

INDIVIDUAL MANAGEMENT OF THE FINANCIAL RESOURCES (THE CASE OF NORTH MACEDONIA)

Elena Parnardzieva Stanoevska¹, Besiana Dauti²

¹*International Balkan University, elena.parnardzieva@ibu.edu.mk*

²*International Balkan University, besiana.dauti@ibu.edu.mk*

ABSTRACT

People behave financially in a different manner. Some people like to behave as risk lovers and to “live for today” by spending money today rather than saving or investing it. Others are risk averse. Save or invest in financial assets and think more about the future. With the ongoing process of worldwide digitalization (continued development of peer-to-peer technologies: cryptocurrency, and non-fungible tokens (NFTs)) new financial services and payment methods are available and offered to companies and households. The world is becoming a more complex place to live, offering a lot of different financial opportunities. Decisions that people make regarding their money ultimately affect their financial well-being, as well as the well-being of the whole society. Therefore, it is crucial to assess the financial literacy of the people consisting of financial behavior, financial attitude, and financial knowledge.

The study analyzes the financial behavior of individuals in North Macedonia through five financial behavior concepts. It examines people’s financial behavior and finds out whether gender, age, occupation, and monthly income have an impact on different financial behavior. Both secondary and primary data are used. The primary data are gathered through a self-administered questionnaire method, consisting of closed-ended questions and JASP (a statistical software).

The findings ascertain that in general, respondents exhibited lower-than-average financial behavior. Results show differences in terms of gender, age, occupation, and monthly income.

KEYWORDS

financial literacy, financial behavior, households, income

JEL CLASSIFICATION CODES

G210, G510, O33

1. INTRODUCTION

People make decisions regarding their money on a daily, weekly, monthly basis, or for a longer period. Some people tend to have a “live for today” attitude and think that it is more logical to spend one’s money today rather than to save it or invest it. On the other hand, some people might feel anxious about their future and whether they will be financially well as they get older. Therefore, they think that it is important to start saving and investing with utmost priority. Others might not be risk-takers, so they never invest in financial assets. Some people might prefer to prepare a budget for how they are going to spend their money, while others might not care and spend it as they wish. Some people try to spend money only on what they need and can afford, while others might allow themselves to spend their money on other purposes as well. Some might not agree with the practice of having to pay interest when one borrows from a financial institution, therefore they might never take

out a loan, whereas others might not care and decide to borrow anyway. Thus, they might take out too many loans and later have debt issues.

The financial behavior that people exhibit has very important implications. It shows how well people manage their money or how reckless they are with it. The decisions that people make regarding their money will ultimately affect their financial well-being. Therefore, it is crucial to assess the financial behavior of individuals. Its importance can especially be seen from the fact that central banks all over the world and individual researchers are constantly doing studies on the financial literacy of people. According to OECD (2022), financial behavior together with financial attitude and financial knowledge are important aspects of the financial literacy of people.

Recently, there have not been many studies conducted on the financial behavior of individuals in North Macedonia. The research was done by GfK (2018) for the National Bank of the Republic of North Macedonia (NBRNM), which took the approach of the OECD and focused on financial literacy in general (including questions regarding financial attitude, financial behavior, and financial knowledge). The financial behavior questions were divided into behavior statements, budgeting, active saving, choosing products, and making ends meet. The advantage of such an approach is that it is based on a method prepared by an international organization, which might make it more accurate, and it is much easier to compare the results to those of other research done in other countries. This research has a different approach. It defines financial behavior and focuses on five financial behavior concepts: budgeting, spending, saving, borrowing, and investing. The goal is to find out more about what constitutes good financial behavior among Macedonian individuals, according to what NBRNM considers as good financial behavior. The research is more specific and focuses on the types of financial behavior Macedonian individuals exhibit and how gender, age, occupation, and monthly income affect different financial behavior.

2. LITERATURE REVIEW

2.1. Defining financial behavior

For the purpose of this study, financial behavior will be defined and measured as created behavior concerning budgeting, spending, saving, borrowing, and investing financial resources. There are different studies performed on the financial behavior of people. Many studies have found that, in general, people do not save or invest their money (Hogarth et al., 2003; Kim et al., 2019; Dew & Xiao, 2011; Herdjiono et al., 2018; Halilovic et al., 2019). De Bassa Scheresberg (2013) also found that the majority of respondents do not save their money, i.e., they do not have money saved for emergencies. Jung (2015) also found that investment is low. Contrary, however, Grohmann (2017) found that while investment is low, the majority of respondents save their money i.e., have a savings account.

Rahadian et al. (2020) found that the respondents have good budget behavior, but bad credit and spending behavior. Kim et al. (2019) found that respondents have a budget, but that they also exhibit good spending behavior. Credit management was found to be bad by Grohmann (2017), but good by Hogarth et al. (2003).

Regarding gender, some studies have found that women tend to have worse spending behavior than men (Funfgeld & Wang, 2009; Hira & Mugenda, 2000), while Fachrudin et al. (2022) and Herdjiono et al. (2018) found that women have better spending behavior. Men tend to invest more than women (Walczak & Kamieniecka, 2018) and make better investing decisions than women (Fachrudin et al., 2022). According to Rusou et al. (2016), women save more than men, while according to Herdjiono et al. (2018), men have better saving behavior. However, both researchers found that men tend to have better credit management. Dewi (2022) found that women tend to manage their money better than men and save more than men. GfK (2018) and Halilovic et al. (2019) found that there are no differences in financial behavior between genders.

When it comes to age, Xiao et al. (2015), and Ksendzova et al. (2017) found that age affects financial behavior. According to some studies, investment tends to increase with age i.e., older people invest more, and they also save more (Henager & Cude, 2016), young people spend more and save less (Funfgeld & Wang, 2009), and young people have better debt management (Fachrudin et al., 2022). According to GfK (2018), adults aged 35-44 (Generation Y or so-called Millennials) have the best financial behavior score.

Regarding income, some studies have found that income does affect the financial behavior of individuals (Robb & Woodyard, 2011; Perry & Mason, 2005; GfK, 2018). Higher-income individuals tend to invest more (Grohmann, 2017; Jung, 2015), have better spending behavior (Fachrudin et al., 2022; Jung, 2015), save more (Jung, 2015), and have better debt management (Fachrudin et al., 2022). However, according to other studies (Arifin, 2017; Rahman & Risman, 2021; Siregar & Simatupang, 2022; Adiputra & Patricia, 2019; Halilovic et al., 2019), income doesn't have an impact on financial behavior. There is a lack of studies performed on whether occupation impacts financial behavior.

There are a few definitions given about financial behavior. Some of the definitions are summarized in Table 1. Financial behavior can be examined from the perspective of how well a household or individual manages financial resources from the perspective of savings, budget planning, insurance, and investments. Financial behavior can also be seen in how well a person deals with his/her cash, debt, savings, and other expenses. Thus, financial behavior can be seen as a component of financial literacy.

Table 1. Defining financial behavior

Author(s)	Definition	Key hallmarks
Perry and Morris (2005)	define financial behavior as consumers' tendency to save, budget, and control their spending.	Focus on consumers' spending
Xiao (2008)	defines financial behavior as any behavior of people related to money management – more commonly that includes cash, credit, and saving behaviors.	Focus on money management
Dew and Xiao (2011)	created a financial behavior measurement which includes consumption management, cash flow management, credit management, savings and investments, and insurance.	Focus on measurement
OECD INFE (2011)	defined financial literacy as: “A combination of awareness, knowledge, skill, attitude, and behavior necessary to make sound financial decisions and ultimately achieve individual financial wellbeing”. In this case, financial behavior is seen as behaviors related to budgeting, planning, and managing finances (OECD 2022).	Component of financial literacy
Sudindra and Naidu (2018)	financial behavior consists of four broad categories: saving, spending, borrowing, and investment.	Focus on measurement
Hasibuan, Lubis & Walad (2018)	A responsible person will effectively use his/her money – make good decisions regarding the management and control of money, spending, investing, and will pay his/her fees on time.	Focus on rational behavior

Source: Own research

2.2. Elements of good financial behavior

NBRNM (2018) has published “Smart Management of Money – a Personal Finance Guide” to help people make better and smarter decisions regarding their money. This guide provides information about many aspects of money, but for this research, the focus will be on the concepts that are related to financial behavior: budgeting, spending, saving, borrowing, and investing.

Budgeting: Budgeting is the act of deciding how much money is going to be spent on one item, how much on another item, and so on before the person actually starts spending the money. Sticking to the budget means strictly following the budget plan. The budget needs to be realistic, otherwise, a person will not be able to follow it (Stouffer, 2012). Budgeting can also be defined as a plan that categorizes an individual's income into spending, saving, and investing categories. After the budget is made and expenses are recorded, people can compare their spending with the budgeted amounts (Friedberg, 2015). According to NBRNM (2018), when people prepare their personal *budget*, they should:

- Calculate their proceeds for the budget period: the income, allowances, and any other sources of proceeds.
- Save at least 10% of their monthly proceeds and leave a certain amount of money in their fund in case of emergencies.
- Calculate the fixed expenses for the budgeting period that need to be paid monthly, like the house or apartment rent, payment of installment loans, insurance premiums, etc.
- Calculate different expenses like fuel, food, bills for general expenses (electricity bills, water bills, telephone bills, heating bills, etc.
- Analyze other expenses and consider whether they can afford them, for example, gifts, hobbies, recreation, yearly vacation, etc.
- Keep in mind their financial goals and compare their budget with them.

Spending: Spending is “the act of giving money for goods and services” (Cambridge University Press, n.d.). Money can be spent on needs, wants, and luxury items, in which needs should come first, while the rest after the needs have been satisfied (Garrett, 2008). Some people spend more than they make – this is the case when their spending is the same as, or less than, their income (Rabbior, 2018). Therefore, assessing one’s spending habits is really important. By doing that, a person will be able to identify unnecessary expenses and cut them. For example, for some people spending their money means rewarding themselves when they are sad or disappointed, or celebrating something good that happened – going out to eat, going on a weekend getaway, visiting a mall, etc. These are activities that everyone does every once in a while, but they can quickly become an addiction and can lead someone to spend more than they can afford. Other people have a “live for today” attitude which can also lead to bad spending habits (Benna et al., 2009). For spending, the NBRNM (2018) stated the importance of differentiating between needs and wants. When it comes to needs, people need to ask themselves whether a good or service is something that they truly need and whether they can allow themselves to purchase it. For wants, before purchasing something, people should check whether a substitute with a lower price exists for it, which would allow someone to spend less and save more. A person should simply say “no” if they find that a product or service is not within their personal budget – at the end of the day, alternatives for their wants and needs most likely exist.

Saving: Saving is the “process of setting aside a portion of current income for future use or the flow of resources accumulated in this way over a given period of time” (Britannica, 2019). Saving can be as simple as setting aside a certain amount of money from every paycheck and keeping it in a jar (Benna et al., 2009), or by having one’s money transferred into a savings account (Friedberg, 2015). People might save for different reasons: to be able to afford some more expensive things like a car or home; to be prepared for unexpected things; to be able to do things when the opportunity comes like traveling or helping others; to have a “peace of mind”, i.e., feel better knowing they have money available (Rabbior, 2018). When it comes to saving, the NBRNM (2018) advises people to save at least 10% (but it’s more recommended to save 20-30%) of their monthly earnings. There are two methods to do that:

- To deposit money every month in their savings account.
- To transfer money from their transaction account to their savings account through electronic banking.

Many people might forget to do these things every month, therefore it is recommended that people ask their bank to do it for them – in this case, the bank will automatically transfer 10% of a person’s monthly income to their savings account. People can also ask the bank to increase this percentage.

Borrowing: Borrowing is “the act of borrowing money or the amount of money that a person, company, government, etc. borrows.” (Cambridge University Press, n.d.). People usually borrow to finance large purchases, in which case there are some considerations to be made – the number of years required for repayment and whether the individual will be able to afford the monthly repayments (Redhead, 2008). For individuals, borrowing can be in the form of a loan which is the amount of money that a person borrows from another person or institution in order to pay for something that they don’t have the cash to pay for and which has to be repaid with interest (Friedberg, 2015) or a credit card which allow individuals to purchase goods and services today

and pay for them in the future with interest (Aprea et al., 2016). When it comes to borrowing, people in North Macedonia can apply for consumer loans, student loans, car loans, housing loans, and cards like credit and debit cards, deferred debit cards, internet cards, and other cards. Before applying for any of these loans or cards, people need to assess whether they will be able to pay it back together with the interest (NBRNM, 2018). Some questions that people should ask themselves before they borrow include:

- Do you need the product or services that you want to purchase with borrowed money?
- If you really need them, will you be able to pay the loan or credit card installments?
- If you are making a large purchase like a car or house, could you allow yourself to decrease some of your other spending?
- If it is something that you really want, but not need, can you postpone your purchase?
- If you have decided to apply for the loan, have you prepared a financial plan to assess whether you will be able to repay it?
- Do you understand what are the costs of using a credit card beyond the allowed limit?
- Do you understand the consequences of not repaying the loan?

After people take out a loan, they must pay their installments on time.

Investing: Investment is the purchase of financial assets to increase income or wealth in the future (Aprea et al., 2016). Investing requires knowledge of the markets, company documents, and trading rules (Stouffer, 2012). There are generally three types of investments: cash and cash equivalents, fixed income, and equity.

- Cash and cash equivalents are those that are very liquid, low risk, and generate a low return like cash, bank deposits, term deposits, Guaranteed Investment Certificates (GICS), and money market funds.
- Fixed income investments generally refer to bonds which are a loan made to a company or government.
- Equity means buying a share of ownership in a company – companies might decide to sell stocks to obtain money needed for expansion and improvement (Rabbior, 2018).

The kind of investment decision that someone makes depends on their goals, options, and risks they are willing to take (Garrett, 2008). Regarding investing, people need to understand the concept of risk and return from investments. For example, investing in stocks can be extremely profitable but at the same time, it is a risky investment. On the other hand, keeping your money as bank deposits will lead to a lower return, but it is much safer than other investments. Another crucial thing is to not “put all your eggs in one basket”, meaning to not invest your money in only one thing, but rather to invest in different financial assets and have a diversified portfolio. In North Macedonia, the following types of investments are available: bank deposits, stocks, bonds, investment funds, and real estate (NBRNM, 2018).

Life insurance could also be seen as a form of investing. Recently, people have been able to invest in cryptocurrencies. In North Macedonia, the investing (as well as issuance and trading) of crypto assets is not regulated by any law, including the Law on Foreign Exchange Operations (and its bylaws) – this does not mean that investing in cryptocurrencies is illegal, but that currently the process is not regulated (NBRNM, 2022). Levkov, Gavrilova, and Trajkovska (2022) researched the profile and financial behavior of crypto adopters in North Macedonia and found that the majority of crypto adopters are male between the ages of 19-34 with finished undergraduate studies, employed, and with an average monthly income of 501-1500 EUR and who live on their own.

3. RESEARCH DATA AND METHODOLOGY

For effecting the research, primary and secondary data were used. The primary data was gathered through a self-administered questionnaire disseminated through social media, like Facebook, LinkedIn, Reddit, as well as email. The questionnaire had closed-ended questions related to people’s demographic characteristics (gender, age, occupation, and monthly income) and to their budgeting, spending, saving, borrowing, and investing behaviors. Questions were categorized in the form of multiple-choice and dichotomous questions. As a research instrument, the Likert scale was also used. There were in total 16 questions – four questions about the

respondents' demographic characteristics and 12 about the behaviors. The research was carried out with 127 respondents. The primary data were analyzed through graphs, JASP, and pivot tables in MS Excel. The secondary data was gathered from various studies, books, research papers, and journals. Additionally, a score was developed on all behaviors in the following way:

- *Budgeting* behavior - The highest score is 7. Good budgeting behavior is a score higher than 3.5.
- *Spending* behavior - The highest score is 6. Good spending behavior is a score higher than 3.
- *Saving* behavior - The highest score is 4. Good saving behavior is a score higher than 2.
- *Borrowing* behavior - The highest score is 1. Good borrowing behavior is when the score is higher than 0.5.
- *Investing* behavior - The highest score is 6. Good investing behavior is a score higher than 3.

An overall financial behavior score was also established as the sum of all the behavior scores. The highest possible score was 24. Good financial behavior is a score higher than 12. Differences in the behaviors were analyzed using these scores. To find the average score, a mean was used.

4. ANALYSES AND DISCUSSIONS OF THE RESULTS

4.1. Demographic characteristics of respondents

According to the gender distribution (see Table 2), among the participants, males dominate with 66.1% (33.9% female respondents). Millennials (Gen Y) and Gen Z dominate in the research. Most respondents belong to the age group 25-40 (44.9%), followed by 18-24 (42.5%), while only a small percentage belong to Gen X or age group 41-64 (12.6%) and none in 65 or older. Regarding occupation, most of the respondents answered that they are employed (59.8%), and 28.3% answered that they are students. A small percentage answered they are a freelancer (5.5%) and unemployed (5.5%), only 0.8% answered with 'other' and 0% with 'retired'. The majority of the respondents 49.6% had monthly income distribution of more than 30.000 MKD. 20.5% responded that they have an income between 18.000 and 30.000 MKD, 17.3% stated that they have an income of less than 18.000 MKD and 12.6% said that they do not have a monthly income.

Table 2: Demographic data of the sample

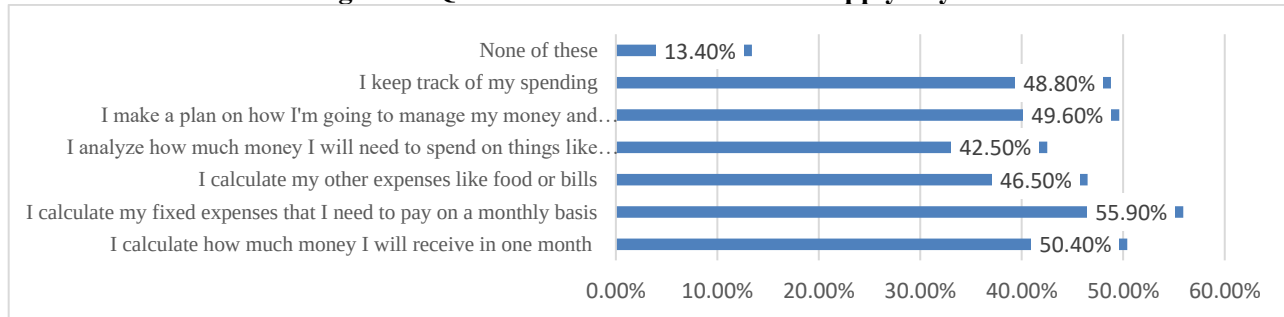
Demographic data			
Features		Total	%
Gender	Male	84	66.1
	Female	43	33.9
Age	18-24	54	42.5
	25-40	57	44.9
	41-64	16	12.6
	65 or older	0	0
Occupation	Student	36	28.3
	Employed	76	59.8
	Freelancer	7	5.5
	Unemployed	7	5.5
	Retiree	0	0
	Other	1	0.8
Monthly Income	Less than 18.000 MKD	22	17.3
	18.000-30.000 MKD	26	20.5
	More than 30.000 MKD	63	49.6
	No monthly income	16	12.6

Source: Own research

4.2 Budget Behavior

Three questions were asked regarding the budgeting behavior. On the question “Do you manage your own money”, 91% of respondents replied with yes, and 9% with no. The majority of respondents (78) answered with 1 (33%), 2 (24%), or 3 (25.6%), and very few with 4 or 5 to the question “If you do not manage your own money, please on the Likert scale from 1 (none) to 5 (a lot) rate the influence that your peers (family, friends, relatives, colleagues) have on your decision-making when spending money (this influence can be in form of discussions, debates, encouraging, etc.)”. In general, with an average of 2.346 it can be concluded that responders lack influence i.e., they are not influenced by their peers.

Figure 1: Question “Please check all that apply to you.”



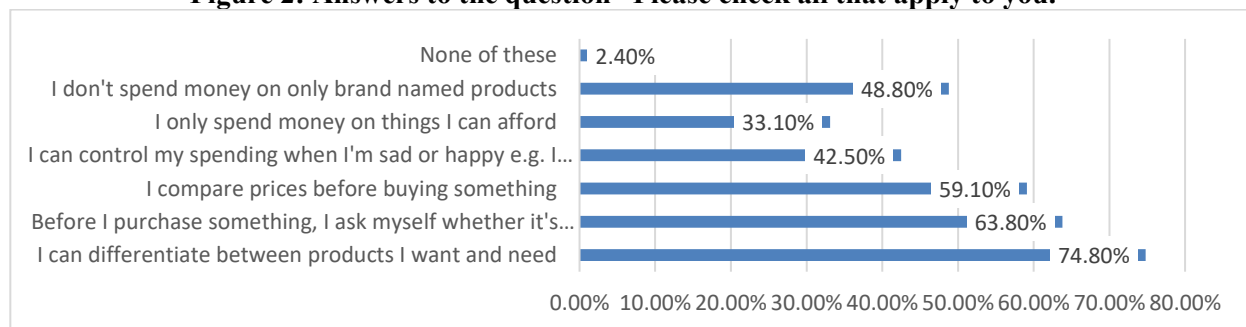
Source: Own research

As presented in Figure 1, most of the responders answered that they calculate the fixed expenses they need to pay monthly (55.9%), how much money they will receive in one month (50.4%), and plan for how to manage their money (49.6%). They keep track of their spending (48.8%) and analyze less how much money they need to spend on other expenses like food or bills (46.5%), things like gifts, hobbies, and yearly vacations (42.5%). Only 17 respondents (13.4%) said they did not do any of the listed activities.

4.3 Spending Behavior

Two questions were posed regarding spending behavior. As shown in Figure 2, a larger percentage of the respondents (74.8%) answered that they can differentiate between products they want and need, (63.8%) asked themselves whether it's a product they truly need, (59.1%) compared the prices before buying something and almost half (48.8%) do not spend money on only brand products. The minority of the respondents answered that they can control spending based on their mood (42.5%) and spend money only on things they can afford (33.1%). Only three respondents (2.4%) stated that they did not do any of the listed activities.

Figure 2: Answers to the question “Please check all that apply to you.”



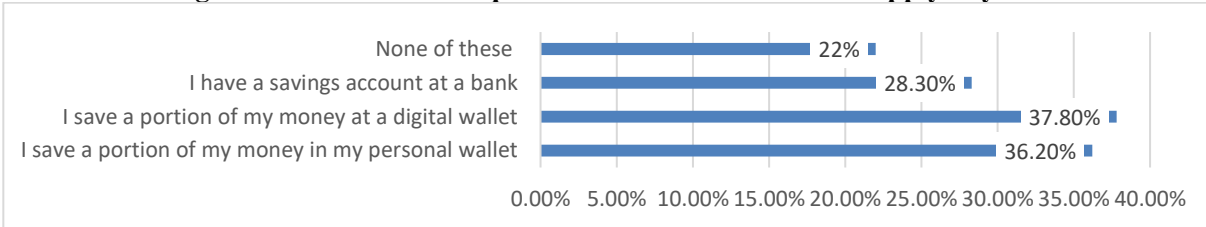
Source: Own research

The majority of all 124 responders (64%) spend less than their income, 24% spend all income and 12% spend more than they earn. It can be concluded that the analyzed sample had good spending behavior.

4.4 Saving Behavior

Four questions were asked regarding the saving behavior. Most of the respondents, as shown in Figure 3, do save money within a digital wallet (37.8%). 36.2% save money in cash and only 28.3% have a savings account. However, 22% of the respondents do not save money at all.

Figure 3: Answers to the question “Please check all that apply to you.”



Source: Own research

Out of 110 responders who answered the question regarding the percentage of savings the majority (37%) replied that they save 30% of their money, while 21% (altogether 63%) replied that they save 20%, 10%, and less than 10% of their money, respectively. These results confirm that the analyzed sample of the population had a relatively good saving behavior.

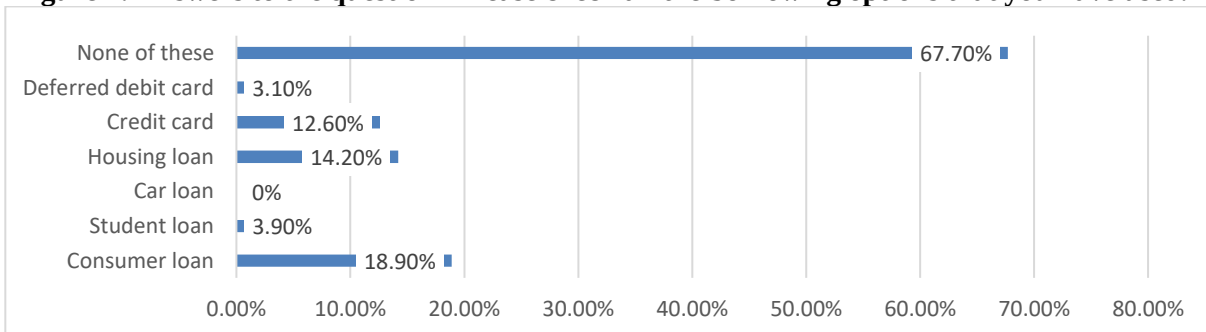
There were 69 responses collected to the question of whether responders deposit money in their savings accounts by themselves or they are asking their bank automatically to do that for them. Most of the respondents (88%) replied that they deposit money into their savings accounts by themselves. The NBRNM suggests that people ask their bank to do it for them, so they do not forget to do it every month. According to the results received very low percentages, only 12% have replied that are using this type of bank service. With further research can be investigated the reasons for such low acceptance of this type of bank service.

To assess the saving behavior a question was raised regarding the solvency of the population, i.e. if some kind of emergency were to suddenly happen (e.g. job loss, accident, car troubles, etc.) whether they would have enough money to cover the costs. Most of the respondents answered “yes” (54%), however, there’s still a high percentage of respondents who replied “no” (46%).

4.5 Borrowing Behavior

Two questions were asked regarding the borrowing behavior. Analyzing the types of borrowings, 86 of the respondents (67.7%) replied that they have not used any of the borrowing options presented in Figure 4. Consumer loans are highly used as borrowing options (18.9%), followed by housing loans (14.2%) and credit cards (12.6%). Surprisingly, none of the respondents have ever taken a car loan.

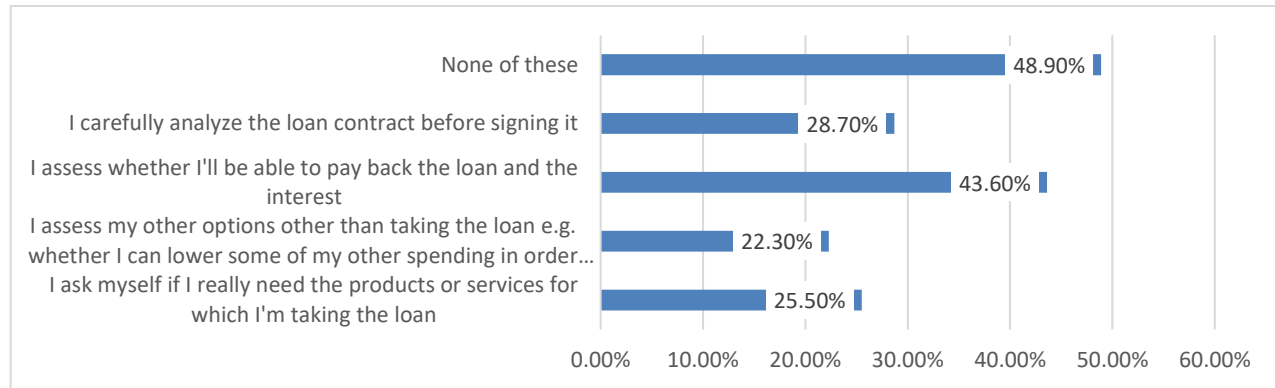
Figure 4: Answers to the question "Please check all the borrowing options that you have used."



Source: Own research

The question presented in Figure 5 had in total of 94 responses. Almost half of the interviewee (48.9 %) answered that they do not undertake any of the listed activities before applying for a loan, which is rather reckless. However, a large percentage (43.6%) answered that they assess their capability of repaying the loan and interest on time. Creditworthiness is the most important thing before signing a loan contract, especially for banks. The lower number of responders analyze the loan contract before signing it or assess other options than taking loans. 25.5% are asking themselves whether they really need the products or services for which they are taking loans.

Figure 1: Answers to the question "Please check all the activities that you do before applying for a loan."

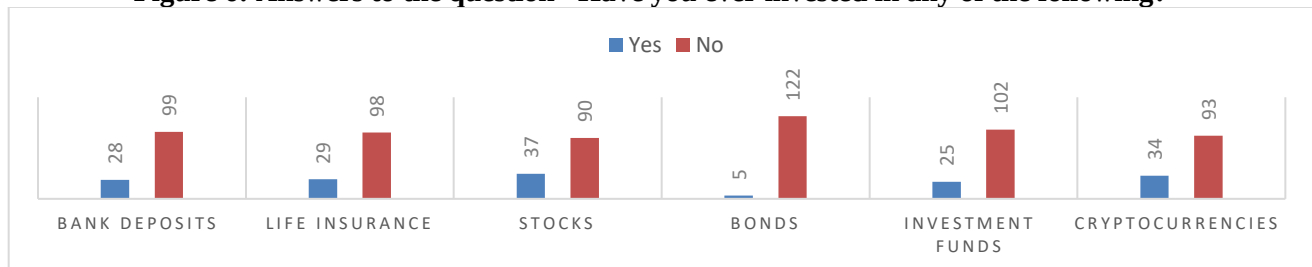


Source: Own research

4.6 Investing Behavior

Only one question was asked regarding the investing behavior. As shown in Figure 6, the majority of the respondents have not invested in any investing option. The options with the highest responses are stocks (37 responses) and cryptocurrencies (34), while bonds have the lowest (5 responses).

Figure 6: Answers to the question "Have you ever invested in any of the following?"



Source: Own research

4.7 Budgeting, spending, saving, borrowing, and investing score

In what follows, an analysis will be made based on budgeting, spending, saving, borrowing, and investing scores by using the JASP software program. From Table 3, it can be concluded that the respondents have good budgeting, spending, and borrowing, but poor saving and investing behavior. The low average for the saving behavior is surprising, considering the fact that when analyzing the questions individually, it looks as though most respondents save their money. However, there were 22% of responders who replied with "none of these" when they were given a list of saving options and 46% answered "no" when they were asked whether they think they have enough money to cover the costs in case of emergencies. 46% of the respondents might have especially brought down the average.

Table 1: The budgeting, spending, saving, borrowing and investing score

	BUDGETING	SPENDING	SAVING	BORROWING	INVESTING
Valid	127	127	127	127	127
Missing	0	0	0	0	0
Mean	3.843	3.220	1.567	0.677	1.244
Std. Deviation	2.106	1.543	1.020	0.469	1.500
Minimum	0.000	0.000	0.000	0.000	0.000
Maximum	7.000	6.000	4.000	1.000	6.000

Source: Own research

Analyses are also made to see how gender, age, occupation, and monthly income influence different financial behaviors in budgeting, spending, saving, borrowing, and investing.

Table 2: Differences in the budgeting behavior, spending, saving, borrowing, and investing score

Characteristics	Budgeting Behavior	Spending Behavior	Saving Behavior	Borrowing Behavior	Investing Behavior	Overall Financial Behavior
Female	3.698	3.236	1.442	0.744	0.814	9.93
Male	3.917	3.214	1.631	0.643	1.464	10.869
18-24	3.685	3.185	1.407	0.852	1.444	10.574
25-40	4.404	3.439	1.842	0.544	1.316	11.544
41-64	2.375	2.563	1.125	0.563	0.313	6.938
Employed	3.974	3.237	1.658	0.605	1.171	10.645
Freelancer	5.714	4.571	2	0.429	1.143	13.857
Other	3	4	3	1	3	14
Student	3.389	2.833	1.25	0.889	1.417	9.778
Unemployed	3	3.571	1.571	0.571	1	9.714
18.000 - 30.000 MKD	4.038	2.808	1.269	0.769	0.423	9.308
I don't have a monthly income	2.188	3.125	1	0.75	0.75	7.813
Less than 18.000 MKD	4.136	3.136	1.318	0.864	1.227	10.682
More than 30.000 MKD	4.079	3.444	1.921	0.556	1.714	11.714
Overall mean	3.843	3.22	1.567	0.677	1.244	10.551

Source: Own research

Analyzing by gender there is not much of a difference in the budgeting and spending behavior between females and males. Those in the age group 25-40 tend to have better budgeting behavior, and scored the highest spending behavior, while those belonging to the age group from 41 to 64 have the lowest budgeting mean and scored the lowest spending behavior. When it comes to occupation, 'Other' and unemployed responders scored the lowest budget behavior, whereas freelancers were among the highest group followed by employed respondents. Freelancers scored the highest, while students had the lowest spending behavior. Those who do not have a monthly income scored significantly lower budget behavior than the others, while those with less than 18.000 MKD of income scored the highest budgeting behavior. Those with income between 18.000 and 30.000 MKD scored the lowest, whereas those with income of more than 30.000 MKD scored the highest spending behavior.

From the perspective of saving and investing behavior, males tend to save and invest more than females. Those in the age group 18-24 scored the highest investment behavior whereas those belonging to the age group

between 25-40 showed significantly higher saving behavior. Those in the age group 41-64 applied the lowest saving behavior and significantly low investing behavior. 'Other' employed and freelancer respondents demonstrated the highest saving and investment behavior, whereas students have the lowest saving and high investment behavior. Those who do not have a monthly income scored the lowest saving behavior. Those with an income between 18.000 and 30.000 MKD scored the lowest investment behavior. Interviewees with an income of more than 30.000 MKD scored the highest saving and investment behavior. This confirms that saving and investing behavior is proportionally moving related to the level of the monthly income. It can be concluded that the higher the level of the monthly income is, the higher savings and investments will be.

In the borrowing behavior, females borrow slightly more than the average. Responders between the 18-24 age group scored the highest, whereas 24-40 had the lowest borrowing behavior. 'Other' scored the highest, followed by students, while freelancers scored the lowest borrowing. Those with an income of more than 30.000 MKD scored the lowest, whereas those with an income of less than 18.000 MKD scored the highest borrowing behavior. This confirms that borrowing behavior is opposed to the level of the monthly income. Thus, the higher the income, the lower the borrowing.

The overall financial behavior score is 10.551. Although the highest possible score was 24, the highest score received by a respondent was 19, whereas the lowest was 2. It can be concluded that overall, the respondents do not have good financial behavior. In the overall financial behavior, males scored slightly higher than females. Those in the age group 25-40 scored the highest, while those in the age group 41-64 scored very low in financial behavior. 'Other' and freelancer scored the highest, whereas unemployed the lowest. Those who do not have a monthly income scored the lowest, while those with an income of more than 30.000 MKD scored the highest in overall financial behavior.

5. CONCLUSION

The findings show that out of the five behaviors analyzed, the respondents scored a little bit higher than average only for the budgeting, spending, and borrowing behaviors. For the saving and investing behavior, respondents scored lower than the average. For all the behaviors, there were respondents that answered with "None of these" which is quite worrying. The respondents also scored low on the overall financial behavior score, which leads to the conclusion that Macedonian individuals do not exercise the best financial management.

Concerning the differences in terms of demographic characteristics, some significant differences include in general that those in the age group 25-40 (millennials) tend to have better financial behavior, whereas those in the age group 41-64 (Gen X) had worse financial behavior. Concerning occupation, those in the 'other' and freelancer scored higher in most behaviors, however, there were not many respondents that belonged to those categories. Employed responders also scored higher. When it comes to the monthly income, those with no monthly income or with an income between 18.000 and 30.000 MKD usually scored lower, while those with an income higher than 30.000 MKD showed higher overall financial behavior. When it comes to gender, a significant difference was in the investing behavior, in which males invest more than females. There were also some exceptions. For example, those aged 18-24 had better borrowing behavior.

This research provides a good basis that can be used for further research using a larger sample, in which case more significant results might be found. Additionally, questions regarding the financial position and knowledge could also be included in the future survey followed by checking whether there is a correlation between these variables and financial behavior.

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APPENDIX

Questionnaire: Financial Behavior

1. What is your gender?
 - Female
 - Male
2. Which age group do you belong to?
 - 18-24
 - 25-40
 - 41-64
 - 65 or older
3. What is your occupation?
 - Student
 - Employed
 - Freelancer
 - Unemployed
 - Retired
 - Other
4. What is your monthly income?
 - Less than 18.000 MKD
 - 18.000 – 30.000 MKD
 - More than 30.000 MKD
 - I don't have a monthly income
5. Do you manage your own money?
 - Yes
 - No
6. If you do not manage your own money, please on a scale from 1 (none) to 5 (a lot) rate the influence that your peers (family, friends, relatives, colleagues) have on your decision-making when spending money (this influence can be in form of discussions, debates, encouraging, etc.)

1 2 3 4 5

7. Please check all that apply to you.
 - ☐ I calculate how much money I will receive in one month
 - ☐ I calculate my fixed expenses that I need to pay on a monthly basis
 - ☐ I calculate my other expenses like food or bills
 - ☐ I analyze how much money I will need to spend on things like gifts, hobbies, yearly vacations etc.
 - ☐ I make a plan on how I'm going to manage my money and expenses
 - ☐ I keep track of my spending
 - ☐ None of these
8. Please check all that apply to you.
 - ☐ I can differentiate between products I want and need
 - ☐ Before I purchase something, I ask myself whether it's something that I really need
 - ☐ I compare prices before buying something
 - ☐ I can control my spending when I'm sad or happy e.g. I don't always purchase something new as a way to feel better or celebrate a success.
 - ☐ I only spend money on things I can afford
 - ☐ I don't only spend money on brand named products
 - ☐ None of these
9. Which of the following applies to you?

- I spend less than my income
 - I spend all of my income
 - I spend more than my income
10. Please check all that apply to you.
- ☐ I save a portion of my income in my personal wallet
 - ☐ I save a portion of my income at a digital wallet
 - ☐ I have a savings account at a bank
 - ☐ None of these
11. If you save money, what percentage do you save?
- Less than 10 percent
 - 10 percent
 - 20 percent
 - 30 percent
12. If you have a savings account, which of the following applies to you?
- I deposit money there myself
 - I have asked my bank to automatically do it for me
13. If some kind of emergency were to suddenly happen (e.g. job loss, accident, car trouble etc.) would you say you have enough money for the costs?
- Yes
 - No
14. Please check all the borrowing options that you have used.
- ☐ Consumer loan
 - ☐ Student loan
 - ☐ Car loan
 - ☐ Housing loan
 - ☐ Credit card
 - ☐ Deferred debit card
 - ☐ None of these
15. Please check all the activities you do before applying for a loan.
- ☐ I ask myself if I really need the products or services for which I'm taking the loan
 - ☐ I assess my other options other than taking out the loan e.g. whether I can lower some of my other spending
 - ☐ I assess whether I'll be able to pay back the loan and the interest
 - ☐ I carefully analyze the loan contract before signing it
 - ☐ None of these
16. Have you ever invested in any of the following?

	Yes	No
Bank deposits		
Life insurance		
Stocks		
Bonds		
Investment funds		
Cryptocurrencies		