



---

---

## **Do education and religiosity affect redistribution preferences?**

**Mustofa<sup>1\*</sup>, Catur Sugiyanto<sup>2</sup>, Akhmad Akbar Susamto<sup>2</sup>**

<sup>1</sup>The Graduate School of Universitas Gadjah Mada, Indonesia, <sup>2</sup>Departement of Economics, Universitas Gadjah Mada, Indonesia

\*Corresponding Author: [mustofa80@mail.ugm.ac.id](mailto:mustofa80@mail.ugm.ac.id)

---

### **ABSTRACT**

Redistribution preference refers to an individual's tendency or priority in dealing with redistribution problems. This study examines the effects of education and religiosity on redistribution preferences. The novelty of this study is an estimation strategy that includes the influence of education and parental education. The data utilized WVS Wave 7 data. The data analysis used probit regression analysis with a sample of 66,468 respondents. The research results show that the higher the education is, the greater possibility of an individual agreeing with inequality in income will be. Individuals who graduated from elementary and junior high schools tend to agree with equal income, while individuals who graduated from high school and college tend to agree with unequal income. The higher the mother's education is, the greater possibility of individuals agreeing with equal income will be. The higher the father's education is, the greater possibility of individuals agreeing with unequal income will be. Religiosity has a different influence on redistribution preferences. The obedience variable has a positive influence, while the variable of belief in places of worship and frequency of worship tend to have a negative influence.

**Keywords:** redistribution preferences, education, religiosity, equality

---

#### **Article history**

*Received:*

*1 November 2022*

*Revised:*

*21 November 2022*

*Accepted:*

*17 January 2023*

*Published:*

*29 January 2023*

---

**Citation (APA Style):** Mustofa, M., Sugiyanto, C., & Susamto, A. A. (2023). Do education and religiosity affect redistribution preferences? *Cakrawala Pendidikan: Jurnal Ilmiah Pendidikan*, 42(1), 53-63. DOI: <https://doi.org/10.21831/cp.v42i1.53109>

---

## **INTRODUCTION**

Redistribution describes the ownership change of a particular individual, collective agent, or group and the adjustment of group ownership. Recipients of resources are identified as individuals, sometimes as strictly allocated groups to which individuals are assigned, and others as groupings identified by their holdings (Barry, 2018). Inequality is a phenomenon found in individuals or groups, both individuals, households, and between social groups. Inequality is caused by the concentration of wealth in certain individuals and groups. Inequality can foster social polarization in a society or a country. Societies characterized by inequality can be fragmented, making it difficult for societies to reach social consensus.

Redistribution preferences are individual tendencies or priorities in dealing with redistribution issues. They are closely related to welfare and equality. The European region in recent decades has experienced continuous income inequality, so the government is forced to experience redistribution. The European government implements the transfer of the tax burden, the provision of subsidies, and other policies (Alvaredo et al., 2013, 2017).

Wealth and income redistribution refers to transferring wealth and income from one group of people to another through taxation, benefits, provision of public resources, or charitable donations. Redistribution of wealth and income in society can result from changes to laws including land acquisition, foreclosure, or divorce laws. People's views about income redistribution are influenced by various variables, including their past beliefs about distributive

justice, self-interest, inequality levels, and the degree of redistribution they experience in the economy (Alvaredo et al., 2013, 2017).

The data shows that redistribution between countries is still low, as viewed from the extreme income gap. The average adult individual earned PPP €16,700 per year in 2021, and the average adult has €72,900. These averages cover wide gaps between and within countries. The richest 10% of the global population currently takes 52% of global income, while the poorest half earns 8.5%. On average, an individual from the top 10% of the global income distribution earns €87,200 per year, while an individual from the poorest half of the global income distribution earns €2,800 per year. In Indonesia, the average national income of the adult population is IDR 69,030,990. While the bottom 50% earns IDR 22,612,000, the top 10% on average earns 13 times more IDR 285,073,820 (Chancel et al., 2022).

Redistribution preferences are interesting to study. In some literature, preference for redistribution is influenced by 7 factors, including events experienced by individuals (Piketty, 1995); cultural background (Alesina & Glaeser, 2005); democratic and non-democratic government systems (Alesina & Fuchs-Schündeln, 2007); parent's education (Bénabou & Tirole, 2011); household structure (Alesina & Giuliano, 2011; Esping-Andersen, 1999; Todd & Garrioch, 1989); views on employment and income (Alesina & Angeletos, 2005; Alesina & Glaeser, 2005); and values in society (Corneo & Grüner, 2002).

Weber et al. (1930) hypothesizes that religious identity influences individual economic outcomes. Weber assumes that the individual daily behavior, whether economic, social, or political, is based on their understanding of religion. Weber finds that Protestants prefer to save money and invest or engage in economic activity. This is the basis of Weber's theory of "rationality" in Capitalism (Weber et al., 1930).

Education is considered a determinant of redistribution preference. Many economists are interested in examining this issue, for example, Alesina & Ferrara (2005) say that the rich tend not to support redistribution preference. Also, they state that people with higher education do not support redistribution preference, while people with low education tend to support it. Alesina & Giuliano (2011) find that the higher the social class of individuals is, the more they support redistribution preference will be. In addition, individuals who place greater trust in luck and connections to gain success than hard work tend to favor redistribution preferences. The more educated individuals are, the lower their preference for redistribution they have. Heckman et al. (2018) state that education can increase an individual's income. Individuals with higher incomes tend to be more conservative, and this conservative feeling makes them less likely to support a preference for redistribution (Peterson, 2016).

The results of previous research on redistribution preferences show that education has negative effects on redistribution preferences. On the other hand, the research results on the effect of religiosity on preference for redistribution are inconsistent. Neher (2012) says that education has a negative effect on preference for redistribution. Guillaud (2013) states that Catholic and Protestant religiosity did not support redistribution. Research by Scheve (2006) reveals that religiosity has a negative effect on preference for redistribution. Research by Alesina & Ferrara (2005) finds that religiosity does not affect preference for redistribution. In examining the effects of religiosity on preference for redistribution, different aspects were used, including attendance at places of worship (Guillaud, 2013) and willingness to help (Alesina & La Ferrara, 2005).

Regarding the redistribution preference research, Andreoli & Olivera (2020) utilized the European Social Survey (ESS) taken from the EU Survey of Income and Living Conditions (EU-SILC). Alesina & Ferrara (2005) used General Social Survey data (GSS) and Panel Study Income Distribution (PSID). Neher (2012) used the World Values Survey data, including 34 countries as members of the OECD. Alesina & Giuliano (2011) and Klor & Shayo (2010) used WVS and GSS as international data between countries. Furthermore, in data analysis, Neher (2012) utilized the ordinal logit model because the measurement of variables utilized a Likert scale. Fong (2001), Alesina & Ferrara (2005), Yamamura (2012), Guillaud (2013), and Andreoli & Olivera (2020) used ordered probits.

This study investigates the relationships or influences of education and religiosity on redistribution preferences. The novelties of this study are (1) examining the effects of education

based on the level of education, not in the aggregate; (2) using parental education control variables; (3) using the variables of obedience, belief in places of worship, and frequency of worship as proxies for religiosity. The main contribution is expanding the estimation method by using educational variables in stages or ordinal, not in aggregate.

## **METHOD**

The data in this study were taken from the World Values Survey (WVS) Wave 7. The unit of analysis included the individual level. Respondents in this study were from 57 countries or regions. The samples of WVS Wave 7 data that met the redistribution preference model consisted of 66,468 respondents. All respondents had different religions, including Buddhism, Islam, local religions, Christianity, and atheism.

To measure the level of redistribution preference, this study utilized questions related to respondents' views about income equality in WVS Q106. The value of the redistribution preference ranges from 1 to 10. If the individual's Q106 answers are 1-5, they tend to agree that income is unequal. If the individual answers 6-10, they will likely agree on equal income. Educational variables in this study were divided into 4 categories, namely Elementary School, Middle School, High School, and College. Education data were taken from WVS Q275. The education variable was arranged into a dummy variable. If the highest education level completed by the respondent is the education level, the answer is yes (1) (Table 1).

The descriptive analysis technique was used to describe data or investigate data patterns. The result of the descriptive analysis was crosstab analysis. Inferential statistical data analysis included panel data regression analysis with probit. Probit regression is a regression model that can be used to explain the relationship between the dependent variable which is an ordinal scale discrete variable and an independent variable consisting of continuous variables, discrete variables, or a mixture of both. The econometric model used in this study developed the research model (Neher, 2012) as follows.

$$\begin{aligned} \text{Pref}_{it} &= \beta_0 + \beta_1 \text{Country}_i + \beta_2 \text{Religion}_i + \beta_3 \text{Educ\_Prime}_i + \beta_4 \text{Educ\_Sec}_i + \beta_5 \text{Educ\_Sen}_i + \\ &\beta_6 \text{Educ\_Uni}_i + \beta_7 \text{Mother\_Educ}_i + \beta_8 \text{Father\_Educ}_i + \beta_9 \text{Obedience}_i + \beta_{10} \text{Reg\_Trust}_i \\ &+ \beta_{11} \text{Pray}_i + \beta_{12} \text{Work\_Hard}_i + \beta_{13} \text{House\_Income}_i + \beta_{14} \text{Choice\_Control}_i + \\ &\beta_{15} \text{Proud}_i + \varepsilon_i \end{aligned}$$

## **FINDING AND DISCUSSION**

### **Finding**

The study results begin with the presentation of descriptive statistical data in the form of cross-tabulation analysis in Table 2. The sample of cross-section data that meets the preference for the redistribution model is 66,468.

Based on Table 2, the redistribution preference of individuals who tend to agree that income is not equal include: (1) individuals who have not attended school, are not elementary school graduates, and junior high school graduates; (2) individuals whose mothers do not attend school and are not elementary school graduates; (3) individuals whose fathers do not attend schools and are not elementary school graduates; (4) non-religious and atheist individuals; (5) individuals who do not believe in places of worship; (6) individuals who have never worshipped. The preference for redistribution of individuals who tend to agree that income is unequal include: (1) college graduates; (2) individuals whose mothers are junior high school graduates, high school graduates, and university graduates; (3) individuals whose fathers are junior high school graduates, high school graduates, and university graduates; (4) religious individuals; (5) individuals who trust places of worship; (6) individuals with the frequency of worshipping several times and often.

Table 3 presents 57 countries divided based on the adherents of the majority religion. There are 5 major religious groups in this study, including atheists, Muslims, Buddhists, Folk religions, and Christians. Atheist-majority countries consisting of South Korea, New Zealand, China, Hong Kong SAR, and Japan tend to agree that income is equal. Buddhist-majority countries including Singapore, Mongolia, Myanmar, and Thailand tend to agree that income is equal.

**Table 1. Operational definition**

Variables	Definitions	Sources
Preference for Redistribution	If the individual's Q106 answer is 1-5, they tend to agree that income is not equal. If the individual's answer is in the range of 6-10, they tend to agree that the income is equal	Q106
Dummy Country	Respondent Country: Indonesia (1), other countries (0)	B_COUNTRY
Dummy Religion	Respondent's religion: Islam (1), other religions (0)	Q289
Elementary School	The highest education completed by the respondent is elementary school: yes (1), no (0)	Q275
Middle School	The highest education completed by the respondent is middle school: yes (1), no (0)	Q275
High School	The highest education completed by the respondent is high school equivalent: yes (1), no (0)	Q275
College	The highest education completed by respondents was post-school tertiary non-tertiary education/short-cycle tertiary education/university: yes (1), no (0)	Q275
Mother's Education	The highest education completed by the respondent's mother: no school (0), elementary school (1), middle school (2), high school (3), post-school tertiary non-tertiary education (4), short cycle tertiary education (5), bachelor (6), master (7), doctoral (8)	Q277
Father's Education	The highest education completed by the fathers as respondents: no school (0), elementary school (1), middle school (2), high school (3), post-school tertiary non-tertiary education (4), short cycle tertiary education (5), bachelor (6), master (7), doctoral (8)	Q278
Obedience	The level of religious obedience includes an atheist (1), not a religious person (2), and a religious person (3).	Q173
Belief in Place of Worship	Respondents' belief in the place of worship: yes (1), no (0)	Q64
Worship Frequency	The frequency of prayer includes the lowest frequency to the highest frequency, namely: never (score 1), less than once a year (score 2), once a year (score 3), only on religious holidays (score 4), only on attending religious events (score 5), several times a week (score 6), once a day (score 7), several times a day (8).	Q172
Hard Work	Now I want you to explain your view on hard work: choose 1 if you agree with "In the long run, hard work usually leads to a better life" and 10 if you agree with "Working hard doesn't always lead to success – depends more on luck and connections" or pick a number in between.	Q110
Household Income	Income is calculated from all received by household members including wages, and pensions: choose 1 for "low income" or 10 for "highest-income" or choose a number in between.	Q288
Freedom of Choice	How much freedom to choose and control your life: choose 1 for "no choice at all" or 10 for "have a very big choice" or choose a number in between.	Q48
National Pride	How proud are you to be an Indonesian citizen? not a citizen (1), not proud at all (2), not too proud (3), quite proud (4), very proud (5)	Q254

Muslim-majority countries consisting of Nigeria, Malaysia, Kazakhstan, Indonesia, Kyrgyzstan, Egypt, Bangladesh, Tajikistan, Iran, Pakistan, Maldives, Turkey, Iraq, Tunisia, and Morocco tend to agree that income is equal. Folk Religion-majority countries consisting of Taiwan ROC, Vietnam, and Macau SAR tend to agree that income is equal. Christians-majority countries consisting of Netherlands, Ethiopia, Australia, Germany, Canada, Cyprus, Russia, United States, Serbia, Ukraine, Kenya, Nicaragua, Argentina, Philippines, Colombia, Zimbabwe, Greece, Chile, Andorra, Venezuela, Bolivia, Peru, Ecuador, Brazil, Mexico, Puerto Rico, Armenia, and Romania tend to agree that income is unequal.

Table 4 presents probit regression values, showing the effects of each independent variable on preference for redistribution. Based on the regression results, the F value is 0.00. This means that the model can be used. Based on the regression results presented in table 4, the 15 independent variables used in this study significantly affect the dependent variable with one variable (preference for redistribution) significant at 10% confidence.

The Pseudo R<sup>2</sup> value of 0.0075 which means 0,75 percent of the variation of the redistribution preference variable can be explained through the variables of dummy country,

dummy religion, elementary school, middle school, high school, college, mother's education, father's education, obedience, belief in places of worship, worship frequency, hard work, household income, freedom of choice, and national pride. The influences of the independent variable on the redistribution preferences are determined by looking at the marginal effect values.

**Table 2. Cross tab analysis for education and religiosity**

Variables	Redistribution Preferences	
	Equal Income	Unequal Income
Education		
No School	6,33	5,08
Elementary School	15,78	11,8
Middle School	14,02	14,02
High School	28,38	28,38
College	33,83	40,72
Mother's Education		
No School	24,41	22,17
Elementary School	27,01	25,91
Middle School	14,69	15,25
High School	17,71	18,73
College	16,18	17,93
Father's Education		
No School	22,37	19,65
Elementary School	26,66	24,87
Middle School	14,74	14,98
High School	17,5	18,61
College	18,73	21,88
Obedience		
Atheist	9,96	8,96
Not Religious	27,89	27,74
Religious	62,15	63,3
Faith Place of Worship		
Don't Believe	12,01	10,01
Believe	87,99	89,99
Worship Frequency		
Never	27,98	25,46
Several Times	12,86	13,7
Often	59,17	60,84
Not Too Proud	9,39	7,74
Pretty Proud	30,44	29,66
So Proud	55,53	59,44

Source: WVS Wave 7 that has been processed

**Table 3. Cross tab analysis of countries based on majority religions**

Religion Majority	Equal Income	Unequal Income
Atheists	10.13	9.97
Buddhists	8.55	6.88
Muslims	31.20	27.78
Folk Religion	5.25	2.50
Christians	44.68	52.87

Source: OECD, WVS Wave 7 that has been processed

The results of this study contribute to the development of the redistribution preference theories, which are still limited in number. The dummy country variable has a negative effect on redistribution preferences. In other words, individuals from Indonesia tend to agree that income is unequal. The dummy religion variable has a negative effect on preference for redistribution. In summary, individuals who hold Islam tend to agree that income is not equal.

**Table 4. Probit regression results**

Variables	Preference for Redistribution	Marginal Effects
Dummy Country (1=indonesia)	-0.11***	-0.0810
Dummy Religion (1=islam)	-0.06***	-0.0157
Elementary School	0.12***	0.0500
Middle School	0.04***	0.0214
High School	-0.05***	-0.0213
College	-0.08***	-0.0500
Mother's Education	0.01**	0.0051
Father's Education	-0.02***	-0.0067
Obedience	0.03**	0.0036
Belief in Place of Worship (1=belief)	-0.04***	-0.0377
Worship Frequency	-0.04***	-0.0094
Hard work	0.01***	0.0069
Household Income	-0.04***	-0.0302
Freedom of choice	-0.05***	-0.0174
National Pride	-0.08***	-0.0248
_cons	7.26***	
N	66.468	
Pseudo R2	0,0075	

Source: WVS Wave 7 that has been processed

Elementary education variable has a positive effect on preference for redistribution. In short, elementary school graduates tend to agree on equal income. The junior high school education variable has a positive effect on preference for redistribution. This means that junior high school graduates agree that income is equal. High school education variables have a negative effect on preference for redistribution. This means that high school graduates tend to agree that income is unequal. College variable has a negative effect on preference for redistribution. In other words, college or post-school graduates tend to agree that income is not equal.

Mother's education variable has a positive effect on preference for redistribution. This means that the higher the mother's education is, the more individuals tend to agree with an equal income. The father's education variable has a negative effect on the preference for redistribution. In summary, if the fathers' education is higher, the individual tends to agree that income is unequal.

The obedience variable has a positive effect on the preference for redistribution. If the obedience level is higher, the individuals tend to agree with an equal income. The variable of trust in places of worship has a negative effect on preference for redistribution. This means that when the trust in places of worship is higher, individuals tend to agree that income is unequal. The variable frequency of worship has a negative effect on the preference for redistribution. If the frequency of worship is higher, the individuals tend to agree that income is not equal.

The hard work variable has a positive effect on the preference for redistribution. This means that when the work is harder, the individuals tend to agree with an equal income. The household income variable has a negative effect on preference for redistribution. This means that if the household income is higher, the individuals tend to agree that income is not equal. The variable of freedom of choice has a negative effect on preference for redistribution. If the freedom of choice is higher, the individuals tend to agree that income is unequal. The variable of national pride has a negative effect on preference for redistribution. If the national pride is higher, the individuals tend to agree that income is not equal.

## **Discussion**

Using data from the World Values Survey, Murthi & Tiongson (2009), Shayo (2009), and Klor & Shayo (2010) examined the preference for redistribution proxied through the answers to the Q106 questionnaire regarding income equality, "Now I want you to tell me your views on various issues. How would you place your views on this scale?.1 means that you completely agree with the statement on the left; 10 means that you completely agree with the statement on the right; and if your view is between the two, you can choose any number in between. Sentence: 'Revenues should be made more equal' (1) vs. 'We need a bigger income differential as an incentive' (10)."

The results of Murthi & Tiongson's (2009) research show that the unemployed are more likely to prefer greater equality or greater redistribution while the self-employed prefer greater inequality. Those with relatively low income prefer greater equality, and individuals with lower educational attainment prefer greater equality. In addition, the research found that Central and Eastern European countries were more likely to prefer greater equality than the former Soviet Union countries, with the Baltic states in between. The results also confirm conventional individual and demographic determinants of preference for redistribution. Shayo (2009) states that the presence of national identification tends to reduce support for redistribution. There is a strong negative relationship between the prevalence of national identification and the degree of redistribution across democracies. Klor & Shayo (2010) say that social identification is an essential force that shapes voting behavior. Among social identifiers, the correlation between their actual economic situation and their expressed preference for redistribution outside the laboratory is essentially zero. On the other hand, the correlation between monetary yield maximizers is positive and relatively high. The results of this study are in line with Murthi's finding that working individuals, male individuals, highly educated individuals, and wealthy individuals tend to have greater inequality.

This fact differs from the research results of Alesina & Giuliano (2011) which use 2 answers from the World Values Survey questionnaire as a proxy for redistribution preference, namely Q106, and Q108. Questionnaire Q108 on the role of government in the welfare of its people shows that "Now I want you to tell me about your views on various issues. How would you place your views on this scale?". 1 means you completely agree with the statement on the left; 10 means you completely agree with the statement on the right; and if your view falls between the two, you can choose any number in between. 'People should be more responsible for meeting their own needs' (1) vs. 'Governments should be more responsible for ensuring that everyone is provided for them' (10)."

Alesina & Giuliano (2011) find that personal characteristics including age, gender, race, and socioeconomic status determine preferences for redistribution. Still, they are also a product of history, culture, political ideology, and justice perceptions. Women, youth, and African Americans have a stronger preference for redistribution. Individuals who believe that people are trying to take advantage of them, rather than being fair, have a strong desire for redistribution. Similarly, believing that luck is more important than work as a driver of success is strongly linked to a taste for redistribution. The results of this study have differences from Alesina & Giuliano (2011) in work versus luck section. This study finds that hard work has a positive effect on preference for redistribution.

This study refers to the research of Murthi & Tiongson (2009), Shayo (2009), and Klor & Shayo (2010) which utilized WVS Q106 as a proxy for preference for redistribution. Views about income equality are considered relevant because the main indicator of preference for redistribution is income equality. Income equality will be obtained if the "rich" distribute their wealth to the "poor". This is in line with the research by Georgiadis & Manning (2012) which found that redistribution supports the reduction of inequality in the United Kingdom. In addition, research by Cavaillé & Trump (2015) states that when there is no redistribution of the rich, poverty in society will increase.

The dummy country variable has a significant negative value, meaning Indonesians tend to agree that income is unequal. The dummy religion variable has a significant negative value. This means that Muslims tend to agree that income is unequal.

The education variable has a significant negative effect on preference for redistribution. If the individual education is higher, the preference for redistribution tends to agree that income is not equal. Based on the results of the regression analysis, individuals who graduated from elementary school and junior high school tend to agree on equal income. On the other hand, high school graduates and college graduates tend to have unequal income. The results of this study are in line with previous research stating that education has a negative effect on preferences for redistribution (Alesina & Giuliano, 2011).

Individuals who have completed junior high school education are considered the limit of individual redistribution support. This is about standard job qualifications for entering the labor market. Upper secondary or post-secondary non-tertiary education is frequently regarded as the minimum educational attainment most individuals require to participate successfully in the labor market. Individuals with a junior high school education have a more difficult time finding work. Employment rates of 25–64-year-olds with upper secondary or postsecondary non-tertiary attainment are significantly higher than those with lower secondary attainment. In OECD countries, 58% of those with less than an upper secondary education is employed, while 75% of those with an upper secondary or post-secondary non-tertiary education are employed. The employment rate for those with tertiary education is even higher, at 85%. Still, the gap between the employment rates for those with non-tertiary education in upper secondary or postsecondary and those with tertiary education is smaller than the gap between those with non-tertiary education in lower secondary and upper secondary or postsecondary.

Individuals with basic education are more likely to work in the informal sector. In contrast, those with secondary or higher education are more likely to work in the formal sector. The income earned by the workers in the informal sector does not vary much, so the income earned is not significantly different. In the formal employment sector, there is typically a lot of variation, resulting in tiers of income and significant differences. Indeed, Leon & Borchers (1998) predict that future recruitment will raise the educational level of prospective employees. Recruiters are looking for employees who work well as team members, respect gender, have cultural sensitivity, respect ethnic differences among coworkers, arrive on time, and have a positive attitude.

Educational attainment and labor-market participation significantly correlate regardless of whether participation in the labor market is measured by employment, unemployment, or inactivity rates. This relationship exists in every OECD and partner country where data is available. It is extremely rare to find a country where a sub-population with lower educational attainment outperforms a subpopulation with higher educational attainment regarding labor-market participation. Despite a significant increase in attainment levels across the OECD, this positive relationship has remained stable over the decades. Therefore, it makes sense for people with junior high school education or less to desire redistribution or equal pay. Also, higher educational attainment increases income gains outside of employment opportunities. Workers between the ages of 25 and 64 who have completed senior secondary school or other post-secondary education generally make 29% more money than those who have only completed high school.

The results of this study show that the father's and mother's education have different effects. Mother's education variable has a significant positive effect on preference for redistribution. These results align with Alesina & Giuliano (2011) who found that individuals whose parents had low education tended to agree on equal income. The father's education variable has a significant negative effect on the preference for redistribution. This aligns with previous studies showing that individuals with highly educated fathers tend to agree with unequal income (Alesina & Giuliano, 2011; Isaksson & Lindskog, 2009).

Education affects the mindset in preference for redistribution. Higher education will change a person's thinking or perception, including the perception of justice. Perception of fairness is one of the channels that influence individual preferences for (Bénabou & Tirole, 2011; Lipset, 1977; Osberg & Smeeding, 2006; Trump, 2018). Individuals tend to choose a preference for redistribution if they feel injustice in the economy. However, if differences in efforts cause inequality, individuals are less likely to favor a preference for redistribution.



Research by Neher (2012) utilized the answers to the WVS Q172 questionnaire as a proxy for religiosity. Questionnaire Q172 is "Outside of weddings and funerals, how often do you pray?". The religiosity variable in this study used 3 questionnaire answers as proxies, namely WVS Q173, WVS Q64, and WVS Q172. This study adds 2 answers to the questionnaire, namely WVS Q64, "To what extent do you believe in places of worship, do you believe (1) or do not believe (0)?" and WVS Q173 namely "Regardless of your presence in religious events, according to you whether you are atheist (0), not religious (1), or religious (2)". The addition of proxies is aimed at getting a more relevant religiosity variable than the research of Neher (2012). Religiosity is a broad variable because the indicators of religious people in each religion differ.

The results of the regression analysis show that the variable of obedience has a different effect on the variables of belief in places of worship and frequency of worship. If the obedience is higher, the individuals tend to agree with an equal income. The results of this study are in line with previous research which states that religion has a positive effect on preference for redistribution (Clark & Lelkes, 2005; Dehejia et al., 2007). When the belief in places of worship and the frequency of worship is higher, individuals tend to agree that income is unequal. The results of this study are in line with previous research stating that the worship frequency has a negative effect on preference for redistribution (Neher, 2012).

If the work is harder, the individuals tend to agree on equal income. The results of this study are not in line with previous research stating that hard work has a negative effect on preference for redistribution (Neher, 2012). When the household income is higher, individuals tend to agree that income is unequal. The results of this study are in line with previous research stating that household income has a negative effect on preference for redistribution (Meltzer & Richard, 1983; Roberts, 1977; Romer, 1975). If the freedom of choice is greater, more individuals tend to agree that income is unequal. The results of this study are in line with previous research which states that freedom of choice has a negative effect on preference for redistribution (Fong, 2001). If the national pride is higher, the individuals tend to agree that income is unequal. The results of this study differ from previous studies which state that national pride has a positive effect on preference for redistribution (Klor & Shayo, 2010).

## **CONCLUSION**

This study aims to determine the effects of education and religiosity on preference for redistribution. The novelty of this study is an estimation strategy that includes the effects of education and parental education. The results of this study indicate that elementary and junior high school graduates tend to agree on equal income. High school and college graduates tend to agree that income is unequal. If the education level of the mother is higher, the individuals tend to agree with an equal income. When the education level of the father is higher, more individuals tend to agree that income is unequal. If the obedience is higher, the individuals tend to agree with an equal income. When the trust in places of worship and the frequency of worship is higher, individuals tend to agree that income is unequal.

Elementary and junior high school graduates want income equality because these individuals can work in the informal sector with low wage variations. In this study, the redistribution preference is not focusing on individual or group wealth as in Barry's (2018) research. However, it focuses on the education gap, individuals do not get the opportunity to earn an equal income.

Individual education influences redistribution mindsets or preferences. Individuals with basic education have a fixed mindset or tendency towards equal income. Meanwhile, individuals with high school and college education have a growth mindset or tendency towards unequal income. The growth mindset concept views that individual income should not be the same, it is based on the efforts made by everyone. Therefore, education has an important role in changing the mindset of individuals from a fixed mindset to a growth mindset. Further research is suggested to utilize action variables that reflect redistribution preference behavior, such as paying taxes.

## ACKNOWLEDGEMENTS

The research was supported by Universitas Gadjah Mada through the Final Project Recognition Program (*Rekognisi Tugas Akhir*, RTA) 2021 with assignment number 3143/UN1.P.III/DIT-LIT/PT/2021. We also would like to thank the World Values Survey Association (WVSA) for their permission to utilize the database of the WVS Wave 7.

## REFERENCES

- Alesina, A., & Angeletos, G.-M. (2005). Fairness and redistribution. *American Economic Review*, 95(4), 960–980. <https://doi.org/10.1257/0002828054825655>
- Alesina, A., & Fuchs-Schündeln, N. (2007). Good-bye Lenin (or not?): The effect of communism on people's preferences. *American Economic Review*, 97(4), 1507–1528. <https://doi.org/10.1257/aer.97.4.1507>
- Alesina, A., & Giuliano, P. (2011). *Preferences for redistribution* (pp. 93–131). <https://doi.org/10.1016/B978-0-444-53187-2.00004-8>
- Alesina, A., & Glaeser, E. L. (2005). *Fighting poverty in the US and Europe: A world of difference*. Oxford University Press.
- Alesina, A., & La Ferrara, E. (2005). Preferences for redistribution in the land of opportunities. *Journal of Public Economics*, 89(5–6), 897–931. <https://doi.org/10.1016/j.jpubeco.2004.05.009>
- Alvaredo, F., Atkinson, A. B., Piketty, T., & Saez, E. (2013). The top 1 percent in international and historical perspective. *Journal of Economic Perspectives*, 27(3), 3–20. <https://doi.org/10.1257/jep.27.3.3>
- Alvaredo, F., Chancel, L., Piketty, T., Saez, E., & Zucman, G. (2017). Global inequality dynamics: New findings from WID.world. *American Economic Review*, 107(5), 404–409. <https://doi.org/10.1257/aer.p20171095>
- Andreoli, F., & Olivera, J. (2020). Preferences for redistribution and exposure to tax-benefit schemes in Europe. *European Journal of Political Economy*, 63, 101880. <https://doi.org/10.1016/j.ejpoleco.2020.101880>
- Barry, C. (2018). Redistribution. In E. N. Zalta (Ed.), *The Stanford Encyclopedia of Philosophy (Spring 2018 Edition)*. Metaphysics Research Lab, Stanford University. <https://plato.stanford.edu/archives/spr2018/entries/redistribution/>
- Bénabou, R., & Tirole, J. (2011). Identity, morals, and taboos: Beliefs as assets \*. *The Quarterly Journal of Economics*, 126(2), 805–855. <https://doi.org/10.1093/qje/qjr002>
- Cavaillé, C., & Trump, K.-S. (2015). The two facets of social policy preferences. *The Journal of Politics*, 77(1), 146–160. <https://doi.org/10.1086/678312>
- Chancel, L., Piketty, T., Saez, E., & Zucman, G. (2022). *World inequality report 2022*. World Inequality Lab.
- Clark, A. E., & Lelkes, O. (2005). *Deliver us from evil: Religion as insurance* (halshs-00590570; Papers on Economics of Religion). <https://shs.hal.science/halshs-00590570>
- Corneo, G., & Grüner, H. P. (2002). Individual preferences for political redistribution. *Journal of Public Economics*, 83(1), 83–107. [https://doi.org/10.1016/S0047-2727\(00\)00172-9](https://doi.org/10.1016/S0047-2727(00)00172-9)
- Dehejia, R., DeLeire, T., & Luttmer, E. F. P. (2007). Insuring consumption and happiness through religious organizations. *Journal of Public Economics*, 91(1–2), 259–279. <https://doi.org/10.1016/j.jpubeco.2006.05.004>
- Esping-Andersen, G. (1999). *Social foundations of postindustrial economies*. Oxford University Press/Oxford. <https://doi.org/10.1093/0198742002.001.0001>
- Fong, C. (2001). Social preferences, self-interest, and the demand for redistribution. *Journal of Public Economics*, 82(2), 225–246. [https://doi.org/10.1016/S0047-2727\(00\)00141-9](https://doi.org/10.1016/S0047-2727(00)00141-9)
- Georgiadis, A., & Manning, A. (2012). Spend it like Beckham? Inequality and redistribution in the UK, 1983–2004. *Public Choice*, 151(3–4), 537–563. <https://doi.org/10.1007/s11127-010-9758-7>
- Guillaud, E. (2013). Preferences for redistribution: An empirical analysis over 33 countries. *The Journal of Economic Inequality*, 11(1), 57–78. <https://doi.org/10.1007/s10888-011-9205-0>

- Heckman, J. J., Humphries, J. E., & Veramendi, G. (2018). Returns to education: The causal effects of education on earnings, health, and smoking. *Journal of Political Economy*, *126*(S1), S197–S246. <https://doi.org/10.1086/698760>
- Isaksson, A.-S., & Lindskog, A. (2009). Preferences for redistribution—A country comparison of fairness judgements. *Journal of Economic Behavior & Organization*, *72*(3), 884–902. <https://doi.org/10.1016/j.jebo.2009.08.006>
- Klor, E. F., & Shayo, M. (2010). Social identity and preferences over redistribution. *Journal of Public Economics*, *94*(3–4), 269–278. <https://doi.org/10.1016/j.jpubeco.2009.12.003>
- Leon, J. E. De, & Borchers, R. E. (1998). High school graduate employment trends and the skills graduates need to enter Texas manufacturing industries. *Journal of Career and Technical Education*, *15*(1). <https://doi.org/10.21061/jcte.v15i1.693>
- Lipset, S. M. (1977). Why no socialism in the United States? In *Radicalism In The Contemporary Age, Volume 1* (p. 120). Routledge.
- Meltzer, A. H., & Richard, S. F. (1983). Tests of a rational theory of the size of government. *Public Choice*, *41*(3), 403–418. <https://doi.org/10.1007/BF00141072>
- Murthi, M., & Tiongson, E. R. (2009). Attitudes to income equality: The ‘Socialist Legacy’ revisited. *Comparative Economic Studies*, *51*(3), 344–366. <https://doi.org/10.1057/ces.2009.4>
- Neher, F. (2012). *Preferences for redistribution around the world-discussion papers 2*. <https://ideas.repec.org/p/zbw/fubsbe/20122.html>
- Osberg, L., & Smeeding, T. (2006). “Fair” inequality? Attitudes toward pay differentials: The United States in comparative perspective. *American Sociological Review*, *71*(3), 450–473. <https://doi.org/10.1177/000312240607100305>
- Peterson, E. (2016). The rich are different: The effect of wealth on partisanship. *Political Behavior*, *38*(1), 33–54. <https://doi.org/10.1007/s11109-015-9305-9>
- Piketty, T. (1995). Social mobility and redistributive politics. *The Quarterly Journal of Economics*, *110*(3), 551–584. <https://doi.org/10.2307/2946692>
- Roberts, K. W. S. (1977). Voting over income tax schedules. *Journal of Public Economics*, *8*(3), 329–340. [https://doi.org/10.1016/0047-2727\(77\)90005-6](https://doi.org/10.1016/0047-2727(77)90005-6)
- Romer, T. (1975). Individual welfare, majority voting, and the properties of a linear income tax. *Journal of Public Economics*, *4*(2), 163–185. [https://doi.org/10.1016/0047-2727\(75\)90016-X](https://doi.org/10.1016/0047-2727(75)90016-X)
- Scheve, K. (2006). Religion and preferences for social insurance. *Quarterly Journal of Political Science*, *1*(3), 255–286. <https://doi.org/10.1561/100.00005052>
- Shayo, M. (2009). A model of social identity with an application to political economy: Nation, class, and redistribution. *American Political Science Review*, *103*(2), 147–174. <https://doi.org/10.1017/S0003055409090194>
- Todd, E., & Garrioch, D. (1989). *The explanation of ideology: Family structure and social systems (family, sexuality and social relations in past times)*. Blackwell Pub.
- Trump, K.-S. (2018). Income inequality influences perceptions of legitimate income differences. *British Journal of Political Science*, *48*(4), 929–952. <https://doi.org/10.1017/S0007123416000326>
- Weber, M., Parsons, T., & Tawney, R. H. (1930). *The Protestant ethic and the spirit of capitalism*. George Allen & Unwin Ltd.
- Yamamura, E. (2012). Social capital, household income, and preferences for income redistribution. *European Journal of Political Economy*, *28*(4), 498–511. <https://doi.org/10.1016/j.ejpoleco.2012.05.010>