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Examination of Financial Investment Opportunities Based on the Investment and Risk Tolerance of Hungarian University Students

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Abstract: With the broad availability of the internet and today's technology, people have the opportunity to invest their savings in endless types of ways. However, the eternal recurring question is what to invest in? How risky is the investment, how much return can we expect? Are young people aware of the wealth of opportunities available to them at all? The aim of the research is to reveal the financial awareness, risk tolerance and investment willingness of young people studying in the Hungarian higher education within the framework of a quantitative questionnaire research. Describe patterns of behavior, emotionally influencing factors that can influence even the best investors on making successful decisions. Describe and analyze the investment opportunities in correlation to the results of the primary research, which are easily available to students in Hungary. The aim of the research is to provide a starting guideline for young investors on investment opportunities, and the basic mindset behind controlling emotions, analyzing large firms and making successful long-term decisions.

Keywords: Investing; Savings; Shares; Risk; Return

1 Introduction

Based on the research of the Central Statistics Office, Hungarian real estate and apartment renting prices were increasing steadily in the past years. Young adults in Hungary are still living with their parents until an average age of 27. It becomes clear that with the postponement of time spent in higher education and young adults starting to work at a later age of their lives, they are in a very difficult position in saving money and starting their independent life without significant financial support. Young adults tend to stay at home even after finishing their studies, to be able to increase their savings. With average paying jobs it would take ten or even more years to gather the savings needed for an independent apartment. It is more and more important for young adults to get financial experience early in their lives and to create their own savings in order to help themselves later moving forward.



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We are living in a technologically advanced era where financial decisions can be made even with our mobile devices. With the help of different financial applications, investors can trade crypto currencies and buy stocks of the world biggest companies within minutes. Investing became very easy, and it is available to everyone with a credit card. It can be stated that investing does not require any more, large amounts of capital, and it became very easy to place savings in different investing opportunities. However, the financial information and experience does not come with these modern applications, investing overall became more approachable but did not become easier to manage.

The first goal of the research was to understand the financial opportunities, the most common investing strategies, and the way of controlling emotions in order to achieve the correct mindset required for investing. But under the research period it became very clear, that the uncovered information about finances and the current state of economy, would be very useful to understand at the young adult stage in order to help others to the necessary, straight to the point and relevant knowledge. Undoubtable that the results of the research would have helped the researcher a lot in investing and in creating savings for the future even in the past few years.

The aim of the research is to discover the most common behavioral and influencing factors of decision making. Along the uncovered aspects showcasing the Hungarian characteristics and mentality in investing. Based on these factors suggest investing opportunities and strategies that are meeting the expectations of the Hungarian nation.

The methodology of the research is based on an online quantitative research which was distributed with snow ball method in order to gather relevant data on the Hungarian knowledge, risk awareness, and decision making on the territory of finance and investments. Based on the results, investment opportunities and strategies were uncovered in the framework of an extensive literature review. The presented investment opportunities, based on the available data, were valued and their expected return were calculated considering the past years. The aim of the analyzation was to confirm that the research truly showcases forms of investments that are relevant, easy to understand for young adults, investors without experience, and are led to increase in their returns in the past years.

2 Emotions in decision making

It can be stated that even experienced investors are often making their decisions based on emotions and irrational bases. Emotions on the financial field can be very difficult to overcome. The fear from missing out on a promising investment or the dread from losing money can lead to investing or selling positions in otherwise rationally unfounded situations. (Graham, 2003) Thanks to smart phones, investors



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can check on their investments every minute, and can make financial decision within seconds. That is why it is very difficult to keep themselves to their regular investment strategies. Their months of investigating and analyzation can be ruined within seconds, thanks to their temporary emotions. Based on the research of Kahneman and Tversky from the year of 1979, the fear of losing money is twice as high as they joy of earning. This often leads to the result that the average investor is buying high and selling low. (Kahneman & Tversky, 1979)

That is why it is considered crucial that investors not only have to understand the market but must get to know their emotions. They must be able to control them. Self-control and inaction must be achieved. The investor must have a strategy which is trusted and is built upon real information gathering. Investing experts suggest that collecting information and listening to advices are important but they must be valued with care. (Miller, 2006) The final decision always should be made based on the investor's own calculations. Investing in opportunities that the subject trusts, lowers the fear of losing money and the chance of sudden bailing out. (Kiyosaki, 1997)

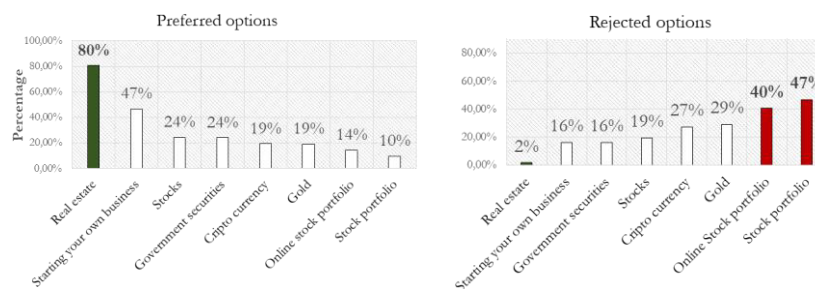
The herd behavior can highly influence the movement of the crowd and the formation of public opinion. It can significantly change the value of stocks, or the judgement of companies based on rumors and news which temporary affect the emotions of investors. People in a position of trust and influencers can significantly change the market even with a single statement, even if their judgement has nothing to do in reality with the company's actual growth in the future. (Ante, 2021) In many cases, however, the challenge is not to follow these rumors but to learn making good use of the crowd's expected reaction. (Hensman – Smith, 2010)

3 Primary research

The aim of the primary research was to get relevant information on the opinions of young adults on the topic of financial knowledge, risk awareness and investments. The research was conducted in a form of an online questionnaire, shared in online Facebook and University groups with snowball methods. In this period 927 answers were gathered. From the respondents, 63% lives in Budapest and 84% studied or studies in higher education. It must be stated that based on the respondents, the research results cannot be extended to the whole Hungarian society, but more likely represents the financial judgements of students living in Budapest. 66% of answerers studied finance, 73% saves money for a given future goal, but 66% does not invest their savings at all.

From the primary research three key aspects must be highlighted because these results are key to understanding the investment opportunities showcased later in the research. The first topic is the preferred forms of investments by the respondents.

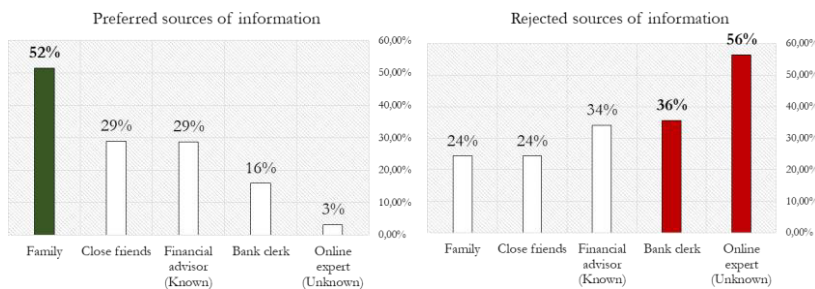
The answers showcased that investing into real estate is the most preferred option. With 80% of agreeing, real estate leads the investment opportunities significantly. It must be mentioned that government securities despite their low risk, only takes the fourth most preferred place, while prebuilt stock portfolios are mostly rejected by the respondents. In the case of crypto currencies, high distribution could be noted within the answerer's preference. Most responses could not decide confidently whether it is worth investing into the crypto market.



1. Figure: Preferred and Rejected investment options

Source: Own research; n = 927; Own editing

It was very important to get information of the sources of financial advice that the respondents actually trust and consider following when making investment decisions. In the case of respondents, it can be stated that the lack of visible trust is significant. Only 52% of answerers would accept financial advice from their families and other sources received even higher level of rejection. Bank clerks and online experts are the most untrusted based on the answers.



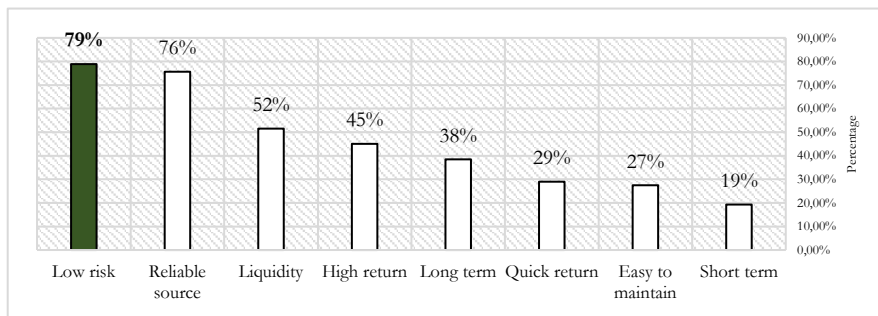
2. Figure: Preferred and Rejected sources of information

Source: Own research; n = 927; Own editing

Reviewing the expectations towards investments are crucial because the aim of the research is to reflect on the primary research and to highlight forms of investments that takes into consideration the needs of the respondents. In this case the answers are completely in line with the secondary literature. For the answerers, low risks in investments are the highest priority. The second is to get the investment information



from a reliable source, while liquidity, therefore, to be able to reach their money whenever they want is at the third place. It is important to mention that the expectation of high return is only on the fourth place and the need for high income is significantly lower than the before mentioned aspects.



3. Figure: Expectations toward investments

Source: Own research; n = 927; Own editing

The primary research highlighted that the asked multitude lacks financial information. Underestimates itself in terms of investment awareness. The respondents are distrustful and 66% of them does not invest their savings in any form. Separating the young adult respondents from the older generation, it could be seen from the results that the level of trust actually did not improve over the years. The young generations are just as distrustful as their ascendants, and they are continuing the rejection of information from bank employees. Most young adult has the opportunity to save money, but would not like to risk losing their hard earned savings. Most respondents would only consider investing 1 – 25% of their savings.

Respondents had the opportunity in a form of an open question to highlight the reasons behind not investing their savings. The four most common answers were the lack of information, the lack of sufficient savings, the lack of trustworthy source of information and the difficulty of making the final decision.

4 Investing opportunities and expected returns

Based on the results of the primary research, low risk was the highest priority in investing for the asked population. Therefore, government securities were chosen as the benchmark opportunity for investing. The reason for this is that government securities are having guaranteed interest payments by the government and are tax free. Because of the support of the government, it can be stated that they are relatively risk free. However, it was interesting to see that significant number of respondents rejected this opportunity of earning low but confident returns. The secondary research highlighted that behind this judgement, often political aspects



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or the lack of information lies. People does not know that government security investment returns are guaranteed by the government, therefore they value them on a higher risk level. (MNB, Máp plusz ismertető, 2020)

4.1 Real estate market

Investing into real estate was the most preferred option based on the questionnaire. More than 80% of respondents would invest their savings in this form. Buying and managing real estate requires more experience and it is riskier than the government securities. The owner must count with amortization and taxes after the purchase and regular incomes. However, reviewing the past 6 years in Hungary, the prices in the real estate territory and renting are rising steadily. There is no doubt that investors could achieve relevant yield on this area as well in the past years. Calculating the expected return of the real estate market is harder to estimate and the variables can change based on the environment and aspects which the owner cannot influence. The return on the real estate market was determined based on the data provided by the Central Statistics Office, using the average cost of buying and renting an apartment in the past five years in Hungary, corrected with the 4% fee upon purchasing the real estate, taxes, and calculating with risks which appear in the form of annual 2% amortization and only 11 months of rent out income. (Szendrei, 2020)

4.2 Stock market

In the case of buying stocks, the strategy of defensive investing was reviewed which method was first introduced by Benjamin Graham. The reason for this is that the respondents highlighted the real estate investments as highly preferred option, and the defensive investor strategy has common aspects with it. The defensive investor purchases stocks of high quality, prospering, well-known companies that are paying dividends frequently. (Cunningham, 2013) The goal is to earn the expected yield from buying stocks at the right time and keeping them for long years, while enjoying the dividends and the rise of the company in valuation, instead of constantly trading with stocks at the market. This way the investor's two sources of income will be similar to the real estate investments. The income comes from general value increase and the frequent dividend pays. Investing into stocks are requiring information and the right timing, but with the correct mentality it can be relatively managed at low risks. Investing into stocks requires the earlier mentioned predetermined investing strategy that an investor has to choose for themselves based on the risk aversion and the ability to manage emotionally stressful situations. (Hill, 2005) The defensive investor strategy is good for unexperienced investors and provides easy to follow steps in valuating companies. However, it is crucial that the investor follows the predetermined strategy. Any difference or bold move increases the risk, distrust and fear of losing money, which may lead to thoughtless, emotional decisions. (Firer, 1995) The return on stocks were calculated following Benjamin



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Grahams guide of company evaluation and was corrected by Hungarian tax regulations.

4.3 Gold and Crypto currencies

Crypto currencies and gold highly divided the respondents. It can be stated that both ways of investing are highly volatile and requires experience. Some expert investors do not consider these options as classical forms of investments and more as speculative opportunities. Both cryptocurrencies and gold do not pay dividends nor interest. The yield only comes from the balance of the demand and supply created by the investors themselves. The investor must get information on the project in the case of crypto currencies whether it is trustworthy, while the gold must be bought from well-known and trusted vendors as well. Both investing options require high attention, caution and the right timing. (Lewis, 2018) The herd behavior can be very dangerous in the case of these investing options. However, for both of them, considering the past years, it can be said that they are stable investment options. The gold is often viewed as security capital, as its demand often changes in the opposite direction as the market. It can be used as a cover in times of depression, or wars. Calculating returns was based on the data provided by Yahoo Finance and corrected by Hungarian tax regulations. (Wiedemann, 2021)

4.4 Portfolios, investment funds

The last, reviewed option is investment funds. Based on the survey it was clear that the respondents are mostly rejecting funds and prebuilt stock portfolios. The bank employees and financial advisors lack the trust in the eye of the customer. This is an issue because in case of the investment's funds, trust and honesty would be key. The investor has to hand over their hard-earned savings and allow an expert to manage it. Banks and trust funds need to work on their transparency and trust because otherwise prebuilt portfolios would be a very good option for investing savings. The investor could place their money in well rounded, diversified portfolios which would allow them to mitigate risks. (CIB Bank, 2021; Ittelson, 2020)

4.5 Return calculation

Based on the previously mentioned forms of investments, annual yield and internal return rate was calculated, weighted with inflation with net present value calculation. The calculation's aim was to prove that in the research, relevant investment options were showcased, which do lead to real returns over the years. The lowest risk, government securities options could lead to an average annual 2,28% yield in the past five years. While real estates with significantly higher risks can provide 5,5% annual return. Based on the Intelligent investor strategy, choosing



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the stock of the international company Target, stocks could lead to a 42,6% increase annually in the past years. Gold showcased a stable 3,2% growth, while crypto currencies, considering bitcoin performed a stunning 1.369% increase in each year in the past five years.



4. Figure: The growth of TARGET (Green) and the downfall of EXXON (Red) in the past five years

Source: Yahoo Finance

Investment option	Yield (annual)
Government securities	2,28%
Real estate	5,5%
Stocks	42,6%
Gold	3,2%
Cryptocurrency	1369,2%

5. Figure: Calculated return

Source: Own calculation; Own editing

Conclusion

Based on the primary research it can be stated that the asked multitude is risk averse, distrustful and mostly lacks the required financial information for confident investing. However, information is not the problem anymore. Because of the internet the investors can reach infinite data about companies and investment recommendations. The issue of the subject is more likely the lack of investment spirit. People are afraid from investments but are not motivated to gain information on the subject. The primary research showcased that the lack of trust did not decrease between the older and younger generations. This is an issue because



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financial institutions and banks could provide meaningful information and investment opportunities for their customers.

The analyzation of possible investment options showcased that all six reviewed forms of investments could lead to stable returns in the past years. However, it can be commonly stated that mastering the knowledge for investing is not enough. Investors must create their own investing strategies based on their emotional capabilities and they must learn to manage their feelings as well.

Schools and financial institutions should raise awareness and provide basic financial information to the young generation in order to keep them up to date on today's technology, the investment opportunities they have, and the emotions they have to manage in order to be able to successfully increase their savings.

It is understandable that it is very hard to earn the attention of young adults and to get them to make responsible decisions, but it can be stated that it would have been very useful in the past years if someone would have brought attention to investment options and to the importance of starting to save early. Even in the past five years, significant yields could have been earned. The key is that with today applications and opportunities, investors do not need large amounts of savings. Even ten or twenty euros can be placed into stocks or crypto currencies. The final conclusion of the research is not necessarily the need for financial education in high school. Young adults have all the necessary technology and opportunity to gain knowledge on the subject. However, it would be very important to raise awareness early for the young generation to warn them about the economic situation, about their future, and the possible positive aspects of investing even small amounts of their savings.

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