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RISK PROPENSITY AND SAVING BEHAVIOURS AMONG YOUNG PEOPLE – THE CASE OF POLAND

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Abstract. The primary objective of this article is to explore the saving behaviour of young Poles through the lens of behavioural finance. The study investigates the motives, preferences, and conditions influencing saving decisions among young individuals, particularly in the context of turbulent geopolitical phenomena, such as the pandemic, armed conflicts in neighbouring countries, and rising inflation. The research aimed to assess the financial behaviours of young Poles by examining the types of specific saving forms and beliefs regarding saving. The study explored the relationship between saving behaviour and the socio-economic characteristics of the surveyed individuals, as well as their inclination toward risky behaviour. A hypothesis was developed regarding gender differences in risk tolerance, with the expectation that men would exhibit a higher inclination toward risk-taking than women. The findings indicated that individuals with savings demonstrated a lower inclination towards stimulating risk compared to those without savings. Furthermore, those with savings demonstrated a higher inclination to take instrumental risks than their non-saving counterparts. Additionally, the study revealed that women are more proactive in their saving behaviour than men, and they also exhibit a lower propensity for stimulating risk.

Keywords: risk propensity; stimulating risk; instrumental risk; behavioural finance

INTRODUCTION

Saving involves managing one's budget to allocate a portion of income for future purposes or later use. It also entails postponing consumption by either reducing expenses or increasing revenue. The motives for saving do not always align with the intended use of saved money. Attitudes towards money and saving are influenced by financial literacy and economic socialisation (Ameliawati and Setiyani, 2018), which suggests that people, at all stages of life, aim to maintain a constant level of consumption. Savings-related offers, such as those involving financial investments, often target young individuals who are entering adulthood and making their first significant financial decisions. There is a common perception that young people often neglect financial matters and are unconcerned about securing their future (Brzozowska and Goszczyńska, 2002). Many lack awareness about the importance of savings, and a considerable number may not have significant savings accumulated.

This article aims to explore the saving behaviour of young Poles through the framework of behavioural finance. The study examines the factors influencing their saving decisions, including the underlying motives,

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preferences, and external conditions, particularly amid turbulent geopolitical phenomena, such as the pandemic, armed conflicts in neighbouring countries, and high inflation. The research investigates the types of saving behaviours prevalent among young individuals and their attitudes toward saving, while also considering how these behaviours are related to socio-economic characteristics and their risk-taking tendencies. A central hypothesis, drawing on studies by Byrnes et al. (1999) and other studies (Harris et al., 2006; Johnson et al., 2004; Weber et al., 2002), posits that men are more likely to engage in risk-taking behaviour than women. The study also hypothesises that awareness of current geopolitical events may influence young Poles' attitudes toward saving.

THEORETICAL BACKGROUND

Attitudes towards savings

Attitudes toward saving are significantly influenced by the objectives and priorities associated with saving money. They are also shaped by personal experiences, family circumstances, individual characteristics, and the broader economic environment in the country. A study on the drivers of savings behaviour by Gerhard et al. (2018) revealed that savings behaviour is a result of a mix of future needs and expectations and that psychological characteristics may predict household savings behaviour. In Poland, factors such as high inflation, a low minimum wage, and rising unemployment can make saving a lower priority for the average Pole. Moreover, many Poles encounter difficulties in consistently saving money (Frączek, 2012).

Generally, three main groups of people are characterised by different attitudes toward managing household budgets and saving (Kronenberg Foundation, 2011). The first group consists of "sensible" individuals, for whom moderation is the primary motivator when making financial decisions. In this group, there is an alignment between declarative intentions and actual behaviours. Those who declare and set the goal of accumulating a specific amount of money consistently work towards those objectives by saving regularly. The majority of individuals in this group believe in the value of saving and planning expenses, which contributes to a sense of financial security. This security allows for occasional indulgences or modest investments. A study by Świecka (2009) showed that individuals who maintain some savings and build a financial cushion (also known as a cash cushion or emergency fund) experience greater psychological comfort when facing potential financial challenges, reducing fear and anxiety.

The next group consists of individuals who live "from paycheck to paycheck". Most people in this group allocate all their income to immediate expenses, although many express the belief that saving is worthwhile. This attitude may stem from a low financial status and the desire to establish a sense of security. Despite believing they have control over their expenses, members of this group often fail to secure their future, resulting in a lack of financial stability. These individuals might feel compelled to forego many daily pleasures, associating saving with significant sacrifices, and therefore abstain from saving money. Due to their current life stage, they are less inclined to build future security, and saving is mainly seen as a way to address immediate concerns, such as illness or essential equipment repairs.

The final group consists of "carefree" individuals who are not inclined to accumulate money and instead embrace a consumerist lifestyle. They allocate most of their funds to immediate needs and see little value in saving, as they do not have extensive financial requirements. Many people in this group lack sufficient financial knowledge or simply disregard financial matters, possibly due to others managing this aspect of their lives for them. They tend to defer concerns about money to the future.

Antonides and Raaij (2003) distinguish four main levels of financial behaviour:

1. **Budget and Cash Management:** Consumers accumulate income, typically in a bank account, and allocate it toward current consumption. If monthly expenses are lower than income, residual savings occur. However, if expenses exceed income, unconscious borrowing takes place.
2. **Creating and Maintaining Buffer Stocks:** At this level, consumer behaviour primarily involves saving unused cash for current expenses at home, either in a savings or deposit account. With the advancement of financial markets, consumers may also invest in various types of insurance policies.
3. **Financing Various Purposes:** This level is associated with saving or borrowing money for specific consumption goals. A significant percentage of consumers prefer saving money over incurring debt, engaging in saving for a specific purpose.
4. **Property Management:** This final tier applies to high-income consumers and involves the accumulation

and allocation of capital through investments and speculation. Individuals engage in these practices to yield financial benefits, such as high interest rates and profits that surpass the inflation rate.

These levels are hierarchical. Once individuals take action at the initial level, they may progress to subsequent levels, deepening their financial knowledge and multiplying their accumulated funds. Consumers engaged in a particular level of financial behaviour are also inherently involved in the lower levels. However, these levels are not strictly isolated from one another. For example, some individuals may first save money for a specific purpose, such as the acquisition of a fixed asset, and only later begin accumulating buffer savings (Smyczek, 2007).

Risk propensity as a factor that shapes attitudes toward saving

Saving decisions are shaped by a multitude of external factors, often beyond an individual's control, as well as internal factors directly tied to the individual's current mindset. This mindset includes various cognitive and emotional elements related to the person's psychophysical state. Choices in saving behaviour are notably influenced by an individual's predisposition towards risk. Dahlbäck (1991) found a significant relationship between risk propensity and saving behaviour, noting that this predisposition strongly affects the financing of assets and the investment of capital in assets with varying degrees of risk.

The relationship between risk propensity and saving may also be inverse. A study by Carvalho et al. (2016) demonstrated that saving behaviour may influence attitudes toward risk and intertemporal choice. They suggest that access to savings could affect an individual's perception of scarcity, and that perception, in turn, impacts cognitive function in ways that shape risk attitudes and intertemporal choices. For example, individuals who save regularly appear to be less risk-averse and more capable of envisioning the potential uses of larger sums of money.

Research by Sobaih and Elshaer (2023) further highlighted evidence that financial knowledge has a significant positive influence on attitudes towards risky investment. Financial knowledge stimulates university students' positive attitudes toward investment., helping them develop better money management skills. Students with strong financial knowledge, particularly those supported by family and peers, were more likely to engage in riskier investments.

Attitudes toward financial risk and saving are particularly important in times of crisis. Prolonged stress caused by low socioeconomic status (low SES) can lead to what is known as "scarcity mentality". This mindset emerges when the experience of insufficient resources (e.g., food, money, or time) adversely affects cognitive functions such as attention, memory, and decision-making (Huijsmans et al., 2019).

In a pilot study on individuals from lower-income households, Poudel et al. (2022) found that risky decision-making strategies mediated the relationship between amygdala activity and real-world financial savings. By examining brain activity during decision-making and task performance in the Balloon Analogue Risk Task (BART), they found that heightened amygdala activity was linked with more strategic decision-making in the task. Hyperactivity in regions associated with reward processing and cognitive control may explain the tendency toward impulsive, risk-taking behaviours.

However, risk propensity can also be shaped by personality and identity (Branch and Berman, 2023). Identity development may help resist engagement in risky behaviours (Dumas et al., 2012), while adolescents who have not explored or committed to their identities tend to be more prone to risk-taking (Jones and Hartmann, 1988). Branch and Berman (2023) also found that the personality trait of narcissism can be a predictor of risk-taking, particularly among adolescents with a consolidated identity.

Risk attitudes can vary across domains, such as financial risk, occupational risk, leisure risk, and health risk (Murray et al., 2023). Literature suggests that financial crises, extreme economic shocks, and long-term macroeconomic conditions can all influence financial risk attitudes. Malmendier and Nagel (2011) found that individuals who lived through the Great Depression were more likely to avoid financial risks compared to those born after the event.

METHODOLOGY AND DATA

Participants

The study recruited 257 participants (169 female and 88 male), aged 14 to 30, from the general population. Participants were not compensated for their involvement. Table 1 provides a summary of the socio-demographic

Table 1. Socio-economic characteristics of the population (values in % if not stated differently) (n = 257)

Variables (categories)	Total	Male	Female
Age (years)			
14–22	73.5	52.3	84.6
23–30	26.5	47.7	15.4
mean age	21.6	22.8	20.9
Education level			
vocational or lower	10.9	20.5	5.9
secondary	22.6	36.4	15.4
secondary/currently in college	57.6	33.0	70.4
university	8.9	10.2	8.3
Field of study			
economic/financial	32.3	13.6	42.0
technical/mathematical/natural sciences	17.9	15.9	18.9
humanistic – social	12.1	11.4	12.4
others	11.3	13.6	10.1
this question does not concern me	26.5	45.5	16.6
Household size			
live alone	7.4	10.2	5.9
from 2 to 3 persons	40.5	42.0	39.6
from 4 to 5 persons	41.6	38.6	43.2
more than 5 people	10.5	9.1	11.2
Place of residence			
village	33.1	29.5	34.9
city up to 10 thousand inhabitants	18.7	19.3	18.3
city from 10,000 to 50,000 inhabitants	15.2	17.0	14.2
city from 50,000 to 100,000 inhabitants	5.1	5.7	4.7
city from 100,000 to 500,000 inhabitants	6.2	11.4	3.6
city over 500,000 inhabitants	21.8	17.0	24.3

Source: authors' calculations.

characteristics of the sample. Statistically significant differences were observed between men and women in terms of age (p = 0.000), level of education (p = 0.000), and field of study (p = 0.000). However, the chi-square test for independence revealed no significant differences for the remaining characteristics.

Materials

Participants completed an online survey designed to explore saving behaviours, saving motives, and risk attitudes affecting saving decisions. The survey consisted of two sections:

1. **Saving Behaviours and Motives:** This section assessed participants' saving habits, objectives, and preferences.
2. **Attitudes Toward Risk:** Risk attitudes were measured using the Stimulating and Instrumental Risk Questionnaire (Makarowski, 2012). This tool assesses two distinct dimensions of risk perception and interpretation:
   - **Stimulating Risk (S):** Reflects a tendency to seek excitement through risky activities, regardless of outcomes. High scores suggest a preference for physiological arousal and sensation-seeking.
   - **Instrumental Risk (I):** This represents a rational, goal-oriented approach to risk, where risks are taken only to achieve a positive outcome.

The questionnaire includes a 5-point Likert scale (5 – true, 4 – rather true, 3 – hard to say, 2 – rather untrue, 1 – untrue). The stimulating risk dimension comprises items 1, 3, 5, and 7 (score range: 4–20), while the Instrumental Risk dimension includes items 2, 4, and 6, with a score range of 3 to 15 (Makarowski, 2012).

RESULTS AND DISCUSSION

Saving behaviours results

The study revealed that 93.38% of respondents (n = 240) considered saving important, and 90.27% (n = 232) reported having current savings. A statistically significant difference was noted between genders: 92.9% of women had savings compared to 85.23% of men (p = 0.049).

The primary forms of saving were:

- **Bank Accounts:** Chosen by nearly 30% of respondents
- **Cash at Home:** 28.8% save money in cash at home.
- **Savings Accounts:** Used by 26.46%.

Participants cited the following main objectives for saving:

- **Future Goals (e.g., Home Purchase):** 46.3%
- **Emergency Funds:** 29.96%.

Frequency of saving behaviour included:

- **Monthly saving:** 36.57%.
- **Non-Regular Saving:** 33.46%.
- **No Saving:** 4.28%.

See Table 2 for the details on the key saving statistics and saving habits.

Table 2. Distribution of responses related to saving habits (%)

Questions and answers	value (n = 257)
Main sources of income	
salary	58.0
financial assistance from parents or other relatives	26.5
scholarship	7.0
social benefits	2.3
another source	6.2
Place of savings storage	
term deposit in the bank	7.8
cash in house	28.8
savings account	26.5
standard bank account	30.0
investments in the stock exchange	2.3
employee pension schemes (PPE)/employee capital plans (PPK)	0.4
another place	4.3
The main purpose of saving	
a specific purpose, such as building a house, buying an apartment	46.3
emergency	30.0
travels	10.5
passions	12.1
family/kids	1.2
Frequency of savings	
once a quarter	0.8
once a month	36.6
funds remaining at the end of the month from savings	18.3
once a week	4.7
every day	1.9
irregularly	33.5
at all	4.3

Source: authors' calculations.

The chi-square test for independence showed that gender significantly influenced the form of saving ($p = 0.023$). Women most frequently opted for cash at home (28.99%), while men preferred bank accounts (31.82%) and savings accounts (27.27%). The top reasons for saving were:

- **Financial security:** 48.25%
- **Funds for personal expenses:** 40.08%.
- **Retirement preparation:** 6.61%.

Saving decisions

33.46% of respondents made saving decisions independently, drawing knowledge from newspapers, radio, and podcasts. However, saving habits were primarily shaped by family and home life (35.8%), with 25.29% seeking advice from parents, relatives, and friends. Only 1.94% cited advertisements for financial products as a motivator and one respondent reported relying on professional financial advice.

Table 3. Distribution of responses about saving habits related to the ongoing economic turmoil (%)

Questions and answers	Value (n = 257)
Are you concerned about the deterioration of your financial situation shortly	
Yes	48.6
No	51.4
Has the current situation (pandemic/war/economic crisis) caused you to start saving more or more regularly?	
Yes	32.7
No	63.0
I do not save money	4.3
Has your attitude toward saving changed due to high inflation?	
Yes	42.4
No	29.2
Hard to say	28.4
Given the ongoing military conflict in Ukraine, do you consider it safe to save money in deposits or bank accounts?	
Yes	24.1
No	24.5
I have no opinion	51.4

Source: authors' calculations.

Table 4. Distribution of responses related to how savings decisions are made?

Answer	n = 257	%
I learned how to save at home/ school	92	35.8
I make saving decisions myself, based on my knowledge acquired from traditional media or the Internet	86	33.5
I save based on the advice of my parents or friends	65	25.2
I do not make any decisions because I do not save	8	3.1
I make decisions under the influence of advertisements for financial products	5	2.0
I use paid individual financial advice offered by experts	1	0.4

Source: authors' calculations.

When asked about adherence to saving plans:

- 53.31% admitted they do not always save the planned amount.
- 18.68% stick strictly followed their saving plan.
- 17.12% attempted to save but occasionally fell short of planned amounts.

Inflation impacted saving attitudes for 42.41%, while it had no effect for almost 30%, and 30% were undecided. Regular saving was more common among women (36.1%) than men (26.1%), but the chi-square test showed no significant gender effect on saving regularity (p = 0.128).

Influences on saving decisions

The survey also explored sources of knowledge influencing saving decisions. The majority of respondents learned about saving through:

- **Home or school education:** 35.8%.
- **Media and online sources:** 33.5%.
- **Advice from parents and friends:** 25.2%.

Only a small percentage of respondents relied on advertisements (2%) or professional financial advice (0.4%).

Risk propensity and saving behaviours

This study examined the levels of risk propensity among participants, focusing on two dimensions of risk:

- **Instrumental risk** – risk undertaken with a rational, goal-oriented approach, and requires logical thinking and prudence to maximise the likelihood of a positive outcome.
- **Stimulating risk** – risk taken for the thrill and excitement it provides, often associated with physiological arousal and adrenaline.

Socio-demographic differences in risk propensity

Significant differences in risk propensity were found for certain socio-demographic variables, but only for stimulating risk:

- **Gender** – men displayed a higher propensity for stimulating risk than women.

Table 5. Average results obtained by respondents regarding their tendency to particular types of risk

Variable	Simulating risk			Instrumental risk		
	total	male	female	total	male	female
Mean	10.97	12.14	10.37	11.73	11.56	11.82
Median	10.00	12.00	10.00	12.00	12.00	12.00
Standard deviation	4.01	4.21	3.77	2.32	2.50	2.22
Skewness	0.43	0.15	0.56	–0.86	–0.88	–0.82
Kurtosis	–0.48	–0.67	–0.24	0.54	0.34	0.63

Source: authors' calculations.

Table 6. Differences in risk propensity for socio-demographic variables

Variable	Gender		Age		Educational level		Field of study		Household size		Place of residence	
	Z	p	Z	P	H	p	H	p	H	p	H	p
Stimulating risk	3.35	0.001*	1.28	0.203	18.53	0.000*	24.20	0.000*	1.42	0.702	13.93	0.016*
Instrumental risk	–0.56	0.576	–0.20	0.841	3.24	0.355	2.64	0.620	0.641	0.887	6.69	0.245

*p < 0.05.
Source: authors' calculations.

- **Education, field of study, and place of residence** – differences in stimulating risk levels were also observed across these variables.

  See Table 6 below for details.

Relationship between risk propensity and savings

The study identified noteworthy differences in risk propensity between individuals with and without savings:

- **stimulating risk** – individuals with savings exhibited a lower propensity for stimulating risk compared to those without savings.
- **instrumental risk** – individuals with savings showed a higher propensity for instrumental risk compared to those without savings.

Table 7. Results of Mann-Whitney U Test

Variable	Possession of savings		Importance of savings	
	Z	p	Z	P
Stimulating risk	–2.4509	0.01425*	–2.4509	0.01425*
Instrumental risk	2.8092	0.00497*	1.9245	0.05429

*p < 0.05.
Source: authors' calculations.

Importance of saving and risk propensity

Participants who regarded saving as important demonstrated a lower willingness to engage in stimulating risk. While no statistically significant differences were observed in instrumental risk levels based on the perceived importance of saving, there was a general tendency for those valuing saving to prefer instrumental risk.

CONCLUSIONS

This study sought to explore the saving behaviours of young Poles within the framework of behavioural economics. These behaviours were examined in terms of various motives, attitudes, and their relationship with risk propensity, particularly among women. Key findings highlighted the interplay between the awareness of saving's importance, its utilisation, and decision-making processes, providing insight into specific dimensions of these behaviours.

Additionally, the study evaluated the influence of the global geopolitical situation and assessed levels of stimulating and instrumental risk propensity. Variations in the saving behaviour were also analysed based on socio-demographic variables. The findings revealed that women are more proactive savers than men and exhibit a lower propensity for stimulating risk, consistent with prior research by Zhou et al. (2014).

Key findings

1. **Risk propensity and gender**

- Hypothesis 1, predicting a higher level of stimulating risk propensity in young men was confirmed.
- Women demonstrated lower levels of stimulating risk and a greater inclination toward proactive saving compared to men.

2. **Geopolitical factors and savings**

- Hypothesis 2, regarding the impact of the geopolitical situation on saving decisions, was not supported.
- This finding may reflect the challenge of connecting macro-level geopolitical phenomena, as presented in media narratives, with individual financial behaviours at a micro level.

3. **Savings and risk attitudes**

- Individuals with savings displayed a lower inclination for stimulating risk but a higher propensity for instrumental risk compared to non-savers.
- These results align with Carvalho et al. (2016), who suggested that saving behaviours may enhance one's ability to envision future possibilities, thereby influencing risk attitudes. In this study, having savings was associated with a higher likelihood of engaging in instrumental risk-taking, which could be viewed as a strategy to improve financial well-being.

Limitations of the Study

While this research offers valuable insights, several limitations should be acknowledged:

1. **Sample size and demographics**
   The study included only young participants from Poland. Broadening the sample to include individuals from diverse national and cultural backgrounds could enhance the generalisability of the findings. An international scope would allow for cross-cultural comparisons of risk attitudes and financial decision-making.

2. **Scope of financial decisions**
   The study focuses primarily on saving behaviours. Future research could extend the scope to encompass a wider array of financial activities, such as financial planning, investment decisions, willingness to pay, and gambling behaviours.

3. **Financial literacy and psychological factors**
   The study did not delve into the role of financial literacy or psychological dimensions. Future studies could examine how factors such as emotional intelligence, self-esteem, and financial knowledge shape risk attitudes and financial behaviours.

CONCLUSION

Overall, this study highlights the intricate relationship between risk propensity, saving behaviours, and sociodemographic variables among young Poles. By addressing its limitations and expanding the scope of future research, a more comprehensive understanding of financial behaviours and their psychological underpinnings can be achieved.

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