

PHILANTHROPY IN HIGHER EDUCATION: A COMPARATIVE ANALYSIS OF DONOR  
MOTIVATIONS IN UKRAINE AND THE USA

by

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## ABSTRACT

This research examines the differences in charitable giving between the respondents from the United States and Ukraine, particularly in the context of higher education. The United States has a well-established system for raising funds for universities, supported by tax incentives and effective donor engagement practices. This has allowed American universities to build strong, long-term relationships with alumni and donors. In contrast, Ukrainian universities face challenges in attracting private donations due to an underdeveloped fundraising infrastructure and lack of knowledge. However, this is gradually changing, especially with the rise of innovation and boost of external support. For this study a mixed approach was used, combining quantitative analysis of donation data from the Kyiv School of Economics (KSE) with qualitative survey data from their donors. Findings reveal that U.S. donors are more likely to support education-related and humanitarian causes, while Ukrainian donors focus on urgent needs especially defense, due to the ongoing war. Male donors tend to contribute more frequently and in larger amounts in both countries. However, alumni connections to alma maters showed little impact on donation behavior to KSE. Based on these insights, Ukrainian universities could improve their fundraising strategies by adopting practices from the U.S., particularly in alumni engagement and developing a more systematic approach to donor relations. These findings offer valuable recommendations to help Ukrainian universities strengthen their fundraising efforts, especially during times of crisis, ensuring the stability and growth of higher education in Ukraine.

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## **LIST OF ABBREVIATIONS**

**KSE** – Kyiv School of Economics

**MLR** – Multiple Linear Regression

**ANOVA** – Analysis of Variance

**UN Sustainable Development Goals** – United Nations Sustainable Development Goals

**CSOs** – Civil Society Organizations

**OECD** – Organisation for Economic Co-operation and Development

**CASE** – Council for Advancement and Support of Education

**VIF** – Variance Inflation Factor

## CHAPTER 1. INTRODUCTION

Philanthropy is money and other resources as time or talent directed towards positive change and public good in the long term and is a crucial source of funding for many sectors, like higher education or healthcare (Jung et al.; Von Schnurbein et al.). It supports social initiatives and areas that are underdeveloped because funding lack, in the way of expanding opportunities for access to quality education, supporting socially vulnerable groups, providing medical care and developing potentially successful projects. The role of philanthropy in higher education is essential, as funding from private donors allows universities to implement projects, develop new programs and attract talented faculty and students. This is true even in the countries with significant welfare systems (Schuyt). Nevertheless, there are significant differences in how it is developed and how philanthropists perceive and implement their contributions across countries. The same diversity applies to the general understanding of the importance and need for charity, philanthropy and donations across countries and cultures (Von Schnurbein et al.) This study is motivated by a significant increase of global philanthropic activities related to Ukraine. While the number of donations to support Ukraine have increased significantly in the course of the past few years, very little is known about the cross cultural motivations of private donors, mostly for the lack of empirical data.

This study aims to investigate the reasons for the differences in charitable contributions to higher education institutions between donors from the two countries - Ukraine and the USA using the example of the Kyiv School of Economics (KSE) as a receiver. The application of this research is twofold.. On the one hand, it might contribute to the academic debate about the motivation for philanthropy across cultures. On the other hand, it is also relevant to foundations which operate in this market and would like to evaluate their own strategies and maximize donations from both Ukrainian and American private donors.

The findings of this research will be valuable not only for higher education institutions but also for the entire educational system in Ukraine. As the culture of philanthropy is still developing in Ukraine, particularly for education, the results will contribute to shaping strategies for growing donor engagement in the sector. This is especially relevant during the war when donor contributions are essential for the stability of higher education, considering the damage to universities, the outflow of students and teachers and the limited state funding available.

In general, donorship in support of education in Ukraine remains less developed compared to other countries, in particular the USA. Low prior involvement in philanthropy may exist due to several factors that determine this: the lack of a developed infrastructure for raising funds, a low level of public awareness regarding donation opportunities, the absence of tax benefits for donors and the non-existence of long-standing traditions of cooperation between universities and graduates. During the full-scale invasion, Ukrainians actively began to support military and humanitarian projects. Huge collections from volunteer organizations were closed in a matter of hours or days, depending on the goal amount. In accordance with such activity to help, Ukrainians have a huge potential to better develop the culture of philanthropy. At the same time, research on philanthropy in Ukraine shows that interest in education is growing as an important area for investment and the experience of countries with a developed system of charity can significantly improve the situation.

The first section of the study will present a comprehensive literature review that explores key theories of philanthropy and its impact on higher education. It will examine the historical and cultural factors that shape charitable giving, particularly focusing on the differences in philanthropic behavior between regions like the USA and Ukraine. The review will address donor motivations, including economic incentives, moral values and social responsibility, as well as the role of institutional trust and awareness. Additionally, it will explore the influence of economic conditions and social movements on philanthropic patterns, with a particular emphasis on education. This review will provide essential insights into the global landscape of educational philanthropy, helping to contextualize the research and ensure that the study is aligned with previous work in the field.

The research methodology involves analysis of the existing database as well as collecting new data using a survey. The analysis is divided into two parts: descriptive analysis of the statistical data and statistical modeling of a survey. The first part explores a database of 13,905 donations in various areas: institutional, defense and humanitarian. The survey analysis part is based on a questionnaire completed by donors, which will allow us to reveal motivational factors, the impact of education and ties to the alma mater.

In what follows, the text will discuss hypothesis which compares donors from Ukraine and the US based on their motivation, gender, education, and engagement with alma maters. All these hypotheses are driven by the literature which will be presented in the following parts.

The database includes donations for different areas such as institutional, defense and humanitarian causes. After cleaning the data, approximately 4,500 complete records will be used for building models and analyzing donation patterns. A Multiple Linear Regression (MLR) model will be employed to assess the impact of various factors, including donation category, gender, country and other relevant variables, on donation amounts. This model will allow us to identify key drivers of donation behavior and test our hypotheses.

The survey gathers data on donors' affiliations with KSE, their motivations for giving and their emotional connections to the institution. Variables like alumni engagement, satisfaction with communication and preferences for supporting urgent vs. long-term projects will be analyzed. Statistical methods, including Pearson correlation, linear regression, Random Forest models and ANOVA tests, will be used to examine the relationships between these variables and donor behavior.

The results of this study will examine how mentioned factors influence donation behavior and compare the motivations of donors in Ukraine and the United States, with a specific focus on education. These findings will offer valuable recommendations which will be organized in the final section for improving fundraising strategies at Ukrainian universities, particularly in the current



wartime context, where donor contributions are crucial for maintaining the stability of higher education institutions facing significant challenges.

## CHAPTER 2. LITERATURE REVIEW

Philanthropy plays an important role in funding education, healthcare and social programs worldwide. Back in the middle of the twentieth century, Merle Curti in 1958 defined philanthropy as the “love of man, charity, benevolence, humanitarianism, social reform” (Chan 6). Nowadays, however, there are many ways in which philanthropy is seen in the world: as a prosocial act driven by moral values, social responsibility sometimes driven by economic incentives, as a family tradition, as fulfilling career goals and promises, or even as a rational strategy for virtue signaling and brand promotion (Jung et al.). The World Giving Index shows that countries worldwide have different levels of giving, influenced by their unique cultures and economic situations. During the last 7 years, Indonesia tops the list with 74 points in 2023, while bigger economies like the United States have lower scores, showing that generosity is widespread and varied globally (Charities Aid Foundation 6). This generosity is driven by strong cultural and religious traditions, particularly by fundamental values such as *zakat* (which requires Muslims to donate a portion of their income to those in need), along with mutual aid traditions and community support deeply embedded in Indonesian culture (Zablotska). The global average score is 40 points, matching its highest level in 2021, highlighting the developing spirit of giving (Charities Aid Foundation 5).

Global philanthropy varies across regions. In Asia, philanthropy varies due to religion, culture and history. Countries like Thailand and China are seeing a shift towards strategic philanthropy and social investing, with India enforcing laws that mandate corporate social responsibility (2% profit allocation law) (OECD 40). Western Europe also has a strong tradition of philanthropy, but with a greater emphasis on corporate social responsibility and a focus on development rather than individual giving, in line with the UN Sustainable Development Goals and Agenda 2030 (OECD 40). Since 2019, Ukraine has experienced significant growth in charitable giving, driven by enhanced fundraising tools, increased advocacy, and a strong societal response to crises, especially due to Russia’s full-scale invasion (Charities Aid Foundation 12). Meanwhile, the Arab region is rethinking philanthropy to address social issues such as youth unemployment through social enterprises,

increasingly focusing on job creation and economic empowerment following the Arab Spring (OECD 41). In Latin America, the shift from individual acts of charity to more structured organizations has led to a more engaged civil society, but issues like corruption and the mixing of roles between foundations and CSOs have complicated philanthropy efforts (OECD 41). In the USA, corporate philanthropy plays a leading role, with most donations coming from corporations and foundations rather than individual donors. Unlike some regions where philanthropy is deeply rooted in cultural traditions, philanthropy in the USA tends to focus on short-term projects that deliver quick results and can be used in brand communications (Zablotska). In 2023, their charitable donations hit a record \$557.16 billion. Despite this record, the actual value fell by 2.1% after adjusting for inflation (“Giving USA”).

The size of donations, solicitation methods and communication strategies all impact giving patterns (Farrokhvar et al. 2). Therefore, while philanthropy varies across regions, several fundamental factors influence how and why people give. Economic circumstances, government policies and cultural traditions shape donors' behaviors, but individual motivations also play a crucial role. Studies confirm that individuals with higher incomes tend to give more, highlighting a direct link between financial capability and philanthropic activity (Jackson and Beaulier). Young donors often prefer cause-specific giving, prioritizing initiatives aligning with their values rather than contributing to broad directions and traditional institutions (Brown and Ferris). Institutional trust is another key factor influencing donations. People are more likely to give when they believe their contributions will be used effectively and transparently (Osili et al.). Social capital, including civic and religious engagement, also plays a key role, as strong community networks foster a culture of giving (Brown and Ferris).

Beyond financial and social influences, psychology significantly shapes donor behavior. The "warm glow" effect, first introduced by Andreoni in 1989, referenced in 'Economic Freedom and Philanthropy', describes how giving brings personal satisfaction, which in turn encourages repeated donations and larger contributions (Jackson and Beaulier). Additionally, a sense of moral duty, social

recognition and emotional connections to specific causes can further drive charitable actions. Research also suggests that donors are shifting toward more strategic philanthropy, carefully selecting causes and organizations that align with their long-term values rather than making impulsive donations (Osili et al. 26). This trend is especially strong among younger donors and social activism supporters.

Another key finding in the scholarship is that awareness plays a crucial role in giving decisions. Donors are more likely to contribute when they feel informed about a cause through personal experiences or media coverage, in such a way they understand why their support matters. Moreover, many donors count a lack of transparency and information as a barrier to donate, emphasizing the importance of clear communication from nonprofit organizations (Osili et al.). Social movements and crises - such as COVID-19, racial justice initiatives and war in Ukraine - have also influenced donation patterns, inspiring more targeted and immediate responses to urgent needs (Osili et al., Al Gharaibeh et al.).

Digital transformation is also changing philanthropy, with more donors using online platforms, social media and geofencing to engage with causes (Osili et al. 18-19). This shift has made it easier for organizations to reach broader audiences, but it also raises sustainability concerns, as donors question whether current levels of generosity can be maintained in the long run. Donors prefer organizations with a personalized approach for reporting impact and usage of money rather than one-time donations. Finally, giving behavior remains a deeply personal decision influenced by financial stability, social values, psychological rewards and effective nonprofit communication.

Recent research indicates that education is one of the key sectors receiving significant support from philanthropists around the world. According to the OECD report "Private Philanthropy for Development", in 2013-2015, education received \$2.1 billion from philanthropic foundations, making it the second largest funding sector after health. Talking more specifically about education, the largest share - 37 % of total funds is directed to higher education and vocational training, which highlights

the growing awareness of its role in human capital development and economic growth (OECD 55-57).

Higher education fundraising is especially strong in the U.S., where universities rely on private donations, endowments and alumni giving. According to the Council for Advancement and Support of Education (CASE), in the 2022-2023 fiscal year, American higher education institutions received \$58 billion in charitable contributions. Compared with 2016, higher education received \$41 billion (Kaplan). In the U.S., alumni contribute over \$7 billion annually to universities, constitutes a significant portion of voluntary support (Kaplan). American universities have a long tradition of alumni giving, supported by tax incentives and professional development offices that keep in touch with graduates and build strong relationships. In terms of tax policy, under Section 170 of the Internal Revenue Code, individuals who itemize deductions can deduct charitable contributions made to qualified organizations, including educational institutions. This deduction reduces the donor's taxable income, thereby lowering their overall tax liability (Internal Revenue Service). Additionally, some states offer tax credits for charitable donations to universities, further enhancing the tax benefits of donating (Andrews University).

This culture of giving has been strengthened over centuries, including early donations to Harvard in the 17th century to modern-day multi-billion-dollar endowments. There are also individual philanthropists, such as John Paulson, who donated \$400 million to Harvard, and play a significant role in the development of universities or large charitable foundations, such as the Gates Foundation, which focus their efforts on scholarships, professional development of faculty and educational infrastructure (Chan). Universities use planned giving, major gifts and crowdfunding to engage donors and sustain financial growth (Greeley). Moreover, alumni who feel connected to their university are more likely to give back. They support their alma maters both financially and through mentorship, professional connections and advocacy. Younger alumni are less likely to donate, but universities are using new engagement strategies. For instance, networking events, digital campaigns

and career support to build long-term donor relationships. Studies suggest that early engagement during student years increases the likelihood of alumni giving later in life (Monks).

One may argue that, depending on the definition, educational philanthropy in Ukraine can be traced as far as to the time of Kyivan Rus. During the time of Yaroslav the Wise and Volodymyr Monomakh, it began to go beyond simple assistance, it was done at the cultural level, they began to build public schools, libraries (Andriychuk). In the seventeenth century, Petro Mohyla also actively supported education, financially providing for teachers and students, building the first bursa and a new school building, now known as the Trapezna or Svyatodukhivska Church. According to his will, the Kyiv-Mohyla College received significant resources: a library with over 2,100 books, houses, villages, livestock, money and valuables, including silverware and fabrics for clothing for students. And there were many such examples. Nevertheless, most historians would suggest that philanthropy emerged in Ukraine more systematically much later with the development of modern state, education, and private property in the early 19th century (National Library of Ukraine). Then new social classes of entrepreneurs and hired workers were formed, as well as powerful monopolies in the sugar industry. The owners of these enterprises became famous philanthropists, including the Tereshchenko, Symerenkov and Kharytonenko families. At this time, it became common practice for wealthy people to build schools, churches, libraries and support cultural figures. Educational projects were significant, in particular the activities of Halshka Gulevichivna, co-founder of the Kyiv-Mohyla Academy (Andriychuk).

Nowadays Ukrainian universities have historically depended on state funding, with little tradition of private support or alumni donations. The higher education sector is facing serious challenges due to the war. Mass migration and the outflow of personnel have caused significant losses among students and faculty. Almost 450,000 Ukrainians left and did not return home in 2024. Over the three years of war, the number of such Ukrainians is about 3 million. Also, as of early September 2024, more than 141 higher education institutions were destroyed and 3,798 were damaged by shelling, which is catastrophic damage to the educational infrastructure in Ukraine (KyivPost).

Ongoing air strikes and the shift to online learning have made access to quality education more difficult and a lack of funding has limited the capacity of universities.

Despite these challenges, some Ukrainian universities have adapted and attracted significant international grants and donor contributions. Private institutions, such as the Ukrainian Catholic University and Kyiv School of Economics, are actively using fundraising opportunities to support students and develop new programs. Thus, recent trends show a growing interest in alumni philanthropy, but it is still underdeveloped. However, in general, the higher education system in Ukraine remains underfunded and state resources are prioritized for military needs.

This study aims to examine donor motivations in the case of the KSE, using unique data collected since the beginning of the full-scale invasion of Ukraine in 2022. The war has significantly affected the education infrastructure in Ukraine, so this study seeks to understand donor motivations and what factors influence financial support for universities. The analysis of donor motivation will help KSE improve its fundraising strategy and develop a culture of donation in times of war.

### CHAPTER 3. DATA AND METHODOLOGY

This study consists of two main parts designed to test hypotheses about donor motivations and behaviors in supporting the KSE.

Based on the existing scholarship on philanthropy, one can identify multiple motivations to donate. The literature can be divided in two major streams: philanthropy as a prosocial act, and philanthropy as virtue signaling (Jung et al.; Schnurbein et al.; Lee et al.). This literature also identifies that different cultures may have different definitions of public good. For instance, private donors from the U.S. can see the public good as wellbeing and health, while private donors in Ukraine can see security as the major public good.

Sociological studies of Ukraine consistently show that security is the most dominant social value in Ukraine (Shestakovskii). At the same time, most recent surveys in Ukraine show increased support of Ukrainian military and volunteers (Hrushetskyi). At the same time, considering motivations of the US donors to help Ukraine, supporting military causes in a foreign country can be seen problematic, given ethical constraints and also politicised debates about military presence of the U.S. in other parts of the country from Vietnam to Afghanistan. According to the sociological theories of public discourse, such political debates can constrain social norms against supporting military operations abroad (Jeffrey).

Based on this scholarship, the first two hypotheses state that Ukrainian donors are more likely to engage with defense causes, while American donors are more likely to support humanitarian causes as education. They can be formulated in such way:

- **H1:** Ukrainians are more likely to donate for defense and humanitarian aid (“war related”) while Americans are more likely to donate for education.
- **H2:** Ukrainian donations are largely driven by urgent needs, whereas U.S. donors are influenced by long standing philanthropic traditions.



Social variables such as age, gender, and status can also influence charitable donations, as individuals in certain categories may have greater access to resources and power depending on cultural context, both of which are prerequisites for philanthropy. The literature on this topic presents mixed findings. On the one hand, women are often found to be more inclined toward altruism and social support, due to a greater tendency toward risk aversion and cultural patterns of socialization. On the other hand, among high-net-worth individuals in particular, men are more likely to hold the financial means and social status necessary for large-scale giving, reflecting persistent gender disparities. Scholarship often shows that women are likely to engage in donations more often, while men are likely to provide donations of a larger size (Dvorak and Toubman; Lo and Tashiro). Given this, the third hypothesis is that men will give larger donations to KSE, regardless of their origin (Ukrainian or USA donors).

- **H3:** Men donate more money than women in both countries.

In addition, one can argue that education plays a significant role, especially given that KSE is a university. Individuals with higher levels of education tend to value universities and similar institutions more than those without higher education (Bekkers and Wiepking). Moreover, the same literature suggests that spillover effects exist. In other words, people engaged in one form of prosocial behavior are more likely to participate in others, including philanthropy. For example, individuals who are active in their communities are more likely to donate to other social causes. Therefore, it can be hypothesized that individuals who are actively engaged with their own alma mater will also be more likely to donate to KSE compared to those who are not engaged and that people with higher degree are more likely to donate.

- **H4:** Alumni who are engaged with their alma mater are more likely to donate to KSE.
- **H5:** The higher the education degree, the more money individuals donate to higher education institutions.

### 3.1 DATA

The statistical analysis is based on an extensive donor database provided by KSE Foundation, the information is directly from donors, all information that KSE receives when donors make donations. The database initially included \_\_\_\_ donations from individual and corporate donors across various countries. These records represent nearly all retail donor interactions tracked by the foundation, thus offering a robust yet highly focused sample for the analysis. However, the raw dataset contained substantial missing values across several key variables, like country, direction for which people donate, as the such information was not gathering during 2022, guess that most of the money went to support humanitarian and defense initiatives, but can not say for sure. Hence, necessitating thorough data cleaning. After removing incomplete entries and ensuring consistency and reliability, the final dataset used for analysis contained approximately 4,500 complete donation records for building graphs and about 3,500 for MLS model.

Most donations in the dataset originated from the United States (1,636 donations), Ukraine (1,167 donations) and several other countries, including the United Kingdom (352), Germany (246), Denmark (126), Spain (106), Italy (104) and others. For comparative purposes and clarity in analysis, countries were grouped under the category "Other." This allowed the analysis to identify and highlight specific behavioral patterns clearly related to geographic origins. For example, do other countries react as the United States?

To better visualize and interpret donation patterns, various projects (designations) were grouped into six main categories:

1. Scholarships – including targeted initiatives like TalentPRO Scholarships, Scholarships for Internally Displaced Students and other student support programs.

2. Memorial Scholarships – honoring the memory of individuals, it is connected to the defense and educational field.
3. Defense – explicitly related to defense support, including direct donations to battalions, provision of medical supplies and other defense-oriented projects.
4. KSE Institutional Support – general financial support aimed at sustaining university operations, such as faculty salaries and administrative costs.
5. Humanitarian Aid – encompassing projects designed to address humanitarian needs, such as rebuilding hospitals and shelters and providing essential goods to displaced populations.
6. Other – a miscellaneous category for donations that do not fit neatly into the previous groups.

These categories were chosen due to their distinct thematic focus, allowing for clearer identification of donors' preferences and priorities. Graphical visualizations were employed to analyze and present these patterns effectively, offering insights into the most supported areas by donors from different geographic locations.

For deeper quantitative analysis, the study employs a MLR model:

$$\text{Donation\_amount} = \beta_0 + \beta_1(\text{Gender}) + \beta_2(\text{Designation\_grouped}) + \beta_3(\text{Direction}) + \beta_4(\text{Total\_Donation\_Amount}) + \beta_5(\text{Total\_Quantity}) + \beta_6(\text{'Date of donation'}) + \beta_7(\text{Country\_grouped}) + \varepsilon$$

The main dependent variable in our project is the Donation Amount, which is measured in U.S. dollars. In addition, 5 independent variables are included in the study and can be described as follows (see Table 3.1):

- Donation\_amount (dependent variable): The financial contribution provided by a donor in USD.

- Gender: To determine gender-based differences in donation behavior.
- Designation\_grouped: Categorical variable representing the grouped projects supported.
- Total\_Donation\_Amount: Total sum contributed by each donor over their interaction period in USD.
- Total\_Quantity: Frequency of donations per donor.
- Country\_grouped: Grouped countries, highlighting geographic donation patterns.

Table 3.1: Descriptive statistics for dataset

Variable	Min	Mean	Median	Max
Donation Amount	0.02	210.84	50	100085.90
Total Donation Amount	1.18	2715.99	450	102782.10
Total Quantity	1	13.84	10	64
Date of Donation	2022-01-04	2023-11-22	2024-01-05	2024-12-31

Gender	Frequency
Female	1691
Male	2641

Country	Frequency
Ukraine	1167
United States	1636
Other	2005

Designation	Frequency
Defense	840
Humanitarian	763
KSE Institutional Support	516
Memorial Scholarship	175
Scholarships	1304
Other	1210

Source: Calculated by author based on KSE Foundation data.

This statistical method allows simultaneous examination of several variables—including country, gender, donation category and other relevant factors—while assessing their individual and combined impacts on donation amounts. The advantage of using the MLR model is its ability to

control for multiple factors, ensuring the analysis isolates and identifies the precise role each factor plays.

MLR effectively handles multiple predictors simultaneously, enabling the assessment of each variable's unique contribution to explaining variance in donation amounts. This method is particularly suitable given the mixture of categorical and numerical variables present, offering robust and interpretable results.

In addition, to clearly present results from the quantitative analysis, LaTeX tables are constructed to systematically and transparently demonstrate regression outcomes, variable significance and statistical measures, improving readability and facilitating interpretation.

Results obtained from the MLR analysis will thus provide deeper insights into donor motivations and capacities, ultimately supporting targeted strategies for enhancing future fundraising campaigns.

### **3.2 NEW SURVEY AND METHODOLOGY**

This analysis is based on a survey conducted among donors from various countries, aiming to explore the factors that influence their donations to KSE. An online survey was designed to deeply explore donor motivations and behaviors. It was conducted on the LimeSurvey platform and distributed via email to KSE donors. Respondents included individuals who had donated less than \$60,000 throughout their involvement and KSE alumni. A total of 131 donors participated in the survey.

These questions addressed:

- Donors' affiliations with KSE (alumni status, familial connections, friendship or professional ties).

- Initial channels through which donors learned about KSE.
- Motivation scales measuring various motivational drivers (personal connections, shared values, financial incentives, societal impacts).
- Preferences for supporting immediate versus long-term projects.
- Annual donation amounts and likelihood of recommending KSE to others.
- Satisfaction with communication and information transparency provided by KSE.
- Preferred communication channels.
- Suggestions for improvement in donor experience and engagement.
- Alumni engagement and financial support for their alma mater, including factors influencing these decisions and frequency of interactions.
- Demographic and socioeconomic characteristics (age, gender, educational background, occupation, income level, country of residence, marital status and parental status).

For H4, the focus was to understand the relationship between alumni engagement with KSE and their donation behavior. Engagement was measured using the *Feel\_connected* variable, which evaluated how connected donors felt to their alma mater. The *avg\_annual\_donation* variable was used as the dependent variable, representing the amount donated annually. A Pearson correlation was calculated between *Feel\_connected* and *avg\_annual\_donation* to examine the strength and direction of the relationship. Additionally, a linear regression model was constructed with *avg\_annual\_donation* as the dependent variable and *Feel\_connected* as the independent variable. To explore this relationship further, a t-test was conducted, comparing the donation amounts between two groups: Low engagement (those with a *Feel\_connected* score of 3 or lower) and High engagement (those with a score above 3) (see Table 3.2).

For H2, the analysis aimed to examine whether donations from Ukrainian donors are driven by urgent needs, while donations from U.S. donors are more influenced by long standing philanthropic traditions. One of the survey questions specifically asked donors if they prefer to

support long-term projects or focus on immediate, urgent needs. This question helped categorize donors based on their motivations. To analyze the impact of country and donation motivations on donation amounts, a Random Forest model was used. This model employed Country (including other countries also) and donation\_support as predictors for avg\_annual\_donation. To verify further, an ANOVA test was performed to compare the mean donation amounts between Ukrainian and U.S. donors (see Table 3.2).

For H5, the focus was on the relationship between education level and donation amounts. The education levels were categorized as Bachelor's, Master's, PhD and Other. A linear regression model was built to predict avg\_annual\_donation using education level as the independent variable. Furthermore, an ANOVA test was conducted to compare the mean donation amounts across different education levels (see Table 3.2).

Table 3.2: Descriptive statistics for survey's dataset

Variable	Category / Measure	Frequency / Value
<b>Feel Connected</b>		
	1	28
	2	22
	3	23
	4	18
	5	17
	6	8
	7	12
	Difficult to answer	7
<b>Donation Support Preferences</b>		
	No clear preference	22
	Immediate, urgent needs	15
	Long-term, sustainable projects	9
	Support both, depending on situation	94
<b>Country of Residence</b>		
	Canada	5
	Germany	13
	Italy	4
	Other	29
	Sweden	3
	Ukraine	8
	United Kingdom	10
	United States	59
<b>Educational Level</b>		

BA	19
MA	48
PhD	44
Other	24
<b>Average Annual Donation</b>	
Under \$100	35
\$100-\$500	64
\$500-\$1,000	17
\$1,000-\$2,000	14
\$2,000-\$5,000	3
Over \$5,000	3
<b>Summary Statistics</b>	
Avg. Donation (Min)	1
Avg. Donation (Mean)	2.24
Avg. Donation (Median)	2
Avg. Donation (Max)	6

Source: Author's calculations based on data from the survey.

### 3.3 DATA LIMITATIONS

There are several important limitations in this study. Firstly, the exclusive focus on donors of the KSE Foundation limits the generalizability of the results to donors of other institutions or contexts. Donor behavior often varies significantly across different organizations or causes and findings from one foundation might not represent broader trends. Secondly, the substantial missing data in the original dataset significantly reduced the final usable sample size, potentially affecting the accuracy and representativeness of the results. Grouping smaller country donations into the "Other" category might obscure specific donation behaviors unique to individual countries. Additionally, survey data heavily relies on self-reported information, introducing potential biases such as social desirability or recall inaccuracies. Furthermore, the relatively small number of survey respondents (131) may limit the strength and reliability of qualitative conclusions. Moreover, while the second part of analysis focused on engagement, education level and motivation, other factors, such as personal values or financial capacity, may also play a significant role in donation behavior but were not explicitly included in the model. Lastly, the cross-sectional nature of the data collection does not allow for the analysis of changes or developments in donor motivations and behaviors over time.



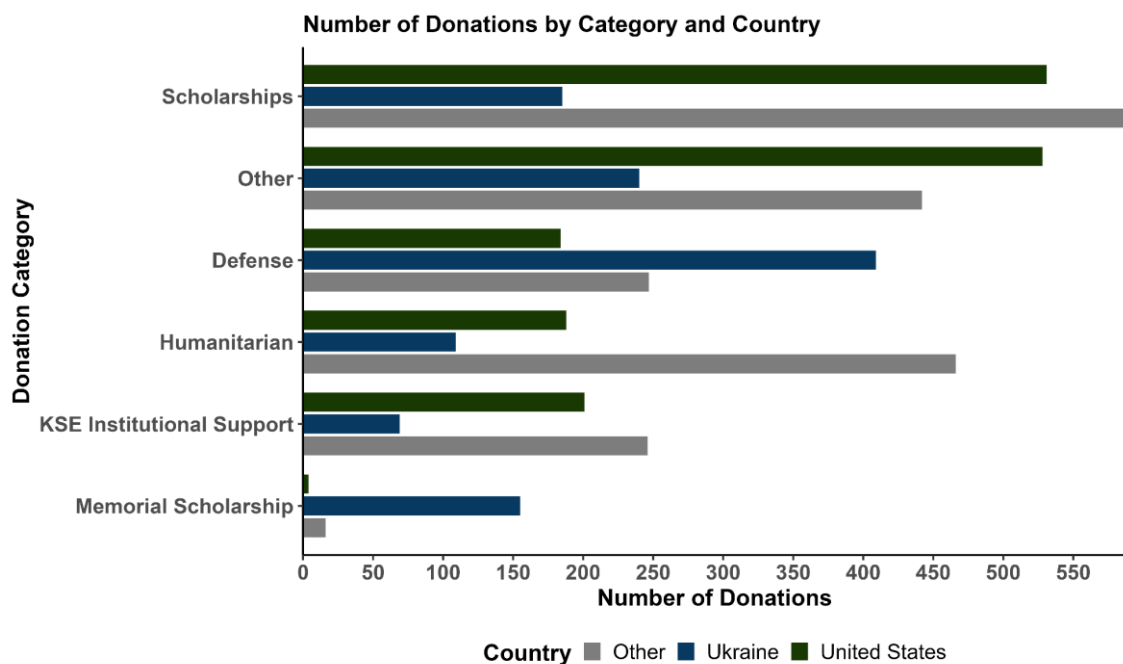
## CHAPTER 4. RESULTS

### 4.1 ANALYSIS OF DONATION PATTERNS BY COUNTRY AND GENDER

This section addresses the quantitative analysis conducted to test the first two hypotheses. Data analysis from the KSE Foundation includes approximately 4,500 complete donation records, covering donation frequency, total sums and average values, grouped by donor country, donation category and gender.

Hypothesis H1 finds clear support from the data. Analysis of the number of donations (see Figure 4.1) reveals distinct preferences: Ukrainian donors primarily support defense-related projects due to urgent wartime needs, whereas donors from the United States and other countries favor scholarships and humanitarian initiatives. Notably, Ukrainians prominently contribute to memorial scholarships, which, although educational, honor fallen heroes and therefore reflect wartime sentiments and national memory preservation.

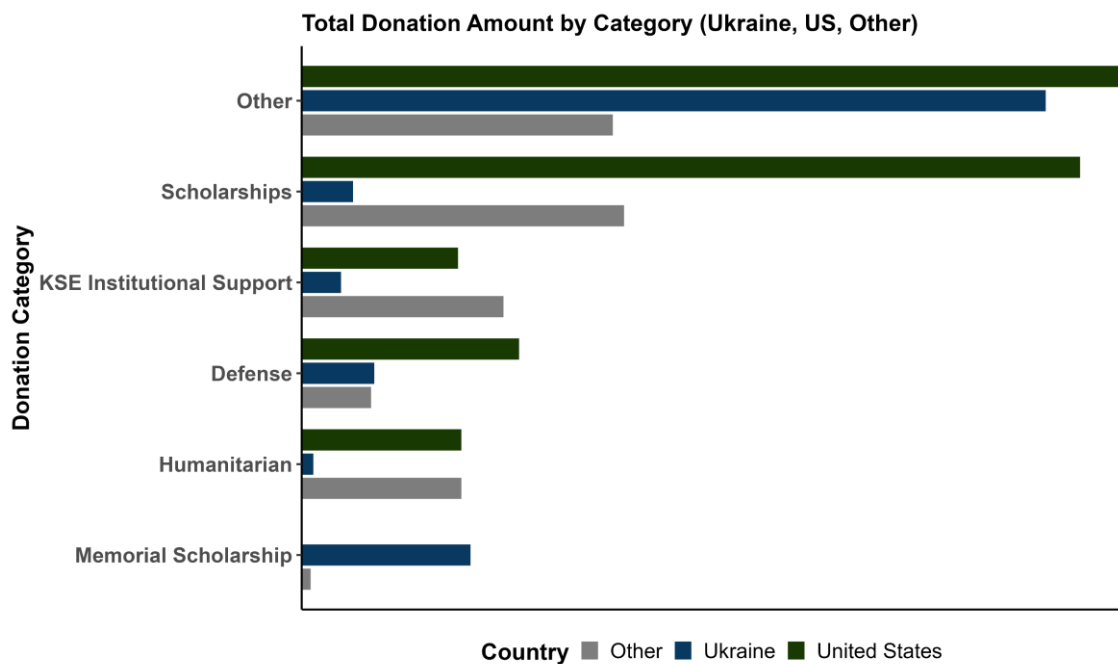
Figure 4.1: Number of donations by donors from Ukraine, United States and Other



Source: Made by author based on KSE Foundation database.

Further insights emerge when examining total donation amounts by category (see Figure 4.2). American donors significantly surpass Ukrainian donors even in defense contributions, highlighting their stronger financial capacity. Ukrainian donors, despite frequent contributions, face financial limitations that restrict their total giving amounts.

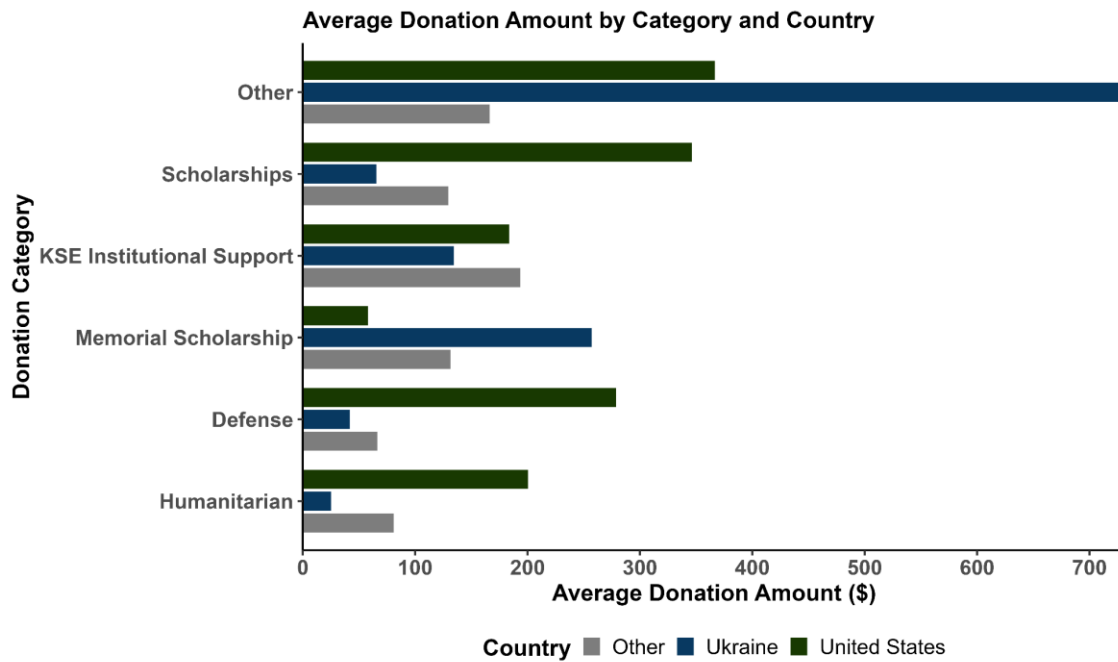
Figure 4.2: Total Donation amount by donors from Ukraine, United States and Other



Source: Made by author based on KSE Foundation database.

Analyzing average donation amounts by category provides approval about donor capacities (see Figure 4.3). This analysis confirms that American donors typically donate higher average amounts across most categories, underscoring their greater financial capabilities. Ukrainians show notable generosity specifically in the memorial scholarships category, again emphasizing national sentiment and respect toward fallen heroes.

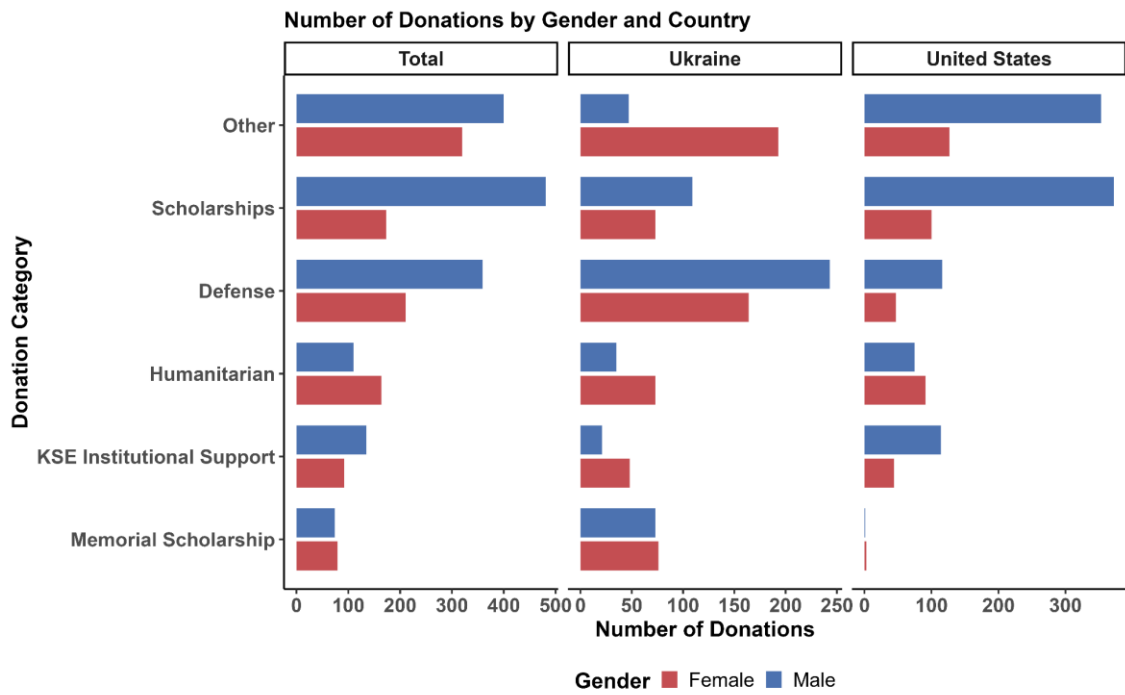
Figure 4.3: Average Donation amount by donors from Ukraine, United States and Other



Source: Made by author based on KSE Foundation database.

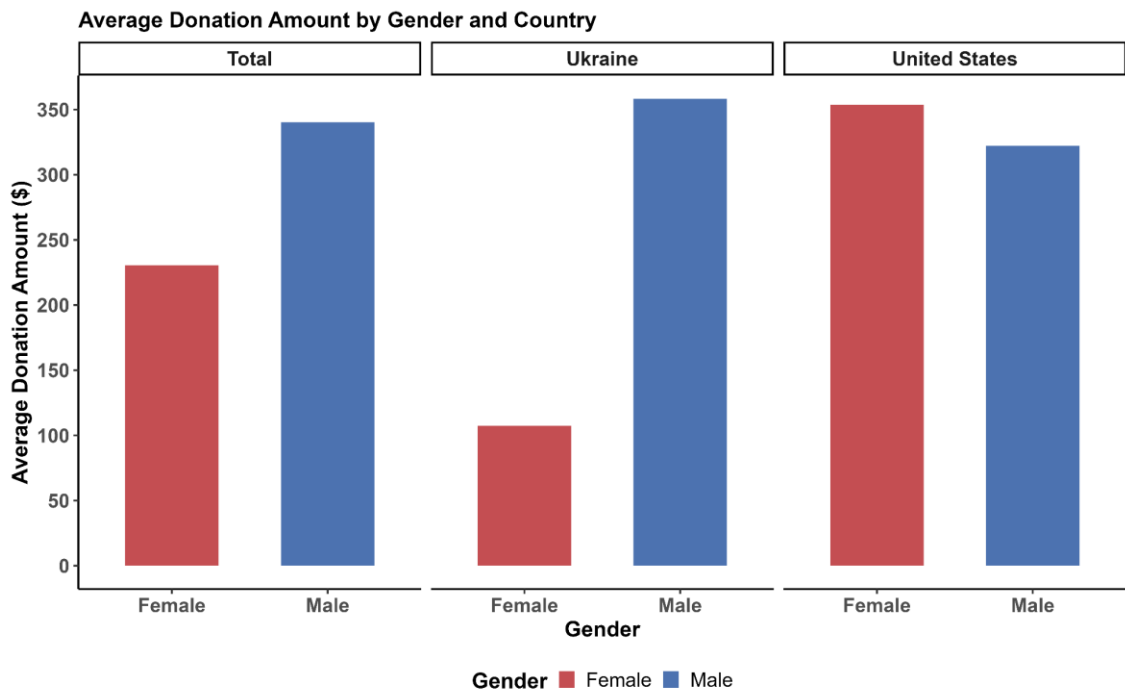
Regarding hypothesis 3, donation data highlights gender-based differences, notably between Ukraine and the United States. In the United States, male donors consistently outnumber female donors across most donation categories, especially in scholarships. Conversely, in Ukraine, women predominantly lead in most donation categories, except for defense initiatives, where male donors clearly prevail. Nevertheless, when considering the total number of donations overall, male donors outnumber female donors (see Figure 4.4). Moreover, their average donation amounts are consistently higher in Ukraine, in the USA and as a result in Total (see Figure 4.5).

Figure 4.4: Number of donation by Gender



Source: Made by author based on KSE Foundation database.

Figure 4.5: Average donation by gender



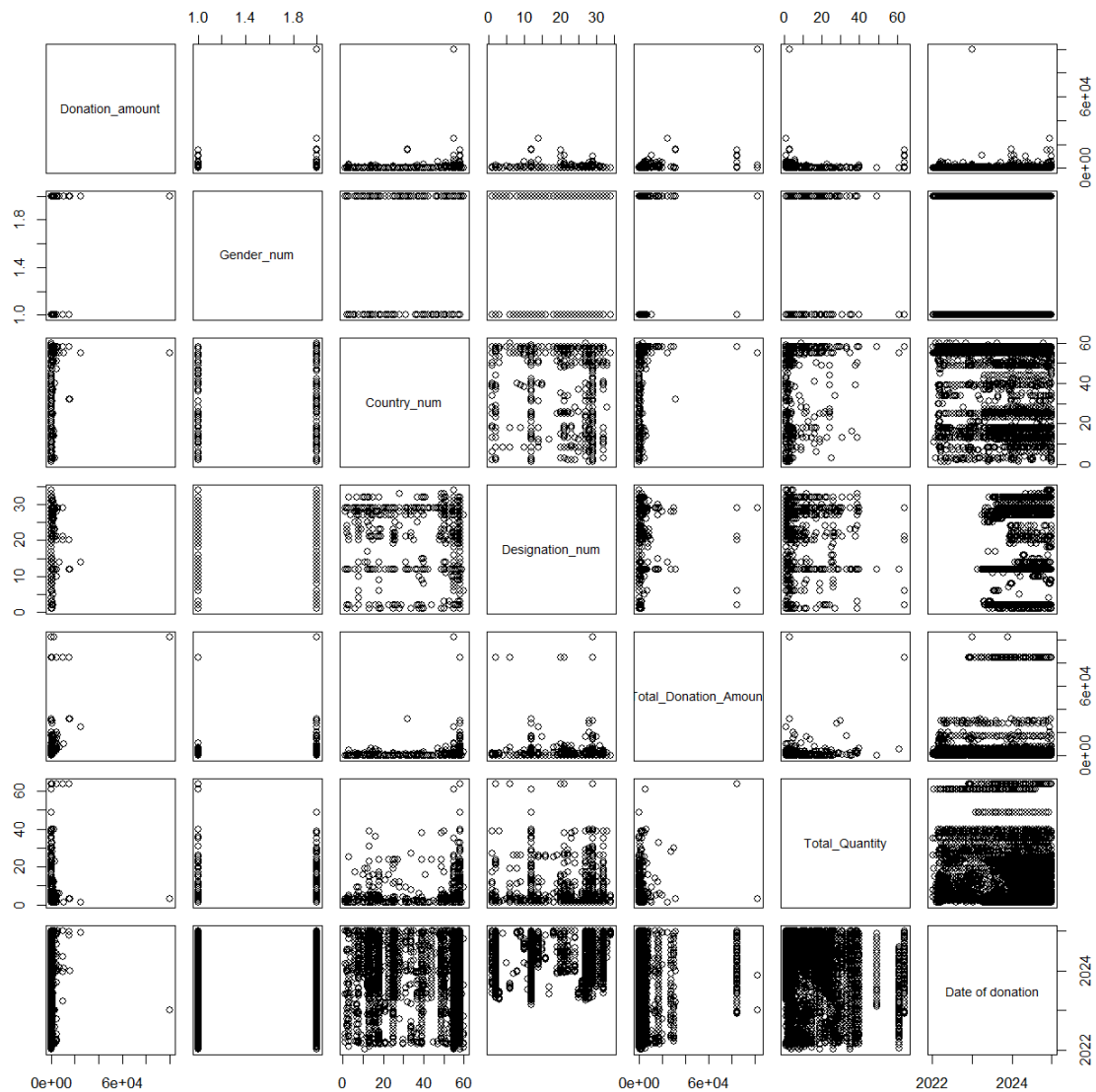
Source: Made by author based on KSE Foundation database.

Graph-analysis supports both H1 and 3. Ukrainian donors exhibit wartime-driven motivations, emphasizing defense and memorial initiatives, while American donors prioritize education and possess greater financial means. Additionally, clear gender disparities suggest targeted donor engagement strategies could increase female donor contributions effectively.

To further explore and quantify how the country of residence and donor gender influence donation patterns, the analysis now moves to the MLR model. By employing this model, it is possible not only to detect, but also to quantify and verify the statistical significance of relationships between donor attributes (such as country or gender) and their donation behaviors. Specifically, this approach helps determine whether the observed patterns—such as the preference of Ukrainian donors for defense initiatives or higher average donations by U.S. donors—remain statistically robust when all other variables are taken into account.

The next step of the analysis involves exploring relationships between variables before building the regression model. For this purpose, a scatterplot matrix was created, presenting pairwise associations between all the key variables (see Figure 4.6).

Figure 4.6: Correlation Matrix of Donation Variables



Source: Author's simulation result based on KSE Foundation data.

Analyzing this scatterplot matrix highlights that a visible positive relationship exists between Donation Amount and Total Quantity, meaning frequent donors often give larger amounts in each transaction.

However, other variables such as Gender and Country do not exhibit clear linear relationships with Donation Amount in the scatterplot, indicating potentially complex or less direct influences. Also, no visible trend is seen between the Donation Amount and Date of Donation, suggesting relatively stable donation patterns throughout the observation period. For better understanding whether they have influence or not, they were added to the model.

The regression analysis was performed step by step, adding one predictor at a time to observe changes in the explanatory power of the model and the significance of each new variable. The procedure was as follows:

First, a simple model using only Gender (Model 1) was created, which showed marginal significance ( $p = 0.0608$ ). When the Designation\_grouped variable was added in Model 2, the "Other" category became strongly significant ( $p = 0.000318$ ), while Gender remained marginally significant ( $p = 0.0911$ ).

In Model 3, the Country\_grouped variable was added. Initially, Ukraine showed marginal significance ( $p = 0.093360$ ), but it was not strong enough to be considered significant. However, after adding the other variables in later models, Ukraine became significant ( $p = 0.03290$ ) in Model 5. This change highlights the importance of considering multiple variables in explaining donation behavior. In contrast, the United States remained significant from the start ( $p = 0.009426$ ).

In Model 4, Total Donation Amount was added, which significantly improved the model. Gender became highly significant ( $p = 0.000199$ ), along with Designation\_groupedOther ( $p = 0.012491$ ) and Total\_Quantity ( $p < 2e-16$ ).

Finally, in Model 6, the Date of donation variable was added and it was found to be statistically significant ( $p = 0.021246$ ), confirming that timing is an important factor in donation behavior (see Table 4.3).

Interestingly, Gender initially appeared insignificant but became significant after adding other variables, highlighting a confounding effect. Model 6, with all significant predictors included, was chosen as the final model to work with. Model 6 also has the highest R square among all of the models, which indicates that it has the best predictive power too and thus will be used as the final model for our interpretations.

One has to be careful since even the highest R square is relatively modest, explaining 10 percent of the variation of the dependent variable. While there is no clear consensus on what is strong R- square in social science, still numbers below 30 percent are not considered as good. In simple words, our model explains 10 percent of variation, while the other 90 percent remains unexplained. This indicates that many factors which explain individual variation remain to be discovered (from individual psychological factors to specific circumstances such as timing of events or media messaging).

Given this low R square and to further validate the relationship between the variables of interest an ANOVA test was conducted to compare Model 6 (which includes all variables) with Model 3 (which includes only Gender, Designation\_grouped and Country\_grouped) (see Table 4.1). The results of ANOVA showed that adding Date of donation significantly improves the model, with a p-value of  $< 2.2e-16$ . This confirms that Date of donation contributes significantly to explaining donation amounts, supporting the hypothesis that timing matters in donation behavior.

Table 4.1: Comparison of Models: ANOVA Table

Statistic	Model 6(final)	Model 3	Difference in Df	Sum of Squares	p-value
Residual Degrees of Freedom	4320	4323	-3	-1242396834	2.2e-16
F-statistic	157.67				***
<i>Note: Significance codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1</i>					

Source: Author's simulation result based on KSE Foundation data.

The Variance Inflation Factor (VIF) was used to check for multicollinearity (see Table 4.2). All VIF values were below 10, indicating no multicollinearity concerns and the model's coefficients are stable and reliable. Assumption checks were performed for linearity and homoscedasticity. Slight violations were found, particularly for higher donation amounts. This suggests that the model could be improved by applying data transformations, such as log-transformation of donation amounts. The Shapiro-Wilk test confirmed that the residuals are not normally distributed (p-value  $< 2.2e-16$ ), suggesting that transformations or robust regression methods may be necessary. Additionally, the



Breusch-Pagan test revealed heteroscedasticity ( $p\text{-value} < 2.2\text{e-}16$ ), indicating that the model is less accurate for larger donations.

Table 4.2: Variance Inflation Factor (VIF) Table

<b>Variable</b>	<b>GVIF</b>	<b>Df</b>	<b>GVIF<sup>1/(2*Df)</sup></b>
Designation_grouped	4.361975	5	1.158693
Total Donation Amount	1.387118	1	1.177760
Total Quantity	1.481967	1	1.217360
Country_grouped	1.405629	2	1.088849
Date of donation	3.100880	1	1.760932

Source: Author's calculations based on data from KSE Foundation.

The coefficients from Model 6 were interpreted as follows: Gender (Male) has a significant effect on donation amounts ( $p < 2\text{e-}16$ ) and Designation\_grouped(Other) shows a strong influence on donations ( $p < 2\text{e-}16$ ), indicating that donations to certain categories, such as Other, are more substantial. Total Donation Amount ( $p < 2\text{e-}16$ ) and Total Quantity ( $p < 2\text{e-}16$ ) remain the most significant factors influencing donation behavior. Country\_grouped(Ukraine) and Country\_grouped(United States) have significant effects on donation amounts ( $p = 0.03290$  and  $p = 0.03589$ , respectively). Date of donation was statistically significant ( $p = 0.021246$ ), confirming that timing plays a role in donation behavior (see Table 4.3).

In conclusion, the regression analysis highlights that Date of donation and Total Donation Amount are significant factors in explaining donation amounts. The model results support both hypotheses 1 and 3. The significant coefficients for Country\_grouped(Ukraine) ( $p = 0.03290$ ) and Country\_grouped(United States) ( $p = 0.03589$ ) further substantiate the observed patterns, highlighting the influence of nationality on donation behavior. Gender (Male) showing a highly significant coefficient ( $p < 2\text{e-}16$ ), indicating that male donors donate larger amounts compared to females across all donation categories.

Table 4.3: MLS Regression Results

MLS Regression Results						
	<i>Dependent variable:</i>					
	Donation Amount					
	(1)	(2)	(3)	(4)	(5)	(6)
Gender Male	99.894* (53.258)	91.295* (54.017)	90.641 (55.149)	198.928*** (53.432)	209.842*** (52.730)	206.837*** (52.720)
Designation Humanitarian		11.504 (89.383)	51.791 (93.461)	12.483 (90.028)	29.742 (88.844)	57.119 (89.591)
Designation KSE Institutional Support		101.511 (101.357)	123.090 (104.292)	142.070 (100.438)	301.125*** (100.174)	349.663*** (102.316)
Designation Memorial Scholarship		164.808 (146.649)	149.332 (148.385)	161.425 (142.895)	-22.882 (142.008)	-72.985 (143.593)
Designation Other		289.690*** (80.404)	288.253*** (83.048)	200.213** (80.117)	255.657*** (79.215)	450.333*** (115.782)
Designation Scholarships		108.759 (79.332)	121.494 (82.665)	115.861 (79.607)	28.878 (78.953)	19.923 (79.010)
Total Donation Amount			119.899* (71.441)	109.269 (68.799)	145.037** (67.964)	149.476** (67.957)
Total Quantity			160.867*** (61.935)	-97.754 (61.271)	-127.013** (60.516)	-130.278** (60.502)
Country Ukraine						0.00000** (0.00000)
Country United States				0.045*** (0.002)	0.058*** (0.003)	0.059*** (0.003)
Date of Donation					-22.208*** (2.041)	-23.452*** (2.111)
Constant	161.287*** (41.584)	46.558 (70.002)	-49.833 (85.158)	-129.244 (82.120)	138.710 (84.688)	-6,531.074** (2,895.580)

Observations	4,332	4,332	4,332	4,332	4,332	4,332
R <sup>2</sup>	0.001	0.005	0.007	0.079	0.103	0.105
Adjusted R <sup>2</sup>	0.001	0.003	0.005	0.077	0.101	0.102
Residual Std. Error	1,710.016 (df = 4330)	1,707.550 (df = 4325)	1,706.509 (df = 4323)	1,643.354 (df = 4322)	1,621.488 (df = 4321)	1,620.680 (df = 4320)
F Statistic	3.518* (df = 1; 4330)	3.507*** (df = 6; 4325)	3.543*** (df = 8; 4323)	41.136*** (df = 9; 4322)	49.863*** (df = 10; 4321)	45.858*** (df = 11; 4320)
<i>Note:</i>					*p<0.1; **p<0.05; ***p<0.01	

Source: Author's calculations based on data from KSE Foundation.

#### 4.2 ANALYSIS OF DONATION PATTERNS BY ALUMNI ENGAGEMENT, MOTIVATION AND EDUCATION LEVEL

This part of the analysis is based on a survey conducted among donors from various countries, aiming to explore factors influencing their donations to KSE. Specifically, it addresses three hypotheses: H2 (Ukrainian donations are largely driven by urgent needs, whereas U.S. donors are influenced by longstanding philanthropic traditions), H4 (Alumni who are engaged with their alma mater are more likely to donate to KSE) and H5 (The higher the education degree, the more likely individuals are to make donations to higher education institutions). The analysis uses data from several survey questions, including those related to alumni engagement, motivations for supporting KSE and the amount of annual donations.

To test H4, the focus was on the relationship between engagement with the alma mater (measured by the *Feel\_connected* variable) and donations to KSE (measured by *avg\_annual\_donation*). The hypothesis suggested that alumni who feel more connected to their alma mater would donate more to KSE.

A Pearson correlation was calculated between *Feel\_connected* and *avg\_annual\_donation* to measure the strength and direction of their relationship (see Table 4.4). The results revealed a very

weak correlation ( $r = -0.01507$ ) with a p-value of 0.8659, indicating no significant linear relationship between the level of engagement with the alma mater and the amount donated to KSE.

Table 4.4: Pearson Correlation Between Grouped Feeling Connected to Donors Alma Mater and Donation Amount

<b>Statistic</b>	<b>Value</b>
t-value	-0.16918
Degrees of Freedom (df)	126
p-value	0.8659
Confidence Interval (95%)	[-0.1881, 0.1589]
Correlation Coefficient (r)	-0.01507002

Source: Author's calculations based on data from survey.

Additionally, a linear regression was performed to examine the predictive power of *Feel\_connected* on *avg\_annual\_donation* (see Table 4.5). The model showed a low R-squared value of 0.03485, suggesting that *Feel\_connected* has a minimal effect on the amount donated to KSE. The regression results further confirmed that engagement with the alma mater does not significantly influence donation amounts.

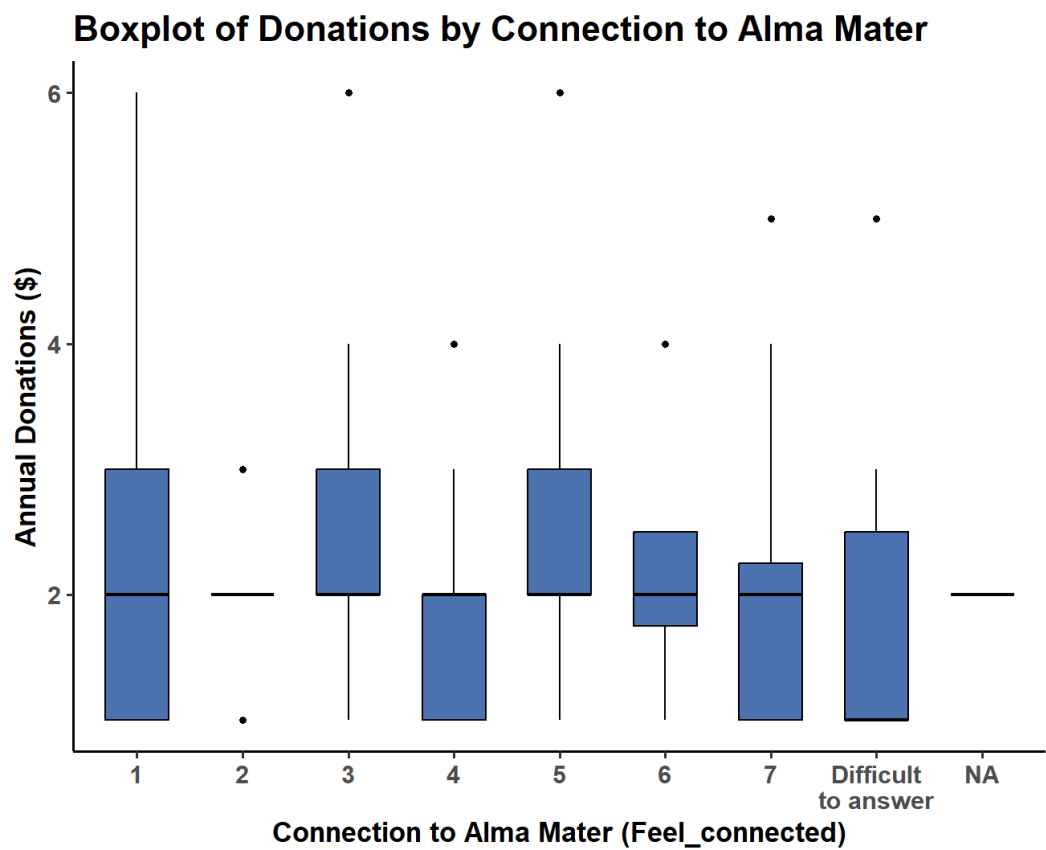
Table 4.5: Linear Regression: Feeling Connected to Donors Alma Mater vs Donation Amount

<b>Variable</b>	<b>Estimate</b>	<b>Std. Error</b>	<b>t-value</b>	<b>p-value</b>
Intercept	2.32143	0.21849	10.625	2e-16 ***
Feel_connected2	-0.32143	0.32938	-0.976	0.331
Feel_connected3	0.24379	0.32535	0.749	0.455
Feel_connected4	-0.37698	0.34928	-1.079	0.282
Feel_connected5	0.03151	0.35548	0.089	0.930
Feel_connected6	-0.07143	0.46348	-0.154	0.878
Feel_connected7	-0.15476	0.39890	-0.388	0.699
Feel_connectedDifficult to answer	-0.32143	0.48855	-0.658	0.512
Residual Standard Error 1.156 (df = 127)				
Multiple R-squared	0.03485			
Adjusted R-squared	-0.01835			
F-statistic	0.655		(df = 7, 127)	0.7096

Source: Author's calculations based on data from survey.

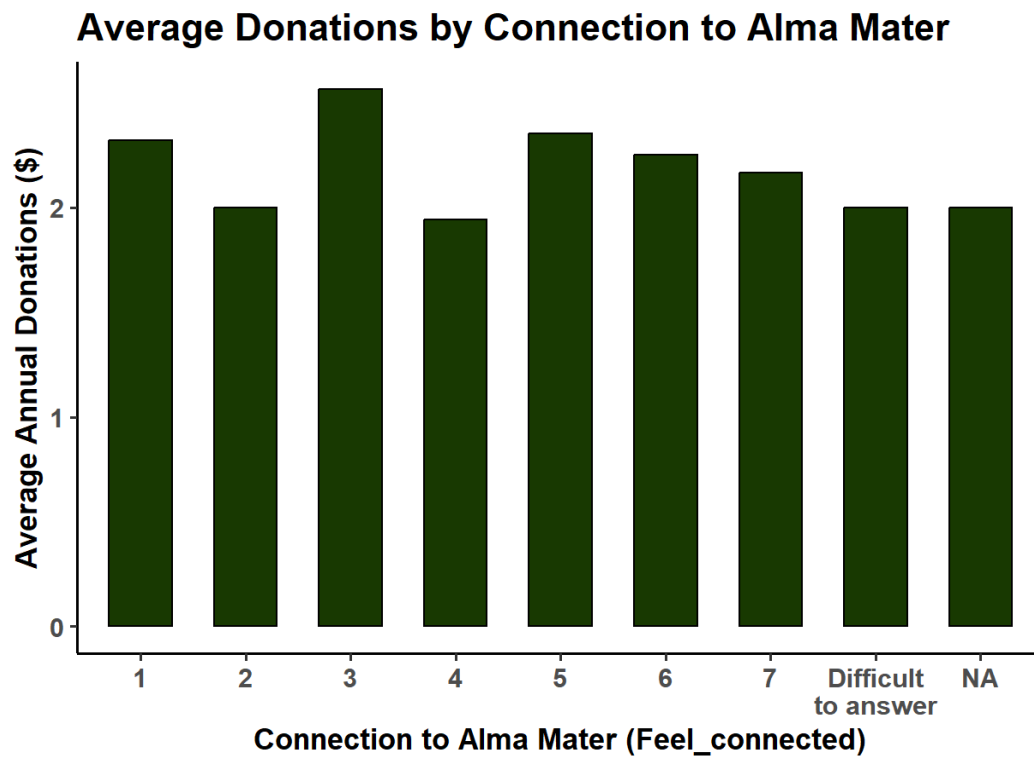
The analysis also included visualizations, such as boxplot and bar plot, to examine the relationship between Feel\_connected and avg\_annual\_donation. Both visualizations showed no clear trend or significant differences between levels of engagement, reinforcing the findings from the statistical tests (see Figure 4.7, 4.8).

Figure 4.7: Boxplot of Donation Amount by Connection to Donor Alma Mater



Source: Made by author based on survey.

Figure 4.8: Bar Plot of Donation Amount by Connection to Donor Alma Mater



Source: Made by author based on KSE Foundation survey.

To explore the effect of engagement more clearly, the *Feel\_connected* variable was grouped into two categories: Low ( $\text{Feel\_connected} \leq 3$ ) and High ( $\text{Feel\_connected} > 3$ ) engagement. However, a t-test comparing the donation amounts between these two groups also showed no significant difference (p-value = 0.4334), indicating that engagement does not substantially affect donation amounts (see Table 4.6).

Table 4.6: Welch Two Sample t-test Results

Statistic	Value
t-value	-0.78584
Degrees of Freedom (df)	127.71
p-value	0.4334
Confidence Interval (95%)	[-0.5495, 0.2371]
Mean in Group High	2.145161
Mean in Group Low	2.301370

Source: Author's calculations based on data from survey.

In conclusion, the analysis does not support the hypothesis that alumni who are more engaged with their alma mater donate more to KSE.

The next part of analysis focuses on the relationship between donor priorities, which type of needs to support, country of origin and donation amounts using a Random Forest model. The goal was to see if country and donation\_support (type urgent or long-term initiatives) influence how much people donate.

The data was divided into a training set (70%) and a test set (30%) using random sampling with a fixed seed (`set.seed(123)`) to ensure reproducibility. This split was performed once. The Random Forest model was built using Country and donation\_support as predictors for avg\_annual\_donation. The model was created using 500 trees, which is a typical configuration for Random Forest to ensure robust results while balancing computational efficiency. The Random Forest model type is regression, as the dependent variable, avg\_annual\_donation, is continuous. After training, the model's accuracy was evaluated on the test set using Mean Squared Error (MSE).

The model output showed the following results (see Table 4.7):

- Mean Squared Error: 1.20583. This value indicates the average squared difference between predicted and actual donation values. The obtained MSE value of 1.20583 suggests the model has moderate predictive accuracy, indicating acceptable but not optimal performance, hence still suggests room for improvement.
- % Variance Explained: -4.34%. This negative value is concerning and suggests that the model is underfitting the data. It could be the result of an overcomplicated model or that the features used for prediction are not highly predictive of the donation amounts.

Table 4.7: Random Forest Model Results using Country and Supported Needs Type

<b>Statistic</b>	<b>Value</b>	
Type of Model	Regression	
Number of Trees	500	
No. of Variables Tried at Each Split	1	
Mean of Squared Residuals (MSE)	1.403484	
Percentage of Variance Explained	-4.23	
<b><i>Variable Importance</i></b>		
Country donation support	5.238797	7.404463
	(IncMSE)	(IncNodePurity)
	-8.055963	3.871125
	(IncMSE)	(IncNodePurity)
<i>Mean Squared Error (MSE):</i>		1.20583

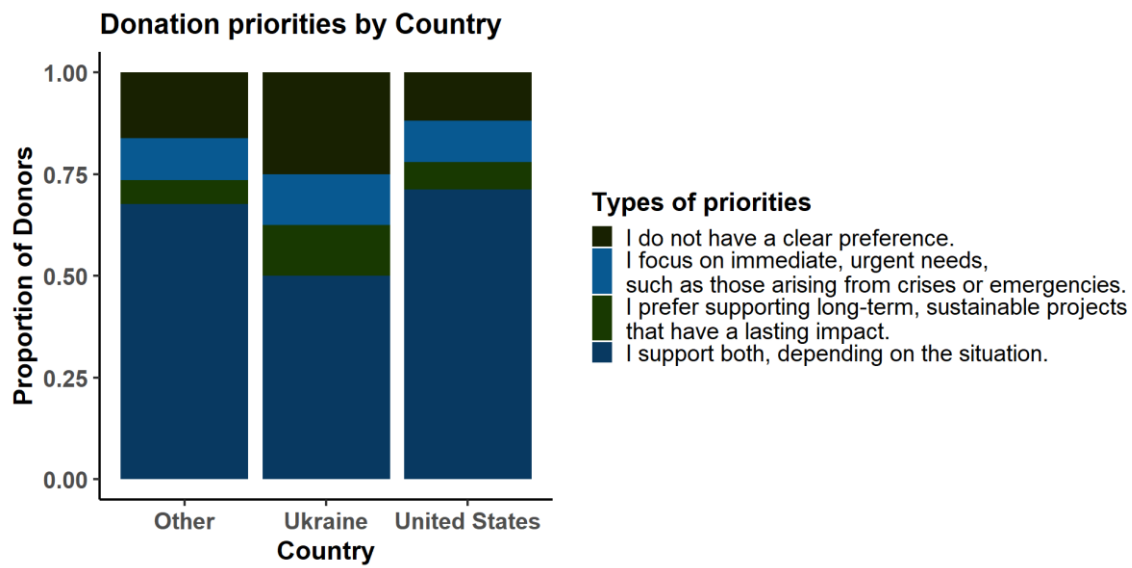
Source: Author's calculations based on data from survey.

The importance of each variable in the model showed that Country had the greatest impact on the donation amounts, while donation\_support had a minimal effect. This suggests that the country of the donor plays a larger role in determining how much they donate than their motivation (whether they focus on urgent needs or long-term projects). It also aligns with the conclusion that geographic location (the country of the donor) may have a stronger influence on the donation amount than the type of support (urgent vs. long-term).

To better understand donor motivations, a stacked bar plot was created (see Figure 4.9). The plot shows the proportions of donors from various countries who are motivated by different factors like urgent needs or long-term projects. The results reveal that the proportions of motivation types are fairly consistent across countries, with most donors supporting both types of projects. The distribution of motivations was quite similar across countries, suggesting that donor behavior is more influenced by factors other than just the country of origin.



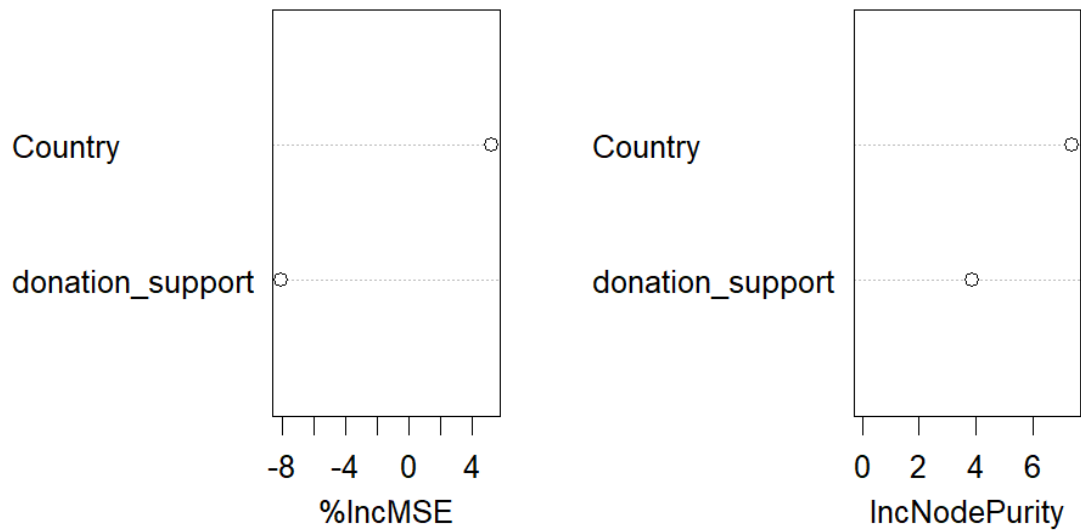
Figure 4.9: Stacked Bar Plot of Donation Priorities by Country



Source: Made by author based on KSE Foundation survey.

The importance plot shows that Country has a much higher impact on donations compared to donation\_support, which confirms that the country of origin is a significant predictor of donation amounts, while the type of support (urgent vs long-term) has a minimal effect (see Figure 4.10).

Figure 4.10: Random Forest Variable Importance Plot



Source: Author's simulation result based on survey.

In conclusion, the analysis did not support the idea that donation motivation (urgent vs long-term projects) is a significant driver for donation amounts. Instead, similar to previous findings, Country appeared to be the most important factor influencing donation behavior.

Initially, an analysis was conducted to test Hypothesis 5. A linear regression model was built with avg\_annual\_donation as the dependent variable and education level as the independent variable. The regression results showed that the p-values for the coefficients of each education level were all above 0.05, indicating that education level was not a significant predictor of donation amounts (see Table 4.8). There was no strong evidence that individuals with higher education degrees (e.g., PhD) donate more than those with lower degrees (e.g., Bachelor's).

Table 4.8: Linear Regression Results for Education Degree and Donation Amount

Variable	Estimate	Std. Error	t-value	p-value
Intercept	2.22101	0.11247	19.747	2e-16***
Degree.L	0.26934	0.25868	1.041	0.300
Degree.Q	-0.18179	0.22495	-0.808	0.421
Degree.C	0.02234	0.18516	0.121	0.904
Residual Std. Error	1.146 (df=120)			
Multiple R-squared	0.01408			
Adjusted R-squared	-0.01057			
F-statistic	0.5713	(df =3, 120)	0.635	

Source: Author's calculations based on data from survey.

ANOVA was used to compare the mean donation amounts across education levels. The results showed no statistically significant differences in donation amounts between education groups, with an F-value of 0.571 and a p-value of 0.635, suggesting that education level does not explain variations in donation behavior (see Table 4.9).

Table 4.9: ANOVA Results for Education Degree and Donation Amount

<b>Source</b>	<b>Df</b>	<b>Sum of Squares</b>	<b>Mean Squares</b>
<b>F-value</b>	<b>p-value</b>		
Degree	3	2.25	0.7498
0.571	0.635		
Residuals	120	157.49	1.3124

Source: Author's calculations based on data from survey.

This analysis, including both regression and ANOVA, suggests that education level does not significantly influence donation behavior and hence does not confirm hypothesis.

Other factors, such as personal values, financial capacity, or emotional attachment to the cause, may have a stronger impact on donation amounts than education level alone. The lack of significant findings could also be due to the sample size (131 responses), which might not be large enough to detect subtle differences, especially if the distribution of education levels is imbalanced.

## CHAPTER 5. DISCUSSION

The findings of this study provide valuable insights into the differences in charitable giving behaviors between donors from Ukraine and the United States, particularly in the context of higher education fundraising. These results are interpreted by discussing each hypothesis individually, linking relevant literature directly to empirical findings.

First, consistent with previous studies (Schuyt; Jung et al.; Von Schnurbein et al.), the analysis confirms that philanthropic motivations and behaviors differ significantly across cultures and are strongly influenced by contextual factors such as economic conditions, social norms, and ongoing crises. Specifically, Hypothesis 1, stating that Ukrainian donors predominantly support defense-related initiatives due to urgent wartime needs, while American donors favor education-related and humanitarian causes, found clear empirical support. This aligns well with literature emphasizing how immediate crises significantly shape philanthropic priorities (Osili et al.). This context should be taken into account by charitable foundations when they prepare messages and communication strategy.

Second, this study reinforces existing research on gender differences in philanthropy (Dvorak and Toubman; Lo and Tashiro). Hypothesis 3, which predicted that men contribute more frequently and in larger amounts compared to women, was partially supported by the analysis across both Ukrainian and American contexts. In the United States, men significantly outnumber women in donations, contributing approximately twice as much, with the exception of humanitarian causes. In Ukraine, women dominate most donation areas, although the difference is not as pronounced. However, in defense donations, men make a much larger contribution. Overall, when looking at the donor structure, men contribute more frequently, and their average donation amount is higher in both countries. These gender disparities emphasize the persistent influence of gender-based financial and social resource inequalities on philanthropic giving. In the same vein to the previous finding, this insight indicates that foundations should differentiate their audiences by gender as well.

Third, contrary to prior assumptions in the literature regarding alumni engagement (Bekkers and Wiepking; Monks), empirical analysis found no significant relationship between feelings of connection to donors' alma mater and donation amounts (Hypothesis 4). The wartime context in Ukraine might overshadow typical motivational factors, suggesting that immediate societal needs significantly outweigh institutional ties in crisis situations. This finding poses a dilemma to charitable foundations who often work through networks of the most committed and connected individuals. Perhaps during the war, this variable becomes insignificant, creating new opportunities to engage people regardless of their commitment. However, one has to be mindful that this variable can become significant again once the war is over.

Fourth, Hypothesis 5, proposing that higher education attainment significantly impacts donation behaviors, was not supported by the analysis. Despite literature suggesting such a link (Bekkers and Wiepking), results revealed no significant relationship between education levels and donation behavior, despite most donors holding advanced degrees (MA or PhD). This discrepancy could indicate that other overriding factors, such as economic instability, personal financial capacity, or emotional responsiveness to immediate needs, must be considered jointly with education to reveal their combined influence.

The limited sample size and potential response bias in survey data might have obscured subtle motivational differences, particularly affecting the representativeness of Ukrainian donor motivations compared to the significantly larger American sample. This imbalance could reflect differences in willingness to engage, share opinions, and expectations for higher-quality donor communication.

Using unique statistical data, a novel survey, and various statistical tools including regression and Random Forest models, the study emphasizes that multiple complex factors influence donor motivations. Given the modest explanatory power (small R-squared values) and minor differences identified in alumni engagement, donations likely result from a combination of measured and unmeasured factors such as personality traits, media influence, and unique events or circumstances.

Practically, Ukrainian foundations should strategically consider cultural motivations (military versus humanitarian) to avoid alienating potential donors through overemphasis on military narratives or excessive investment in niche segments such as alumni.

Future research should extend beyond single-case studies such as KSE to include multiple Ukrainian universities and other philanthropic sectors to achieve a more comprehensive understanding of donation behaviors across various contexts. Additionally, longitudinal research could clarify whether observed deviations are persistent or temporary wartime anomalies.

## CHAPTER 6. CONCLUSION

This thesis investigated the differences in philanthropic behavior between Ukrainian and American donors for supporting higher education, using the KSE and analyzing 5 hypotheses. The primary aim was to identify the key factors influencing donor motivations and behaviors, with an emphasis on understanding the impact of the ongoing war in Ukraine compared to the longstanding philanthropic culture in the United States. The study employed a mixed-methods approach, combining quantitative analysis of a robust dataset of donor records and qualitative insights derived from an original survey made for KSE donors.

The quantitative component of the study utilized comprehensive statistical analyses, including MLR and Random Forest models, to explore donation patterns among donors from Ukraine and the USA. These analyses were complemented by the survey data, which examined deeper motivational factors, the impact of education levels, priorities of which project to support and the role of alumni engagement.

The findings confirmed several critical differences in donor motivations and behaviors between the two countries. Consistent with existing literature, Ukrainian donors primarily supported defense-related initiatives and memorial scholarships, reflecting urgent wartime needs and strong patriotic sentiments. Conversely, American donors demonstrated a preference for educational and humanitarian causes, highlighting the influence of established philanthropic traditions and systematic donor engagement practices in the U.S.

Additionally, the analysis revealed significant gender differences in philanthropic behavior, with men contributing in larger amounts compared to women in both countries. This finding aligns with previous studies on gender and philanthropy, indicating persistent disparities likely due to existing socioeconomic inequalities.

Contrary to initial expectations based on the existing scholarship, alumni engagement and education level did not significantly predict donor behavior within the KSE context. This absence of "spillover effects" from alumni engagement may indicate the overwhelming influence of immediate wartime circumstances that overshadow more traditional motivational factors.

The policy implications arising from these findings are substantial, particularly for higher education institutions in Ukraine navigating fundraising efforts during and beyond wartime conditions. Ukrainian universities and foundations could greatly benefit from adopting structured and systematic fundraising strategies modeled after successful U.S. practices, especially in areas of consistent donor communication, transparent reporting of impact, and targeted engagement campaigns. Such specific communication strategies and campaigns will help to attract new donors from other income, gender and social categories and from all over the world to sustain Ukraine's future. Given the cultural and motivational differences highlighted, foundations should also diversify their narratives to balance urgent defense appeals with broader humanitarian and educational causes, thereby appealing to a wider international donor base and proposing different directions to support, in this way, more donors can find the purpose to donate. Be transparent and communicate this, prepare reports, showing results and impact will be useful and will be a good sign for people to believe in the institution's goal and be a part of nice changes.

Future research should address several limitations identified in this study, notably the small and imbalanced sample size, particularly regarding Ukrainian respondents. Expanding data collection to encompass multiple Ukrainian universities and conducting longitudinal studies could significantly enhance understanding of donor behaviors and motivations over time. Moreover, incorporating additional variables such as personality traits, media influences, and specific temporal events into future analytical models would likely yield more nuanced and comprehensive insights.

In conclusion, this research underscores significant cultural and contextual differences in philanthropy between Ukrainian and American donors showing the behavior from the start of full-



scale invasion. It highlights the urgent need for Ukrainian institutions to start or keep using fundraising initiatives by leveraging international best practices and diversifying donor outreach methods. Addressing identified gaps in donor communication, gender disparities, and alumni engagement could substantially enhance philanthropic support, contributing positively to the resilience and growth of Ukraine's higher education sector.

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## APPENDICES

### Appendix A: Survey Questions to KSE Donors

#### Group 1

**1. What is your affiliation with KSE? (Select all that apply)**

- Former university student (alumni)
- Parent of a current or former student
- Friend/associate of someone affiliated with KSE
- KSE staff (faculty, admin, researcher at any unit of KSE)
- Regular donor
- One-time donor
- Other (please specify)

**2. How did you first learn about KSE? (Choose only one)**

- Referred by a KSE alumnus (alumna) or friend
- Admission campaign
- Attended an event
- Followed KSE staff on social media (Facebook, Twitter, LinkedIn)
- Followed specifically Tymofiy Mylovanov on social media (Facebook, Twitter, LinkedIn)
- Found through KSE social media
- Found through media coverage (newspapers, radio broadcasts, TV shows, interviews, etc.)
- Other

**3. To what extent do the items listed below motivate you to support Kyiv School of Economics (KSE)? (1 = not motivating at all, 7 = the strongest motivation)**

- I belong to KSE (alumni, staff, student, etc.)
- I have personal ties to someone in KSE (family or friends)
- KSE has values which I support
- KSE works with specific projects/causes which I support
- KSE general appeal and role in society
- I support educational institutions
- I want to help Ukraine during the war
- Financial benefits, such as tax incentives or matching donations
- Other people whom I know in person have donated to KSE
- Sense of responsibility to give back
- I support KSE's initiatives to help military personnel and veterans
- I do this because I feel that my support makes a difference
- I align my personal values with my donations to KSE
- Transparency in the use of funds encourages me to contribute
- Positive previous donation experiences motivate me to continue donating
- It is a tradition for me—I always support initiatives that matter to me
- I have walked a similar path, so I need to support KSE

**4. Do you prefer to support long-term projects, or do you focus on immediate, urgent needs?**

**(Choose only one)**

- I prefer supporting long-term, sustainable projects that have a lasting impact
- I focus on immediate, urgent needs, such as those arising from crises or emergencies
- I support both, depending on the situation
- I do not have a clear preference

**Group 2**



**5. On average, how much do you donate to KSE annually? (Choose only one)**

- Under \$100
- \$100-\$500
- \$500-\$1,000
- \$1,000-\$2,000
- \$2,000-\$5,000
- Over \$5,000

**6. How likely are you to suggest KSE as a donation option to others? (1 = not likely at all, 7 = very likely)**

**7. How long have you been with KSE? (Choose only one)**

- Before 2022
- Since 2022
- Since 2023
- Since 2024
- Since 2025

**8. How satisfied are you with the information KSE provides on how donations are used? (1 = not satisfied at all, 7 = very satisfied)**

**9. Which channels do you prefer for KSE communications? (Select all that apply)**

- Email
- Messengers
- Social media or online communications
- Online events
- Offline events

- Printed newsletters/reports/cards
- Other (please specify)

**10. What improvements can KSE make to enhance our communication with you and enrich the overall experience?**

*(open-ended response)*

### **Group 3**

**11. What is the highest degree you have earned? (Choose only one)**

- BA
- MA
- PhD
- Other

**12. Please specify the institution where you completed your highest level of education:**

*(open-ended response)*

**13. Have you ever financially supported your alma mater? (Choose only one)**

- Yes, monthly
- Yes, quarterly
- Yes, annually
- Yes, once
- No, but I would consider it in the future
- No, and I do not plan to

**14. What influenced your decision to support your alma mater? (Select all that apply) *(if answered yes above)***

- A direct request from the institution
- Alumni events and engagement
- Personal belief in the institution's mission
- Emotional connection to the institution
- Social responsibility
- Economic incentives
- Family tradition
- Other (please specify)

**15. How often do you engage with your alma mater (e.g., attending events, contributing to activities)? (1 = never at all, 7 = every time invited)**

- Events
- Gatherings (e.g., alumni meetings)
- Donations
- Parties
- Fundraising activities

**16. How connected do you feel to your alma mater? (1 = not connected at all, 7 = very connected)**

#### **Group 4**

**17. What is your gender? (Choose only one)**

- Male
- Female
- Non-binary
- Genderqueer

- Genderfluid
- Prefer not to say
- Other

**18. What is your age?** (*open-ended numerical response, full years*)

**19. What is your current country of residence? (Choose only one)**

- United States
- Ukraine
- Canada
- United Kingdom
- Germany
- Sweden
- Italy
- Other

**20. What is your current occupation?** (*open-ended response*)

**21. What is your monthly income level (total household)?** (*open-ended numerical response in \$*)

**22. What is your marital status? (Choose only one)**

- Single
- Married
- Divorced
- Widowed
- Domestic partnership
- Prefer not to say

**23. Do you have any children? (Choose only one)**

- Yes
- No