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Expected inheritance and pension attitudes among young people in EU post-communist vs. Anglosphere countries

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Abstract. The goal of the study is to evaluate the influence of participants' expected inheritance (assets) on their attitudes toward etatism and pension benefits. The primary question is whether young people with an expected family inheritance exhibit different attitudes in these areas. Additionally, the study examines attitudes across gender, age, and country. One of the most significant challenges of pensions is preserving value over an individual's lifetime, as there is no definitive answer regarding which assets perform best in this regard. Public

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skepticism toward the pension system and the state is common, complicating matters further. This problem is particularly pronounced among younger individuals who have yet to assume full economic and financial responsibilities. They are often less economically literate and have limited access to financial advice. However, they do receive some foundational prior knowledge from their homes. The rationale for incorporating attitudes towards pensions as a valid variable is that prior knowledge plays a crucial role in judgments on specific issues, such as preserving value in the future or evaluating long-term investments. Even without personal experience, individuals have attitudes that shape their judgments. Overall, more than 700 people participated in the study. After removing outliers, N= 531 valid cases from seven countries: Poland, Romania, the USA, the UK, Canada, and Ireland. A power analysis preceded the testing of the MANOVA model. We found a significant difference in attitudes among participants who grew up in families investing in real estate and tangible assets. Those from families that invested in tangible assets exhibited a stronger concern regarding pension benefits, implying that people with such investments feel less secure about their pensions. Additionally, we found a significant interaction effect between the type of country and expected inheritance. In the Anglosphere countries, people have more positive attitudes toward etatism and pension benefits compared to those in Poland and Romania. This outcome confirms stronger kinship ties in the latter countries and a higher cultural attachment to real estate.

Keywords: pension, inheritance, Poland, Romania, English-speaking countries

JEL Classification: D14, H55

1. INTRODUCTION

The pension system plays many essential roles in the economy. It has a significant macroeconomic effect due to the multiplier effect of social expenditures (Yurchyk et al., 2024), positively contributes to the reduction of income inequality (Mishchuk et al., 2018). (Barr & Diamond, 2006) indicated that, on a microeconomic scale, it smooths income throughout the course of one's life. Pensions allow individuals to sustain themselves during their senior or retirement years. Since it is impractical to save real goods from youth to old age; therefore, the only option is to save value in certain assets, hoping that these assets will preserve their value over time. However, the theory of value, explored by many economists, does not provide a clear consensus on which assets are best for preserving value over long periods, particularly in relation to pensions. Although pension adequacy is extensively researched (Chybalski & Marcinkiewicz, 2015; Hernández-Mejía & Moreno-García, 2023), there is a need to view this issue from the perspective of young people.

The perception of a pension's value varies with age. Younger workers tend to be more optimistic about new pension rules than older individuals, as they have less or no experience with the issue. In contrast, older individuals are often more concerned about potential adverse outcomes due to past experiences (Hekken et al., 2022; Low et al., 2021). Young people who typically do not acquire sufficient financial knowledge exhibit lower trust in the system and myopia – prioritizing short-term financial goals (Foster, 2017).

Social class adds another layer of complexity. Higher social classes are usually more financially literate, have better access to financial advice, and enjoy more stable employment. These factors influence both the

cognitive and non-cognitive views of retirement (Gough & Niza, 2011). Additionally, younger individuals, particularly students, regardless of employment status, tend to support the European idea of a developed social system (Social Europe), as this was a significant and positive parameter in the regression analysis of such attitudes (Baute et al., 2019).

Taking the above into account we add above this attitudes towards pension benefits and etatism. The first can be defined as pension benefits concerning also non cash items. The latter indicates how a person accepts states control of the economy. Therefore the goal of our research is to assess the connection between those attitudes and Investment types in the family, taking into account demographic characteristics either. Young people often lack the capacity to fully understand economics, focusing instead on the present and foreseeable future while neglecting to anticipate the economic challenges and needs they may face in their senior or post-retirement years.

In the following sections, we will discuss literature review, our hypotheses in detail, describe our participants and methods used, and estimate the MANOVA model with a power check to verify our hypotheses. The final section will discuss our findings.

2. LITERATURE REVIEW

When planning for retirement, people consider expected inheritance in conjunction with pension benefits. Specifically, many people, especially those from higher social classes, anticipate future inheritance, such as their parent's house, savings, and investments. This expectation can significantly influence retirement decisions, as inherited assets are often perceived as long-term value. This perception arises from the "mental accounting effect," where inherited wealth is mentally allocated to a different account, affecting spending and investment patterns connected to long-lasting investments. The stronger the relationship with the deceased, the more conservative, utilitarian, and safe the investment choices tend to be (Tykocinski & Pittman, 2013). The study highlights the psychological impact of inheritance and how it influences investment choices. Additionally, the perceived value of assets tends to increase as psychological distance decreases (Polman et al., 2018; Bednarczyk et al., 2023).

Gender is a significant factor in shaping perceptions of social benefits and the state's role, including etatism. For instance, research indicates that women generally exhibit higher utilitarian benefit attitudes, while men demonstrate higher hedonic benefit attitudes (Zhou et al., 2014). Consequently, on average, women are more likely to have favorable attitudes toward pension benefits, which support elderly individuals, and a greater inclination toward state control.

Culture is also crucial for understanding attitudes toward etatism and pension benefits. According to the seminal work of Esping-Andersen (1990), countries such as the USA, UK, Canada, and Ireland are classified as liberal welfare states. Esping-Andersen use of the term liberal emphasizes the means test coupled with the free market rather than a pure classical understanding or corporatist maintenance of social hierarchies. In these countries, social benefits are generally more means-tested and targeted than universal, emphasizing assisting those in lower-income groups. State regulations are typically less stringent compared to other forms of capitalism, reflecting a preference for market-driven solutions and individual responsibility. Although the roots of the Anglosphere's socioeconomic world remain, the system has undergone significant changes over the past thirty years in response to various socioeconomic challenges. These changes have been marked by notable post-industrial reforms, including increased liberalization, rising socioeconomic inequalities, and a middle-class shift toward center-right politics (Deeming, 2016).

Conversely, post-communist countries such as Poland and Romania have experienced significant economic transformations. In Poland, this transformation occurred rapidly, leading to increased inequalities (Maszczyk, 2015). In Romania, youth unemployment remains a persistent issue into the early 2020s, rooted

in the economic transformation (Borlacu et al., 2021). Additionally, both countries have shifted their pension systems from defined benefits to defined contributions, resulting in a gradual decrease in pension adequacy and a decline in trust in the system.

Summing up, in addition to considering the type of investment pursued in the family households of the participants, and with a further dimension and focus on expected inheritance, we incorporate fixed factors such as gender, age, and culture to examine their effects on the dependent variables: attitudes toward etatism and pension benefits. Both of these attitudes are encompassed within welfare theory. Post-communist countries often maintain etatistic attitudes, although liberal attitudes can emerge through economic transformation. Notably, in Poland, there was a shift in attitudes following the 2008 financial crisis (Zagórski, 2018). When assessing overall etatist attitudes, it is essential to distinguish them from attitudes toward pension benefits, as the latter reflects specific expectations and needs regarding pension provisions. We define our understanding of the term "attitude" based on accepted conventional psychological definitions. According to Eagly and Chaiken (1993, p. 1), "attitude is a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor." This suggests that individuals can have positive or negative feelings, which subsequently inform their opinions about a given "something."

The first theory on attitudes by Thorndike (1929) posited three dimensions of attitudes: emotional, cognitive, and behavioral. However, attitudes are generally not stable over time, as evidenced by the low correlation between attitude and behavior ($r = .30$, Fishbein & Ajzen, 1974/2018). Proponents of the three-dimensional attitude theory propose that cognitive processes precede attitude formation—initially, an individual forms a judgment stored in memory. Prior knowledge significantly affects the processing of new information, leading to the formation of new judgments and subsequent attitudes (Albarracín et al., 2005, p. 6).

Eagly and Chaiken (1993), among others, introduced a fresh perspective on attitudes, emphasizing that they are predominantly emotional states. What is measured are the emotions caused by things, situations, and people. Attitudes can pertain to physical objects, such as a dress or a certain kind of food, as well as to a person or group of persons (psychologists often refer to prejudice against a nation or ethnic group in this context, while cognitive stereotypes are considered part of psychological schemas, Nisbett & Ross, 1980). Most psychological questionnaires on attitudes measure emotions toward given phenomena (e.g., Sexton et al., 2006).

Our research incorporates both psychological and sociological approaches to understanding attitudes. While we recognize that attitudes are emotional responses, we focus specifically on their relation to economic phenomena. In this context, attitudes reflect emotional judgments regarding family savings, etatism, and pension benefits.

The concept of measuring attitudes differs between psychology and sociology. In psychology, attitudes are considered unobservable constructs (latent variables) comprised of several items, necessitating reliability checks to account for measurement errors (Albarracín et al., 2005, p. 28). In sociology, attitudes are seen as observable phenomena, focusing on social judgments rather than individual predispositions to act in specific ways (Voas, 2014). Our research defines attitude as a fundamental concept concerning judgments on issues, measured as an unobservable variable. We agree that attitudes are emotional responses; however, they pertain to economic phenomena in this context. Specifically, these attitudes reflect emotional judgments regarding family savings, etatism, and pension benefits.

We assess two types of attitudes: etatism and pension benefits. Etatism, or statism, is the belief that the state should control many aspects of social and economic life. This attitude is also linked to associational activities (Schofer & Fourcade-Gourinchas, 2001). Attitudes toward pension benefits reflect a person's

support for more privileges for pensioners, such as higher pensions for those who have worked under challenging conditions or equal benefits for women who have lost work periods due to childbearing.

3. METHODOLOGY

As noted above, we have four fixed factors: Gender, Country, Age, and Types of Investment in the Family. Using the MANOVA model, we assess how these independent groups influence the dependent metric variable: attitudes toward etatism and pension benefits. Our particular focus is on expected inheritance, while the remaining grouping variables serve as covariates. This dual purpose enhances the model's robustness and verifies its accuracy, testing whether the grouping variables exhibit similar characteristics, which are well-documented in the literature.

The hypotheses are as follows:

1. Gender (Female vs. Male): Gender is expected to influence mean attitudes toward etatism and pension benefits. Females are anticipated to exhibit higher attitudes toward pension benefits compared to males. Although etatism may not show significant differences, females are expected to demonstrate more utilitarian attitudes rather than general beneficence.
2. Country (East Europe vs. Anglosphere): We do not anticipate a significant main effect of country in differentiating mean attitudes toward etatism and pension benefits. However, we hypothesize an interaction with the type of family household investment. The Anglosphere is characterized by a liberal welfare state, whereas post-communist countries have introduced liberal reforms. Thus, the country effect may be more pronounced in specific issues rather than as a primary effect.
3. Age (Early Emerging Adulthood (18-20) vs. Mid Emerging Adulthood (21-24) vs. Late Emerging Adulthood (25-30)): Gradual differences are evident between these age phases (Arnett, 2000). Older participants are expected to exhibit higher economic knowledge and commitment, as both economic literacy and overall maturity increase with age. The age brackets can vary across cultures. We adjust it to our sample (Lang, et. al., 2023)
4. Investment Types in familial households (Real Estate vs. Tangible Assets vs. Extended Assets with Inheritance Expectations): We hypothesize a main effect when comparing real estate and tangible assets. Attitudes toward pension benefits are expected to be higher among those with investments in tangible assets, as these assets are associated with higher risk, leading to a preference for better pension benefits.

3.1 Participants

Participants originated from Canada, Poland, Romania, the United States, the United Kingdom, and Ireland. At the beginning of the study, we received 741 surveys: 241 from Poland, 174 from Romania, and 326 from English-speaking countries. We excluded outliers, incomplete responses, and cases where the participants' ages did not meet our criteria (18-30 years). After applying these exclusion criteria, we obtained 531 valid surveys for further analysis.

Table 1

Gender, country, and age of the sample

Country	GENDER					
	Female			Male		
	AGE			AGE		
	N	Mean	Standard Deviation	N	Mean	Standard Deviation
Poland	123	19	1	72	20	2
Romania	93	21	3	41	21	2
USA	96	22	2	56	22	2
UK	32	22	2	10	22	2
Canada	2	21	1	3	24	2
Ireland	3	24	2	0	.	.

Source: Authors' calculations

Summing up, we have two groups of countries: Poland and Romania (N=329), as post-communist EU members and English-speaking countries (N=202). In the whole sample, N = 349 women and 182 men. It should be noted that further reductions of the database were conducted due to outliers (described later).

3.2. Procedure & applied method

All participants were informed about the scientific purpose and anonymity of the study. They were also told that they could withdraw from the survey at any time. English-speaking participants (from Canada, the U.S., and the U.K.) completed the questionnaires via CircleSurvey and SurveySwap, in addition to economic students at Flagler College in St. Augustine, Florida. Polish and Romanian participants were recruited from the International Relations Studies at the Faculty of Economics, University of Gdańsk (Poland), and the Faculty of Economic Science at "Vasile Alecsandri" University of Bacău, respectively, and they filled out the questionnaires using Google Forms.

Polish and Romanian participants were not compensated for their participation, whereas English-speaking participants were rewarded with double exchange points on the survey platforms. Additionally, \$1 was donated to the "Nova Ukraine" foundation for each completed survey to expedite data collection and deter participation from individuals with atypical social traits. We do not believe this affected our data or created a significant difference from the East European sample; it was a common practice to gather data more quickly.

After reading the cover story, which explained the aim of the study and the rules, participants provided their demographic information: country, age, gender, number of siblings in the family, birth order, field of study, and whether their college was private or state-owned. They then answered 17 questions concerning pension benefits, attitudes toward Etatism, and institutional attitudes. Participants also indicated the forms of savings in their families and finally specified the determinants of the pension that would meet their expectations. The total number of questions was 35, leading us to name it the Towards Pension Questionnaire (APQ-35).

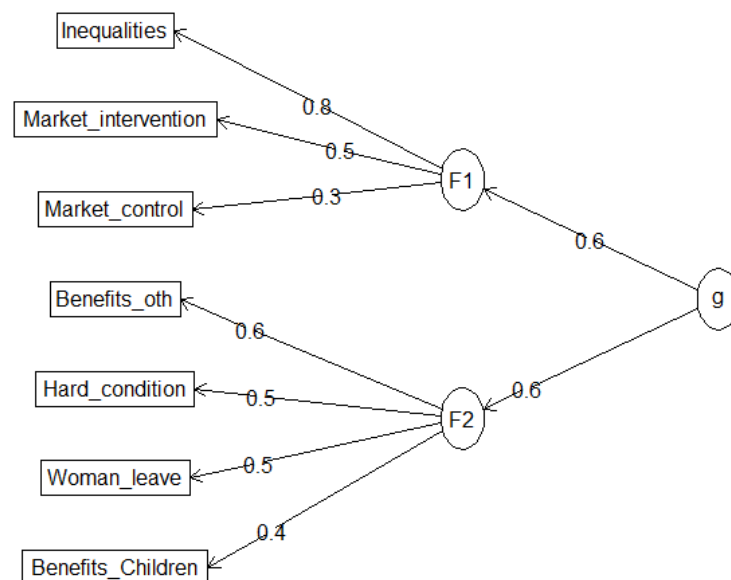
At the end of the study, questions on attitudes toward pensions were presented. Native speakers and experts in economic science translated all items.¹

¹ From Polish to English: Mark Biernat with Marcin Brycz, from English to Romanian: Laura Țimiraș with Marcin Brycz

3.3. Creation of Attitudes Towards Pension Questionnaire (APQ-35)

One important goal of the study was to develop a reliable and accurate questionnaire measuring attitudes toward pensions. We started with an initial pool of items, consisting of 18 positions on the dimensions of pension benefits, institutional trust, Etatism, and fairness of pension distribution. Using principal component analysis, we selected two dimensions: etatism and pension benefits. The questions were rated on a Likert scale from 1 (disagree) to 5 (agree).

Our next step was to select the best variables reflecting Etatism and Pension Benefits by utilizing uniqueness in the Principal Component Analysis. Following this, we checked for consistency using McDonald's Omega, which is appropriate for our questionnaire, which includes several scales. We began by eliminating items that did not fit our assumptions of representing etatism and pension adequacy factors. Items were eliminated based on their highest uniqueness. Finally, we calculated McDonald's (1999) Omega, resulting in $\Omega = 0.62$ and $\Omega_{\text{Total}} = 0.7$.



Graph 1. Factor Analysis of Attitudes

Source: Authors' calculations

In the diagram (Graph 1), the loadings, factors (F1, F2), and the common factor (g) are shown. The Root Mean Square Error of Approximation (RMSEA) for the model with two equations is 0.071, with a Comparative Fit Index (CFI) of 0.923 and a Standardized Root Mean Square Residual (SRMR) of 0.046. The RMSEA index for the whole model is 0.059 (95% CI: 0.059 to 0.112). These statistics indicate that the item data fit the model well, though not perfectly.

Factor one (F1) can be named Etatism, as it includes the following items: i) there will be inequalities without government intervention, ii) the government should intervene in specific markets and iii) the market will not reach equilibrium without government control. Factor two (F2) can be named Pension Benefits, as it includes attitudes toward i) benefits to the elderly, ii) contributions to women's pensions during maternity leave, iii) additional money for working in challenging conditions and iv) benefits of having more children.

The raw data includes outliers, observations that differ significantly from others, potentially indicating a different generating process. In electronic surveys, outliers may arise when participants do not fill out the forms carefully. Outliers negatively affect data distribution, inference, and credibility (Uher et al., 2022). Identifying outliers in a questionnaire is more complex than in a single series, as one must find outliers across all items. One of the most popular methods for this is Mahalanobis distance and its subsequent enhancements. In this research, we used Mahalanobis distance to identify outliers. After multiple attempts, the best method for obtaining high reliability was Mahalanobis distance for dependent variables with a Chi-square distribution test ($p > 0.05$). The factors' consistency was then re-evaluated.

4. EMPIRICAL RESULTS AND DISCUSSION

Our hypothesis necessitates a comprehensive model to capture the outlined dependencies. Given the questionnaire's originality, we have carefully examined the relationships between variables. We have selected pension benefits and etatism as our dependent variables, and gender, country, age, and types of family investment are our grouping variables.

4.1. MANOVA

Our model includes two dependent variables and four grouping variables: 2 Gender (Female vs. Male) x 2 Type of Country (Poland and Romania vs. English-speaking countries) x 3 Types of Pension Investment (Real Estate vs. Tangible Assets vs. Extended Assets with Inheritance Expectations) x 3 Age groups (Early Emerging Adulthood (18-20) vs. Mid Emerging Adulthood (21-24) vs. Late Emerging Adulthood (25-30)). This results in a $2 \times 2 \times 3 \times 3 = 36$ group design, with five covariates (including one interaction: Investment Types in the Family x Country).

We aimed to verify the hypothesis that different types of family investments influence means of etatism and pension benefits attitudes. Additionally, we evaluated whether the country of origin interacts with this relationship. Furthermore, we assessed differences across the grouping variables mentioned. Although gender and age were not our primary focus, they provided additional explanatory power for the central hypothesis.

Before model estimation, we ensured that the assumption of homoscedasticity was met. The Box M test ($F(78, 4349,7) = 0,754, p > 0,1$) indicated equality of variance matrices across dependent variables. A high p-value also suggested a normal distribution of dependent variables, as the test is sensitive to this error (Hair et al., 2010, p. 365). Levene's tests for dependent variables showed $F(31, 496) = 0,745, p > 0,1$, and $F(31, 496) = 0,175, p > 0,05$ for etatism and pension benefits, respectively, indicating equal error variance across groups. This allowed us to conduct the MANOVA analysis.

The model, built using a hierarchical approach (Kendall et al., 2020), yielded significant results. All tests (Pillai's Trace, Wilks' Lambda, Hotelling's Trace, Roy's Largest Root) were significant at the $p < 0,051$ level, underscoring the importance of the main effects and one interaction. We also applied power analysis to ensure control of both types of statistical errors, further validating the significance of our findings.

Table 2

Power analysis based on Pillai's Trace

Variable	Pillai's Trace	Power (1- β error prob.)	F Tests of Between-Subjects Effects	
			Etatism	Pension Ben.
Corrected Model			3,450***	7,606***
Gender	0,016	0,766	0,182	8,458**
Country	0,036	0,916	4,149*	18,255***
Investment types in the Family	0,019	0,808	1,060	5,062**
Age	0,041	0,939	6,134**	8,312***
Investment types in the Family x Country	0,025	0,851	4,442*	3,768*

Source: Authors' calculations; $\alpha = 0,05$ error probability, sample of size = 528, number of groups: $2 \times 2 \times 3 \times 3 = 36$, number of predictors = 5, number of variables = 2. Own calculations in G-Power software. Critical F is 1,285. * $p < 0,05$, ** $p < 0,01$, *** $p < 0,001$.

In Table 2, we assess Type I error using F Tests (fourth and fifth columns). The F tests are listed with associated p-value levels denoted by asterisks. All groups within all fixed factors differ significantly with respect to the pension benefits dependent variable. This implies that means of pension benefits attitudes differ across gender, country, investment types in the family, age, and the interaction between investment types in the family and country. The effect of etatism is weaker, with significant differences in means for country, age, and the evaluated interaction.

Power analysis, conducted using the G-Power calculator (Faul et al., 2007 and 2009), indicated statistical power exceeding the reasonable level of 0,8 for all variables except gender, which was slightly lower (0,76). Power analysis further suggests that age is crucial for understanding pension relationships and implications for future life. The power is 0,93, and the significance is very high.

The main effect of the corrected model for etatism is $F(8, 2.105) = 3,450$ ($\eta^2 = 0,05$), and for pension benefits is $F(8, 3.585) = 7,606$ ($\eta^2 = 0,105$), indicating that the whole model explained etatism and pension benefits in 5% and 10%, respectively.

Despite significant differences across groups, we investigated the sources of these differences, particularly focusing on investment types in the family and age. The battery of post hoc tests is shown in Tables 3 and 4

Table 3

Post hoc test for main effect of Types of Investment in the Family on Pension Benefits

(I) Types of Pension Investment in Family	(J) Types of Pension Investment in Family	Mean Difference (I-J)	Std. Error	Statistical Significance of Post Hoc Comparison		
				LSD	Bonferroni	Tukey HSD
Real Estate	Tangible Assets	-0,347	0,088	<,001	<,001	<,001
	Enhanced Assets with Expected Inheritance	-0,213	0,103	0,040	0,120	0,099
Tangible Assets	Enhanced Assets with Expected Inheritance	0,134	0,075	0,075	0,226	0,177

Source: Authors' calculations

Table 3 gives us insight into the main effect. The most important difference is between real estate and tangible assets. Pension investments in real estate are associated with a lower attitude towards pension benefits compared to tangible assets by 0,347, which is statistically significant across all tests performed.

Enhanced assets investment in the family has a higher impact on pension benefits attitudes than real estate (mean difference = 0,213), but statistical significance is confirmed only by the LSD test.

Table 4

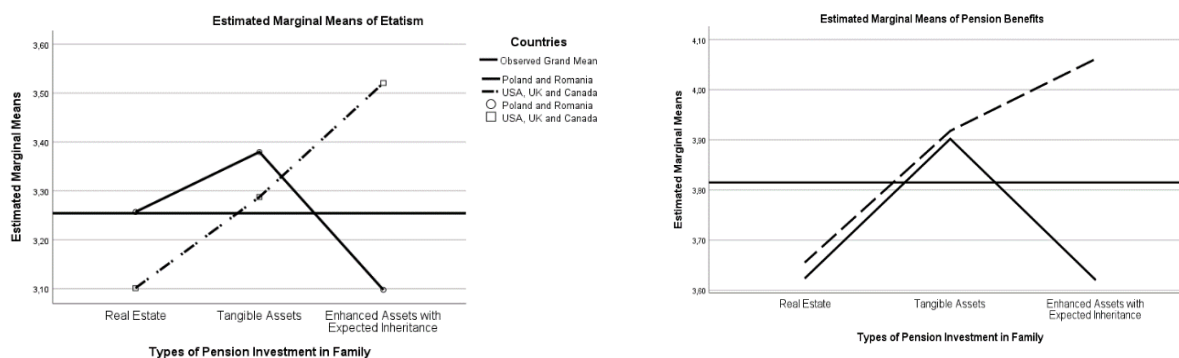
Post hoc test for main effect of Age on Etatism, and Pension Benefits

	(I) AGE	(J) AGE	Mean Difference (I-J)	Std. Error	Statistical Significance of Post Hoc Comparison		
					LSD	Bonferroni	Tukey HSD
Etatism	Early Emerging Adulthood (18-20)	Mid Emerging Adulthood (21-24)	-0,266	0,072	<,001	<,001	<,001
		Late Emerging Adulthood (25-30)	-0,330	0,125	0,009	0,027	0,024
	Mid Emerging Adulthood (21-24)	Late Emerging Adulthood (25-30)	-0,063	0,128	0,621	1,00	0,874
Pension Benefits	Early Emerging Adulthood (18-20)	Mid Emerging Adulthood (21-24)	-,324	,063	<,001	<,001	<,001
		Late Emerging Adulthood (25-30)	-0,359	0,110	0,001	0,004	0,004
	Mid Emerging Adulthood (21-24)	Late Emerging Adulthood (25-30)	-0,035	0,113	0,758	1,000	0,949

Source: Authors' calculations

4.2. Pension types of Investment and country effect

The next step is to assess the country's effect on etatism and pension benefits by pension types of investment. The marginal means are shown in Graph 2.



Graph 2. Interaction between Types of Pension Investment in Family, Etatism for group of countries

Source: Authors' calculations

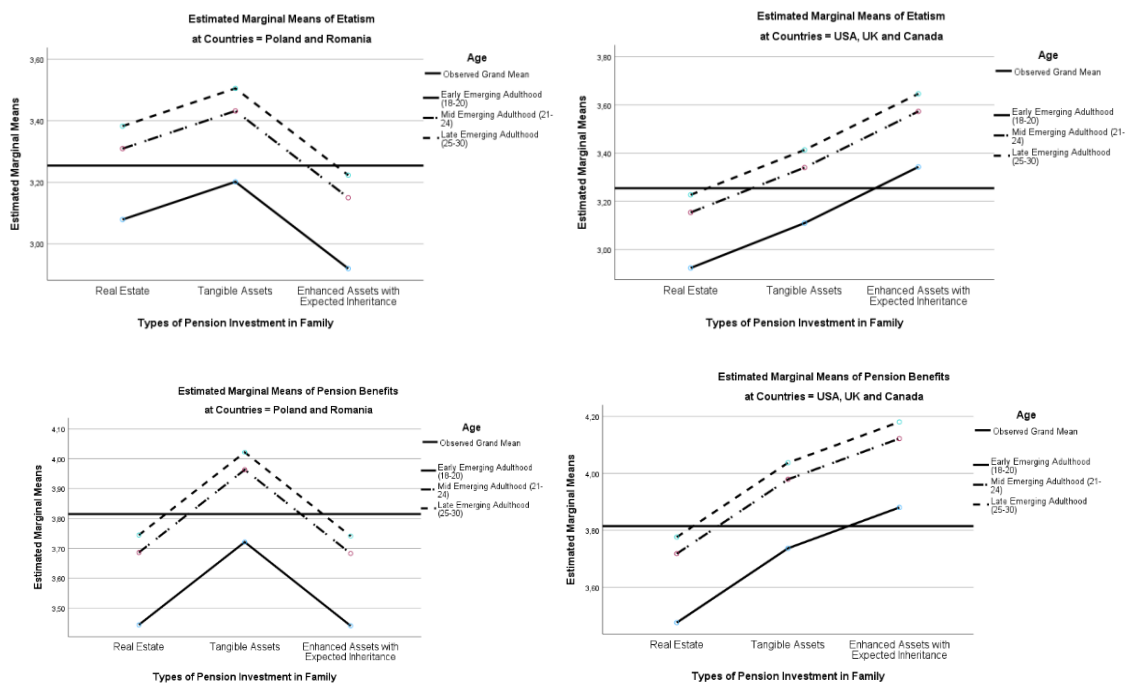
Graph 2 presents disordinal interactions between countries for tangible assets and expected inheritance. Visual inspection suggests that in Anglosphere countries, attitudes toward etatism and pension benefits increase with the type of investment, from real estate to tangible assets to expected inheritance. The situation in Poland and Romania differs: for etatism, the lowest mean is expected inheritance, followed by

real estate, and the highest for tangible assets. For pension benefits, tangible assets have a higher mean than other categories.

We employed a battery of marginal means tests with Bonferroni significance to confirm conclusions from visual inspection. The means are significantly different across countries for expected inheritance for both etatism (difference = 0,423, std. error = 0,161, $p = 0,009$) and pension benefits (difference = 0,439, std. error = 0,141, $p < 0,002$). Additionally, in Poland and Romania, there is a significant difference between tangible assets and inheritance for etatism (difference = 0,282, std. error = 0,111, $p = 0,035$) and pension benefits (difference = 0,277, std. error = 0,098, $p = 0,013$).

4.3. Age, Country, and Pension Investment in Family

The graphs below present detailed insights into the interaction between age, country, and types of investment in families. Visual inspection suggests a similar pattern to that seen with countries alone, with no significant age and country interaction.



Graph 3. Investment type in the family, countries and age

As age increases, new development stages are achieved. Visual inspection of the graphs indicates different patterns of attitudes across country groups. Higher age correlates with higher attitudes toward pension benefits and etatism in both country groups. In all cases, the difference between early and mid-emerging adulthood and late-emerging adulthood is significant at the 0,05 level. In contrast, the difference between mid-emerging adulthood and late-emerging adulthood is insignificant in all specifications shown on the graph. There are significant differences between countries for expected inheritance across all age categories for both etatism and pension benefits at the level of less than 0,05. These outcomes indicate that age is crucial when considering long-term investments, and expected inheritance has a strong effect across countries.

Gender as a grouping variable shows a significant effect on attitudes toward pension benefits (etatism is not statistically significant). Post hoc Bonferroni tests indicate a significantly higher mean among females (difference = 0,197, std. error = 0,063, $p < 0,002$). Tests for differences between countries (Anglosphere

vs. Poland and Romania) indicated no significant difference for etatism (difference = 0,058, std. error = 0,121, $p = 0,63$) and for pension benefits (difference = 0,162, std. error = 0,107, $p = 0,129$).

5. CONCLUSION

Our model has revealed a significant finding: women, in general, are more likely to support etatism and pension benefits. This finding, which aligns with existing literature, sheds light on women's disadvantaged position in the labor market, particularly regarding pension benefits and issues such as childbearing. This validates our model and provides a deeper understanding of the societal dynamics at play (Ortiz-Ospina, 2024).

Age, as our model and existing literature confirm, is a key factor in shaping attitudes toward etatism and pension dependencies. The fact that young adults aged 25-30 tend to be more future-oriented is a well-documented phenomenon, further validating the robustness of our model (Ranta et al., 2020). This underscores the importance of considering generational differences, as these attitudes are likely to shift as the population ages.

Our research highlights the dependency of pension attitudes on the type of investment within the family household. Across the entire sample, there is a notable difference between family households with investments in real estate and funds/savings. The only significant difference observed is in attitudes toward pension benefits. Those who invest in real estate exhibit lower attitudes toward pension benefits, suggesting that real estate investment provides a sense of security.

There is a significant difference in attitudes toward etatism and pension benefits between Anglosphere countries and Poland and Romania. These attitudes are much lower in the latter countries, suggesting that anticipating an inheritance relieves individuals from worrying about the future. Furthermore, there is a notable difference between tangible assets (funds, savings) and inheritance, with the latter showing lower attitudes toward pension benefits (only in Poland and Romania). This outcome can be attributed to the cultural significance of real estate in both countries—it is highly valued both as a status symbol and as an asset due to its stable nominal value. This underscores the need to consider the cultural differences between the Anglosphere and Poland and Romania, where inheritance and real estate are seen as more important.

REFERENCES

- Albarracín, D., Blair T. J., & Zanna, M. P., (2005), [ed] *The Handbook of Attitudes*, Psychology Press, Taylor & Francis Group, New York and London.
- Barr, N., & Diamond, P. (2006). The economics of pensions. *Oxford Review of Economic Policy*, 22 (1), 15-39. <https://doi.org/10.1093/oxrep/grj002>
- Baute S., Meuleman B., & Abts K. (2019). Welfare State Attitudes and Support for Social Europe: Spillover or Obstacle? *Journal of Social Policy*. 2019 ;48(1), 127-145. <https://doi.org/10.1017/S0047279418000314>
- Bednarczyk, T. H., Szymańska, A., Ostrowska-Dankiewicz, A., & Silva, P. (2023). Life insurance with insurance capital funds as a form retirement savings: Determinants for the self-employed. *Journal of International Studies*, 16(3), 127-143. <https://doi.org/10.14254/2071-8330.2023/16-3/7>
- Burlacu, S., Diaconu, A., Balu, E. P., & Gole, I. (2021). The economic and social effects of unemployment in Romania. *Revista de Management Comparat International*, 22(1), 21-27.
- ByIcek A., Fishbein, M., Lohmann, S., & Albarracín, D., *The Handbook of Attitudes*, Volume 1: Basic Principles Edition 2nd Edition First Published 2018 Imprint Routledge Pages 59 eBook ISBN 9781315178103
- Deeming C. (2017). The Lost and the New 'Liberal World' of Welfare Capitalism: A Critical Assessment of Gøsta Esping-Andersen's *The Three Worlds of Welfare Capitalism* a Quarter Century Later. *Social Policy and Society*. 16(3), 405-422. <https://doi.org/10.1017/S1474746415000676>
- Eagly, A. H., & Chaiken, S. (1993). *The psychology of attitudes*. Harcourt Brace Jovanovich College Publishers.

- Esping-Andersen, Gøsta (1990). *The three worlds of welfare capitalism*. Princeton, New Jersey: Princeton University Press.
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41, 1149-1160.
- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39, 175-191
- Foster L. (2017). Young People and Attitudes towards Pension Planning. *Social Policy and Society*. 16(1), 65-80. <https://doi.org/10.1017/S1474746415000627>
- Gough, O., & Niza, C. (2011) Retirement Saving Choices: Review of the Literature and Policy Implications. *Population Ageing* 4, 97–117. <https://doi.org/10.1007/s12062-011-9046-4>
- Hair, J.F., Black, W.C., Babin, B.J. & Anderson, R.E. (2010) *Multivariate Data Analysis*. 7th Edition, Pearson, New York.
- Hernández-Mejía, S., & Moreno-García, E. (2023). Financial literacy and retirement planning in Mexico. *Economics and Sociology*, 16(3), 65-81. <https://doi.org/10.14254/2071-789X.2023/16-3/4>
- Herr, D. G., (1986). On the History of ANOVA in Unbalanced, Factorial Designs: The First 30 Years, *The American Statistician*, Nov., 1986,40(4), 265-270
- Chybalski, F., & Marcinkiewicz, E. (2015). The Replacement Rate: An Imperfect Indicator of Pension Adequacy in Cross-Country Analyses, *Social Indicators Research*,126, 99–117
- Lang, D., (2023). *Individual And Family Development, Health, And Well-Being*, Iowa State University Digital Press.
- Low, D., Nathan, R., J., Gorgenyi-Hegyes, E., & Fekete-Farkas, M. (2021). The demand for life insurance in a developing country and the mediating role of persuasion. *Journal of International Studies*, 14(3), 138-154. <https://doi.org/10.14254/20718330.2021/14-3/9>
- Maszczyk, P. (2015). Ewolucja modelu kapitalizmu w Polsce. Nierówności społeczne a wzrost gospodarczy, (41), 107-122.
- Mishchuk, H., Samoliuk, N., Bilan, Y. & Streimikiene D. (2018). Income inequality and its consequences within the framework of social justice. *Problemy Ekonomii*, 13(2), 131-138.
- Orit E. Tykocinski, & Pittman S., (2013) Money imbued with essence: how we preserve, invest, and spend inherited money. *Basic and Applied Social Psychology*, 35(6), 506-514, <https://doi.org/10.1080/01973533.2013.840635>
- Ortiz-Ospina, E., Hasell, J., & Roser, M. (2024). Economic inequality by gender. Our World in Data.
- Polman, E., Effron, D. A., & Thomas, M. R. (2018) Other people's money: Money's perceived purchasing power is smaller for others than for the self. *Journal of Consumer Research*, 45(1), 109-125
- Ranta, M., Silinskas, G., & Wilska, T. A. (2020). Young adults' personal concerns during the COVID-19 pandemic in Finland: an issue for social concern. *International Journal of Sociology and Social Policy*, 40(9/10), 1201-1219.
- Sexton, J.B., Helmreich, R.L., Neilands, T.B. et al. The Safety Attitudes Questionnaire: psychometric properties, benchmarking data, and emerging research. *BMC Health Serv Res* 6, 44 (2006). <https://doi.org/10.1186/1472-6963-6-44>
- Schofer, E., Fourcade-Gourinchas, M., (2001). The Structural Contexts of Civic Engagement: Voluntary Association Membership in Comparative Perspective, *American Sociological Review*, 66(6), (Dec., 2001)
- Smith, K.N., Lamb, K. N., Henson, R. K., (2020). Making Meaning out of MANOVA: The Need for Multivariate Post Hoc Testing in Gifted Education Research, *Gifted Child Quarterly* 2020, 64(1) 41–55, <https://doi.org/10.1177/0016986219890352>
- van Hekken, A., Hoofs, J. & Brügger, E.C. (2022) Pension Participants' Attitudes, Beliefs, and Emotional Responses to the New Dutch Pension System. *De Economist* 170, 173–194 (2022). <https://doi.org/10.1007/s10645-022-09396-7>
- Voas, D., (2014). Towards a Sociology of Attitudes, *Sociological Research Online*, 19(1), <https://doi.org/10.5153/sro.3289>
- Vojtěch Uher, Pavla Dráždilová, Jan Platoš, Petr Badura (2022). Automation of cleaning and ensembles for outliers detection in questionnaire data, *Expert Systems With Applications* 206, 117809
- Yurchyk, H., Mishchuk, H., Bilan, S., & Scare, M. (2024). Social expenditure multiplier: Assessment of economic effect and optimal values. *Economics and Sociology*, 17(1), 182-195. <https://doi.org/10.14254/2071-789X.2024/17-1/12>

- Zagórski, K. (2018). Etatism versus liberalism: Economic attitudes in Poland after the world crisis. *Central European Management Journal*, 26(1), 149-170.
- Zhongyun Z., Xiao-Ling J., Yulin F., (2014) Moderating role of gender in the relationships between perceived benefits and satisfaction in social virtual world continuance. *Decision Support Systems*, 65, 69-79, <https://doi.org/10.1016/j.dss.2014.05.004>.
- Zijlstra, W. P., Van der Ark, L. A., & Sijtsma, K. (2013). Discordancy tests for outlier detection in multi-item questionnaires. *Methodology: European Journal of Research Methods for the Behavioral and Social Sciences*, 9(2), 69–77. <https://doi.org/10.1027/1614-2241/a000056>