possible to observe a decline in real gross domestic product in purchasing power standards in Croatia in the period 2009 – 2011. After 2011 GDP shows a slight upward trend and is retained at that level

until the end of 2013. These economic conditions have influenced and management of personal finances population.

Banking account is an actual requirement for being able to take part in societal and economic life. (Jerusalmy; 2013;5)

But in Croatia even today there is one part of the population, which is not financially involved or do not possess any form of bank account (Chart 1, Table 2).

**Chart 1.** Owning a bank account



**Table 2.** Owning a bank account

Type of bank account	Survey			Mean	Median	Standard Deviation	Standard Error
	2011	2013	2014				
Only current account	52,6	39,71	47,3	46,53667	47,3	6,478814	3,740545
Only giro account	11,5	12,2	10,5	11,4	11,5	0,8544	0,493288
Current & giro account	26,5	39,89	39,6	35,33	39,6	7,648379	4,415794
no bank account	9,4	8,2	2,5	6,7	8,2	3,686462	2,12838
Total percent	100	100	100				

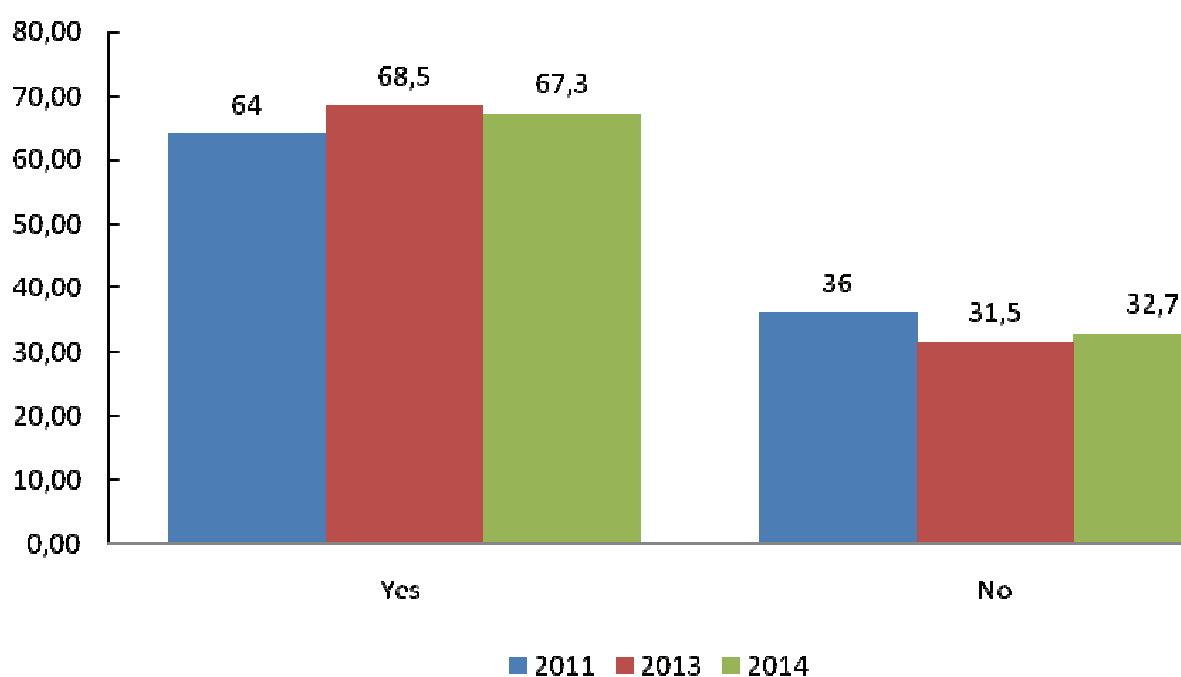
Source: Authors

The largest number of the population has a current account in all study years, although the number is in constant decline and the largest was in the 2011. Number of the population has a giro account grew in 2013, after which records the intensity of the drop, caused by poor economic conditions.

Similarly can be seen by the population with both accounts open. But it is certainly satisfactory information that the number of the population that does not have any bank account in decline during the studied years (Table 2).

An approved overdraft on population account is shown in Chart 2 and Table 3.

**Chart 2.** Approved overdraft



**Table 3.** Approved overdraft

Approved overdraft	Survey			Mean	Median	Standard Deviation	Standard Error
	2011	2013	2014				
Yes	64	68,5	67,3	66,6	67,3	2,330236	1,345362
No	36	31,5	32,7	33,4	32,7	2,330236	1,345362
Total percent	100	100	100				

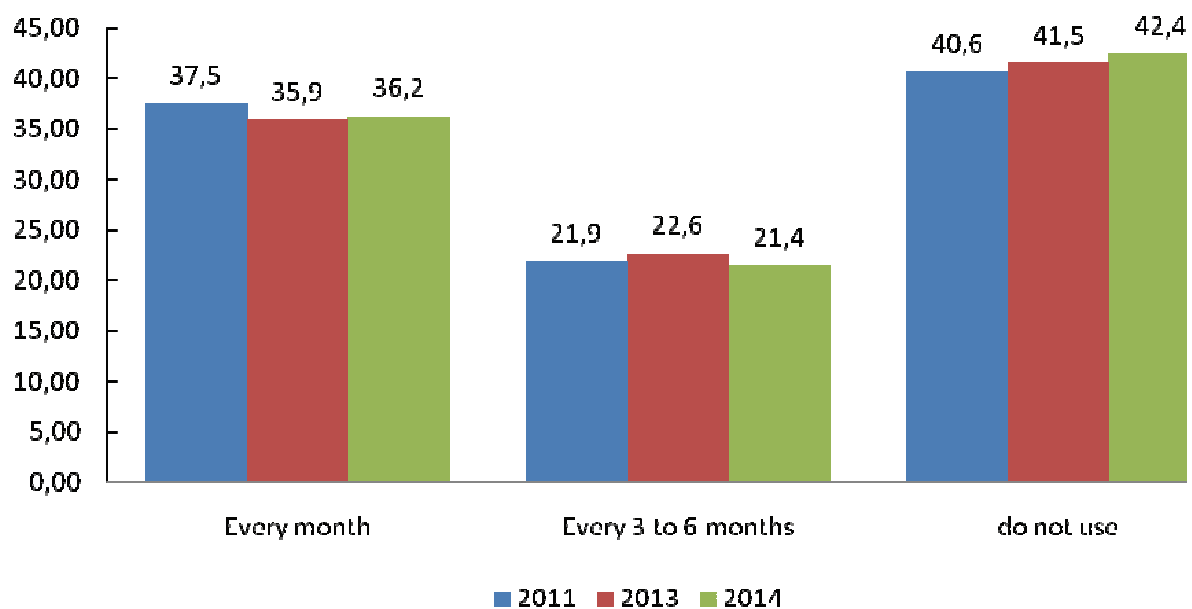
Source: Authors

The number of the population that has received approved overdraft on accounts is higher in relation to the population that does not have this option. Authorized overdrafts largest were in 2013, and the lowest in 2011 and recorded a slight downward trend in 2014 as compared to 2013.

Also the largest percentage of the population that does not have overdrafts recorded in 2011, and the smallest 2013 (Table 3).

Use of approved overdraft is shown in Chart 3 and Table 4.

**Chart 3.** Use of overdraft



**Table 4.** Use of overdraft

Use of overdraft	Survey			Mean	Median	Standard Deviation	Standard Error
	2011	2013	2014				
Every month	37,5	35,9	36,2	36,53333	36,2	0,85049	0,491031
Every 3 to 6 months	21,9	22,6	21,4	21,96667	21,9	0,602771	0,34801
do not use	40,6	41,5	42,4	41,5	41,5	0,9	0,519615
Total percent	100	100	100				

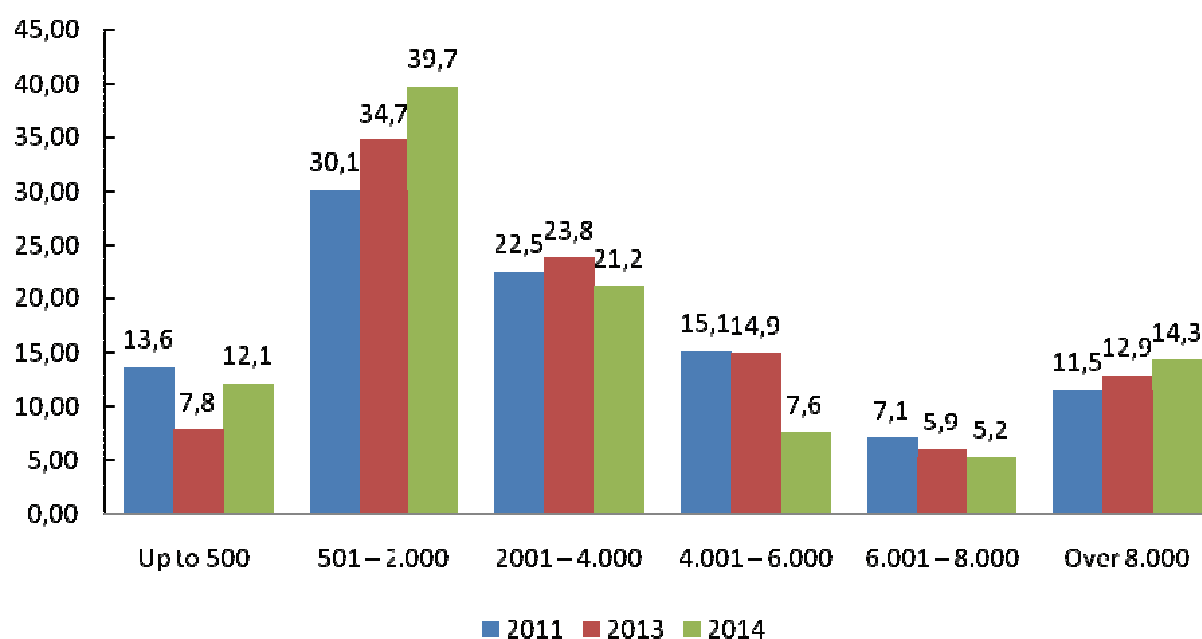
Source: Authors

Despite overdrafts largest percentage of the population does not use its permitted overdraft. In addition, the constant increase in population during the investigated period not exceeding the permitted uses. The highest was recorded in 2014 and amount 42%.

Part of the population that uses their overdraft usually uses them every month, and the highest percentage recorded in the 2011. Overdraft every three to six months using 21-23% of the respondents (Table 4).

Amounts used overdrafts are shown in Chart 4 and Table 5.

**Chart 4.** Amount of used overdraft in HRK and %



**Table 5.** Amount of used overdraft

Amount of used overdraft in HRK	Survey			Mean	Median	Standard Deviation	Standard Error
	2011	2013	2014				
Up to 500	13,6	7,8	12,1	11,16667	12,1	3,010537	1,738134
501 – 2.000	30,1	34,7	39,7	34,83333	34,7	4,801389	2,772083
2.001 – 4.000	22,5	23,8	21,2	22,5	22,5	1,3	0,750555
4.001 – 6.000	15,1	14,9	7,6	12,53333	14,9	4,273562	2,467342
6.001 – 8.000	7,1	5,9	5,2	6,066667	5,9	0,960902	0,554777
Over 8.000	11,5	12,9	14,3	12,9	12,9	1,4	0,80829
Total percent	100	100	100				

Source: Authors

Permissible overdrafts in the accounts of the population are in the range of HRK 500 to HRK 8.000. The largest number of responding commonly used overdraft in the amount of HRK 501 to HRK 2.000. The percentage of this population is constantly increasing during the years studied, and the highest was recorded in 2014 and amount 40%.

The least used amount of overdraft is those in the range of HRK 6.001 to HRK 8.000 and used them 5-7% of those surveyed. Based on the data in the table and despite the poor economic circumstances largest percentage of respondents did not charge too much (Table 5).

### 3. Conclusion

Nowadays, owning a bank account is the basis for access and use of various financial services and as such it is also a basis of the financial and social inclusion of all individuals. The results of the survey and research indicate a noticeable downward trend in the financial exclusion of citizens of Eastern Croatia measured by owning a bank account. Moreover increasing trend in owning all type of bank account is closely related to generated additional business activities of respondents. Use of overdraft despite the negative economic circumstances uses two thirds of respondents by the significant drop in their absolute values. This is a result of more responsible management of personal finances.

### Reference

1. Atkinson, A. and F. Messy (2013), "Promoting Financial Inclusion through Financial Education: OECD/INFE Evidence, Policies and Practice", OECD Working Papers on Finance, Insurance and Private Pensions, No. 34, OECD Publishing. <http://dx.doi.org/10.1787/5k3xz6m88smp-en>
2. Jerusalmy, O. (2013) Financial inclusion and new means of payment European Foundation for Financial Inclusion, Brussels
3. Lamza – Maronić, M. & Glavas, J.& Bošnjak S. (2008) Contribution to the Development of the Urban Management Model, Interdisciplinary Management Research, Faculty of Economics in Osijek, Croatia, vol. 4, pages 526-541
4. Law of Obligations, Official gazete No 35/2005, 41/2008, 125/2011
5. Matic, B. & Serdarušić, H. & Vretenar, M. (2010) Financijski marginalno stanovništvo kao faktor ograničenja regionalnog razvoja, Proceedings of 2nd International Conference "Vallis Aurea" Focus on: Regional Development, Katalinić,

- Branko (ur.), Politechnic of Požega, Croatia; DAAAM International Vienna, Austria, Požega; Vienna, pages 829-833
6. Matić, B. & Serdarušić, H. & Vretenar, M. (2011) Impact of Financial Crisis on Credit Lending of Croatian Banks, Interdisciplinary Management Research VII, Urban Bacher; Dražen Barković; Karl - Heinz Dernoscheg; Maja Lamza - Maronić; Branko Matić; Norbert Pap; Bodo Runzheimer (ur.), Osijek: Josip Juraj Strossmayer University in Osijek, Faculty of Economics in Osijek, Croatia Postgraduate Studies "Management"; Hochschule Pforzheim University, Osijek, pages 598-607
  7. Matić, B. & Serdarušić, H. & Vretenar, M. (2012) Some Features of the Relationship to Personal Finances within Population of Eastern Croatia, Interdisciplinary Management Research VIII, Urban Bacher; Dražen Barković; Karl - Heinz Dernoscheg; Maja Lamza - Maronić; Branko Matić; Norbert Pap; Bodo Runzheimer (ur.), Osijek: Josip Juraj Strossmayer University in Osijek, Faculty of Economics in Osijek, Croatia Postgraduate Studies "Management"; Hochschule Pforzheim University, Osijek, pages 603-612
  8. Matić, B. & Serdarušić, H. & Vretenar, M. (2013) The Impact of Financial Population Education on Managing Personal Finances, Interdisciplinary Management Research IX, Urban Bacher; Dražen Barković; Karl - Heinz Dernoscheg; Maja Lamza - Maronić; Branko Matić; Norbert Pap; Bodo Runzheimer (ur.), Osijek: Josip Juraj Strossmayer University in Osijek, Faculty of Economics in Osijek, Croatia Postgraduate Studies "Management"; Hochschule Pforzheim University, Osijek, pages 503-511
  9. Matić, B. & Serdarušić, H. (2008) Načini i modeli financiranja regionalnog razvoja – financiranje putem zaklada i fundacija, Ekonomski fakultet u Osijeku, Osijek
  10. Matić, B. (2010) Financijska inkluzija i regionalni razvitak, Ekonomski fakultet u Osijeku, Osijek
  11. Matić, B. (2012) Financijski potencijal stanovništva Istočne Hrvatske, Ekonomski fakultet u Osijeku, Osijek
  12. McKinsey and Company (2010) Global Financial Inclusion, Achieving full financial inclusion at the intersection of social benefit and economic sustainability. <http://mckinseyonsociety.com/global-financial-inclusion/>
  13. Splitska banka d.d. <http://www.splitskabanka.hr/retail-clients/accounts-and-payments/accounts/giro-account>