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Do values predict external political efficacy? Assessing the impact of traditional values on external political efficacy in a global context

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**Do values predict external political efficacy? Assessing the impact of traditional
values on external political efficacy in a global context**

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BSc Thesis

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Introduction

Political efficacy is a key indicator of the health of a democratic system (Craig et al., 1990; Karv et al., 2022; Kevins, 2022). Namely, a lack of political efficacy, represented by powerlessness and cynicism, is suggested to be a threat to an established democratic order (Craig et al., 1990, p. 289). A low external political efficacy reveals citizens' dissatisfaction with the responsiveness of the current democratic institutions (Kevins, 2022). A low internal political efficacy results in psychological detachment and political disengagement (Morrel, 2005).

This concept of political efficacy is increasingly gaining scholarly attention in the context of democratic deficit, wherein democratic entities are perceived to be falling short of upholding democratic principles such as popular representation (Nabatchi, 2010). The democratic deficit is detrimental since it creates a vicious cycle that undermines the legitimacy of political institutions (Nabatchi, 2010, p. 378). First, low trust in political institutions' responsiveness to citizens discourages political participation (Nabatchi, 2010, p. 379). Hence, citizens' input decreases, and political institutions can reflect less public opinion accordingly (Nabatchi, 2010, p. 379). Thus, political institutions further lose public trust in their responsiveness to the public (Nabatchi, 2010). As such, democratic deficit undermines political institutions' trust and legitimacy and contributes to a further decline of political participation through the cycle (Nabatchi, 2010). Behind this mechanism, external political efficacy, a belief about the political institutions' responsiveness to public preferences, is an important concept to address the factors of public perception about the political institutions' ability to represent the public.

Scholarship has attempted to reveal factors that explain the variations of external

political efficacy both between states and individuals. For example, scholars show that contextual factors, such as the media's role in reporting politics and economic inequality, explain the difference in average external political efficacy between countries (Miller et al., 1979; Bene, 2020; Norris, 2015; Lee et al., 2021). At the individual level, precedent studies suggest various factors, including socioeconomic status and electoral status as supporters or opponents of parties in power (Wu, 2003; Borgonovi & Pokropek, 2017; Oser et al., 2023; Davis & Hitt, 2017; Mauk, 2022; Etzel, 2023). These studies mutually imply that all factors affect one's perception of how much one's preferences are reflected in politics, and the diversity in this perception explains the variation in levels of external political efficacy (OECD, 2019, p. 160).

Despite its effect in determining people's perception of the responsiveness of political systems to them, one individual-level factor which has been little explored yet is human values. Evidence exists that values shape people's political attitudes, including political efficacy (Goren et al., 2022; Feldman, 1988). Particularly, Etzel (2023) discovers that traditional value holders report less external political efficacy compared to progressive value holders in Europe. This is moderated by the progressiveness of politics (Etzel, 2023). Progressive values have been increasingly reflected in political systems following the intergenerational value change from traditional to progressive ones (Etzel, 2023). As a result, today's politics more satisfies progressive value holders, while it fails to satisfy the remaining traditional value holders as much as it used to be (Etzel, 2023). Another evidence from a global perspective indicates that people with self-expression values¹ report greater democratic satisfaction (Norris, 2011), which has a strong positive

¹ Self-expression values can be described as progressive values. It will be elaborated in the literature review

correlation with external political efficacy (OECD, 2021).

Even though these findings imply that values can impact external political efficacy, the effect of human values on external political efficacy has not been explored beyond the European context. However, there are reasons that the study of the effect of human values on external political efficacy should be extended to the global level. According to the Value Change theory, societies' dominant values change through major societal developments, such as industrialisation (Datler et al., 2013, p. 908). Depending on their socioeconomic levels, the values people in each society emphasise the most vary across the world (Sagiv & Schwartz, 2022, p. 519). Although Etzel (2023) examines European countries where the silent revolution took place (Inglehart & Norris, 2017), similar value changes and progressive societies are not only in Europe. The World Values Survey (2023) reports that English-speaking countries and Confucian countries report self-expression values as much as European countries Etzel (2023) examines. This would suggest that extending his study to the global level can investigate whether his findings in European countries are universal or European context-specific observations. Furthermore, democratic deficit, which makes the study of external political efficacy even more crucial for previously mentioned reasons, is relevant to non-European countries, too. This phenomenon is observed in countries such as India and the Philippines (Varshney, 2022; Hutchcroft & Rocamora, 2003). This suggests that examining the effect of traditional values on external political efficacy beyond Europe might be able to reveal significant social implications. Accordingly, by focusing on traditional and progressive values, which are identified by Etzel (2023) as factors of external political efficacy, this

section.

research aims to answer the following question: *What is the effect of traditional values on external political efficacy?*

This study empirically tests the applicability of Etzel's (2023) findings and the Cultural Backlash thesis at the global level. The Cultural Backlash thesis by Inglehart and Norris (2017) attributes the traditional value holders' lower external political efficacy and support for far-right populists to the politics that fail to sufficiently respond to their opinions (Etzel, 2023). Therefore, it expects the generally negative effect of traditional values on external political efficacy in the current trend of global politics, where progressive issues like environmental protection are increasingly important. Simultaneously, it expects that the traditional values' negative effect on external political efficacy is amplified by culturally progressive politics and weakened by economic salience.

This thesis tests these hypotheses with multilevel models by employing data from the World Values Survey Wave 7 and the 2019 Global Party Survey. The outcome shows a mixed result. While it fails to show evidence of the negative effect of traditional values on external political efficacy, it demonstrates that traditional values have both negative and positive effects depending on the context. Particularly, it provides evidence of the role of economic salience in determining traditional values' effect on external political efficacy.

The remainder of this thesis is composed of four sections. It first reviews prior literature to conceptualise external political efficacy and traditional and progressive values and to establish hypotheses. The second section illustrates the research design.

Then, the subsequent statistical analysis is conducted. At last, this thesis is closed with discussions of the results and their implications.

Literature Review

External political efficacy

External political efficacy is one dimension of a broader concept of political efficacy. The ‘sense of political efficacy’ was initially developed as a unidimensional concept to explain variation in electoral participation (Balch, 1974, p. 1). One of the leading works in developing the concept of political efficacy by Campbell et al. (1954) (as cited in Craig et al., 1990, p. 290) defines political efficacy as “the feeling that individual political action does have, or can have, an impact upon the political process.” However, subsequent research has established the consensus that political efficacy contains two distinct dimensions: internal and external (Craig et al., 1990; Karv et al., 2022). Internal political efficacy focuses on people’s expectations of themselves, defined as “beliefs about one's own competence to understand and participate effectively in politics” (Craig et al., 1990, p. 290; Finkel, 1985, pp. 892-893; Etzel, 2023, p. 260). In contrast, external political efficacy pertains to one’s expectations towards their “external” actors, defined as beliefs that governmental authorities and institutions would be responsive to citizens’ demands (Craig et al., 1990, p. 290; Balch, 1974, p. 24; Finkel, 1985, pp. 892-893; Etzel, 2023, p. 260). Given the increasing significance of understanding external political efficacy due to the growing democratic deficit, this study focuses on external political efficacy.

The concept of external political efficacy can be further investigated through its two dimensions of regime-based efficacy (RBE) and incumbent-based efficacy (IBE).

RBE focuses on general rules and procedures applied to political leaders, defined as beliefs that conventional rules and procedures for policy formation and implementation facilitate citizens' inputs rather than impede them (Craig et al., 1990, pp. 291-300). On the contrary, IBE focuses on current leaders, defined as the belief in the motivation and ability of incumbents to respond to citizens' demands (Craig et al., 1990, pp. 291-300). Despite their differing focuses, Craig et al. (1990) demonstrate that the empirical distinction between RBE and IBE is insignificant. Consequently, this research defines and measures external political efficacy as the belief in the responsiveness of institutions and incumbent governments to citizens' preferences.

External political efficacy has drawn researchers' attention as a crucial political attitude that indicates a healthy democracy (Etzel, 2023; Craig et al., 1990; Karv et al., 2022; Kevins, 2022). Scholarship discussions about what explains different levels of external political efficacy across people have been developed at two levels. One is at the contextual level, aiming to explain why individuals within a particular societal unit report higher average levels of external political efficacy than others. The other dimension operates at the individual level, which explains the variation between individuals within the same society. Despite these two different levels of analysis, theories reveal a common underlying logic that explains the variation in the level of external political efficacy. They suggest that the degree to which political entities represent individual preferences varies among people, and these diverse experiences account for the variation in levels of external political efficacy (OECD, 2019, p. 160). This mechanism is illustrated by the typical factors influencing external political efficacy.

For example, income inequality, which is often identified as a predictor of external

political efficacy (Norris, 2015; Lee et al., 2021), demonstrates how it determines people's experience with governments' representation differently and consequently affects external political efficacy. When income inequality grows, the power and influence of wealthier individuals in politics, such as through lobbying, also increase, which enables them to advocate for policies that favour their interests and dismantle those that primarily benefit the lower and middle classes (Norris, 2015). Consequently, the lower and middle classes not only have a diminished relative ability to establish alternatives to the wealthy but also potentially experience a decrease in policies that represent their preferences (Norris, 2015). This ultimately creates a widespread perception that governments are no longer responsive to the needs of the lower and middle classes, resulting in a decline in overall external political efficacy within the country (Norris, 2015).

At the individual level, the outcomes of elections, which distinguish voters as 'winners' or 'losers', help explain the differences in external political efficacy by affecting people's perceptions about the governments' responsiveness differently (Davis & Hitt, 2017). Provided that elections are primary mechanisms for ensuring government responsiveness to public opinion, a new government reflects the ideas of the winning party and its supporters (Davis & Hitt, 2017). Simultaneously, supporters of losing candidates perceive the new government as less responsive to their demands (Davis & Hitt, 2017). Therefore, supporters of losing parties report lower external political efficacy (Davis & Hitt, 2017). This also illustrates the division in external political efficacy due to varying levels of governmental representation: as the preferences of the losers are less represented by the winning parties, supporters of losing parties report lower external political efficacy (Davis & Hitt, 2017).

Etzel (2023) demonstrates that traditional issues are less represented by current progressive politics than progressive issues, which decreases the external political efficacy of traditional value holders. This was observed in the sample of 23 European countries, based on the European Social Survey data collected in 2018. While previous studies have provided substantial evidence regarding the impact of governmental representation on individual preferences across various regions, the influence of traditional and progressive values has not yet been explored beyond Europe. Therefore, this research aims to address this gap by examining the effect of traditional values and the role of progressive politics on external political efficacy at a global level.

Human values

Values, also referred to as personal values or human values, can be defined as abstract beliefs about desirable inter- and intra-personal end states and behaviours, which work as guiding principles in human lives (Goren et al., 2016, p. 979; Sagiv & Schwartz, 2022, p. 518). They are relatively stable over time and across situations (Sagiv & Roccas, 2017). Individuals hold a variety of values at the same time but differ in the significance they place on particular values (Kesberg & Keller, 2018; Goren et al., 2016; Sagiv & Schwartz, 2022). Values shape attitudes and behaviours, including political opinions (Goren et al., 2016; Feldman, 1988).

To predict one's political attitude, including political efficacy and democratic satisfaction, traditional and progressive values are particularly relevant (Etzel, 2023; Norris, 2011). These values can be conceptualised through the Postmodernisation theory by Inglehart and the theory of Basic Human Values by Schwartz (Etzel, 2023). While Postmodernization theory suggests the societal conditions attached to traditional and

progressive values, the Basic Human Values theory tells motivational goals behind basic human values that form traditional and progressive values (Dobewall & Rudnev, 2014). Their theoretical and empirical similarities suggest that Inglehart's survival values and Schwartz's conservation values, including security, tradition, and conformity, conceptualise traditional values (Etzel, 2023). Similarly, Inglehart's self-expression values and Schwartz's universalism and self-direction values indicate progressive values (Etzel, 2023).

Survival values and conservation values suggest that traditional values can be conceptualised as an emphasis on one's own physical and economic security, including the stability of customs and norms they are used to. Inglehart's survival values and Schwartz's security reveal that people with predominantly survival values emphasise materialistic concerns, such as physical and economic security (Datler et al., 2013; Dobewall & Rudnev, 2014). Extending the scope of security, tradition and conformity values reveals that people with predominantly these values also aim to secure the stability of the customs and norms (Schwartz, 1994). Thus, attitudes like intolerance of outgroups and insistence on traditional customs indicate such traditional value holders.

The opposite end of the value spectrum is progressiveness. Progressiveness can be understood as values emphasising 'higher needs,' such as freedom of thought and action, tolerance for diversity, and the welfare of all people and the environment. These 'higher needs' are explained as postmaterialist concerns, which are emphasised by self-expression values, in contrast to traditional values that prioritise materialistic concerns (Datler et al., 2013; Dobewall & Rudnev, 2014). Progressive values can be expressed as a form of universalism, characterised by high tolerance of outgroups, support for gender equality

and homosexuality, and the protection of individuals' subjective well-being and environment. These values also encompass an aspect of self-direction that respects independence and freedom, as reflected in political participation and liberal democracy (Schwartz, 1994; Inglehart & Baker, 2000).

Importantly, both value theories contrast values as two ends of a spectrum of values. This implies that traditional and progressive values should not be treated as two separate concepts but as two ends of a value continuum.

Theories and Hypotheses: Cultural Backlash Thesis and Etzel (2023)

One main purpose of this research is to analyse the applicability of Etzel's (2023) findings to the globe. He demonstrates the negative effect of traditional values on external political efficacy and the moderating role of progressive politics to fill in the gap of the Cultural Backlash Thesis by Inglehart and Norris (2017) (Etzel, 2023). The gap he aimed to fill was that the argument of the Cultural Backlash thesis that the predominance of progressive issues after the value change caused traditional people's perception that their political systems are less responsive was little supported by empirical evidence (Etzel, 2023). When the focus is extended to the globe, this thesis argues that predictions can still be made based on based on the Cultural Backlash thesis and Etzel (2023).

The Cultural Backlash thesis outlines that traditional value holders have experienced political alienation and political systems that are not responsive to them, and this has resulted in their support of authoritarian populist politicians (Etzel, 2023). This thesis attributes the cause of this to individuals' and societal-level value changes (Inglehart & Norris, 2017; Etzel, 2023). According to this framework, older generations

are materialistically influenced due to the inter- and after-war period (Etzel, 2023). However, the following generations are postmaterialistically oriented since their physical and economic insecurity are met (Etzel, 2023; Inglehart & Norris, 2017). At the societal level, such unprecedentedly high levels of physical and economic security led to the silent revolution, an erosion of materialist values and an emergence of postmaterialist values in the latter half of the twentieth century (Inglehart & Norris, 2017). The shift from traditional to progressive values has been further promoted by societal changes, such as globalisation, urbanisation, and more access to higher education (Inglehart & Norris, 2017; Etzel, 2023, p. 261). As a result of over-time changes, the balance of the public today became more progressive (Inglehart & Norris, 2017). Answering the silent revolution, politics became predominantly progressive, too (Inglehart & Norris, 2017). For example, Green parties have become popular, and mainstream social democratic parties have increasingly incorporated progressive issues (Inglehart & Norris, 2017). This conversely means that traditional issues become less represented by their political system, and traditional value holders report a lower level of external political efficacy (Inglehart & Norris, 2017; Etzel, 2023). Therefore, the theory provided by the Cultural Backlash thesis explains the cause of traditional people's lower external political efficacy as a predominance of postmaterialist values within a society (Etzel, 2023).

Etzel (2023) provides empirical support in line with this theory. According to Etzel (2023), one unit of an increase in security values reduces external political efficacy by 0.04, while one scale point of an increase in tradition values decreases it by 0.03. They are both statistically significant (Etzel, 2023). The remaining research gap is that the relationship between traditional values and external political efficacy has not been tested

beyond Europe, even though similar value changes from traditional to progressive ones have been observed in non-Western societies (Inglehart & Abramson, 1994; Inglehart & Norris, 2017).

Nonetheless, evidence exists that progressive self-expression values are globally linked to higher democratic satisfaction (Norris, 2011). Emancipative self-expression values show greater preferences over democracy and a stronger opposition to authoritarian rules (Inglehart & Baker, 2000; Welzel & Inglehart, 2009; Norris, 2011). Contrarily, traditional value holders become more inclined towards authoritarian politicians, who promise to restore national sovereignty and traditional and conservative moral values (Inglehart & Baker, 2000; Welzel & Inglehart, 2009). This would be consistent with the Cultural Backlash theory and Etzel (2023). As political regimes adopt progressive values, a cleavage between traditional and progressive value holders in their satisfaction with their regimes' responsiveness emerges (Inglehart & Baker, 2000; Welzel & Inglehart, 2009; Etzel, 2023). This expected correlation between satisfaction with political administration, their democracy, or regime and external political efficacy is confirmed by studies like Wong et al. (2011) and Kevins (2022).

In light of this evidence, the following relationship is hypothesised.

H1: Traditional values have a negative effect on external political efficacy.

As briefly mentioned, Etzel (2023) demonstrates that the negative effect of traditional values on external political efficacy is due to the dominance of culturally and environmentally oriented issues and the lower salience of materialist issues in politics. The mechanism behind this is that progressive preferences amongst citizens are not

always translated into their politics (Etzel, 2023). Similarly, progressive politics could be shaped without a progressive public when those in power are progressive (Etzel, 2023). It is when these progressive values are adopted by the political system, rather than when a large portion of the population is progressive, that traditional economic issues lose their relative importance in politics (Etzel, 2023). Once such value balance is reflected in politics, a political system fails to satisfy traditional value holders (Etzel, 2023). It is true that politicians often adopt popular ideas to attract many voters (Etzel, 2023). This implies that when the population is progressive, politicians might adopt progressive values, and political systems become progressive accordingly. However, the effect of traditional values on external political efficacy is ultimately moderated by how progressive political systems are (Etzel, 2023).

Within Europe, this theory is empirically supported by Etzel's (2023, p. 272). He demonstrates that as politics become more progressive by one scale unit, the effect of traditional values on external political efficacy becomes more negative by 0.01 ($p < 0.01$). Based on his theoretical explanation, the following hypothesis is formulated:

H2a: The negative relationship between traditional values and external political efficacy is strengthened by progressive political systems.

Simultaneously, it needs to be considered that economic issues could still be salient in progressive politics (Brown & Carmines, 1995; Czeglédi, 2024). In Etzel (2023), the effect of traditional values on external political efficacy is expected to change by -0.07 when economic salience decreases by one unit. Thus, another hypothesis is set up for testing the effect of the absolute relevance of economic issues in politics, given that

H2a can only imply their relative importance compared to progressive issues.

H2b: The negative relationship between traditional values and external political efficacy is weakened by the salience of economic issues.

Research Design

This research conducts a cross-national study using data from the 7th wave of the World Values Survey (WVS) for most variables and the Global Party Survey (GPS) 2019 to control moderators. The WVS is recognised as the largest investigation of attitudes, values, and beliefs across the world (Inglehart & Baker, 2000). The 7th wave of the WVS covers 66 countries and territories (Haerpfer et al., 2022a). Most data were collected between 2018 and 2020, with around a dozen countries whose surveys were conducted in 2021 and 2023 due to the pandemic (World Values Survey, n.d.). Samples are selected based on a random probability sampling method (World Values Survey, n.d.), which is designed to represent each country's adult population². Each country's sample size is weighted to accurately reflect its population, with a minimum sample size of 1200 respondents (World Values Survey, n.d.). While in-person interviews were mainly employed, interviews over phone calls, communication via mail, and online surveys were also utilised in some cases to collect data (Haerpfer et al., 2022c).

Dependent variable: External political efficacy

One's external political efficacy is indicated by respondents' answers to the question, "How much would you say the political system in your country allows people like you to have a say in what the government does?" (Haerpfer et al., 2022, p. 16).

² The adult population refers to individuals aged 18 and over

Respondents receive an ordinal answer option from 1 ("a great deal") to 5 ("not at all") (Haerpfer et al., 2022, p. 16). As outlined in the literature review, a higher belief in the responsiveness of political systems to citizens indicates greater external political efficacy. Therefore, this original indicator is reversed to indicate a greater external political efficacy with a higher score. Additionally, this is treated as a continuous variable, following the convention that an ordinal variable with at least five categories can be treated as continuous (Hox et al., 2017, p. 141). Consequently, this variable is continuous, ranging from 1 to 5, where a higher score indicates greater external political efficacy (mean = 3.055, standard deviation = 1.220).

Independent variable: Traditional and progressive values

One's emphasis on traditional and progressive values is measured by the postmaterialism index, measuring to what extent one emphasises postmaterialist issues over materialist ones. Scores are determined through three rounds of questions, each presenting respondents with four choices of national priorities. In each round, respondents select the first and second most important issues (Haerpfer et al., 2022a, p. 11). As Table 1 summarises, each question consists of items that represent materialist and postmaterialist values (Lakatos, 2015, p. 293). When one chooses a postmaterialist item, one point is added, and when one picks a materialist item, no point is added (Haerpfer et al., 2022c, p. 208). For example, one question asked respondents to select the top two national priorities from options A, B, C, and D in Table 1. If one chooses both postmaterialist items (i.e. B and D) as their two most important national priorities, they receive two points (Haerpfer et al., 2022c, p. 208). If a respondent selects one materialist item (i.e. B or D) and one postmaterialist item (i.e. A or C), they receive one point for choosing a postmaterialist item, regardless of the order (Haerpfer et al., 2022c, p. 208).

Then, choosing both materialist items (i.e. A and C) results in zero points (Haerpfer et al., 2022c, p. 208). As such, scores of this indicator range from 0 to 5, with which a higher score indicates a more postmaterialist person. Since this research aims to measure how traditional one's values are, the direction of this indicator is reversed. Since this indicator comprises five categories, this variable is treated as continuous in the same manner as the dependent variable. Consequently, the independent variable is considered continuous, ranging from 0 to 5, with higher scores indicating more traditional values (mean = 2.100, standard deviation = 1.188).

Table 1 12 items used in Inglehart's postmaterialist indicator

Materialist measures	Postmaterialist measures
A) Maintaining order in the nation ^a	B) Giving people more say in decisions on the government ^a
C) Fighting rising prices ^a	D) Protecting freedom of speech ^a
E) Maintaining a high rate of economic growth	G) Giving people more say in how things are decided at work and in their community
F) Making sure the country has strong defense forces	H) Trying to make our cities and countryside more beautiful
I) Maintaining a stable economy	K) Moving toward a friendlier, less impersonal society
J) Fighting against crime	L) Moving toward a society where ideas count more than money

Source Adapted from Lakatos (2015, p. 293)

The postmaterialism index from the WVS is a suitable indicator because of its theoretical foundation on Inglehart's postmaterialism theory and value change theory (Lakatos, 2015; Datler et al., 2013). As this research conceptualises traditional and progressive values partially based on Inglehart's framework, the coherent alignment

between conceptualisation and measurement enables this research to comprehensively capture these values. For example, traditional values' emphasis on physical and economic security, as well as stability in national customs, are captured by items A, C, E, F, and I, as outlined in Table 1.

However, the potential limitation of this indicator in measuring traditional values is that the questions used in this indicator might address one's preferences on national policies rather than one's values (Lakatos, 2015). Flanagan (1982) suggests that respondents' answers might reflect situational factors rather than their ideal society. However, values are defined to be relatively stable over time and across situations (Sagiv & Roccas, 2017). Thus, whilst this indicator generally captures one's value preferences, it is important to acknowledge this potential limitation in fully capturing one's values (Lakatos, 2015; Flanagan, 1982).

Moderator 1: Progressiveness of politics

As outlined in H2a, this research aims to examine the moderation effect of progressive politics. Building upon Etzel (2023), it measures the progressiveness of a country's politics by the weighted average progressiveness of political parties. Political parties function as outlets of political elites' ideas and entities influencing political systems (Etzel, 2023). Thus, to calculate the progressiveness of a country's politics, Etzel (2023, p. 268) subtracts the sum of all parties' conservativeness scores from that of all parties' progressiveness scores. Each party's scores are weighted by their seat share (Etzel, 2023, p. 269).

Although he obtains the scores for each conservative and progressive item from the Manifesto Project, which provides quantitative data on parties' emphasis on various

issues (Etzel, 2023, p. 269), it has a limitation in its coverage beyond Europe. Alternatively, this research employs the 2019 Global Party Survey (GPS). The GPS is an expert survey that provides data about the ideological values and positions of 1043 parties in 163 countries on various issues (Norris, 2020a, p. 5; Norris, 2020c, p. 697). Experts participating in this survey are defined as political scientists or other social scientists in a related discipline who are particularly familiar with parties and elections (Norris, 2020a, p. 7). Each party's scores of variables³ are the average of participating experts' scorings (Norris, 2020a).

To measure the progressiveness of parties and countries, the following six aspects of progressive values are considered: social liberalism, environmental protection, multilateralism, women's rights, ethnic minority rights, and liberal democracy. They are chosen to comprehensively cover traditional values as conceptualised, by corresponding to Schwartz's exemplary values of self-direction and universalism.

First, the indicator of conservatism-social liberalism is measured by the parties' support for expanded individual freedom (Norris, 2020a, p. 13). While liberal positions should support these ideas, conservative positions should show objection to them and prioritise social order and tradition (Norris, 2020a, p. 13). Support for such individual freedom captures self-direction values, which emphasise independent actions (Schwartz, 1994). Second, the indicators of environmental protection, women's rights, ethnic minority rights, and principles of liberal democracy indicate parties' stronger support for these ideas (Norris, 2020a, pp. 14-15). Supporting these issues corresponds to

³ This reference is limited to variables about ideological values, policy issues, and populist rhetorics, all of which are graded by experts.

universalism, valuing social justice as tolerance of outgroups, equality for all people, and preserving the environment (Schwartz, 1994). Lastly, the multilateralism indicator contrasts it with nationalism (Norris, 2020a, p. 15). Parties supporting multilateralism respect and engage with international treaties, the United Nations agencies, as well as regional organisations, while those in nationalistic positions reject them (Norris, 2020a, p. 15). Such support for multilateralism aligns with a broader mind and tolerance to outgroups, which characterises universalism (Schwartz, 1994).

The process of obtaining a country's weighted average of parties' progressiveness is summarised in Table 1 with an example of the US. This research first seeks each party's progressiveness score, weighted by their vote shares, to consider parties' different impacts on politics and society depending on their size. Then, the sum of each party's weighted progressiveness scores is divided by the sum of the vote shares to ensure that the final progressiveness score is proportionate to the actual distribution of votes, given that the sum of all parties' vote shares does not equal 1 in some countries. As all indicators' directions are operationalised to indicate a higher progressiveness with a higher score, a weighted average of a country's progressiveness also indicates a greater progressiveness with a higher score. Given that all six variables vary from 0 to 10, the theoretical range of this variable is 0 to 60. In the sample of this research, the minimum score is 21.315, and the highest score is 48.071 (mean = 32.221, standard deviation = 6.258).

Table 2 *Process of calculating the average progressiveness of parties in a country (the US)*

	Social liberalism	Environmental protection	Multilateralism	Women's rights	Ethnic minority rights	Liberal democracy	A sum of six scores	Vote share	Weighted Score (Sum of Scores * Vote share)
Democratic Party	7.586957	7.928571	8.264706	8.534884	8.341463	7.775	48.43158	0.455	$48.43158 * 0.455 = 22.03637$
Republican Party	1.704545	1.078947	1.928571	2.857143	1.769231	1.709677	11.04812	0.512	$11.04812 * 0.512 = 5.656635$
Progressiveness of a country's politics (Sum of weighted scores / Sum of Vote share)									$(22.03637 + 5.656635) / (0.455 + 0.512) = 28.63806$

Moderator 2: Salience of economic issues

Similarly, this study seeks the weighted average of parties' salience of economic issues for each country to test H2b. This variable is created based on an economic issue importance indicator from the GPS. This indicator measures how important economic issues are for each party (Norris, 2020a, p. 13). This is a continuous variable with a range between 0 ("no importance") and 10 ("great importance") (Norris, 2020a, p. 13).

The calculation of each country's weighted average is conducted in the same manner as the progressiveness of politics. It first obtains each party's economic salience score, weighted by their vote shares, so that it can consider the realistic impacts of each party. Then, the sum of the parties' weighted economic salience scores is divided by the sum of the vote shares to make the final economic salience score correspond to the actual distribution of votes, even if all parties' vote shares do not add up to 1. This calculation

process of the economic salience variable is outlined in Table 3, taking the US as an example. Provided that the original variable takes scores from 0 to 10, the theoretical range of this variable is also between 0 and 10. However, the minimum score in the sample of this research is 3.9800, and the maximum score is 8.780 (mean = 7.364, standard deviation = 0.903).

Table 3 *Process of calculating the average economic salience of parties in a country (the US)*

	Importance of economic issues	Vote share	Weighted Score (Sum of Scores * Vote share)
Democratic Party	8.210526	0.455	$8.210526 * 0.455 = 3.735789$
Republican Party	8.571429	0.512	$8.571429 * 0.512 = 4.38857$
Economic salience of a country's politics (Sum of weighted scores / Sum of Vote share)			$(3.735789 + 4.38857) / (0.455 + 0.512) = 8.401612$

Other Control Variables

Some additional factors are controlled to consider the potential confounders and reduce the bias in models. At the individual level, demographic characteristics, such as income level, age, and educational background, may act as confounders, and sex could influence external political efficacy (Etzel, 2023; Kim, 2013; Davis & Hitt, 2017; Marx & Nguyen, 2016). At the country level, economic factors such as income inequality, unemployment rate, and economic performance are controlled to address potential

confounding effects (Etzel, 2023; Marx & Nguyen, 2016; Norris, 2015; Bene, 2020; Kim, 2013). In addition, the year of the interview is considered, given the extended data collection period of the 7th wave of the WVS due to the COVID-19 pandemic (World Values Survey, n.d.).

Research on external political efficacy has observed that older, male, and educated people with higher incomes tend to report higher external political efficacy (Etzel, 2023; Kim, 2013; Davis & Hitt, 2017; Marx & Nguyen, 2016). Simultaneously, young, richer, and more educated individuals, whose material needs are more satisfied, are suggested to report more progressive values (Duch & Taylor, 1993).

Similarly, economic conditions should affect people's evaluations of government and the likelihood of adopting progressive postmaterialist values. Higher economic performance is expected to positively affect external political efficacy, while higher income inequality and unemployment rates are expected to have negative effects (Etzel, 2023; Marx & Nguyen, 2016; Norris, 2015; Bene, 2020; Kim, 2013). Greater economic performance, lower income inequality, and reduced unemployment rates may influence individuals to adopt postmaterialist values (Inglehart & Baker, 2000).

Lastly, this research controls the year of data collection. Evidence exists that the COVID-19 pandemic escalated inequalities both at national and international levels (Redbird et al., 2022, p. 2; Angelov & Waldenström, 2023, p. 351). As mentioned in the literature review, an increase in a country's income inequality can decrease overall external political efficacy in the country. See Appendix A for the details of theoretical justifications and operationalisations of control variables.

Statistical Model

This research will employ multi-level regression models for its empirical analysis⁴. Linear regression models are chosen to examine the average effect of the independent variables on the continuous dependent variable. A multi-level analysis is employed for two purposes. One is to examine the interaction between values at the individual level and the progressiveness of politics at the country level. The null model of this research shows that 83.9% of the total variance of the sense of external political efficacy is attributable to differences between countries rather than at the individual level factors. This underscores the importance of a statistical approach to analyse interactions between country and individual levels. The second reason is to address the geographically clustered nature of datasets, collecting data about societies around the world.

Year selection

Both data from the 7th wave of the WVS and the GPS 2019 were collected around 2019, and they are the latest data available. The use of the most recent data is essential for performing the most up-to-date analysis.

Results

Analysis 1

This section analyses hypothesis 1, arguing that traditional values have a negative effect on external political efficacy with Model 1, consisting of all the independent variables. With a higher score, the independent variable indicates higher traditional values and the dependent variable represents a higher external political efficacy. Thus, a negative coefficient for progressive values supports this hypothesis 1.

⁴ See Appendix B for model assumption checks

The result of Model 1, as summarised in Table 4, shows that the coefficient for traditional-progressive values is negative: external political efficacy is expected to decrease by 0.003 scale points [95% CI: -0.013, 0.007] for each unit of an increase in traditional value, holding control variables constant. Figure 1 displays the predicted values of external political efficacy at different levels of traditional values. It shows that one with very progressive values (minimum score of the independent variable) is expected to score 7.022 on their external political efficacies. When one has very traditional values (maximum score of the dependent variable), they are expected to score 7.008 on their external political efficacies. However, the effect of traditional values on external political efficacy is not statistically significant ($p > 0.05$), indicating the uncertainty of whether the hypothesised relationship can be seen in the population. Furthermore, even if traditional values' effect on external political efficacy is observed in the population, its effect would be very small. A change in the independent variable from its minimum to maximum is expected to produce 0.2% of the change in the dependent variable. Overall, this research fails to reject the null hypothesis of H1: Traditional values have no effect on external political efficacy, and it observes a tiny effect if it had the hypothesised effect on the population at the global level.

Table 4 *Multilevel regression results*

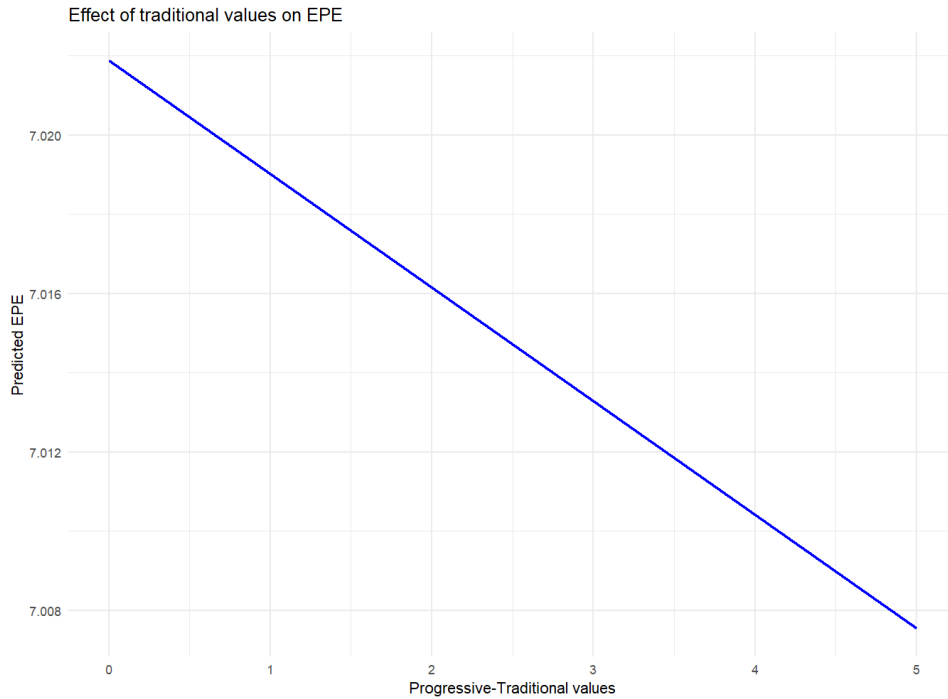
Relationship between values and External Political Efficacy (EPE)

	Model 1	Model 2	Model 3
Intercept	5.829*** (1.237)	5.964*** (1.240)	6.525*** (1.245)
Traditional Values	-0.003 (0.005)	-0.055+ (0.029)	-0.242*** (0.042)
Progressive Politics	0.035* (0.015)	0.030* (0.015)	0.034* (0.015)
Economic Salience	-0.040 (0.073)	-0.038 (0.073)	-0.135+ (0.075)
Sex - Female	-0.067*** (0.012)	-0.067*** (0.012)	-0.067*** (0.012)
Age	0.001** (0.000)	0.001** (0.000)	0.001** (0.000)
Educational Background	0.024*** (0.003)	0.024*** (0.003)	0.024*** (0.003)
Income	0.042*** (0.003)	0.042*** (0.003)	0.042*** (0.003)
Inequality	0.012 (0.060)	0.012 (0.060)	0.012 (0.060)
Unemployment rate	-0.068** (0.024)	-0.068** (0.024)	-0.066** (0.024)
Economic performance	-0.242* (0.100)	-0.241* (0.100)	-0.242* (0.100)
Year - 2018	-1.193*** (0.359)	-1.192*** (0.359)	-1.185*** (0.359)
Year - 2019	-1.024* (0.408)	-1.023* (0.408)	-1.006* (0.409)
Year - 2020	-1.523*** (0.395)	-1.519*** (0.395)	-1.511*** (0.396)
Year - 2021	-1.219** (0.391)	-1.222** (0.391)	-1.220** (0.392)
Year - 2022	-1.398*** (0.393)	-1.396*** (0.394)	-1.382*** (0.394)
Year - 2023	-0.842+ (0.490)	-0.838+ (0.490)	-0.829+ (0.491)
Traditional Values × Progressive Politics		0.002+ (0.001)	
Traditional Values × Economic Salience			0.032*** (0.006)
N	38744	38744	38744

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

Notes: Multilevel linear regression coefficients with standard errors in brackets. Male is the reference group of the Sex variable. 2017 is the reference group of the year of the interview variable.

Figure 1 *Expected score of the dependent variable (external political efficacy) when the independent variable (traditional values)⁵ varies*



Analysis 2

This research argued that the negative relationship between traditional values and external political efficacy is strengthened by progressive politics as its hypothesis 2a. This means that the more progressive the politics is, the more negative effect traditional values should have. Thus, a negative coefficient between traditional values (independent variable) and progressive politics (moderator) is consistent with H2a. It is tested by Model 2, which additionally introduces an interaction term between traditional values and progressive politics. Its regression result is in Table 4 in the centre. Figure 2 shows the shift in the effect of traditional values on external political efficacy as the progressiveness

⁵ Other control variables are held at their mean. Sex and the year of the interview take its reference group (2017).

of politics increases.

As Figure 2 shows, the effect of traditional values on external political efficacy is negative in politics with a lower progressiveness. For example, when the progressiveness of politics equals 21.315 (the lowest score among countries in the sample), the marginal effect of traditional values is expected to be -0.022 [95% CI: -0.044, 0.001]. However, the traditional values' effect is expected to become less negative and turn to be positive as politics become more progressive. As the interaction term between traditional values and progressive politics shown in Table 4 shows, traditional values' effect on external political efficacy is expected to increase by 0.002 [95% CI: 0.000, 0.003] for each unit of an increase in the progressiveness of politics. For example, when the progressiveness of politics scores 40, the effect of traditional values on external political efficacy is predicted to be 0.007 [95% CI: -0.008, 0.021]. Then, when the progressiveness of politics takes 48.071 (i.e. the highest score in the sample), the expected effect of traditional values is 0.019 [95% CI: -0.006, 0.045]. The direction of the effect is contrary to Hypothesis 2a. Nonetheless, this effect is statistically insignificant ($p > 0.05$).

Analysis 3

Hypothesis 2b expects the negative effect of traditional values on external political efficacy to be weakened as the salience of economic issues in politics increases. To prove this hypothesis, the coefficient of the interaction term between traditional values and economic salience should be positive. This is analysed with Model 3, which contains the interaction term between them in addition to all independent variables, and the outcome is displayed on the right of Table 4. To visually grasp the shift in the effect of traditional values on external political efficacy according to economic salience in politics,

Figure 3 is also utilised.

Figure 3 demonstrates that traditional values' effect on external political efficacy is expected to be negative in politics with a lower economic salience. When the economic salience equals 3.980 (i.e. the lowest score in the sample), the effect of traditional values is expected to be -0.113. However, as the salience of economic issues in politics increases, the traditional values' effect is predicted to become less negative and turn positive when the economic salience scores around 7.5. At an economic salience of 7.5, the effect of traditional values is expected to be 0.001. This shift is reflected in the coefficient of the interaction term between traditional values and economic salience, as displayed in Table 4. The traditional values' effect is expected to increase by 0.032 as economic salience in politics increases by one unit scale ($p < 0.001$). In the country with the highest score of economic salience in this sample (i.e. 8.780), traditional values' effect on external political efficacy is estimated to be 0.04. Accordingly, such statistically significant positive interaction between traditional values and economic salience as a moderator provides evidence to support Hypothesis 2b.

Figure 2 *Expected effect of traditional values on external political efficacy depending on the progressiveness of politics*

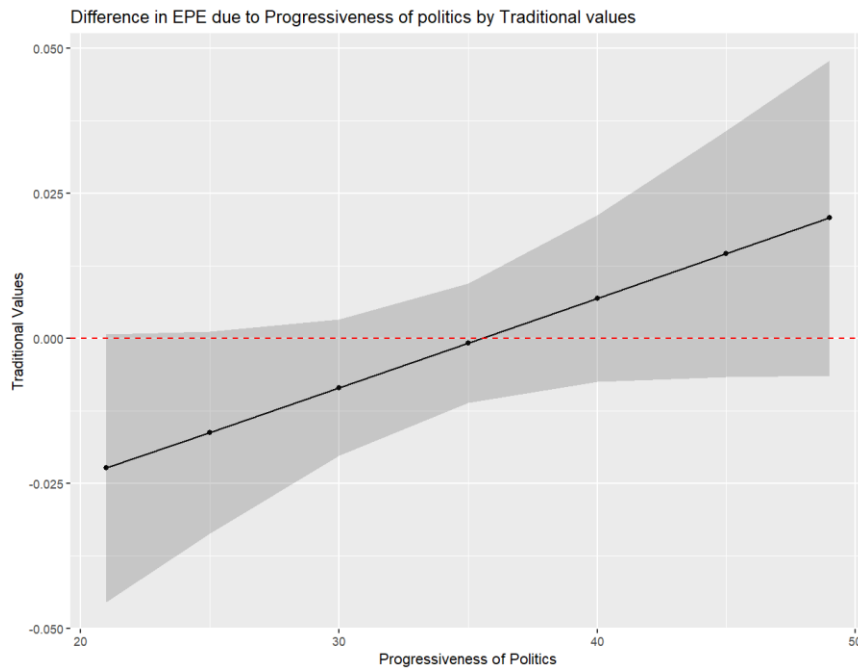
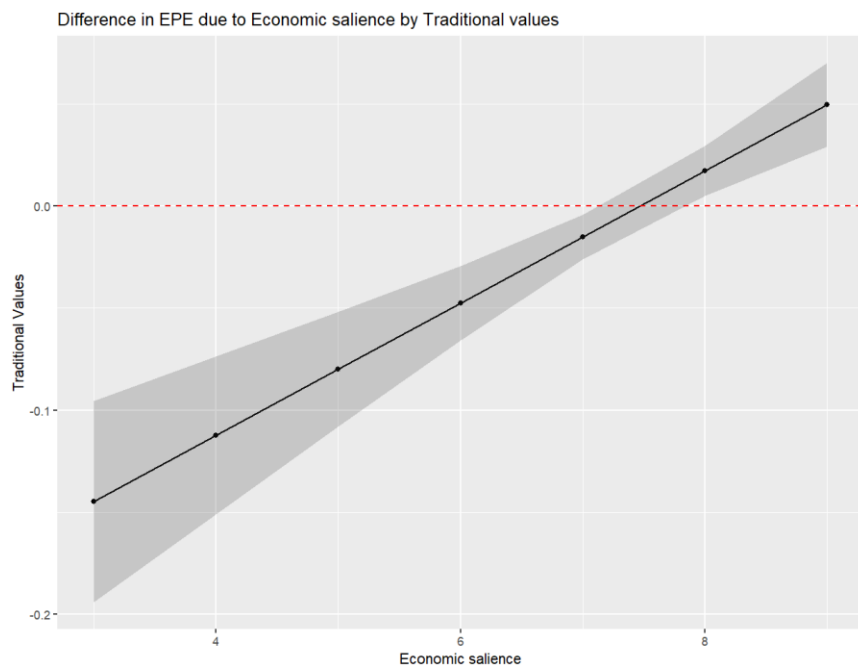


Figure 3 *Expected effect of traditional values on external political efficacy depending on the level of economic salience*



Discussion and Conclusion

Etzel (2023) is a prominent work that empirically demonstrates the association between one's value orientation and external political efficacy, outlined by the Cultural Backlash thesis by Inglehart and Norris (2017) (Etzel, 2023). Extending his focus in Europe to the globe, this research has aimed to examine the effect of traditional values on external political efficacy and moderating effects of progressive politics and economic salience. Prior literature suggests the role of value change from traditional to progressive ones, which ultimately leads to a lower external political efficacy among traditional value holders. Building upon these theories, it hypothesised the negative effect of traditional values on external political efficacy (H1). It also hypothesised that such traditional values' effect on external political efficacy is strengthened by progressive politics (H2a) and weakened by economic salience (H2b). They are tested through three multilevel regression models with data from the 7th wave of WVS and the GPS. This research presented a mixed picture.

The study did not find statistically significant evidence supporting the negative effect of traditional values on external political efficacy. Furthermore, even if an effect exists, the coefficient indicates that its impact is minimal. This contradicts what Etzel (2023) observed in Europe. One plausible explanation for this outcome lies in the pooling of samples from countries that vary in their context and how traditional values are represented in society. As Figure 2 and Figure 3 illustrate, traditional values exert both negative and positive effects across different countries. It is possible that aggregating these opposing effects led the coefficient to approach 0. A theoretical support for this

explanation can be found in the Cultural Backlash thesis.

Economic development brings postmaterialist and self-expressive values to society and individuals in society by increasing their economic security (Inglehart & Baker, 2000). As such progressive issues become dominant in society, traditional individuals perceive their political systems to be less responsive, resulting in their lower external political efficacy (Inglehart & Norris, 2017; Etzel, 2023). As Inglehart and Baker (2000) illustrate, each country's level of development and, consequently, their dominant values vary significantly. For instance, Protestant regions of Europe and English-speaking countries exhibit the highest levels of self-expressive values, followed by Catholic countries in Europe (WVS, 2023). In contrast, survival values are predominant in the African-Islamic region and Orthodox parts of Europe. Regions such as Confucian, West and South Asia, and Latin America fall between the Catholic Europe group and the regions with predominantly survival values (WVS, 2023). Given these value variations and the theory of the Cultural Backlash, when samples mainly from progressive politics are employed, a more pronounced negative effect of traditional values on external political efficacy could be articulated (Etzel, 2023).

Indeed, Etzel (2023) is based on samples in Protestant and Catholic Europe, except for only one Orthodox country. On the other hand, this research includes only six relatively progressive societies, composed of five Protestant European or English-speaking countries and one Catholic European country out of 29 countries. Furthermore, when the moderating effect of economic salience is considered (Model 3), the negative effect of traditional values is much larger and significant. Therefore, while this research did not find sufficient evidence to support the negative effect of traditional values on

external political efficacy with Model 1, it cannot entirely dismiss this effect. As Model 3 demonstrates, this could be particularly relevant in politics where traditional economic issues are marginalised, as also argued by the Cultural Backlash thesis and Etzel (2023).

On one hand, a result which contradicts the theoretical expectation was found. Analysis 2 shows that the effect of traditional values on external political efficacy becomes less negative and even turns positive, as politics become more progressive. A clear reason for this remains uncertain. Nonetheless, it might be explained by the insufficient number of countries in the sample of this research. After the operationalisations of variables, the sample of this study is only from 29 countries. In multilevel regression models without a small number of countries, the estimation of country-level effects could be unstable (Bryan & Jenkins, 2013). Therefore, Hypothesis 2a should be tested with a larger sample in the future. On the other hand, this research finds statistically significant evidence that the negative effect of traditional values on external political efficacy can be lessened in politics where economic issues are still important with Model 2. This aligns with Etzel (2023).

The above outcomes could collectively address whether Etzel's (2023) observation is applicable globally or specific to the European context. At the global level, where political backgrounds differ from county to county, traditional values' effect on external political efficacy is not uniform. Nonetheless, as in Europe, how traditional issues, particularly economic issues, are relevant in politics determines what holding traditional values means. When economic salience is moved into the background, traditional values are associated with lower external political efficacy. When economic issues are salient, traditional values can still be positively associated with external

political efficacy.

However, these discussions should be considered in light of the limitations this study faces. First, this research involves some statistical limitations. One shortcoming is its sample size, as this research is based on data from only 29 countries. This modest size of the sample is due to the elimination of countries with at least one missing value in the involved variables. Although this was a necessary operationalisation, results based on 29 countries might not be representative of all countries. Even though multilevel regression models with more than 15 to 20 countries are generally considered to produce estimates with limited, involving fewer countries can affect the model performance (Stegmueller, 2013; Elff et al., 2021). Additionally, the independent variable in Model 2 and Model 3 exhibits multicollinearity⁶. Multicollinearity in a model could lead to incorrect results in regression analyses (Kim, 2019). However, it is known that a larger sample can mitigate the effect of multicollinearity on predicting the values of the dependent variable (Mundfrom et al., 2017). Hence, future research would benefit from incorporating data from a larger number of countries. That could improve these statistical limitations, as well as provide a more complete picture of this topic at the global scale. More specifically, retesting Hypothesis 2a with a bigger sample is fruitful, given that this research observed a result which contradicts the theoretical expectation. In case the result against the theoretical expectation is maintained with a sample from more countries, the causal relationship behind it should be further explored.

The second limitation is regarding the measurement of the independent variable.

⁶ For further details, see Appendix B

As mentioned in the methodology section, the indicator used to measure the progressiveness of one's values could measure policy preferences rather than their values. People are asked to pick their most and second most important goals of the nations out of four options (Haerpfer et al., 2022a, p. 11). The criticism of this method is about oversensitivity to immediate conditions, such as economic and security situations (Promislo et al., 2017). For example, in the face of security threats, such as war, a strong national defence should be given more priority over postmaterialist items, like freedom of speech (Davis & Davenport, 1999, p. 663). Such oversensitivity to current conditions does not align with the concept of values, which should remain stable over time and across various situations (Sagiv & Roccas, 2017, p. 3). Therefore, although this index is widely accepted by studies as an indicator for a variety of attitudes and behaviours (Datler et al., 2013), this limitation needs to be taken into account (Lakatos, 2015; Davis & Davenport, 1999). Nonetheless, the Value Change theory also suggests that the transition from traditional survival to progressive self-expressive values is not a linear process following modernisation (Inglehart & Baker, 2000, p. 49). For instance, protracted economic collapse can reverse modernisation's influence on such value change, leading to a return of traditional values in societies that had previously embraced progressive values (Inglehart & Baker, 2000, p. 49). This implies that a sudden event also plays an important role in values. However, how this measurement of the index affected the result of this research remains unclear. For future research on the same or similar topic, a close comparison of various indicators in capturing the progressive and traditional values might be beneficial. For instance, Etzel (2023) employs a different indicator to measure traditional and progressive values. It is possible that this contributed to slightly different conclusions between Etzel (2023) and this study.

Despite the limitations mentioned above, this study still has significant academic and social implications. First and foremost, although the outcomes of statistical analysis in this research do not completely conform to the theoretical expectations, this research still shows the relevance of basic human values in relation to one's sense of external political efficacy, even at the global level. As discussed in the literature review, previous research has identified a common mechanism influencing an individual's level of external political efficacy, which is through the extent to which their preferences are represented by political systems (OECD, 2019, p. 160). Traditional and progressive values are represented differently. Traditional values are underrepresented in increasingly progressive politics (Inglehart & Norris, 2017; Etzel, 2023). Etzel (2023) provides empirical evidence for the negative effect of traditional values on external political efficacy in Europe. However, despite the possibility of observing the same relationship beyond the European context, how holding traditional values affects one's sense of external political efficacy has not been examined at the global level. Therefore, this research contributes to closing this research gap by holding its focus at the globe. This research strengthens the possible role of political contexts in explaining the effect of traditional values on external political efficacy. The finding that economic salience can determine the effect of traditional values on external political efficacy to be both negative and positive would be particularly valuable not only as an academic finding but also to real-life politics. Citizens' sense of external political efficacy can give political institutions feedback on their responsiveness to public demands and function as the indicator of healthy democracy (Craig et al., 1990; Karv et al., 2022; Kevins, 2022). It would show the importance of maintaining the salience of traditional economic issues in

politics to people and political institutions that strive to keep or improve external political efficacy.

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Appendix A: Details of Control Variables

- Individual level

- Income level

Prior research has shown that people with a lower-income background and a lower and middle-working class tend to be attached to materialistic survival values (Inglehart, 1977, p. 183). This is because a low income leads to economic insecurity (Etzel, 2023, p. 270). At the same time, income is a resource to influence society and politics (Etzel, 2023). Studies have demonstrated that a lower subjective income leads to a lower external political efficacy (Etzel, 2023; Kim, 2013; Davis & Hitt, 2017; Marx & Nguyen, 2016).

- Respondents are asked to answer the income group they think their household belongs to from 1 to 10 (Haerpfer et al., 2022a, p. 18). 1 indicates the lowest income group, and 10 indicates the highest income group in their country (Haerpfer et al., 2022a, p. 18). They are asked to take into account all wages, salaries, pensions and other incomes that come in (Haerpfer et al., 2022a, p. 18). Since this original ordinal variable contains 10 (> 5) categories, following the same manner as the dependent and independent variables, it is treated as a continuous variable in this research.
- Range: 1 (lowest income group) – 10 (highest income group), Mean = 5.022, standard deviation = 2.207

- Age

As outlined in the literature review, following the heightened economic security levels, younger generations hold more postmaterialist values (Inglehart & Norris, 2017; Etzel, 2023). Through the intergenerational value change, politics

and societies today are more progressive as well. This coherence between political systems and younger generations' values allows them to hold a positive perception of the political systems' responsiveness (Etzel, 2023). The positive association between age and traditional values and the negative associations between age and external political efficacy are both observed by prior studies (Etzel, 2023; Kim, 2013; Davis & Hitt, 2017; Marx & Nguyen, 2016).

- Respondents are asked their ages with the question, “This means you are _____ years old”, which is asked after their year of birth (Haerpfer et al., 2022a, p. 18). In the sample of this study, the youngest respondent was 16 years old, and the oldest one was 103.
- Range: 16 – 103, Mean = 43.380, Standard deviation = 16.756
- o Educational background
 - As the Cultural Backlash thesis outlines, access to higher education promotes the values of postmaterialism by training people's cognitive skills, exposing them to diverse perspectives, and giving them more security in future employment and their income status (Inglehart, 2007; Duch & Taylor, 1993; Marx & Nguyen, 2016). These environments that higher education provides also positively affect one's sense of external political efficacy. Prior research indeed shows that a higher educational background is positively correlated with external political efficacy (Persson, 2015; Kim, 2013; Davis & Hitt, 2017; Duch & Taylor, 1993).
 - Respondents are asked to answer the highest educational level they have attained (Haerpfer et al., 2022a, p. 18). The codes employed here follow the

International Standard Classification for Education used by the UN and UNESCO. Early childhood education or no education is coded as 0. Primary education is indicated by 1. Lower secondary education is coded as 2. Upper secondary education is classified into 3. Post-secondary non-tertiary education is indicated by 4. To short-cycle tertiary education, 5 is corresponded. Bachelor or equivalent is coded as 6. Master or equivalent is represented by 7. Lastly, 8 corresponds to doctoral or equivalent degrees. This original variable is an ordinal variable, which takes scores from 0 to 8. Therefore, just like income level, this variable is treated as a continuous variable, which ranges between 0 to 8.

- Range: 0 (lowest education level) – 8 (highest education level), Mean = 3.627, Standard deviation = 2.023

- o Sex

Female's higher external political efficacy than male's one is widely reported by prior studies (Kim, 2013; Davis & Hitt, 2017; Marx & Nguyen, 2016). For one explanation, Marx and Nguyen (2016) suggests that masculine identity traditionally attached to men makes them more vulnerable and insecure.

- Respondents' sex is determined by observation. Male is indicated by 1, and female is indicated by 2 (Haerpfer et al., 2022a, p. 18). Since this is a binary variable, this variable is included this variable into models as a dummy variable. Therefore, male is treated as a value of 0, and female as a value of 1.

- Frequency table

Male	Female
18357	20387

- Country level

- Income inequality

See literature review for the detailed mechanism of the negative relationship between income inequality and external political efficacy. This relationship is observed by studies such as Etzel (2023), Marx and Nguyen (2016), and Norris (2015). As the Value Change theory outlines, economic development drives the value change from traditional (survival) to progressive (self-expression) ones (Inglehart & Baker, 2000). However, such value change is not a linear progress (Inglehart & Baker, 2000). Although there is a general shift from traditional to progressive values driven by modernisation and economic development, economic uncertainty can reverse this effect (Inglehart & Baker, 2000, p. 49). When income inequality is high, people’s material needs are not sufficiently met (Inglehart & Baker, 2000). Therefore, it ultimately leads to more materialistic traditional values (Etzel, 2023).

- Income inequality of a country is indicated by the GINI index (Haerper et al., 2022b, p. 214). The scores for each country are derived from the most recent data available for each respective country within the period from 2012 to 2019 (Haerper et al., 2022b, p. 214). The Gini index ranges between 0 and 100. While perfect equality is represented by 0, perfect inequality is implied by 100

(World Bank, n.d.-b). In the sample of this research, the lowest score is 24.9, and the maximum score is 50.4.

- Theoretical range: 0 (perfect equality) – 100 (perfect inequality), Actual range: 24.9 – 50.4, Mean: 35.838, Standard deviation: 6.511

- o Unemployment rate

Unemployment ultimately contributes to income inequality, and how income inequality affects external political efficacy is outlined in the literature review (Sheng, 2011, p. 1). The effect of unemployment on values are also similar to that of income inequality. A high unemployment can contribute to a higher material insecurity, and consequently make people's values more traditional on average (Inglehart & Baker, 2000).

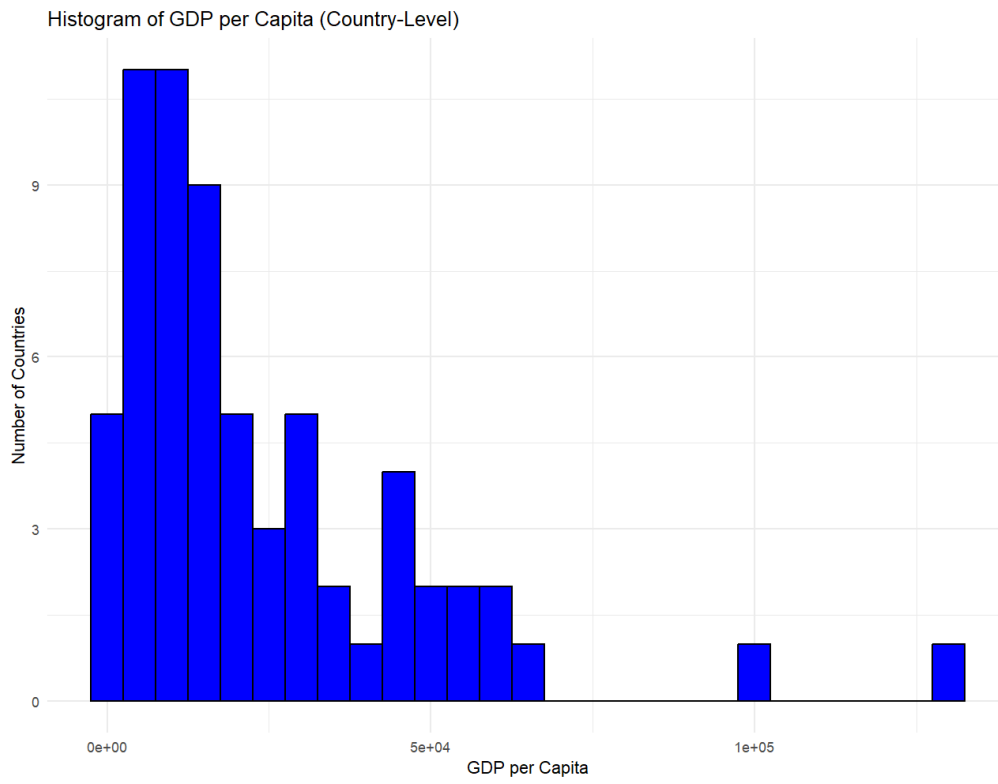
- An unemployment rate of a country is calculated as a percentage of the unemployed population of the total labour force (Haerpfer et al., 2022b, p. 215). The source is the World Bank (Haerpfer et al., 2022b, p. 215). The 2019 data is used here (Haerpfer et al., 2022b, p. 215). The status of unemployment refers to the share of the labour force that is without work but available for and seeking employment (World Bank, n.d.-c). Definitions of labour force and unemployment differ by country (World Bank, n.d.-c). Since the unemployment rate is expressed by percentage, the theoretical range of this variable is from 0 to 100. However, the lowest score was 1.58 and the highest score was 16.99 in the sample of this study.
- Theoretical range: 0 (no unemployment) – 100 (everyone is unemployed), Actual range: 1.58 – 16.99, Mean = 5.922, Standard deviation = 3.420

- o Economic performance

As the Value Change theory outlines, economic development drives the value change from traditional (survival) to progressive (self-expression) ones (Inglehart & Baker, 2000). Another evidence exists that people tend to perceive that political systems are working functionally in line with citizens' interests when their economic performance is good (Bene, 2020).

- The level of economic development of a country is indicated by the gross domestic product (GDP) per capita, expressed in current international dollars converted by purchasing power parity (PPP) (Haerpfer et al., 2022b, p. 214). In this study, data from 2019 is utilised (Haerpfer et al., 2022b, p. 214). GDP represents the total gross value added by all resident producers in the country, including any product taxes, which excludes any subsidies not included in the value of the products (World Bank, n.d.-a). By taking account of PPP, it adjusts the price level differences between countries (World Bank, n.d.-a). The total population of a country refers to the number of all residents regardless of legal status or citizenship in the middle of the year (World Bank, n.d.-a).
- GDP per capita is logged in this research to handle the highly skewed data. As Figure 4 shows, GDP per capita in the sample of this study is positively skewed. Moreover, the range of GDP per capita is huge. Taking the logarithm of GDP per capita can compress its range. After this operationalisation, this variable ranges from 7.991 to 10.997.
- Range: 7.991 – 10.997, Mean = 9.767, Standard deviation = 0.826

Figure 4 *Histogram of GDP per capita*



Appendix B: Model Assumption Checks

Model 1

- Normally distributed errors

Figure 5 Histogram of residuals for Model 1

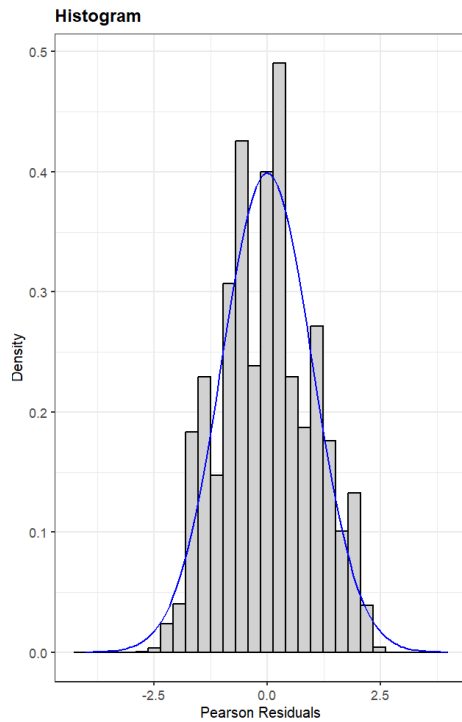


Figure 6 Q-Q plot of residuals for Model 1

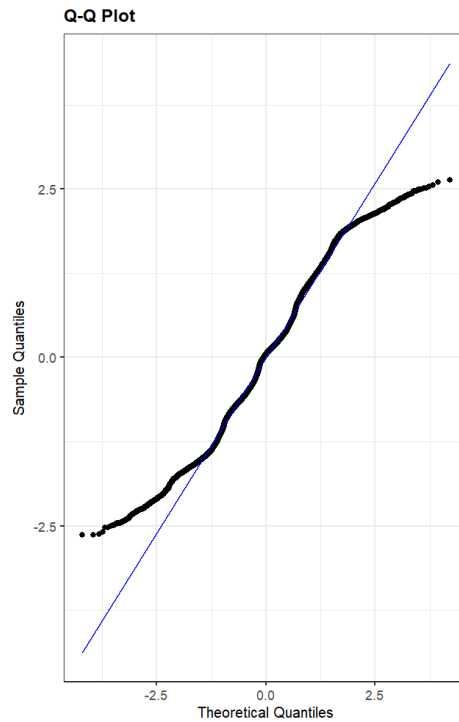


Figure 5 displays that residuals are approximately symmetric, roughly drawing the bell-shaped curve, although some bars exceed or are far below the curve. Figure 6 shows that most residual plots in the middle follow the line, while there are deviations at both ends. These two figures collectively show errors in Model 1 are generally normally distributed with some deviations to be taken into account.

- Homoskedasticity & Linearity

Figure 7 Residual plot of Model 1 (Pearson Residuals vs. Predicted Values)

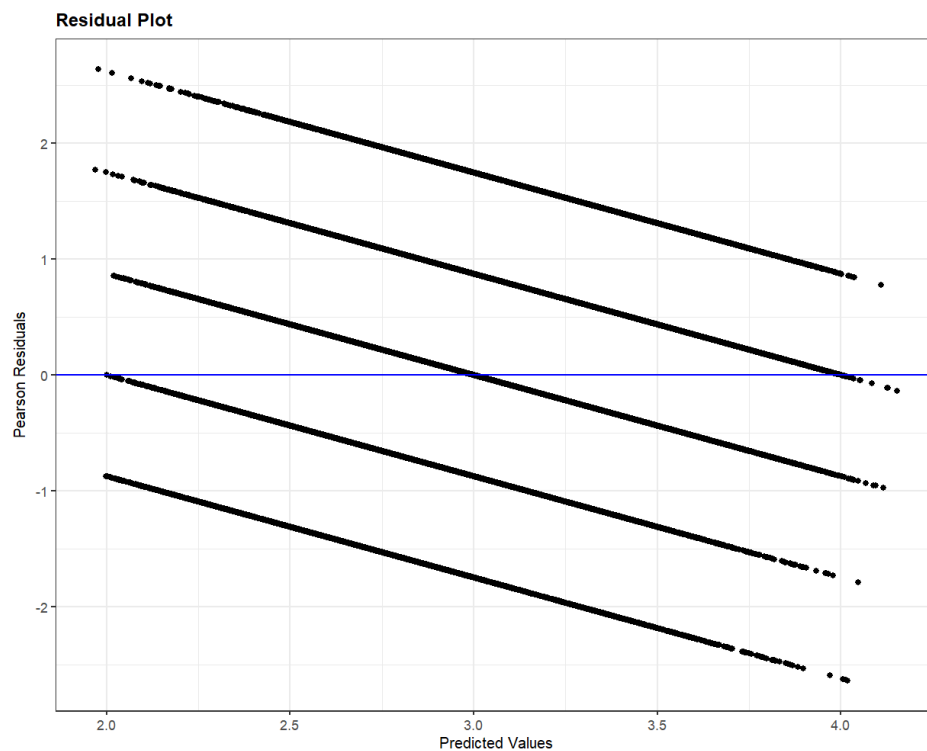


Figure 7 illustrates that residuals are randomly scattered across the range of the dependent variable, without showing any patterns that suggest heteroskedasticity. Hence, the assumption of homoskedasticity of Model 1 is met. In addition, this does not show any systematic pattern related to the dependent variable that imply a non-linearity. Thus, the assumption of linearity should be met as well.

- Multicollinearity

Table 5 $GVIF^{(1/(2*Df))}$ values of each variable in Model 1

Variable	GVIF	Df	$GVIF^{(1/(2*Df))}$
Traditional values	1,011844684	1	1,005904908
Progressiveness of politics	2,979354738	1	1,726080745
Salience of economic issues	1,992279503	1	1,411481315
Sex	1,004820633	1	1,002407419
Age	1,057583838	1	1,028388953
Educational background	1,116668168	1	1,056725209
Income	1,070642389	1	1,034718507
Income inequality	1,301039875	1	1,14063135
Unemployment rate	2,616482634	1	1,617554523
Economic performance	2,033286527	1	1,425933563
Year of the interview	3,723806189	6	1,115789463

Since Model 1 incorporates categorical variables, the Generalized Variance Inflation Factor (GVIF) adjusted for degrees of freedom, denoted as $GVIF^{(1/(2*Df))}$, is presented in Table 5. Consequently, to assess multicollinearity, the $GVIF^{(1/(2*Df))}$ value of each variable should be compared to 2.23, which is the approximate square root of 5. According to Table 5, none of the $GVIF^{(1/(2*Df))}$ values exceeds 2.23, meaning that no variable exhibits multicollinearity.

- Independence of errors

This research does not employ a time-series data. Therefore, problematic correlations between the errors due to a time relation should not occur in Model 1. When it comes to geographic clustering, it could be relevant to this research since multistage sampling is used for the WVS. However, the model result should not violate the assumption of the independence of errors because Model 1 is multilevel regression model.

Model 2

- Normally distributed errors

Figure 8 Histogram of residuals for Model 1

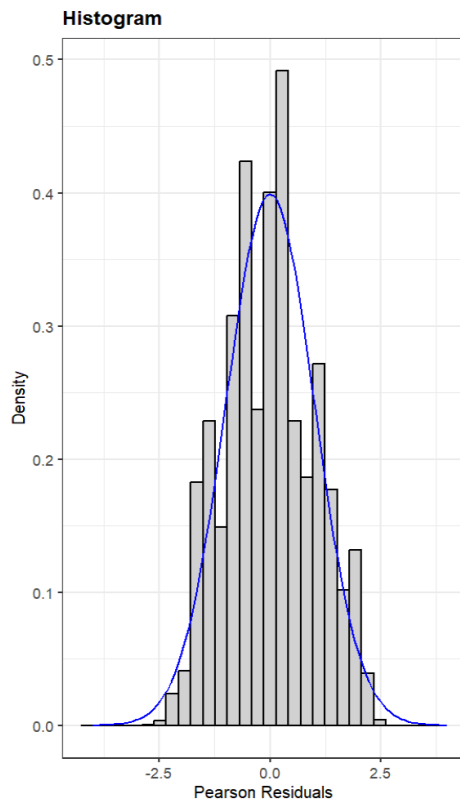


Figure 9 Q-Q plot of residuals for Model 1

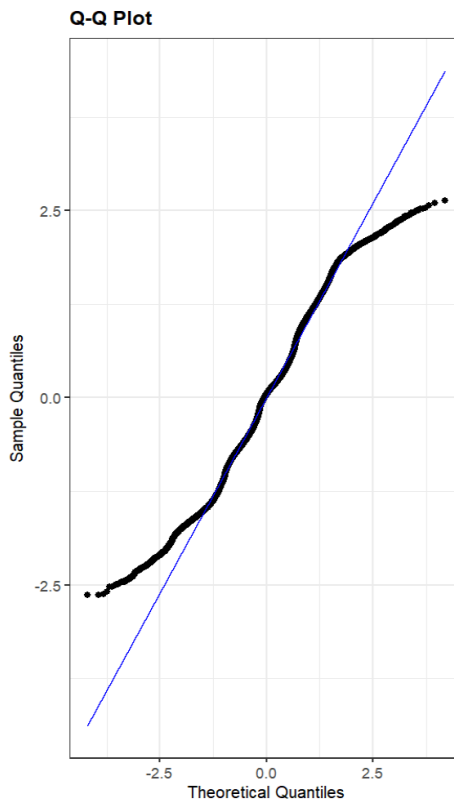


Figure 8 shows that the residuals approximately follow a normal distribution, although there is a noticeable excess of residuals slightly above 0. In Figure 9, the Q-Q plot indicates that the residuals generally align with the theoretical normal line, except for some deviations at both ends. From these two figures, it is possible to conclude that residuals of Model 2 are generally normally distributed with minor departure from perfect

normality.

- Homoskedasticity & Linearity

Figure 10 *Residual plot of Model 2 (Pearson Residuals vs. Predicted Values)*

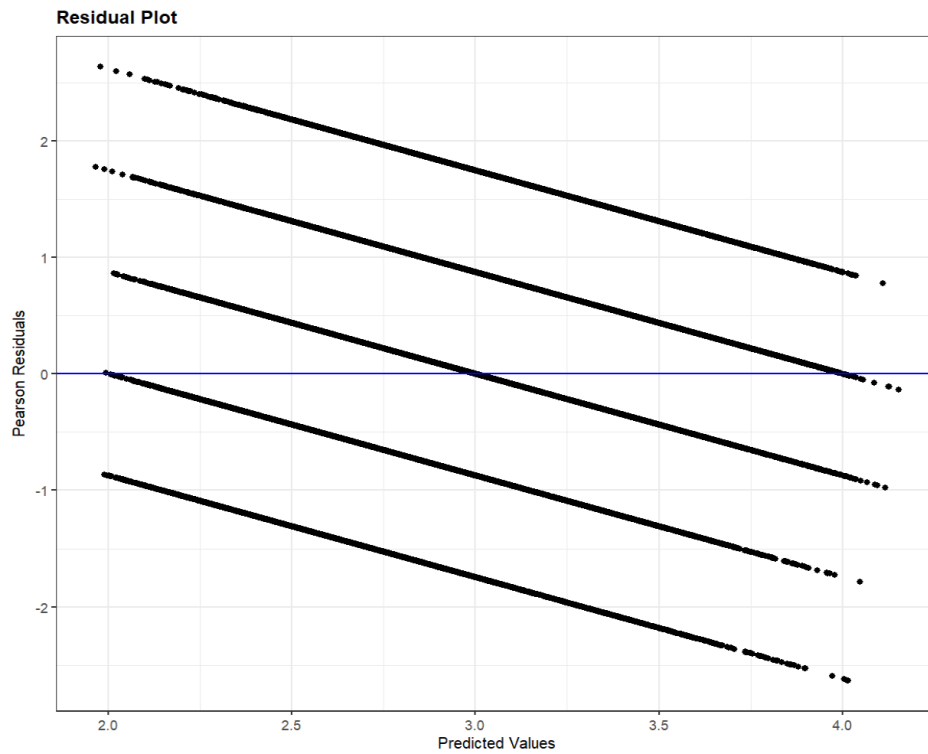


Figure 10 displays that the spread of residuals appears random, without any clusters or distinct patterns, like a funnel shape. Consequently, Figure 10 shows no clear evidence of heteroskedasticity in Model 2. Furthermore, the residuals appear randomly scattered within their bands, with no evidence of systematic deviations that could imply non-linear patterns. Thus, the linearity assumption is likely to be met, as well.

- Multicollinearity

Table 6 $GVIF^{(1/(2*Df))}$ values of each variable in Model 2

Variable	GVIF	Df	$GVIF^{(1/(2*Df))}$
Traditional values	31,493841	1	5,6119374
Progressiveness of politics	3,0685848	1	1,7517376
Salience of economic issues	1,9925171	1	1,4115655
Sex	1,0050334	1	1,0025135
Age	1,0576418	1	1,0284171
Educational background	1,1168704	1	1,0568209
Income	1,0708895	1	1,0348379
Income inequality	1,301043	1	1,1406327
Unemployment rate	2,6165447	1	1,6175737
Economic performance	2,0333859	1	1,4259684
Year of the interview	3,7248181	6	1,1158147
Traditional Values × Progressive Politics	31,58094	1	5,6196922

Comparing $GVIF^{(1/(2*Df))}$ values of each variable in Table 6 to 2.23, which is the approximate square root of 5, traditional values (the independent variable) and the interaction term between traditional values and progressive politics shows the multicollinearity. This might lead to uncertainty of regression results of Model 2 (Kim, 2019).

- Independence of errors

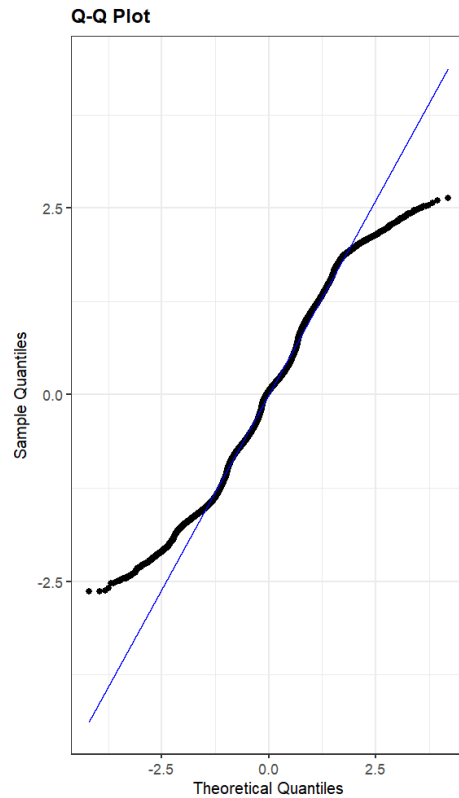
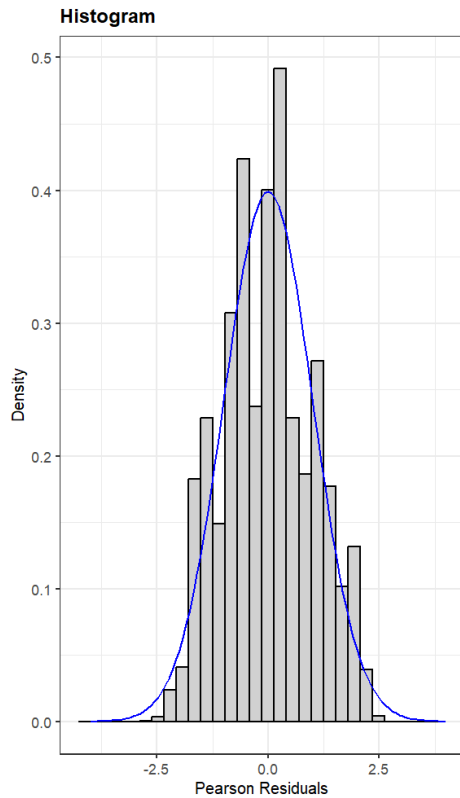
Model 1 should meet the assumption of the independence of errors. This is because it is not based on time-series data, which could cause problematic correlations between the errors. Moreover, Model 2 is a multilevel regression model that could deal with the multistage sampling nature of the WVS.

Model 3

- Normally distributed errors

Figure 11 Histogram of residuals for Model 3

Figure 12 Q-Q plot of residuals for Model 3



According to Figure 11, the residuals are generally distributed along the normal distribution curve, although there are some deviations, with clusters of residuals at certain points and others falling below the curve. Similarly, Figure 12 shows that residuals are roughly distributed along the normal line, indicating that they generally follow a normal distribution. Nonetheless, it still shows some deviations at the tails. Overall, errors of Model 3 generally follow a normal distribution, with some deviations from perfect normality.

- Homoskedasticity

Figure 13 *Residual plot of Model 3 (Pearson Residuals vs. Predicted Values)*

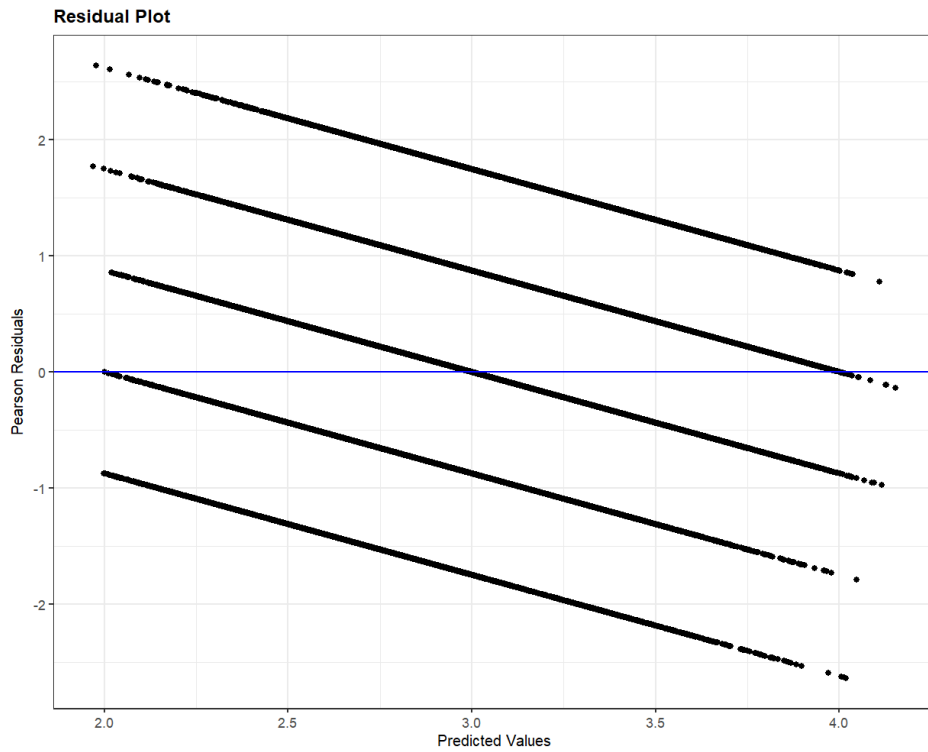


Figure 13 illustrates that residuals are randomly spread on the parallel lines, following the ultimately ordinal nature of the dependent variable. It does not show any clusters or patterns to be concerned about heteroscedasticity. The spread of the residuals is constant across all levels of the bands. Consequently, Figure 13 does not show any heteroscedasticity nor non-linearity in Model 3.

- Multicollinearity

Table 7 $GVIF^{(1/(2*Df))}$ values of each variable in Model 3

Variable	GVIF	Df	$GVIF^{(1/(2*Df))}$
Traditional values	67,391737	1	8,209247
Progressiveness of politics	2,0944379	1	1,4472173
Salience of economic issues	2,9793603	1	1,7260824
Sex	1,0048206	1	1,0024074
Age	1,0576024	1	1,028398
Educational background	1,1167603	1	1,0567688
Income	1,070643	1	1,0347188
Income inequality	1,301065	1	1,1406424
Unemployment rate	2,6168548	1	1,6176696
Economic performance	2,0332796	1	1,4259311
Year of the interview	3,7244534	6	1,1158056
Traditional Values × Economic Salience	67,461572	1	8,2134993

To find potential multicollinearity in Model 3, the $GVIF^{(1/(2*Df))}$ values of each variable should be compared to 2.23, which is the approximate value of the square root of 5. Table 7 tells that traditional values (independent variable) and the interaction term between traditional values and economic salience show multicollinearity. Due to this, Model 3 contains some uncertainty in its regression results (Kim, 2019).

- Independence of errors

Just like Model 1 and 2, Model 3 should not violate the assumption of independence of errors. The data is not time-series, which might lead to too much correlations between the errors. Although Model 3 tests the data from the WVS, which is a nested data where countries are sampled, and individuals are further sampled within those countries.