MANAGING PERSONAL FINANCES: EXAMPLES AND LESSONS FROM CROATIAN STUDENT POPULATION

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Abstract
In this paper the authors present the results of their research related to financial involvement and management of personal finances of the student population on the territory of eastern Croatia. The research focused on the reasons for the entrance of student population into the financial system, the amount of their use of credit institutions’ services as well as their motives for choosing a certain credit institution.

Keywords: financial education, personal finance, financial management

JEL Classification: D14, D31

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1. INTRODUCTION

The way in which a person behaves will have a significant impact on their financial wellbeing (Atkinson&Messy;2012,7). Owning a bank account is the basis for financial involvement. The right to a basic bank account, as one of the fundamental rights for all individuals in the European Union, has been managed and acknowledged by the Directive 2014/92/EU on the comparability of fees related to payment accounts, payment account switching and access to payment accounts with basic features.

Despite of constant technological advancements and developments of new technologies in the payment sectors, cash payments are still present. These are the kinds of situations, where the individual takes no part in the financial system or just peripherally participates in it. In this paper the authors present and analyse the results of the research conducted by carrying out surveys of the relationship between the student population and their personal finances on the territory of eastern Croatia.

2. FINANCIAL EDUCATION OF STUDENT POPULATION ON THE TERRITORY OF EASTERN CROATIA AND ITS INFLUENCE ON THE MANAGEMENT OF PERSONAL FINANCES – RESEARCH RESULTS

Financial involvement is closely connected with financial education. Financial literacy is a combination of awareness, knowledge, skill, attitude and behaviour necessary to make sound financial decisions and ultimately achieve individual financial wellbeing. (Atkinson&Messy;2012,14).

Reasons for complete, increased or partial financial involvement of student population on the territory of eastern Croatia can be found due to the shortage of personal incomes, i.e. incomes of their households, changed circumstances of the incomes in a specific time period (decrease of total income due to a job loss and similar), poor financial education, and lacking in knowledge of financial regulations, personal views regarding personal finances and similar. On the other hand, it is possible to define financial exclusion as a gap between the needs and demands for some basic financial services of certain social groups. (Matić&Serdarušić&Vretenar-Cobović;2013,504).
Research was conducted with the aim of collecting information about the financial potential and financial involvement of student population on the territory of eastern Croatia, their comprehension of their own status in the financial system and their relation to personal finances, as well as the level of their financial education. The collected results were used to calculate correlative values between financial education and personal finance management for certain variables from the conducted survey.

The research was conducted in January, 2015 on a representative sample of 505 examinees. The target group included student population, while the survey itself consisted of four parts. The first part of the survey collected some basic information about the sample (gender, age, year of study, student status and residence); the second part dealt with the students’ participation in the financial system; the third dealt with the state of current monthly incomes and current and expected financial duties of students, whereas the fourth part dealt with questions related to students’ points of view on their personal finances.

Gender and student status of student population are shown in Table 1.

Table 1: Gender and status of the studied sample

<table>
<thead>
<tr>
<th>Gender &amp; Status of study</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>142</td>
<td>28,1</td>
<td>28,1</td>
<td>28,1</td>
</tr>
<tr>
<td>Female</td>
<td>363</td>
<td>71,9</td>
<td>71,9</td>
<td>100,0</td>
</tr>
<tr>
<td>Total</td>
<td>505</td>
<td>100,0</td>
<td>100,0</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Student status</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time Student</td>
<td>298</td>
<td>59,0</td>
<td>59,0</td>
<td>59,0</td>
</tr>
<tr>
<td>Part-time Student</td>
<td>207</td>
<td>41,0</td>
<td>41,0</td>
<td>100,0</td>
</tr>
<tr>
<td>Total</td>
<td>505</td>
<td>100,0</td>
<td>100,0</td>
<td></td>
</tr>
</tbody>
</table>

Source: authors

There were 71,9% of female student examinees and 28.1% male student examinees who were questioned in the total sample of 505 examined students. According to their student status, there were 59% full-time students and 41% part-time students questioned. The survey was conducted among students at the Institutions of higher education in eastern Croatia. The biggest number of survey participants was questioned in Osijek-Baranja County (44.4%), and Brod–Posavina County (28.5%) (Table 1).
An important factor during the evaluation of the student population’s financial potential is the level of their financial involvement in the banking system. Financial involvement of student population was monitored through their participation and their use of banking services, which is shown in Table 2, Chart 1.

**Table 2: Use of banking services**

<table>
<thead>
<tr>
<th>Used banking services</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>458</td>
<td>90,7</td>
<td>90,7</td>
<td>90,7</td>
</tr>
<tr>
<td>No</td>
<td>47</td>
<td>9,3</td>
<td>9,3</td>
<td>100,0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>505</strong></td>
<td><strong>100,0</strong></td>
<td><strong>100,0</strong></td>
<td></td>
</tr>
<tr>
<td>One bank</td>
<td>345</td>
<td>68,3</td>
<td>73,2</td>
<td>73,2</td>
</tr>
<tr>
<td>Two bank</td>
<td>107</td>
<td>21,2</td>
<td>22,7</td>
<td>96,0</td>
</tr>
<tr>
<td>More than two banks</td>
<td>19</td>
<td>3,8</td>
<td>4,0</td>
<td>100,0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>471</strong></td>
<td><strong>93,3</strong></td>
<td><strong>100,0</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Source: authors*

**Chart 1: Use of banking services**

By analysing and comparing data collected from the students questioned in the survey, it is possible to conclude that students (regardless of their student status) participate significantly in the banking system by using banking services. Most of the questioned students use the services of just one bank (68.3%), whereas 25% of them use the services of two or even more than two banks. Banking services most commonly used by student population are: card business (17.4%) and payment services (16.6%), whilst saving services (9%) and certain loans (4%) are ranked third and fourth.
Despite a certain amount of participation within the banking system, there is, however, still a significant amount of student population that does not use any of the banking services (9.3%) as well as a part of the sample that has not answered any of the given questions (6.7%). The students list shortage of information on these types of services as the main reasons for non-participating in the banking system. This proves a low level of their financial education. Another part of the students list low interest rates on savings as the main reason for non-participating in the banking system. (Table 2, Chart 1)

Amount of monthly income, which students have access to, is shown in Table 3 and Chart 2

Table 3: Amount of monthly income

<table>
<thead>
<tr>
<th>Amount of monthly income</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>up to 500 kn</td>
<td>77</td>
<td>15.2</td>
<td>15.2</td>
<td>17.8</td>
</tr>
<tr>
<td>501-1000 kn</td>
<td>158</td>
<td>31.3</td>
<td>31.3</td>
<td>49.1</td>
</tr>
<tr>
<td>1001-3000 kn</td>
<td>189</td>
<td>37.4</td>
<td>37.4</td>
<td>86.7</td>
</tr>
<tr>
<td>3001-5000 kn</td>
<td>46</td>
<td>9.1</td>
<td>9.1</td>
<td>95.8</td>
</tr>
<tr>
<td>5001-7000 kn</td>
<td>9</td>
<td>1.8</td>
<td>1.8</td>
<td>97.8</td>
</tr>
<tr>
<td>over 7001 kn</td>
<td>11</td>
<td>2.2</td>
<td>2.2</td>
<td>100.0</td>
</tr>
<tr>
<td>unanswered</td>
<td>15</td>
<td>2.6</td>
<td>2.6</td>
<td>2.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>505</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Source: authors

Chart 2: Amount of monthly income

Source: authors
The highest amount of monthly income amongst students on the territory of eastern Croatia is within the span of 1001,00 to 3000,00 kuna (37,4%), followed by students with monthly incomes from 500,00 to 1000,00 kuna (31,3%).

Only 1.8% of all students has a monthly income from 5001,00 to 7000,00 kn.

Their incomes usually come from their pocket money, apropos their household incomes (parental income 53,3%), and their salaries (part-time students), as well as scholarships (13,1%). They usually receive their monthly incomes in their bank account (33,7%) or they get paid in cash (32,5%). (Table 3, Chart 2).

A bank account enables us to receive different types of deposits and withdrawals of money, and makes payments easier for us especially when we are purchasing goods or services online. Owning a certain type of a bank account is an important indicator of financial involvement.

Analysis shows that even after accounting for national income level, there is a strong relationship between investment in education (as measured by spending per student on primary education) and account penetration. (Demirguc-Kunt & Klapper; 2012,16) Transactional account types most commonly used by students are shown in Table 4.

Table 4: Transactional account types

<table>
<thead>
<tr>
<th>Transactional account types</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>kuna current account</td>
<td>117</td>
<td>23,2</td>
<td>23,4</td>
<td>23,4</td>
</tr>
<tr>
<td>kuna and foreign currency current account</td>
<td>5</td>
<td>1,0</td>
<td>1,0</td>
<td>24,4</td>
</tr>
<tr>
<td>kuna giro account</td>
<td>88</td>
<td>17,4</td>
<td>17,6</td>
<td>41,9</td>
</tr>
<tr>
<td>kuna and foreign currency giro account</td>
<td>5</td>
<td>1,0</td>
<td>1,0</td>
<td>42,9</td>
</tr>
<tr>
<td>kuna current and giro account</td>
<td>230</td>
<td>45,5</td>
<td>45,9</td>
<td>88,8</td>
</tr>
<tr>
<td>kuna current, kuna giro account and foreign currency current account</td>
<td>4</td>
<td>.8</td>
<td>.8</td>
<td>89,6</td>
</tr>
<tr>
<td>kuna and foreign currency current and giro account</td>
<td>3</td>
<td>.6</td>
<td>.6</td>
<td>90,2</td>
</tr>
<tr>
<td>foreign currency giro account</td>
<td>9</td>
<td>1,8</td>
<td>1,8</td>
<td>92,0</td>
</tr>
<tr>
<td>I do not own a transactional bank account</td>
<td>40</td>
<td>7,9</td>
<td>8,0</td>
<td>100,0</td>
</tr>
<tr>
<td>unanswered</td>
<td>4</td>
<td>.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>505</td>
<td>100,0</td>
<td>100,0</td>
<td></td>
</tr>
</tbody>
</table>

Source: authors
Based on the given table data, it is noticeable that students most commonly use a kuna current account and a giro account (45.9% of students), as well as kuna current account (23.4% of students) and a kuna giro account (17.6% of students).

It is also very important to mention the influence the students had, when they were opening their account. Some students (66.2%) were influenced by members of their immediate family, who also own an account at that certain bank. Students (20.4%) were influenced by marketing activities of the bank (20.4%). These marketing activities include media such as television and radio (34.4%). (Table 4, Chart 3).

Time of opening a bank account is shown in Table 5 and charts 4 and 5.

**Table 5: Time of opening a bank account**

<table>
<thead>
<tr>
<th>Time of opening a bank account</th>
<th>Gender</th>
<th>Student status</th>
<th>Full-time student</th>
<th>Part-time student</th>
</tr>
</thead>
<tbody>
<tr>
<td>When I turned 18</td>
<td>Male</td>
<td></td>
<td>24</td>
<td>16</td>
</tr>
<tr>
<td>When I entered the university</td>
<td>Male</td>
<td></td>
<td>32</td>
<td>26</td>
</tr>
<tr>
<td>As a student, when I started working within the Student Job Center</td>
<td>Male</td>
<td></td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>When I got a job</td>
<td>Male</td>
<td></td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>Male</td>
<td></td>
<td>73</td>
<td>57</td>
</tr>
<tr>
<td>When I turned 18</td>
<td>Female</td>
<td></td>
<td>73</td>
<td>36</td>
</tr>
<tr>
<td>When I entered the university</td>
<td>Female</td>
<td></td>
<td>99</td>
<td>44</td>
</tr>
<tr>
<td>As a student, when I started working within the Student Job Center</td>
<td>Female</td>
<td></td>
<td>27</td>
<td>18</td>
</tr>
<tr>
<td>When I got a job</td>
<td>Female</td>
<td></td>
<td>9</td>
<td>27</td>
</tr>
<tr>
<td>Total</td>
<td>Female</td>
<td></td>
<td>208</td>
<td>125</td>
</tr>
</tbody>
</table>

*Source: authors*
Based on the data in the table and charts, it is noticeable that students usually open their bank accounts when entering a university regardless of their gender and student status. It is interesting to see that part-time students also open a bank account when they enter university and not when they turn 18 and become of age or when they get a job. This fact clearly indicates a somewhat poorer participation of those students in the banking system. (Table 5, Chart 4, Chart 5).

The correlation or the degree measure of the linear connection between individual important variables for the conducted research is shown in table 6. The Pearson correlation coefficient was used to calculate the correlation. The Pearson linear correlation coefficient is the direction measurement and the degree of statistical connection which varies within the span of ±1.

If the correlation takes a value > 0, there is a positive linear correlation, and if the correlation takes a value < 0, there is a negative linear correlation. If the correlation value points to a 0, it is a clear indicator that there is no connection between the tested variables.

When taking the span of the given values in consideration, the strength of the correlation can be ranked in three degrees. The correlation value with a span...
from 0 to 0.25 signifies a poor correlation; a span from 0.25 to 0.64 signifies a medium strong correlation of the variables, whilst a span from 0.64 to 1 signifies a strong correlation between the tested variables.

Table 6: Correlation research variables

<table>
<thead>
<tr>
<th></th>
<th>SP</th>
<th>SS</th>
<th>RE</th>
<th>BS</th>
<th>NBS</th>
<th>RN</th>
<th>MI</th>
<th>FTA</th>
<th>TOA</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.72</td>
<td>0.450</td>
</tr>
<tr>
<td>SS</td>
<td>0.043</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.41</td>
<td>0.492</td>
</tr>
<tr>
<td>RE</td>
<td>0.082</td>
<td>-0.074</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.36</td>
<td>2.083</td>
</tr>
<tr>
<td>BS</td>
<td>0.064</td>
<td>0.176**</td>
<td>-0.108*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.09</td>
<td>0.291</td>
</tr>
<tr>
<td>NBS</td>
<td>0.027</td>
<td>-0.021</td>
<td>0.029</td>
<td>0.024</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.31</td>
<td>0.543</td>
</tr>
<tr>
<td>RN</td>
<td>-0.003</td>
<td>0.137</td>
<td>0.069</td>
<td>0.140</td>
<td>0.103</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>3.15</td>
<td>1.635</td>
</tr>
<tr>
<td>MI</td>
<td>-0.100**</td>
<td>0.157**</td>
<td>0.084</td>
<td>-0.148*</td>
<td>0.152**</td>
<td>0.045</td>
<td>1</td>
<td></td>
<td></td>
<td>2.50</td>
<td>1.126</td>
</tr>
<tr>
<td>FTA</td>
<td>0.094*</td>
<td>-0.045</td>
<td>-0.080</td>
<td>0.544**</td>
<td>0.050</td>
<td>0.407**</td>
<td>-0.106*</td>
<td>1</td>
<td></td>
<td>2.698</td>
<td>1.5503</td>
</tr>
<tr>
<td>TOA</td>
<td>-0.011</td>
<td>0.185**</td>
<td>-0.113*</td>
<td>-0.006</td>
<td>-0.062</td>
<td>-0.063</td>
<td>-0.216**</td>
<td>-0.147*</td>
<td>1</td>
<td>2.030</td>
<td>0.891</td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.05 level (2-tailed).

**Correlation is significant at the 0.01 level (2-tailed).

GE – Gender; SS – Status of study; RE – Residence; BS – Bank services; NBS – Number of banking services; RN – Reasons for non-use; MI – Monthly income; FTA – Form of transactional account; TOA – Time of opening a bank account

There is a significant connection between the forms of transactional bank accounts and the use of banking services. There is also a noticeable medium strong level of connection between the forms of transactional accounts and the reasons for their nonuse. (Table 6)

CONCLUSION

The importance of awareness and quality of financial education directed towards an increase of financial responsibility of all individuals is becoming more and more significant. The reasons for this are the introduction and the expansion of new banking and financial products and services, which are motivated by the need for market development and contemporary technologies.

The survey results on financial involvement, financial education and personal finance management among student population on the territory of eastern Croatia point out the following:
most of the student population enters the financial system, or opens a transactional account when they enter a university or while studying at university;

students were mostly influenced by members of their immediate family, mostly by their parents, and by marketing activities of the bank such as advertising media (usually television and radio) when they were choosing a bank to open their bank account in;

there is a noticeable diversification trend of banking activities directed towards student population;

there is a noticeable trend of using the services of several banks as well as an increase in the use of different types of transactional accounts by the student population;

there is a greater concern for personal finance management which was stimulated by a decrease of the level and source of financial incomes; approximately 10% of the student population is financially excluded.

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