

A Cross-country Study on the Effects of Cultural Tightness on Donation Request Compliance

Alex Hanyu Chen

BASIS Independent Silicon Valley, San Jose, 95126, USA

Abstract. The world is becoming increasingly dependent on charities to solve inequality and poverty. Charitable giving is a social phenomenon heavily dependent on cultural factors. One such underexplored factor is cultural tightness/looseness (CTL), or the degree to which individuals within a society adhere to the social norm. Prior literature indicated that there may be greater extrinsic motivations for individuals in tighter cultures to comply with donation requests based on very limited data. To verify this hypothesis, we used data from [1] and the 2021 World Giving Index Report across 54 different nations. We then developed a model for the relationship between CTL and the donation request compliance rate in a cross-country study. The model was then adjusted with other factors such as GDP per capita, ethnic tensions, and internal conflicts to improve the accuracy. We find evidence that as the culture is looser, individuals are less willing to comply with donation requests, validating the initial hypothesis and expanding on the external validity of past literature. We reveal a critical link between culture and donor behavior, and we also provide a strong foundation for future research regarding cultural effects on donor behavior at the individual level.

Keywords: Charitable giving, CTL, Cross-country data.

1. Introduction

Charitable giving, or simply giving, is the act of donating time or money for no direct personal gain. Despite being part of the small voluntary sector of the economy, as [2] explains, it has hovered at around 2% of the total GDP in the United States and around 1% of the total GDP in the United Kingdom. The reasoning behind the variation of this number is primarily caused by a difference in the development of charitable giving culture.

Despite being an often understudied field in economics, charitable giving plays a significant role in our economy. [3] discovered that governments around the globe are slowly increasing their reliance on charitable giving to manage inequality. [4] further find that, in the United Kingdom, for every pound donated to R&D, 0.94 more pounds is crowded into private research and development. These papers indicate that charitable giving, or simply giving, can significantly impact entire nations and is a vital component of the economy.

Many extrinsic motivations cause individuals to comply with donation requests. In this context, extrinsic motivations are motivations that don't come from the act of giving itself. One such motivation is social pressure. [5] found that Americans were 10-25% more likely to avoid donations when informally presented with the option, and 30% more likely to avoid it when formally presented with the option. This implies that social pressure plays a significant role in determining the likelihood of individuals donating. Similarly, [6] found that the warm-glow effect, the emotional reward of positively impacting a community, is another extrinsic factor that influences donors [1]. Furthermore, as [7] found, the idea of reciprocity, where individuals donate for possible future gains, may also influence giving. A study conducted by [8] found that alumni with teenage children who are likely to apply to their university were far more likely to donate to the university than alumni without teenage children or alumni with teenage children who are unlikely to apply to the university. This indicates that potential future gains, such as higher admission rates, may be a major reciprocal incentive to donate to organizations.

However, the success of giving differs from country to country. [2] concludes that the difference between charitable giving rates in the US and the UK is caused by a difference in the development of giving culture between countries. However, [2] also acknowledges many other factors that may differ between nations, such as political structures or social attitudes, that may play a role in this difference.

This is further backed by [9], who state that giving is a social phenomenon that is influenced by cultural urges. One of these cultural urges may be the urge to follow societal norms. Cultural tightness/looseness (CTL) is a cultural dimension defined as the degree to which societal norms are imposed on individuals within a society. Societal norms are more imposed on individuals in a tighter culture than on individuals in a looser culture.

Greater cultural tightness has the potential to increase several extrinsic motivations for charitable giving. [10] found that, in looser cultures, people generally behave depending on their personal values. However, in much tighter cultures, there was nearly a non-existent relationship between individual values and the actions they took. These results imply that culturally tight nations may have a greater degree of social pressure placed on the donor, increasing their willingness to donate. Similarly, in another study, [11] argue that in tighter cultures, individuals have a greater sense of collective control than in looser cultures. These individuals generally believe that group action and social coordination can be more effective than individual action. Thus, tighter cultures may exhibit a greater warm glow effect, as they believe their actions are having a greater positive impact on society than looser cultures. Furthermore, [12] find that in culturally tight groups of individuals, adhering to the social norm can result in upward social mobility. This study implies that tighter cultures will have a greater tendency to give, as it may have a reciprocating effect on their social status.

While these studies point toward a strong connection between cultural tightness and donation request compliance, there has only been one study about the two. [13] conducted a study between Americans and South Koreans, where the Americans represented a looser culture and the South Koreans represented a tighter culture. The study discovered that the tighter culture complied with donation requests more often than the looser culture. They also conducted a second study, where it was found that the looser culture had an increase in donation participation while observed, but the tighter culture had little to no increase. This indicates that CTL does have a noticeable effect on giving, and there is a greater internalized extrinsic motivation among individuals in a tighter culture. However, this study is limited to two nations, allowing for other variables to influence the result.

While there haven't been any other studies directly linking CTL with donation request compliance, there have been many similar studies. Although not directly measuring the CTL of nations or individuals, several other papers have found a significant within-group disposition to donate. [14] discovered that racial biases can lead individuals to be significantly more likely to donate to those of the same race due to perceiving them as more "worthy". Similarly, regarding ethnic and religious effects, [15] found that religious and ethnic diversity within communities generally reduced rates of giving by 10% and 14%, respectively, for every 10% increase in diversity. These show how internal racial, ethnic, or religious biases within a more homogeneous society generally lead to higher rates of giving, as they have a greater within-group disposition to donate.

Other findings suggest a connection between cultural connection and the willingness to donate. [16] found that undergraduate male athletes who won basketball championships are 7% more likely to donate to their university than others. [17] also find that athletic success has a small but noticeable increase in donations, most notably in National Collegiate Athletic Association Division one (NCAA IA) schools. This is speculated to be due to NCAA IA schools receiving greater media attention, leading to athletes identifying with their colleges more. These studies suggest that individuals who are more active and culturally connected to their community, such as college athletes experiencing success, may be more willing to donate. Concerning CTL, greater cultural tightness implies a deeper cultural connection, possibly leading to more donations.

In this study, we use a cross-country analysis to uncover a general relationship between CTL and the donation request compliance rate. By considering a broader set of countries, we will be able to find a more accurate connection between CTL and donation request compliance while eliminating some of the confounding variables that may have influenced past studies. With a larger sample size of cultures, we will better demonstrate a link between CTL and the donation request compliance rate. We will also discuss the significance of such a connection when it comes to fundraising.

2. Data and Methods

In this section, we detail the sources for our data, the reasons for our data, and the summary statistics for our data. We also provide the methodology we will use in this paper.

2.1 Variables and Data Sources

The sample data for CTL levels across nations comes from [1]. [1] provides a comprehensive framework in which CTL across 68 nations is examined through a domain-general, domain-specific, and combined index to produce the best possible estimation for a country's CTL level. This paper provides the most recent framework for determining the CTL of multiple nations. The accuracy of this framework was also affirmed when it was applied across states in the US, finding a near-exact correlation with the past literature [1]. Of the three indices in which CTL can be measured, the paper finds that the most accurate measure is the combined index. As a result, we will be using the combined index to determine the cultural tightness or looseness of nations in this cross-country study.

In order to determine the donation request compliance rate, we will be using a proxy. We will be using a subindex of the 2021 World Giving Index Report. The World Giving Index Report is an annual report created by the Charities Aid Foundation [18] detailing the percentage of individuals who donated, volunteered, or helped a stranger across a wide variety of countries. The sample we chose is the dataset for participation in helping a stranger in the 2021 World Giving Index, as it provided the most comprehensive dataset closest to when the CTL index was developed. The statistics are taken from Gallup's World Polls. In the 2021 report, the polls were conducted via telephone. One limitation of this report may be that, due to the COVID-19 pandemic, the method of data collection for the World Giving Index was altered, which could have had effects on the general accuracy of the dataset. The discrepancy between the year when the CTL index was developed and the World Giving Index report is not a major problem, as [20] have demonstrated that CTL levels do not change significantly over time within a nation. This is also why we avoided a fixed-effects model.

From the report, we will not use the money donation rate, as it includes donations raised without request. Instead, we use the participation rate of helping a stranger. This allows us to find a close approximation for the donation request compliance rate. The question asked by Gallup's World Polls to calculate this index is "[Have you] helped a stranger, or someone you didn't know who needed help [in the past month]?" Thus, we can draw a parallel between helping strangers and complying with a donation request from a charity. With the implication that the help was given to a stranger who visibly needed or requested help, the same logic applies to donation requests, where fundraisers ask individuals for money to help strangers. Previous literature also reinforces this idea, as [20] find that volunteering and donations are complements, indicating that individuals who are more willing to volunteer their time to help strangers who requested are also willing to donate to charities if requested. By using the participation rate of helping a stranger as a proxy for the request compliance rate, we can obtain an accurate estimate of the relationship between CTL and the donation request compliance rate.

However, using the percentage of individuals who helped a stranger as a proxy for the donation request compliance rate also has a few limitations. First, different individuals have different preferences for charities [15]. Individuals within certain countries may have certain preferences that make it easier or harder for charities to match their preferences, which can significantly affect individuals' willingness to comply with donation requests. Similarly, while [20] find that volunteering and donations are complements, they aren't perfect complements. This means that the percentage of individuals who may have helped strangers by volunteering their time may not have complied with a donation request from a charity. Nevertheless, the correlation remains strong, meaning that the relationship between the CTL of a given country and the percentage of people who helped a stranger will indicate a relationship between CTL and donation request compliance.

We will also be controlling for the real GDP (PPP) per capita from the World Bank. By converting the GDP to international dollars as adjusted for by the purchasing power parity, the World Bank finds an accurate measure for the average GDP (PPP) per capita of every nation [21]. This measures the

average output and income of an individual. Using this dataset, we will be able to adjust for income and economic activity to find the rate of donation request compliance *ceteris paribus*.

We will also adjust for ethnic tensions and internal conflicts. The datasets for these two variables are from the International Country Risk Guide. Thus, my results will not be influenced by any internal conflicts that may influence the rate at which individuals within a country are willing to help strangers or comply with donation requests.

Because we use the 2021 World Giving Index Report, all the data for the control variables will also be from 2021. We will use GDP per capita in 2021, ethnic tensions within countries in 2021, and internal conflict levels in 2021 as well.

We will be analyzing 54 separate countries within this paper. These 54 nations were chosen out of data availability, the biggest limiter being the [1] on CTL. The countries in the paper came from the European Values Study Group and World Values Survey Association (EWVS) dataset, where 68 nations were successfully surveyed, but [1] had only listed 65 of them in the combined CTL index. However, when combining the data for the combined CTL index with the 2021 World Giving Index, only 54 nations are left. While this dataset may not be as comprehensive, it still provides an accurate and representative sample size for all nations. There is little potential bias in this sample, as the countries in the EWVS dataset were chosen to cover the largest percentage of the population that they can, allowing it to be as representative as possible of the overall population.

2.2 Summary Statistics

Table 1. Descriptive Summary Statistics

	Mean	Median	Standard Deviation	Minimum	Maximum
Combined CTL Index	52.40701	55.1	27.4977	0	119.8
Participation in helping a stranger (2021)	52%	57%	0.1387%	12%	82%
GDP per Capita (2021)	38067.032	37511.7	28832.89	2688.27	137947.34
Ethnic Tensions (2021)	4.01	4.00	1.2001	1.00	6.00
Internal Conflicts (2021)	9.23	9.50	1.0676	6.58	11.25

Table 1 presents the summary statistics of all the variables that are used in the empirical analysis.

In the second row, we give a summary of the data of the combined CTL index from [1]. This index starts at zero, indicating the most culturally tight nations, and increases if a nation is looser. With a mean of 52.4, a median of 55.1, and a standard deviation of 27.50, the distribution of CTL across the nations is relatively normal.

In the third row, we give a summary of the data on the participation rate in helping a stranger obtained from the World Giving Index 2021 report. The data shows a mean of 52% and a median of 57% with a standard deviation of 0.1387%, indicating a slightly skewed distribution to the left.

In the fourth row, we give a summary of the data on the GDP (PPP) per capita in 2021. The distribution of the GDP (PPP) per capita has a few outliers with extremely large GDP (PPP) per capita, as indicated by the maximum. On average, GDP (PPP) per capita is 38067.03219 international dollars.

In the fifth row, we give a summary of the data on ethnic tensions in 2021. Ranging between 0 and 6, this dataset acts as an index for ethnic tensions within nations, where a lower number indicates higher ethnic tensions and a higher number indicates lower ethnic tensions. The mean level of ethnic tensions is a score of 4.01.

In the sixth row, we give a summary of the data on internal conflicts in 2021. Ranging between 0 and 12, this dataset acts as an index for internal conflicts within nations, where a lower number indicates higher internal conflict and a higher number indicates lower internal conflict. The mean of 9.23, the median of 9.50, and the standard deviation of 1.067 indicate a slight skew to the left.

These samples are all relatively normal, indicating that there is little potential for biases within these samples. The distributions of the GDP (PPP) per capita, ethnic tensions, and internal conflicts within this sample all match up with the distributions of the respective variables in the broader dataset. This indicates that these countries accurately represent the whole population and that the restrictions set by data limitations will not affect the broader applicability of the study.

2.3 Methods

To test the hypothesis, we will perform regressions on our data and add control variables accordingly. Because our goal is to determine a relationship between CTL and the donation request compliance rate, we will perform the regression using the combined CTL index and participation in helping a stranger. Then, by adjusting for real GDP (PPP) per capita, internal conflicts, and ethnic tensions, we can eliminate omitted variable bias.

In order to determine if there is a relationship between the donation request compliance rate and CTL among nations, we will perform t-tests and determine the significance of the p-value.

3. Results

Utilizing the described datasets, we perform four regressions according to the methodology previously described.

Table 2. Regression Results

Stranger Help Participation Rate	First regression	Second Regression	Third Regression	Fourth Regression
Cultural Tightness	-0.0025247***	-0.0023065***	-0.0020487***	-0.0012534
GDP per Capita (PPP)		-0.00000112*	-0.00000107*	-0.00000763
Ethnic Tensions			-0.0331039	-0.0151334
Internal Conflicts				-0.0556492***
Constant	0.6512501	0.682281	0.7987752	1.189036
Observations	54	54	54	54
R-Squared	0.2333	0.2898	0.3583	0.4618

Table 2 presents the results of the four regressions. It shows the estimated beta values for each variable and their level of significance (* p-value $\leq .1$, ** p-value $\leq .05$, *** p-value $\leq .01$).

In the first regression, we develop a model that estimates the relationship between CTL and the stranger help participation rate without including any controls. The results show a significant correlation between CTL and stranger help participation rates ($F [1, 53] = 22.21, p \leq .001$). In countries with a looser culture, individuals were generally less willing to help strangers. This supports our hypothesis, as it indicates that individuals will be less willing to comply with donation requests in looser cultures.

In the second regression, we develop a model that estimates the relationship between CTL and the stranger help participation rate after controlling for GDP per capita. The results continue to show a strong relationship between CTL and the stranger help participation rate ($p \leq .001$), though there is also a somewhat significant negative relationship with GDP per capita ($p \leq .1$).

In the third regression, we develop a model that estimates the relationship between CTL and the stranger help participation rate after including all controls except for internal conflicts. The results

continue to indicate an extremely significant relationship between CTL and the stranger help participation rate ($p \leq .005$).

In the fourth regression, we develop a model that estimates the relationship between CTL and the stranger help participation rate after including all controls. The results show that CTL has no statistically significant effect on stranger help participation rates, as $p > .1$. Instead, the results show a very statistically significant relationship between the stranger help participation rate and the level of internal conflicts in a country ($p \leq 0.001$). This may have been the result of imperfect multicollinearity, with a strong relationship between CTL and internal conflicts. A country with higher internal conflicts will be less culturally tight as the social norm will be less expected and enforced. Similarly, a regression between CTL and internal conflicts yields a relatively high correlation coefficient ($r = .511$). Thus, this regression may yield inconsistent slope estimators, leading to the failure to reject the null hypothesis for CTL.

Ultimately, our findings indicate that those in looser cultures are generally less willing to comply with donation requests, and those in tighter cultures are generally more willing to comply with donation requests. These findings model the effect of following cultural norms on donor behaviors across multiple countries. We demonstrate that the strictness of social norms can be an effective predictor of an individual's willingness to comply with donation requests. Charities that fundraise through donation requests will succeed much more frequently in tighter cultures, as they are more inclined to comply. The results presented in this paper validate the findings of the former literature and expand on the external validity of the study conducted by [12].

4. Conclusion

In this paper, we developed a model to predict the effect of CTL on donation request compliance. We found a statistically significant relationship between the two variables, validating the previous literature on how cultural tightness may predict donor behavior. From an examination of 54 countries, we found that the more culturally tight a country is, the higher the likelihood an individual will comply with a donation request. From this, we have expanded the external validity of previous studies, such as those from [12], and theorized the reasoning behind the relationship.

There are a few implications for our study. This research may have several applications in charities, as it can help them strategically advertise their donation requests to maximize the return on investment. Our study also contributes to the wider field of charitable giving, understanding the various cultural factors that are associated with certain donor behaviors. Our paper also contains a few key limitations. While we can always improve our research by expanding our data to include more observations as well as more independent variables to control for, three of the major limitations of this study include proxies, multicollinearity, and causality. First, because this study utilizes the stranger help participation rate as a proxy for the donation request compliance rate, it is not entirely precise. Future research may use field studies or experiments to better measure the donation request compliance for each country. Second, we found multicollinearity in our model between internal conflicts and CTL. After adjusting for internal conflicts, the significance of CTL quickly lowered. While we stated that imperfect multicollinearity may have caused the regression to become inconsistent and unstable, there is potential that internal tensions is a confounding variable that explains the relationship between CTL and donation request compliance. Lastly, while we theorized a causal relationship between CTL and donation request compliance, we were unable to infer causation. However, it may be difficult to determine causation, as [19] found little variation in CTL over time, making it difficult to discover exogenous variation that can show causation.

There are several directions that can be explored for future research. One direction that can be taken is to improve this study with better and more precise measurements and statistical analyses. By eliminating the proxy with a direct and more precise measurement of donation request compliance, a more accurate model can be created. Experiments regarding the effect of CTL on the donation request compliance can also provide better sources of data. Another direction that can be explored is to

understand how CTL affects individual factors that affect donor behavior. Because we hypothesized that the reason CTL affects giving is due to its amplification of existing external motivators for donating (reciprocity, warm-glow, social pressure), further research can be done to better understand how CTL affects each motivator. Lastly, further research can be done to understand the effect CTL plays in other components of giving, such as individual donation amounts, total donations, and volunteering. This will provide us with a more comprehensive understanding of how cultural factors are involved in all of giving, rather than just donation request compliance.

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